



**Metro**

*One Gateway Plaza, Los Angeles, CA 90012,  
3rd Floor, Metro Board Room*

**Agenda - Final**

**Wednesday, September 20, 2023**

**1:00 PM**

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## **Planning and Programming Committee**

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*Ara J. Najarian, Vice Chair*

*Lindsey Horvath*

*Hilda Solis*

*Katy Yaroslavky*

*Gloria Roberts, non-voting member*

*Stephanie Wiggins, Chief Executive Officer*

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**(ALSO APPLIES TO BOARD COMMITTEES)**

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A member of the public may address the Board on agenda items, before or during the Board or Committee's consideration of the item for one (1) minute per item, or at the discretion of the Chair. A request to address the Board must be submitted electronically using the tablets available in the Board Room lobby. Individuals requesting to speak will be allowed to speak for a total of three (3) minutes per meeting on agenda items in one minute increments per item. For individuals requiring translation service, time allowed will be doubled. The Board shall reserve the right to limit redundant or repetitive comment.

The public may also address the Board on non-agenda items within the subject matter jurisdiction of the Board during the public comment period, which will be held at the beginning and/or end of each meeting. Each person will be allowed to speak for one (1) minute during this Public Comment period or at the discretion of the Chair. Speakers will be called according to the order in which their requests are submitted. Elected officials, not their staff or deputies, may be called out of order and prior to the Board's consideration of the relevant item.

Notwithstanding the foregoing, and in accordance with the Brown Act, this agenda does not provide an opportunity for members of the public to address the Board on any Consent Calendar agenda item that has already been considered by a Committee, composed exclusively of members of the Board, at a public meeting wherein all interested members of the public were afforded the opportunity to address the Committee on the item, before or during the Committee's consideration of the item, and which has not been substantially changed since the Committee heard the item.

In accordance with State Law (Brown Act), all matters to be acted on by the MTA Board must be posted at least 72 hours prior to the Board meeting. In case of emergency, or when a subject matter arises subsequent to the posting of the agenda, upon making certain findings, the Board may act on an item that is not on the posted agenda.

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**REMOVAL FROM THE BOARD ROOM** - The Chair shall order removed from the Board Room any person who commits the following acts with respect to any meeting of the MTA Board:

- a. Disorderly behavior toward the Board or any member of the staff thereof, tending to interrupt the due and orderly course of said meeting.
- b. A breach of the peace, boisterous conduct or violent disturbance, tending to interrupt the due and orderly course of said meeting.
- c. Disobedience of any lawful order of the Chair, which shall include an order to be seated or to refrain from addressing the Board; and
- d. Any other unlawful interference with the due and orderly course of said meeting.

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Requests can also be sent to [boardclerk@metro.net](mailto:boardclerk@metro.net).



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**NOTE: ACTION MAY BE TAKEN ON ANY ITEM IDENTIFIED ON THE AGENDA**

### **Live Public Comment Instructions:**

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The Committee Meeting begins at 1:00 PM Pacific Time on September 20, 2023; you may join the call 5 minutes prior to the start of the meeting.

Dial-in: 888-251-2949 and enter  
English Access Code: 8231160#  
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***Public comment will be taken as the Board takes up each item. To give public comment on an item, enter #2 (pound-two) when prompted. Please note that the live video feed lags about 30 seconds behind the actual meeting. There is no lag on the public comment dial-in line.***

### **Instrucciones para comentarios publicos en vivo:**

Los comentarios publicos en vivo se pueden dar por telefono o en persona.

La Reunion de la Junta comienza a las 1:00 PM, hora del Pacifico, el 20 de Septiembre de 2023. Puedes unirte a la llamada 5 minutos antes del comienso de la junta.

Marque: 888-251-2949 y ingrese el codigo  
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***Los comentarios del público se tomaran cuando se toma cada tema. Para dar un comentario público sobre una tema ingrese # 2 (Tecla de numero y dos) cuando se le solicite. Tenga en cuenta que la transmisión de video en vivo se retrasa unos 30 segundos con respecto a la reunión real. No hay retraso en la línea de acceso telefónico para comentarios públicos.***

### **Written Public Comment Instruction:**

Written public comments must be received by 5PM the day before the meeting.

Please include the Item # in your comment and your position of "FOR," "AGAINST," "GENERAL COMMENT," or "ITEM NEEDS MORE CONSIDERATION."

Email: BoardClerk@metro.net

Post Office Mail:

Board Administration

One Gateway Plaza

MS: 99-3-1

Los Angeles, CA 90012

## CALL TO ORDER

## ROLL CALL

APPROVE Consent Calendar Items: 12, 13, 14, 15 and 16.

Consent Calendar items are approved by one vote unless held by a Director for discussion and/or separate action.

## CONSENT CALENDAR

### 12. SUBJECT: LONE HILL TO WHITE DOUBLE TRACK PROJECT

[2023-0281](#)

#### RECOMMENDATIONS

AUTHORIZE the Chief Executive Officer to:

- A. EXECUTE Contract Modification No. 4 to Contract No. AE73891000 with Moffatt & Nichol for professional services and extend the period of performance from October 31, 2023, to December 31, 2024, in the amount of \$3,685,694, increasing the Total Contract Value from \$7,049,780 to \$10,735,474; and
- B. APPROVE programming an additional \$8,023,736 from \$10,500,000 to \$18,523,736 for professional services, Metro related expenses, and third-party services using Measure R 3% funds to achieve a shovel ready level.

Attachments:      [Attachment A - Procurement Summary AE73891000](#)  
[Attachment B - Contract Modification Change Order Log \(AE73891000\)](#)  
[Attachment D - Lone Hill to White Funding and Expenditure Plan](#)  
[Attachment C - DEOD Summary AE73891000](#)  
[Presentation](#)

### 13. SUBJECT: METROLINK ANTELOPE VALLEY LINE

[2023-0472](#)

#### RECOMMENDATION

CONSIDER:

- A. APPROVING the reprogramming of \$1,682,842 unspent operating budget from FY23 to the Southern California Regional Rail Authority (SCRRA) for the FY24 Metrolink Antelope Valley Line (AVL) service restoration (Option 3), to start on October 23, 2023; and
- B. AUTHORIZING the Chief Executive Officer to negotiate and execute all necessary agreements between Metro and SCRRA for the approved

funding.

Attachments:      [Attachment A - Metrolink-System Map](#)  
                              [Attachment B -- Antelope Valley Service Restoration Project](#)

**14. SUBJECT:      COUNTYWIDE CALL FOR PROJECTS** [2023-0393](#)

**RECOMMENDATION**

CONSIDER:

- A. RECERTIFYING \$78.96 million in existing Fiscal Year (FY) 2023-24 commitments from previously approved Countywide Call for Projects (Call) and AUTHORIZING the expenditure of funds to meet these commitments as shown in Attachment A;
- B. DEOBLIGATING \$2.36 million of previously approved Call funding, as shown in Attachment B, and hold in RESERVE;
- C. REALLOCATING:
  - 1. \$1.31 million of Call funds remaining in the City of Los Angeles Century City Urban Design and Pedestrian Connection Plan (Call #F1612), to the City of Los Angeles Exposition West Bikeway - Northvale Project (Call #F3514);
  - 2. \$13.39 million of Call funds in the City of Los Angeles: 1) Alameda Street Downtown LA - Goods Movement Phase 1 (Call #F5207), and 2) Alameda Street Improvements North Olympic Blvd to I-10 Freeway (Call #F9207) projects, to the City of Los Angeles 1) Boyle Heights Chavez Avenue Streetscape Pedestrian Improvements (Call #F3643), and 2) Soto Street Complete Streets (Call #F7109) projects; and
- D. APPROVING changes to the scope of work for:
  - 1. City of Lancaster - Medical Main Street (Call #F9131);
  - 2. County of Los Angeles - South Whittier Community Bikeway Access Improvements (Call #F9511); and
- E. AUTHORIZING the Chief Executive Officer (CEO) or their designee to:
  - 1. Negotiate and execute all necessary agreements and/or amendments for previously awarded projects; and
  - 2. Amend the FY 2023-24 budget, as necessary, to include the 2023 Countywide Call Recertification and Extension funding in the Subsidies budget;
- F. RECEIVING AND FILING:
  - 1. Time extensions for 87 projects as shown in Attachment C; and
  - 2. Reprogram for nine projects as shown in Attachment D.

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- Attachments:**      [Attachment A - FY 2003-24 Countywide Call Recertification](#)  
[Attachment B - FY 2022-23 Countywide Call Deobligation](#)  
[Attachment C - FY 2022-23 Countywide Call Extensions](#)  
[Attachment D - FY 2022-23 Countywide Call Reprogram](#)  
[Attachment E - Background Discussion of Each Recommendation](#)  
[Attachment F - Result of TAC Appeals Process](#)  
[Attachment G - Call and Equity Focused Communities Map](#)

15. **SUBJECT:      MEASURE M 3% LOCAL CONTRIBUTION GUIDELINES      [2023-0441](#)**  
**REVISIONS**

**RECOMMENDATION**

ADOPT revised Measure M Guidelines, Section VIII - 3% Local Contribution to Major Transit Projects (Attachment A).

- Attachments:**      [Attachment A - MM 3% Local Contribution Guidelines Final Revisions](#)  
[Attachment B - Motion 10.1](#)  
[Attachment C - Summary of Public Comments Received](#)  
[Presentation](#)

16. **SUBJECT:      MEASURE M MULTI-YEAR SUBREGIONAL PROGRAM &      [2023-0440](#)**  
**MEASURE R TRANSIT INVESTMENTS PROGRAM**  
**UPDATE - SOUTH BAY SUBREGION**

**RECOMMENDATION**

CONSIDER:

A. APPROVING:

1. Programming of an additional \$20,438,600 within the capacity of Measure M Multi-Year Subregional Program (MSP) - Transportation System and Mobility Improvements Program (Expenditure Line 50), as shown in Attachment A;
2. Programming of an additional \$11,856,223 within the capacity of Measure M MSP - South Bay Highway Operational Improvements Program (Expenditure Line 63), as shown in Attachment B;
3. Inter-program borrowing and programming of an additional \$8,864,097 from Transportation System and Mobility Improvements Program (Expenditure Line 50) to Measure M MSP - Transportation System and Mobility Improvements Program (Expenditure Line 66), as shown in Attachment C;

4. Reprogramming of two previously awarded projects in the Measure R South Bay Transit Investments Program, shown in Attachment D; and

- B. AUTHORIZING the CEO or their designee to negotiate and execute all necessary agreements and/or amendments for approved projects.

**Attachments:**      [Attachment A - Transpo. System Mobility Impr Program \(Line 50\) Project List](#)  
[Attachment B - South Bay Highway Op Impr Program \(Line 63\) Project List](#)  
[Attachment C - Transpo System Mobility Impr Program \(Line 66\) Project List](#)  
[Attachment D - Measure R Transit Investments Program Project List](#)

## NON-CONSENT

17. **SUBJECT: VERMONT TRANSIT CORRIDOR** [2023-0409](#)

### **RECOMMENDATIONS**

AUTHORIZE the Chief Executive Officer to:

- A. AWARD AND EXECUTE up to a 60-month, firm fixed price Contract No. AE97976000 to Vermont Corridor Partners Joint Venture, a joint venture between AECOM Technical Services, Inc., Terry A. Hayes Associates, Inc., and RAW International, Inc., in the amount of \$55,668,537, to prepare the Planning and Environmental Study for the Vermont Transit Corridor, subject to resolution of any properly submitted protest(s), if any, and;
- B. AUTHORIZE the CEO to execute individual Contract Modifications within the Board-approved Contract Modification Authority.

**Attachments:**      [Attachment A - Vermont Transit Corridor Map](#)  
[Attachment B - Board Motion Apr 2019](#)  
[Attachment C - Board Motion Sep 2022](#)  
[Attachment D - Procurement Summary](#)  
[Attachment E - DEOD Summary](#)  
[Presentation](#)

18. **SUBJECT: AWARD RECOMMENDATIONS FOR VISIONARY SEED FUND COMPETITIVE GRANT PROGRAM** [2023-0526](#)

### **RECOMMENDATION**

CONSIDER:

- A. APPROVING the recommended Visionary Seed Fund competitive grant program funding awards totaling \$2,559,090 (Attachment A);
- B. AUTHORIZING the Chief Executive Officer (CEO) or her designee to negotiate and execute all necessary agreements for approved projects;





COMMENTS FROM THE PUBLIC ON ITEMS OF PUBLIC INTEREST WITHIN COMMITTEE'S  
SUBJECT MATTER JURISDICTION

**Adjournment**



## Board Report

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File #: 2023-0281, File Type: Budget

Agenda Number: 12.

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### PLANNING AND PROGRAMMING COMMITTEE SEPTEMBER 20, 2023

**SUBJECT: LONE HILL TO WHITE DOUBLE TRACK PROJECT**

**ACTION: APPROVE RECOMMENDATIONS**

#### **RECOMMENDATIONS**

AUTHORIZE the Chief Executive Officer to:

- A. EXECUTE Contract Modification No. 4 to Contract No. AE73891000 with Moffatt & Nichol for professional services and extend the period of performance from October 31, 2023, to December 31, 2024, in the amount of \$3,685,694, increasing the Total Contract Value from \$7,049,780 to \$10,735,474; and
- B. APPROVE programming an additional \$8,023,736 from \$10,500,000 to \$18,523,736 for professional services, Metro related expenses, and third-party services using Measure R 3% funds to achieve a shovel ready level.

#### **ISSUE**

Staff is advancing the Lone Hill to White Double track project from inception through the final design phase with extensive changes to the existing conditions that have not been accounted for in the current project programming. Board approval of the staff recommendations will allow the continuation of final design services for this capital project to achieve a shovel ready level. This capital project is on the priority list of the 2028 Games Mobility Concept Plan and has been endorsed by Infrastructure LA.

#### **BACKGROUND**

The Lone Hill to White Double Track project runs along the San Gabriel subdivision and merges with the Pasadena subdivision at White Avenue, where the Gold Line Phase project will operate. The proximity between both rail subdivisions results in three railroad crossings being less than 300 feet apart. These railroad crossings include San Dimas Canyon Road, White Avenue, and Fulton Road. The Gold Line Authority has been a collaborative partner through the design development process for the Lone Hill to White Double track. As existing conditions change with the construction of the Gold

Line project, the Lone Hill project shall incorporate design changes based on the installation of new railroad signal houses, field condition adjustments, street infrastructure, traffic loops, and further operational analysis to address the ultimate project conditions.

This double tracking project is the building block for future network integration, on-time performance, and improved line reliability for the Metrolink San Bernardino Line. The Lone Hill to White Double Tack project is shown in the Metrolink Southern California Optimized Rail Expansion (SCORE) program as a vital line reliability project for the rail corridor to upgrade the existing Metrolink system

At its October 24, 2013 meeting, the Board approved \$3M in programming to begin environmental and preliminary engineering work for the four miles of double tracking. Then at its December 05, 2019 meeting, the Board approved \$7.5M for final design work inclusive of all third-party and professional service related costs. In July 22, 2021, a design phase LOP was approved to start the final design services for \$8.2M. However, the design phase LOP does not include Metro labor related expenses, and the approving action continues to be addressed through an annual programming process. Upon review, a design phase LOP is not consistent with other Program Management capital projects without identified construction funding. Given this information, staff will shift from design phase LOP to programming authorization to account for all project expenditures to achieve a shovel ready level. A shift to programming authorization alone allows for staff to refine funding needs and prepare grant applications to fund the construction improvements ahead of the 2028 Olympic and Paralympic Games.

On July 22, 2021 Moffat and Nichol received notice to proceed to perform engineering services for the Lone Hill to White final design phase to prepare approved plans, specifications and estimates. Then two additional contract modifications were approved on April, 12, 2022 and March 10, 2023 for new scope of work that was unforeseen at the time of contract development within the original period of performance. The new scope of work includes surveying and mapping, right-of-way, drainage, hydrology and hydraulics, water quality, geotechnical investigation, and track design for areas outside of the Metro right-of-way. A third contract modification for a no cost extension of the period of performance was required to continue coordination efforts for the necessary contract modification four staff anticipated for consideration for the September Board regular meeting which will allow Moffatt & Nichol to finalize and complete the project deliverables.

This capital project is supported by the City of San Dimas and La Verne with the quiet zone ready improvements this project will bring to enable the silencing of train horns within the project limits after construction is completed. This project is also endorsed by Infrastructure LA with their initiative to maximize LA County's share of infrastructure funding. This capital project is included under the Metro rail capital projects for Infrastructure LA and as a priority project in Metro's 2028 Games Mobility Concept Plan. This critical regional rail project will demonstrate project readiness with the completion of the final design phase make this project more competitive for grant construction funding.

..Discussion

## **DISCUSSION**

With the project stakeholders fully engaged, an extensive amount of subsurface utility location

services is required to determine utility positions of potential conflicts that were unforeseen prior to the development of the 60% final design plans by August 2022. At the same time, the advance design work increases the right-of-way service needs by 36% to address temporary and permanent right-of-way impacts for the project. The double track improvements require a complex bridge design at Marshall Canyon Channel and Walnut Creek that was not considered during the feasibility phase to obtain design approvals from the Los Angeles County Flood Control District and the US Army Corps of Engineers. This work will require supplemental geotechnical investigation in support of the advanced structural design work and new third party agreements.

Another major design change for consideration is at the temporary Metrolink Pomona Fairplex Station Platform. The initial design accounted for a five-car train set. Through design development and ADA compliance oversight, the platform is required to be replaced to accommodate a six-car train set with a locomotive to avoid substantial delays on the local traffic circulation. Other design changes for consideration include project impacts outside of the Metro owned right-of-way that require improvement, off-site drainage, relocation of underdrains, and additional retaining wall locations to reduce right-of-way impacts.

Given the above, the additional programming of Measure R 3% funds requested in the amount of \$8.02M is summarized below in Table 1. It should be noted the \$8.6M programmed for professional services consists of \$6.5M for the final design and \$2.1M for preliminary engineering and environmental clearance phase work.

<b>Lone Hill to White Double Track Project</b>			
<b>Use of Funds</b>	<b>Approved Programming</b>	<b>Requested Programming</b>	<b>Revised Programming</b>
Professional Services	8,600,000.00	4,235,474.00	12,835,474.00
Agency - Metro	0.00	1,545,763.00	1,545,763.00
Outreach	0.00	253,302.00	253,302.00
Real Estate/ Acquisition of Land	0.00	56,000.00	56,000.00
Project Controls	0.00	289,962.00	289,962.00
Project Reserve/Contingency (10%)	650,000.00	423,547.00	1,073,547.00
3rd Party Agreements - City/County/Others	1,250,000.00	1,219,688.00	2,469,688.00
<b>Total Project Cost</b>	<b>10,500,000.00</b>	<b>8,023,736.00</b>	<b>18,523,736.00</b>

Table 1: Lone Hill to White Double Track Programming

**DETERMINATION OF SAFETY IMPACT**

This Board action will not have an impact on safety. The Lone Hill to White Double Track Project is being designed in accordance with Metro and SCRRRA standards, state and federal requirements, and in compliance with the Americans with Disabilities Act.

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## **FINANCIAL IMPACT**

Regional Rail staff have included the recommended \$4,000,000 in FY24 programming as part of the adopted FY24 budget for this project. This is a multi-year capital project, and the Deputy Executive Officer of Regional Rail and Chief Program Management Officer will be accountable and responsible for budgeting the cost of future fiscal year commitments in department 2415, Regional Rail, for project number 460068 as shown in Attachment D, Lone Hill to White Funding and Expenditure Plan. If approved, the total revised programming amount in order to achieve a shovel ready level for the Lone Hill to White Double Track project with Measure R 3% funds will be \$18,523,736 for project number 460068.

### **Impact to Budget**

The source of funds for FY24 and future fiscal year programming through final design for this project is Measure R 3% Transit Capital. These funds are not eligible to be used for Metro bus/rail operating or capital budget expenses.

## **EQUITY PLATFORM**

The Lone Hill to White Double Track project operates on the San Bernardino Line. The median income is \$60,913 on the San Bernardino Line, according to a 2022 Metrolink Rider Survey. 39% of all current Metrolink riders report household incomes below \$50,000. The average age of Metrolink riders in 2022 has increased to 51 years. The same data shows rider demographics at 38% Hispanic or Latino, 31% White, 17% Asian or Pacific Islander, 10% African American and 4% Other.

The Lone Hill to White project will improve line reliability, network integration, on-time performance and lead to more frequent commuter rail service. This capital improvement is within and indirectly supports Equity Focus Communities (EFC) by providing more frequent service and better transit options through the Metrolink SCORE program that proposes 30-minute bi-directional service throughout the day and evening along the San Bernardino Line. For the Lone Hill to White capital projects, communities located in the vicinity of the project are comprised of 48.1% to 75.1% low-income households, 4.7% to 14.9% households with no access to a car, and up to 99.9% Black, Indigenous, and other People of Color (BIPOC) residents.

In addition to the project improvements, this project will improve American with Disabilities Act (ADA) compliance. The Lone Hill to White Double track project includes full reconstruction of the Pomona Fairplex Station per the SCRRRA standards with a mini-high platform for easier access for passengers with disabilities.

## **IMPLEMENTATION OF STRATEGIC PLAN GOALS**

The proposed recommendations support strategic plan goals 1, 3 and 4. The Lone Hill to White improvements improve service reliability and mobility, provide better transit connections throughout the network, and implement the following specific strategic plan goals:

- Goal 1.2: Improve LA County's overall transit network and assets;

- 
- Goal 3.3: Genuine public and community engagement to achieve better mobility outcomes for the people of LA County; and
  - Goal 4.1: Metro will work with partners to build trust and make decisions that support the goals of the Strategic Plan

### **ALTERNATIVES CONSIDERED**

The Board could choose not to approve the authorization to execute the contract modification, amend the programming, and execute necessary third-party agreements for this project. This is not recommended since this project is identified as a key project to provide line reliability to support Metrolink's 30-minute bi-direction service along the San Bernardino Line. In addition, this capital project is on the priority list for the 2028 Games Mobility Concept Plan and has been endorsed by Infrastructure LA. Another alternative is to cancel the professional service contract for Metrolink to lead and complete the final design phase of the Project instead of Metro. This is not advised since the Metro Board previously directed staff to lead and complete the final design phase for Lone Hill to White Double Track Project and will not result in any project cost or schedule savings.

### **NEXT STEPS**

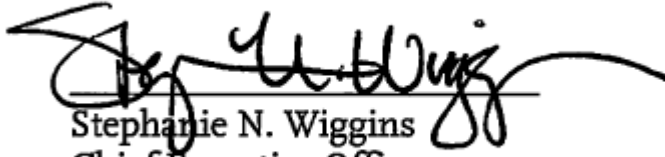
Upon Board approval staff will execute Modification No. 4 to Contract No. AE73891000 with Moffatt & Nichol to continue providing professional services in order to complete the final design phase work in order to prepare for pre-construction activity and then return to the board for a project LOP to approve construction award.

### **ATTACHMENTS**

Attachment A- Procurement Summary AE73891000  
Attachment B- Contract Modification/Change Order Log AE73891000  
Attachment C- DEOD Summary AE73891000  
Attachment D - Lone Hill to White Funding and Expenditure Plan

Prepared by: Brian Balderrama, Deputy Executive Officer, Program Management, Regional Rail (213) 418-3177  
Debra Avilla, Deputy Chief Vendor/Contract Management Officer, (213) 418-3051

Reviewed by: Sameh Ghaly, Chief Program Management Officer (Interim), (213) 418-3369



Stephanie N. Wiggins  
Chief Executive Officer



## PROCUREMENT SUMMARY

LONE HILL TO WHITE DOUBLE TRACK PROJECT FINAL DESIGN PS&E  
AE73891000

1.	<b>Contract Number:</b> AE73891000		
2.	<b>Contractor:</b> Moffatt and Nichol		
3.	<b>Mod. Work Description:</b> Work to address comment resolution meetings with project stakeholders as a result of the 60% final design submittal and period of performance extension through 12/31/24.		
4.	<b>Contract Work Description:</b> Engineering services for the Lone Hill to White final design plans, specifications and estimates (PS&E).		
5.	<b>The following data is current as of:</b> 8/3/23		
6.	<b>Contract Completion Status</b>		<b>Financial Status</b>
	<b>Contract Awarded:</b>	07/22/21	<b>Contract Award Amount:</b> \$6,498,899
	<b>Notice to Proceed (NTP):</b>	N/A	<b>Total of Modifications Approved:</b> \$550,881
	<b>Original Complete Date:</b>	08/04/23	<b>Pending Modifications (including this action):</b> \$3,685,694
	<b>Current Est. Complete Date:</b>	12/31/24	<b>Current Contract Value (with this action):</b> \$10,735,474
7.	<b>Contract Administrator:</b> Samira Baghdikian		<b>Telephone Number:</b> (213) 922-1033
8.	<b>Project Manager:</b> Vahid Haghdoust		<b>Telephone Number:</b> (213) 922-2196

**A. Procurement Background**

This Board Action is to approve Contract Modification No. 4 issued in support of work to address comment resolution meetings with project stakeholders as a result of the 60% final design submittal for the Lone Hill to White (LHW) Double Track project. This Contract Modification also extends the period of performance from October 31, 2023 through December 31, 2024.

This Contract Modification was processed in accordance with Metro's Acquisition Policy and the contract type is firm fixed price.

On July 22, 2021, the Board awarded firm fixed price Contract No. AE73891000 to Moffatt and Nichol in the amount of \$6,498,899 for engineering services for the LHW Final Design Plans, Specifications and Estimates (PS&E).

A total of 3 modifications have been issued to date.

Refer to Attachment B – Contract Modification/Change Order Log.

**B. Cost Analysis**

The recommended price has been determined to be fair and reasonable based upon an independent cost estimate (ICE), cost analysis, technical analysis, fact finding and negotiations.

Metro staff successfully negotiated a cost savings of \$407,307 resulting from a reduction of level of effort under project management, survey and mapping, utilities, grade crossings and bridges/structures while discussing level of effort and earned value.

<b>Proposal Amount</b>	<b>Metro ICE</b>	<b>Negotiated Amount</b>
\$4,093,001	\$2,190,100	\$3,685,694

The difference between the ICE and negotiated amount is due to:

- Additional level of effort for environmental permitting support to coordinate with regulatory agencies such as Army Corps of Engineers and Regional Water Quality Control Board;
- Increase in coordination efforts required with the Los Angeles Bureau of Engineering and Department of Transportation and Army Corps of Engineers;
- Additional level of effort to validate soil parameters at additional locations along the project limits for retaining walls;
- Additional structural support for designing non-standard retaining walls under the railroad live load influence line and data collection adjacent to existing buildings along the right-of-way;
- Additional alternative/value analysis for certain structures over major channels.

## CONTRACT MODIFICATION/CHANGE ORDER LOG

LONE HILL TO WHITE DOUBLE TRACK PROJECT FINAL DESIGN PS&E  
AE73891000

<b>Mod. No.</b>	<b>Description</b>	<b>Status (approved or pending)</b>	<b>Date</b>	<b>\$ Amount</b>
1	Additional work to prepare and complete the final engineering design necessary for the double track project	Approved	04/12/22	\$474,223
2	Additional level of effort (design submittals to Union Pacific Railroad and addition of subcontractor.	Approved	03/10/23	\$76,658
3	No cost extension of period of performance (POP) through 10/31/23.	Approved	07/11/23	\$0
4	Work to address comment resolution meetings with project stakeholders as a result of the 60% final design submittal and POP extension through 12/31/24.	<b>Pending</b>	<b>Pending</b>	<b>\$3,685,694</b>
	<b>Modification Total:</b>			<b>\$4,236,575</b>
	<b>Original Contract:</b>		07/22/21	<b>\$6,498,899</b>
	<b>Total:</b>			<b>\$10,735,474</b>

## DEOD SUMMARY

**LONE HILL TO WHITE DOUBLE TRACK PROJECT FINAL DESIGN PS&E  
AE73891000**

**A. Small Business Participation**

Moffatt & Nichol, Inc. (MNI) made a 27.19% Small Business Enterprise (SBE) and a 3.18% Disabled Veterans Business Enterprise (DVBE) commitment. Based on payments, the project is 60% complete and the current SBE/DVBE participation is 20.59% and 3.67%, respectively, representing a 6.60% SBE shortfall. MNI is exceeding the DVBE commitment by 0.49%.

MNI contends that the shortfall is due to the bulk of the work scheduled to be performed by Pacific Railway Enterprises, Inc. (PRE) taking place later in the project. MNI stated that PRE has ramped up production in the past couple of months and anticipates PRE's level of participation to increase accordingly. MNI projects that its shortfall will be mitigated within the next six (6) months.

MNI listed 15.18% SBE and 3.43% DVBE participation for the proposed modification. Staff will continue to monitor MNI's efforts to meet and/or exceed its commitment.

<b>Small Business Commitment</b>	<b>27.19% SBE 3.18% DVBE</b>	<b>Small Business Participation</b>	<b>20.59% SBE 3.67% DVBE</b>
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	<b>SBE Subcontractors</b>	<b>% Committed</b>	<b>Current Participation<sup>1</sup></b>
1.	Pacific Railway Enterprises, Inc.	16.93%	10.08%
2.	Rail Surveyors and Engineering, Inc.	6.13%	5.51%
3.	Wagner Engineering	4.13%	5.00%
	<b>Total</b>	<b>27.19%</b>	<b>20.59%</b>

	<b>DVBE Subcontractors</b>	<b>% Committed</b>	<b>Current Participation<sup>1</sup></b>
1.	MA Engineering	3.18%	3.67%
	<b>Total</b>	<b>3.18%</b>	<b>3.67%</b>

<sup>1</sup>Current Participation = Total Actual amount Paid-to-Date to DBE firms ÷ Total Actual Amount Paid-to-date to Prime.

**B. Living Wage and Service Contract Worker Retention Policy Applicability**

A review of the current service contract indicates that the Living Wage and Service Contract Worker Retention Policy (LW/SCWRP) was not applicable at the time of award. Therefore, the LW/SCWRP is not applicable to this modification.

**C. Prevailing Wage Applicability**

Prevailing Wage requirements are applicable to this project. DEOD will monitor contractors' compliance with the State of California Department of Industrial Relations (DIR), California Labor Code, and, if federally funded, the U S Department of Labor (DOL) Davis Bacon and Related Acts (DBRA).

**D. Project Labor Agreement/Construction Careers Policy**

Project Labor Agreement/Construction Careers Policy is not applicable to this Contract. PLA/CCP is applicable only to construction contracts that have a construction related value in excess of \$2.5 million.

## Lone Hill to White Funding and Expenditure Plan

<b>Lone Hill to White Double Track Project</b>					
Project Number: 460068					
Project Programming for preliminary engineering, environmental and final design work					
<b>Use of Funds</b>	<b>Inception thru FY23</b>	<b>FY24</b>	<b>FY25</b>	<b>FY26+</b>	<b>Total Capital Costs through Final Design Phase</b>
Professional Services	6,700,000.00	2,500,000.00	3,635,474.00	0.00	12,835,474.00
Agency - Metro	850,000.00	295,763.00	400,000.00	0.00	1,545,763.00
Outreach	184,000.00	44,000.00	25,302.00	0.00	253,302.00
Real Estate/ Acquisition of Land	30,000.00	0.00	26,000.00	0.00	56,000.00
Project Controls	100,000.00	104,237.00	85,725.00	0.00	289,962.00
Project Reserve/Contingency (10%)	0.00	406,000.00	667,547.00	0.00	1,073,547.00
3rd Party Agreements - City/County/Others	700,000.00	650,000.00	1,119,688.00	0.00	2,469,688.00
<b>Total Project Cost through Final Design Phase</b>	<b>8,564,000.00</b>	<b>4,000,000.00</b>	<b>5,959,736.00</b>	<b>0.00</b>	<b>18,523,736.00</b>
<b>Source of Funds</b>	<b>Inception thru FY23</b>	<b>FY24</b>	<b>FY25</b>	<b>FY26+</b>	<b>Total Project Funding through Final Design Phase</b>
Measure R 3%	8,564,000.00	4,000,000.00	5,959,736.00	0.00	18,523,736.00

# Lone Hill to White Double Track Project

Finance, Budget and Audit Committee  
September 20, 2023

# Lone Hill to White Double Track Project

Staff is requesting Board Approval to:

- A. EXECUTE Contract Modification No. 4 to Contract No. AE73891000 with Moffatt & Nichol and extend the period of performance from August 4, 2023, to December 31, 2024, in the amount of \$3,685,694 increasing the Total Contract Value from \$7,049,780 to \$10,735,474; and
- B. APPROVE programming an additional \$8,023,736 from \$10,500,000 to \$18,523,736 for professional services, Metro related expenses and third-party services using Measure R 3% funds to achieve a shovel ready level.



# Lone Hill to White Double Track Project

## Background:

1. The Metrolink San Bernardino Line is the busiest commuter rail line of the Metrolink system.
2. This corridor spans 58 miles from Los Angeles to San Bernardino, serving 14 stations, plus a Redlands extension.
3. This capital project is on the 2022 Prioritized Mobility Concept Plan Project listing under Regional Rail due to line reliability in order to prepare for the arrival of the 2028 Games.



# Final Design Phase Programming

Approval of the contract modification, extending the period of performance, and the additional programming will allow the following funding and expenditure plan.

<b>Lone Hill to White Double Track Project</b>					
Project Number: 460068					
Project Programming					
<b>Use of Funds</b>	<b>Inception thru FY23</b>	<b>FY24</b>	<b>FY25</b>	<b>FY26+</b>	<b>Total Capital Costs</b>
Professional Services	6,700,000.00	2,500,000.00	3,635,474.00	0.00	12,835,474.00
Agency - Metro	850,000.00	295,763.00	400,000.00	0.00	1,545,763.00
Outreach	184,000.00	44,000.00	25,302.00	0.00	253,302.00
Real Estate/ Acquisition of Land	30,000.00	0.00	26,000.00	0.00	56,000.00
Project Controls	100,000.00	104,237.00	85,725.00	0.00	289,962.00
Project Reserve/Contingency (10%)	0.00	406,000.00	667,547.00	0.00	1,073,547.00
3rd Party Agreements - City/County/Others	700,000.00	650,000.00	1,119,688.00	0.00	2,469,688.00
<b>Total Project Cost</b>	<b>8,564,000.00</b>	<b>4,000,000.00</b>	<b>5,959,736.00</b>	<b>0.00</b>	<b>18,523,736.00</b>
<b>Source of Funds</b>	<b>Inception thru FY23</b>	<b>FY24</b>	<b>FY25</b>	<b>FY26+</b>	<b>Total Project Funding</b>
Measure R 3%	8,564,000.00	4,000,000.00	5,959,736.00	0.00	18,523,736.00

It should be noted, of the \$18,523,736 for programming will come from Measure R 3% funds to achieve a shovel ready level.

# Lone Hill To White Double Track Project

**QUESTIONS?**



## Board Report

File #: 2023-0472, File Type: Program

Agenda Number: 13.

### PLANNING AND PROGRAMMING COMMITTEE SEPTEMBER 20, 2023

**SUBJECT: METROLINK ANTELOPE VALLEY LINE**

**ACTION: PROGRAM FUNDS FOR WEEKDAY SERVICE RESTORATION AND ADDITIONAL WEEKEND SERVICE**

#### **RECOMMENDATION**

CONSIDER:

- A. APPROVING the reprogramming of \$1,682,842 unspent operating budget from FY23 to the Southern California Regional Rail Authority (SCRRA) for the FY24 Metrolink Antelope Valley Line (AVL) service restoration (Option 3), to start on October 23, 2023; and
- B. AUTHORIZING the Chief Executive Officer to negotiate and execute all necessary agreements between Metro and SCRRA for the approved funding.

#### **ISSUE**

The COVID-19 pandemic impacted ridership on the Metrolink Antelope Valley Line (AVL), resulting in service reduction. As ridership continues to rebound on the AVL, SCRRA staff are evaluating the restoration of service to pre-pandemic levels plus additional AVL service on weekdays and weekends. To accomplish this goal, SCRRA staff propose an AVL Service Restoration Project with several options for Metro's consideration to increase ridership, serve new ridership markets, and address equity needs for the Antelope Valley communities.

#### **BACKGROUND**

Metro is a member of the SCRRA, a five-county Joint Powers Authority (JPA) that operates the Metrolink regional commuter rail service (see Attachment A). The AVL historically has been the third busiest line on the Metrolink system, averaging 7,000 riders per weekday pre-pandemic. As a result of the pandemic, ridership dropped precipitously, resulting in the reduction of service from 15 weekday round trips to 11 presently. Ridership is recovering gradually, now averaging 3,000 riders per weekday, an improvement of 220% from April 2020.

The AVL provides a critical lifeline service to residents of the Antelope Valley and Santa Clarita regions. Many Antelope Valley residents live and work in Equity Focus Communities and have lower

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income and non-traditional jobs that require non-traditional, non-peak service opportunities, including weekend, late night, and reverse commute schedules. The AVL serves as a transit alternative to the congested SR-14 freeway and provides a vital link between the Antelope Valley, Santa Clarita Valley, San Fernando Valley, and the greater Los Angeles area. Restoration of AVL weekday service to pre-pandemic levels plus additional weekend service will grow AVL ridership significantly by providing more frequent service options and greater transit flexibility, offering greater levels of multimodal transportation choices in Los Angeles County.

## **DISCUSSION**

In December 2015 Metro provided \$3,000,000 in Measure R local funding as a match to a State Transit and Intercity Rail Capital Program (TIRCP) grant to purchase two locomotives for dedicated service expansion on the AVL, including late night and more mid-day and reverse commute services. However, due to the COVID pandemic, the AVL service expansion, planned to be implemented in April 2020, did not happen. Instead, service was reduced from 15 weekday round trips to 8 weekday round trips. As ridership started to recover, service was increased to 11 weekday round trips in April 2022.

In the post-pandemic environment, travel patterns have shifted from the traditional peak hour commuter services to Los Angeles Union Station (LAUS). Metrolink is experiencing more mid-day, off-peak, late-night, reverse commute, and weekend ridership growth. At the June 2023 SCRRA Board meeting, LA County Supervisor and LA Metro and SCRRA Board Member Kathryn Barger requested that SCRRA prepare options for full restoration of weekday service on the AVL and provide them to Metro for consideration in time to implement service adjustments in October 2023. Service restoration would support the steady growth of post-pandemic ridership gains, provide additional public transit service options to Antelope Valley residents, provide access to new mid-day, reverse commute, and late-night markets, provide equity benefits to disadvantaged communities, and fulfill the TIRCP grant requirement to increase service on the AVL.

In response, SCRRA staff created three weekday service restoration and expanded weekend service options which were shared with Metro staff. The primary criteria for evaluating these options are as follows:

- Do the additional trains provide new peak services to/from LAUS?
- Do the additional trains fill in gaps in mid-day service?
- Do the additional trains serve evening, late night, reverse commute, and new markets?
- What are the equity benefits to disadvantaged communities?
- Do the additional trains go from LAUS to Santa Clarita only or all the way to Lancaster?
- What is the projected ridership growth?
- What is the projected cost to Metro to fund the restored service?

All three service restoration options provide strong ridership growth, excellent overall benefits, and more efficient utilization of existing train crews and rolling stock train sets. Each option targets a slightly different market, with the overall goal to restore service to pre-pandemic levels and move scheduling towards pulse clockface hourly service in each direction throughout the weekday. All

service expansion options are consistent with SCRRA's Southern California Optimized Rail Expansion (SCORE) Program, which envisions implementing 30-minute pulsed bi-directional service on the AVL to Santa Clarita and hourly pulsed bi-directional service to Lancaster by 2030.

The following table summarizes the three service restoration options, which are described in detail in Attachment B:

Table 1  
SCRRA Service Restoration Options

<i>Service Restoration Criteria</i>	<i>Option 1</i>	<i>Option 2</i>	<i>Option 3</i>
Number of new round trips	4	4	4
New peak service to/from LAUS?	Yes	Yes	No
Fill in midday gaps in service?	Yes	Yes	Yes
Late night service?	No	No	<b>Yes</b>
New markets served?	Minimal	More	<b>Most</b>
Equity benefits to transit dependent?	Yes	Yes	<b>Yes/Most</b>
No. of trains to Lancaster (end of line)	3 of 8	4 of 8	<b>5 of 9</b>
Projected ridership growth *	35% - 39%	31% - 36%	<b>31% - 39%</b>
Estimated Subsidy Increase to Metro (FY 24) *	\$1,317,461	\$1,839,336	\$1,682,842

*\*Ridership and cost estimates include additional weekend service and armed security*

Additional Weekend Service

SCRRA currently operates six weekend round trips (RT) on the AVL. The post-pandemic environment has shifted traditional peak-hour, weekday travel patterns, resulting in increased weekend ridership recovery. With fewer connecting local bus service trips available in the Antelope Valley on weekends than during the week, the addition of Metrolink AVL service on weekends will better connect residents in the AVL to the greater Los Angeles region, providing much needed transit connectivity.

As part of the Antelope Valley Service Restoration Project, SCRRA performed a comprehensive overhaul proposal of the AVL weekend schedule to adopt pulse scheduling, as implemented during the week, to increase connectivity and provide more frequent service options. As proposed, service would increase from 6 RTs to 12 RTs on the weekends, resulting in near-hourly service from LAUS to/from Santa Clarita, and almost bi-hourly service to/from Lancaster.

Due to crew and equipment limitations, most of the proposed new weekend service would be between LAUS and Santa Clarita only. All new trains originating or terminating in Santa Clarita would be closely coordinated with Antelope Valley Transit Authority and Santa Clarita Transit for timed transfers and efficient connections to complete journeys to Santa Clarita and the Antelope Valley. The AVL weekend service would also be timed to provide efficient 18-minute pulse connections at LAUS to/from the San Bernardino Line. SCRRA estimates the proposed new weekend service will increase ridership by 41% - 44% over current weekend ridership. Costs for the weekend service are

included in the cost estimates provided in Table 1.

### Service Restoration Option 3

All service restoration options provide excellent overall benefits; however, Option 3 is recommended by both Metro staff and SCRRA staff as it accomplishes the following:

- Increases the number of trains traveling all the way to Lancaster instead of originating in/terminating at Santa Clarita.
- Serves new markets, including evening, late night, and reverse trains back to LAUS.
- Provides overall benefits to the most equity focused, disadvantaged communities.

### **DETERMINATION OF SAFETY IMPACT**

Approval of this item will provide funding for additional Metrolink AVL operations that will be operated in compliance with applicable Federal Railroad Administration, California Public Utilities Commission, and other regulatory requirements.

### **FINANCIAL IMPACT**

The total revenues, total expenses, and net costs to Metro, including armed security on the evening and late-night trains, are included in the cost estimate provided in Attachment B. Additionally, the \$1,682,842 requested funding amount is for service from October 23, 2023, through June 30, 2024. The recommended option's (Option 3) annualized costs (\$1,584,977) are estimated to be less for a full year due to strong annualized ridership growth following the start-up of this new service for the remainder of FY 2023-24.

SCRRA has reported that Metro's unspent operations funding is sufficient to fund for this fiscal year. These funds are designated for commuter rail only and are not eligible to be used for Metro bus and rail operations.

### Possible Use of FY 2022-23 Unspent Funds

SCRRA is projecting an underutilization of Operating funding for FY 2022-23. The final amount will not be known until the fiscal year-end audit is completed in late 2023. Available FY 2022-23 unspent Operating funds would be used first to fund the service restoration and expansion. Should the FY 2022-23 unspent funds not be sufficient to fund the entire \$1,682,842 required for service restoration and expansion, new Proposition C and/or Measure M commuter rail funds would be used, as needed, and applied to the FY24 Q3 subsidy.

### **EQUITY PLATFORM**

Approval of re-programming will support the Metrolink AVL commuter rail operations, providing residents, workers, students, and families with a regional public transportation option to access jobs, resources, and services across the greater Los Angeles region. Metrolink enables residents who may not be able to afford to live in high-cost areas to access quality jobs and services in those areas while living in more affordable neighborhoods. These neighborhoods include Equity Focus Communities, such as Lancaster/Palmdale, and the East San Fernando Valley along the Metrolink

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AVL. Riders on the Metrolink AVL have the lowest annual average household income (\$41,000) of any of the seven lines in the Metrolink system. Seven of the eleven stations along the AVL are defined as serving low-income communities. Also, low-income riders who participate in Metrolink's new Mobility-4-All Program, which offers California Electronic Benefit Transfer (EBT) cardholders a 50% discount on any Metrolink ticket or pass, will be able to easily benefit from the increased service on the AVL.

## **IMPLEMENTATION OF STRATEGIC PLAN GOALS**

Recommendation A supports the Metro Vision 2028 Strategic Plan goals 1, 4, and 5 as follows:

- Goal 1.2: Invest in a world-class transit system that is reliable, convenient, and attractive to more users for more trips;
- Goal 4.1: Work with partners to build trust and make decisions that support the goals of the Vision 2028 Plan;
- Goal 5.2: Exercise good public policy judgment and sound fiscal stewardship.

## **ALTERNATIVES CONSIDERED**

An alternative to Recommendation A would be to implement Option 1 or 2 instead of Option 3. This is not recommended since Option 3 performs best in serving new markets, including evening and late night, and provides maximum benefits to equity-focused, disadvantaged communities.

Another alternative is not to go forward with any service restoration at this time. This alternative is not recommended since Metro provided dedicated funding for locomotives for service expansion on the AVL, the TIRCP grant was awarded based on a commitment to expand service, and this action is consistent with the overall SCORE Program. Additionally, the new markets served on the AVL, benefits to economically disadvantaged communities, and strong ridership - all packaged to utilize crews and equipment in a highly cost-efficient manner - are all positive outcomes of Option 3.

Another option is to go forward with weekday service restoration, but not add the weekend service expansion. This is not recommended since the weekend crews, equipment, and service proposal are packaged with the weekday service restoration to achieve maximum efficiencies, ridership growth, and service expansion in the most efficient manner for all seven days of the week. If Metro does not go forward with the weekend service expansion, the overall ridership growth benefits and subsidy impacts would be less efficient for weekday service restoration only.

## **NEXT STEPS**

Subject to Board approval, SCRRA will implement the AVL weekday service restoration and add weekend service effective October 23, 2023. A robust marketing campaign will be implemented to communicate the service restoration and new weekend service on the AVL to the riders. The service will be evaluated for ridership, connections to other services, and overall effectiveness, and can be adjusted in the future.

## **ATTACHMENTS**

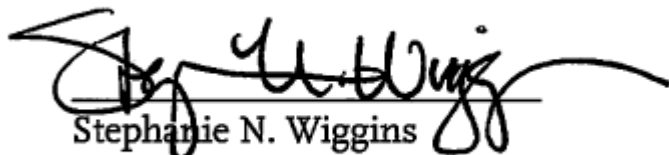


Attachment A - Metrolink Commuter Rail System Map

Attachment B - Antelope Valley Line Service Restoration Project (Options 1, 2, and 3)

Prepared by: Jay Fuhrman, Manager, Transportation Planning, (213) 547-4381  
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Stephanie N. Wiggins  
Chief Executive Officer

# ATTACHMENT A

## METROLINK REGIONAL RAIL SYSTEM



	Antelope Valley Line		Station Served by Multiple Lines
	Inland Empire-Orange County Line		Amtrak Pacific Surfliner
	Orange County Line		Metro Rail/Metro Bus
	Riverside Line		LAX FlyAway Bus
	San Bernardino Line		Coaster Oceanside to San Diego
	Ventura County Line		Sprinter Oceanside to Escondido
	91/Perris Valley Line		Future Station
	Under Construction		

**METROLINK** [metrolinktrains.com](http://metrolinktrains.com)



Updated March 2022 subject to change



**ATTACHMENT B**

**METROLINK**

Antelope Valley Service  
Restoration Project

*Three Weekday Options & Expanded  
Weekend Services Proposal*

# Option 1 -- Schedule (Inbound)

Inbound	200	202	204	ADD 292	206	208	210	212	ADD 214	ADD 216	218	ADD 220	222	224	230
<i>Departure Shift</i>	0:00	0:00	0:00	0:00	0:00	0:00	-0:03	0:00	-0:03	-0:03	0:00	-0:03	0:00	16:12	0:00
<i>Current Departure</i>	3:41	4:41	5:11	5:47	6:11	7:11	9:15	9:11	11:15	12:15	12:11	14:15	14:11	16:15	18:11
LANCASTER	3:41	4:41	5:11	5:47	6:11	7:11		9:11			12:11		14:11		18:11
Palmdale	3:50	4:50	5:20	5:56	6:20	7:20		9:20			12:20		14:20		18:20
Vincent Grade / Acton	4:01	5:01	5:32		6:32	7:32		9:32			12:32		14:32		18:32
Vista Canyon	4:38	5:38	6:07		7:07	8:07		10:07			13:07		15:07		19:07
Via Princessa	4:41	5:41	6:12		7:12	8:12	9:12	10:12	11:12	12:12	13:12	14:12	15:12	16:12	19:12
Santa Clarita	4:48	5:48	6:19	6:46	7:19	8:19	9:19	10:19	11:19	12:19	13:19	14:19	15:19	16:19	19:19
Newhall	4:56	5:56	6:27		7:27	8:27	9:27	10:27	11:27	12:27	13:27	14:27	15:27	16:27	19:27
Sylmar / San Fernando	5:11	6:11	6:41	7:05	7:41	8:41	9:41	10:41	11:41	12:41	13:41	14:41	15:41	16:41	19:41
Sun Valley	5:19	6:19	6:49		7:49	8:49	9:49	10:49	11:49	12:49	13:49	14:49	15:49	16:49	19:49
Burbank Airport - North (AVL)	5:23	6:23	6:52		7:52	8:52	9:52	10:52	11:52	12:52	13:52	14:52	15:52	16:52	19:52
Burbank - Downtown	5:28	6:28	6:58	7:17	7:58	8:58	9:58	10:58	11:58	12:58	13:58	14:58	15:58	16:58	19:58
Glendale	5:35	6:35	7:05		8:05	9:05	10:05	11:05	12:05	13:05	14:05	15:05	16:05	17:05	20:05
L.A. UNION STATION	5:48	6:48	7:18	7:35	8:18	9:18	10:18	11:18	12:18	13:18	14:18	15:18	16:18	17:18	20:18
<i>Current Arrival</i>	5:48	6:48	7:18	7:33	8:18	9:18	10:18	11:18	12:18	13:18	14:18	15:18	16:18	17:18	20:18
<i>Arrival Shift</i>	0:00	0:00	0:00	0:02	0:00	0:00	0:00	0:00	0:00	0:00	0:00	0:00	0:00	0:00	0:00

# Option 1 -- Schedule (Outbound)

Outbound	201	205	ADD 207	Shortened 209	ADD 211	213	ADD 215	219	221	223	ADD 291	225	227	229	231
Departure Shift	0:00	0:00	0:00	0:00	0:00	0:00	0:00	0:00	0:00	0:00	0:00	0:00	0:00	0:00	0:00
Current Departure	6:39	7:39	8:39	9:39	10:39	11:39	12:39	14:39	15:39	16:39	17:25	17:39	18:39	19:39	21:39
L.A. UNION STATION	6:39	7:39	8:39	9:39	10:39	11:39	12:39	14:39	15:39	16:39	17:25	17:39	18:39	19:39	21:39
Glendale	6:51	7:51	8:51	9:51	10:51	11:51	12:51	14:51	15:51	16:51		17:51	18:51	19:51	21:51
Burbank - Downtown	6:58	7:58	8:58	9:58	10:58	11:58	12:58	14:58	15:58	16:58	17:41	17:58	18:58	19:58	21:58
Burbank Airport - North (AVL)	7:03	8:03	9:03	10:03	11:03	12:03	13:03	15:03	16:03	17:03		18:03	19:03	20:03	22:03
Sun Valley	7:08	8:08	9:08	10:08	11:08	12:08	13:08	15:08	16:08	17:08		18:08	19:08	20:08	22:08
Sylmar / San Fernando	7:19	8:16	9:16	10:16	11:16	12:16	13:16	15:16	16:16	17:16	17:52	18:16	19:16	20:16	22:16
Newhall	7:35	8:32	9:32	10:32	11:32	12:32	13:32	15:32	16:32	17:32		18:32	19:32	20:32	22:32
Santa Clarita	7:44	8:40	9:40	10:40	11:40	12:40	13:40	15:40	16:40	17:40	18:12	18:40	19:40	20:40	22:40
Via Princessa	7:51	8:45	9:47	10:45	11:45	12:47	13:45	15:45	16:47	17:47		18:47	19:47	20:47	22:47
Vista Canyon	7:56		9:51			12:51			16:51	17:51		18:51	19:51	20:51	22:51
Vincent Grade / Acton	8:35		10:29			13:29			17:29	18:29		19:29	20:29	21:29	23:29
Palmdale	8:45		10:40			13:40			17:40	18:40	19:07	19:40	20:40	21:40	23:40
LANCASTER	8:57		10:52			13:52			17:52	18:52	19:14	19:52	20:52	21:52	23:52
Current Arrival	8:52	8:47	10:52	10:47	11:47	13:52	13:47	15:47	17:52	18:52	19:14	19:52	20:52	21:52	23:52
Arrival Shift	0:05	-0:02	0:00	-0:02	-0:02	0:00	-0:02	-0:02	0:00	0:00	0:00	0:00	0:00	0:00	0:00

# Option 2 -- Schedule (Inbound)

Inbound	200	202	204	ADD 292	206	208	210	212	ADD 216	218	ADD 220	222	224	ADD 226	230
Departure Shift	0:00	0:00	0:00		0:00	0:00	-0:02	0:00		0:00		0:00	16:13		0:00
Current Departure	3:41	4:41	5:11	New	6:11	7:11	9:15	9:11	New	12:11	New	14:11	16:15	New	18:11
LANCASTER	3:41	4:41	5:11	5:45	6:11	7:11		9:11		12:11		14:11		16:11	18:11
Palmdale	3:50	4:50	5:20	5:54	6:20	7:20		9:20		12:20		14:20		16:20	18:20
Vincent Grade / Acton	4:01	5:01	5:32		6:32	7:32		9:32		12:32		14:32		16:32	18:32
Vista Canyon	4:37	5:37	6:10		7:10	8:10		10:10		13:10		15:10		17:10	19:10
Via Princessa	4:41	5:41	6:13		7:13	8:13	9:13	10:13	12:13	13:13	14:13	15:13	16:13	17:13	19:13
Santa Clarita	4:47	5:47	6:20	6:45	7:20	8:20	9:20	10:20	12:20	13:20	14:20	15:20	16:20	17:20	19:20
Newhall	4:55	5:55	6:28		7:28	8:28	9:28	10:28	12:28	13:28	14:28	15:28	16:28	17:28	19:28
Sylmar / San Fernando	5:10	6:10	6:43	7:05	7:43	8:43	9:43	10:43	12:43	13:43	14:43	15:43	16:43	17:43	19:43
Sun Valley	5:18	6:18	6:50		7:50	8:50	9:50	10:50	12:50	13:50	14:50	15:50	16:50	17:50	19:50
Burbank Airport - North (AVL)	5:22	6:22	6:54		7:54	8:54	9:54	10:54	12:54	13:54	14:54	15:54	16:54	17:54	19:54
Burbank - Downtown	5:28	6:28	7:00	7:17	8:00	9:00	10:00	11:00	13:00	14:00	15:00	16:00	17:00	18:00	20:00
Glendale	5:35	6:35	7:06		8:06	9:06	10:06	11:06	13:06	14:06	15:06	16:06	17:06	18:06	20:06
L.A. UNION STATION	5:48	6:48	7:20	7:35	8:20	9:20	10:20	11:20	13:20	14:20	15:20	16:20	17:20	18:20	20:20
Current Arrival	5:48	6:48	7:18	New	8:18	9:18	10:18	11:18	New	14:18	New	16:18	17:18	New	20:18
Arrival Shift	0:00	0:00	0:02		0:02	0:02	0:02	0:02				0:02	0:02		0:02

# Option 2 -- Schedule (Outbound)

Outbound	201	205	209	ADD 211	213	ADD 215	ADD 217	219	221	223	ADD 291	225	227	229	231
Departure Shift	0:00	0:00	0:00	0:00	0:00	0:00	1:00	0:00	0:00	0:00	0:00	0:00	0:00	0:00	0:00
Current Departure	6:39	7:39	9:39	10:39	11:39	12:39	12:39	14:39	15:39	16:39	17:25	17:39	18:39	19:39	21:39
L.A. UNION STATION	6:39	7:39	9:39	10:39	11:39	12:39	13:39	14:39	15:39	16:39	17:25	17:39	18:39	19:39	21:39
Glendale	6:51	7:51	9:51	10:51	11:51	12:51	13:51	14:51	15:51	16:51		17:51	18:51	19:51	21:51
Burbank - Downtwn	6:58	7:58	9:58	10:58	11:58	12:58	13:58	14:58	15:58	16:58	17:41	17:58	18:58	19:58	21:58
Burbank Airport - North (AVL)	7:03	8:04	10:04	11:04	12:04	13:04	14:04	15:04	16:04	17:04		18:04	19:04	20:04	22:04
Sun Valley	7:08	8:08	10:08	11:08	12:08	13:08	14:08	15:08	16:08	17:08		18:08	19:08	20:08	22:08
Sylmar / San Fernando	7:16	8:16	10:16	11:16	12:16	13:16	14:16	15:16	16:16	17:16	17:53	18:16	19:16	20:16	22:16
Newhall	7:32	8:32	10:32	11:32	12:32	13:32	14:32	15:32	16:32	17:32		18:32	19:32	20:32	22:32
Santa Clarita	7:41	8:40	10:40	11:40	12:40	13:40	14:40	15:40	16:40	17:40	18:13	18:40	19:40	20:40	22:40
Via Princessa	7:48	8:45	10:46	11:45	12:46	13:45	14:46	15:45	16:46	17:46		18:46	19:46	20:46	22:46
Vista Canyon	7:53		10:52		12:52		14:52		16:52	17:52		18:52	19:52	20:52	22:52
Vincent Grade / Acton	8:32		11:31		13:31		15:31		17:31	18:31		19:31	20:31	21:31	23:31
Palmdale	8:43		11:41		13:41		15:41		17:41	18:41	19:10	19:41	20:41	21:41	23:41
LANCASTER	8:54		11:53		13:53		15:53		17:53	18:53	19:18	19:53	20:53	21:53	23:53
Current Arrival	8:52	8:47	10:47	New	13:52	New	New	15:47	17:52	18:52	New	19:52	20:52	21:52	23:52
Arrival Shift	0:02	-0:02	1:06		0:01			-0:02	0:01	0:01		0:01	0:01	0:01	0:01

# RECOMMENDED

## Option 3 -- Schedule (Inbound)

Inbound	Remove							ADD		ADD		ADD		ADD	ADD	
	200	202	204	206	208	210	212	216	218	220	222	224	226	230	234	238
Departure Shift	0:00	-0:30	0:00	0:00	0:00	-0:02	0:00		0:06			-0:02		0:00		
Current Departure	3:41	4:41	5:11	6:11	7:11	9:15	9:11	New	12:05	New	14:11	16:15	New	18:11	New	New
LANCASTER	3:41	4:11	5:11	6:11	7:11		9:11		12:11		14:11		16:11	18:11	20:11	22:11
Palmdale	3:50	4:20	5:20	6:20	7:20		9:20		12:20		14:20		16:20	18:20	20:20	22:20
Vincent Grade / Acton	4:01	4:32	5:32	6:32	7:32		9:32		12:32		14:32		16:32	18:32	20:32	22:32
Vista Canyon	4:37	5:10	6:10	7:10	8:10		10:10		13:10		15:10		17:10	19:10	21:10	23:10
Via Princessa	4:41	5:13	6:13	7:13	8:13	9:13	10:13	12:13	13:13	14:13	15:13	16:13	17:13	19:13	21:13	23:13
Santa Clarita	4:47	5:20	6:20	7:20	8:20	9:20	10:20	12:20	13:20	14:20	15:20	16:20	17:20	19:20	21:20	23:20
Newhall	4:55	5:28	6:28	7:28	8:28	9:28	10:28	12:28	13:28	14:28	15:28	16:28	17:28	19:28	21:28	23:28
Sylmar / San Fernando	5:10	5:43	6:43	7:43	8:43	9:43	10:43	12:43	13:43	14:43	15:43	16:43	17:43	19:43	21:43	23:43
Sun Valley	5:18	5:50	6:50	7:50	8:50	9:50	10:50	12:50	13:50	14:50	15:50	16:50	17:50	19:50	21:50	23:50
Burbank Airport - North (AVL)	5:22	5:54	6:54	7:54	8:54	9:54	10:54	12:54	13:54	14:54	15:54	16:54	17:54	19:54	21:54	23:54
Burbank - Downtown	5:28	6:00	7:00	8:00	9:00	10:00	11:00	13:00	14:00	15:00	16:00	17:00	18:00	20:00	22:00	0:00
Glendale	5:35	6:06	7:06	8:06	9:06	10:06	11:06	13:06	14:06	15:06	16:06	17:06	18:06	20:06	22:06	0:06
L.A. UNION STATION	5:48	6:20	7:20	8:20	9:20	10:20	11:20	13:20	14:20	15:20	16:20	17:20	18:20	20:20	22:20	0:20
Current Arrival	5:48	6:48	7:18	8:18	9:18	10:18	11:18	New	14:18	New	16:18	17:18	New	20:18	New	New
Arrival Shift	0:00	-0:28	0:02		0:02	0:02	0:02				0:02	0:02		0:02		



# RECOMMENDED

## Option 3 -- Schedule (Outbound)

Outbound	Renumber		ADD		ADD	ADD									ADD
	203	205	209	211	213	215	217	219	221	223	225	227	229	231	235
Departure Shift	0:00	0:00	0:00	0:00	0:00	0:00	1:00	0:00	0:00	0:00	0:00	0:00	0:00	0:00	
Current Departure	6:39	7:39	9:39	10:39	11:39	12:39	12:39	14:39	15:39	16:39	17:39	18:39	19:39	21:39	New
L.A. UNION STATION	6:39	7:39	9:39	10:39	11:39	12:39	13:39	14:39	15:39	16:39	17:39	18:39	19:39	21:39	23:39
Glendale	6:51	7:51	9:51	10:51	11:51	12:51	13:51	14:51	15:51	16:51	17:51	18:51	19:51	21:51	23:51
Burbank - Downtwn	6:58	7:58	9:58	10:58	11:58	12:58	13:58	14:58	15:58	16:58	17:58	18:58	19:58	21:58	23:58
Burbank Airport - North (AVL)	7:04	8:04	10:04	11:04	12:04	13:04	14:04	15:04	16:04	17:04	18:04	19:04	20:04	22:04	0:04
Sun Valley	7:08	8:08	10:08	11:08	12:08	13:08	14:08	15:08	16:08	17:08	18:08	19:08	20:08	22:08	0:08
Sylmar / San Fernando	7:16	8:16	10:16	11:16	12:16	13:16	14:16	15:16	16:16	17:16	18:16	19:16	20:16	22:16	0:16
Newhall	7:32	8:32	10:32	11:32	12:32	13:32	14:32	15:32	16:32	17:32	18:32	19:32	20:32	22:32	0:32
Santa Clarita	7:40	8:40	10:40	11:40	12:40	13:40	14:40	15:40	16:40	17:40	18:40	19:40	20:40	22:40	0:40
Via Princessa	7:46	8:45	10:46	11:45	12:46	13:45	14:46	15:45	16:46	17:46	18:46	19:46	20:46	22:46	0:46
Vista Canyon	7:52		10:52		12:52		14:52		16:52	17:52	18:52	19:52	20:52	22:52	0:52
Vincent Grade / Acton	8:31		11:31		13:31		15:31		17:31	18:31	19:31	20:31	21:31	23:31	1:31
Palmdale	8:41		11:41		13:41		15:41		17:41	18:41	19:41	20:41	21:41	23:41	1:41
LANCASTER	8:53		11:53		13:53		15:53		17:53	18:53	19:53	20:53	21:53	23:53	1:53
Current Arrival	8:52	8:47	11:52	New	13:52	New	New	15:47	17:52	18:52	New	20:52	21:52	23:52	New
Arrival Shift	0:01	-0:02	0:01		0:01			-0:02	0:01	0:01		0:01	0:01	0:01	

# Weekend Schedule (Inbound)

Inbound												
	260	264	266	268	270	272	274	276	278	280	282	288
<i>Departure Shift</i>	-0:11	-0:53		-1:04		-0:29		-0:12			-0:12	
Current Departure	6:22	9:04		11:15		12:40		14:23			18:23	
LANCASTER	6:11	8:11		10:11		12:11		14:11			18:11	
Palmdale	6:20	8:20		10:20		12:20		14:20			18:20	
Vincent Grade / Acton	6:32	8:32		10:32		12:32		14:32			18:32	
Vista Canyon	7:09	9:09		11:09		13:09		15:09			19:09	
Via Princessa	7:12	9:12	10:12	11:12	12:12	13:12	14:12	15:12	16:12	18:12	19:12	22:12
Santa Clarita	7:19	9:19	10:19	11:19	12:19	13:19	14:19	15:19	16:19	18:19	19:19	22:19
Newhall	7:27	9:27	10:27	11:27	12:27	13:27	14:27	15:27	16:27	18:27	19:27	22:27
Sylmar / San Fernando	7:42	9:42	10:42	11:42	12:42	13:42	14:42	15:42	16:42	18:42	19:42	22:42
Sun Valley	7:49	9:49	10:49	11:49	12:49	13:49	14:49	15:49	16:49	18:49	19:49	22:49
Burbank Airport - North (AVL)	7:53	9:53	10:53	11:53	12:53	13:53	14:53	15:53	16:53	18:53	19:53	22:53
Burbank - Downtown	7:59	9:59	10:59	11:59	12:59	13:59	14:59	15:59	16:59	18:59	19:59	22:59
Glendale	8:05	10:05	11:05	12:05	13:05	14:05	15:05	16:05	17:05	19:05	20:05	23:05
L.A. UNION STATION	8:20	10:20	11:20	12:20	13:20	14:20	15:20	16:20	17:20	19:20	20:20	23:20
Current Arrival	8:25	11:10		11:10		13:20		16:28			20:29	
<i>Arrival Shift</i>	-0:05	-0:50		1:10		1:00		-0:08			-0:09	

# Weekend Schedule (Outbound)

Outbound												
	261	263	267	269	271	273	275	277	279	281	285	287
Departure Shift	-1:01	-0:01		0:02		-0:19		0:02		0:14	-1:14	
Current Departure	8:40	8:40		11:37		13:58		15:37		17:25	20:53	
L.A. UNION STATION	7:39	8:39	10:39	11:39	12:39	13:39	14:39	15:39	16:39	17:39	19:39	20:39
Glendale	7:51	8:51	10:51	11:51	12:51	13:51	14:51	15:51	16:51	17:51	19:51	20:51
Burbank - Downtown	7:58	8:58	10:58	11:58	12:58	13:58	14:58	15:58	16:58	17:58	19:58	20:58
Burbank Airport - North (AVL)	8:04	9:04	11:04	12:04	13:04	14:04	15:04	16:04	17:04	18:04	20:04	21:04
Sun Valley	8:08	9:08	11:08	12:08	13:08	14:08	15:08	16:08	17:08	18:08	20:08	21:08
Sylmar / San Fernando	8:16	9:16	11:16	12:16	13:16	14:16	15:16	16:16	17:16	18:16	20:16	21:16
Newhall	8:32	9:32	11:32	12:32	13:32	14:32	15:32	16:32	17:32	18:32	20:32	21:32
Santa Clarita	8:40	9:40	11:40	12:40	13:40	14:40	15:40	16:40	17:40	18:40	20:40	21:40
Via Princessa	8:46	9:45	11:45	12:46	13:45	14:46	15:45	16:46	17:45	18:46	20:46	21:45
Vista Canyon	8:51			12:51		14:51		16:51		18:51	20:51	
Vincent Grade / Acton	9:30			13:30		15:30		17:30		19:30	21:30	
Palmdale	9:40			13:40		15:40		17:40		19:40	21:40	
LANCASTER	9:52			13:52		15:52		17:52		19:52	21:52	
Current Arrival	10:51			13:48		16:12		17:59		19:30	23:00	
Arrival Shift	-0:59			0:04		-0:20		-0:07		0:22	-1:08	

# AV Line Service Options Estimates (including Security)

## AV Line Service Assumptions:

- Service to begin on October 23, 2023
- Expenses and Revenues Prorated for the Period of Oct 23, 2023 to June 30, 2024
- Revenue is based on FY24 Ridership/Revenue Forecast(KPMG/Sperry Capital)
- Estimates include Armed Security Guards

	Option 1 + Weekend					TOTAL
	METRO	OCTA	RCTC	SBCTA	VCTC	
Total Revenue	1,336,824	0	0	0	0	1,336,824
Total Expense	2,654,285	(165,711)	(78,056)	(119,709)	(40,910)	2,249,899
<b>Change in Member Support increase / (decrease)</b>	<b>1,317,461</b>	<b>(165,711)</b>	<b>(78,056)</b>	<b>(119,709)</b>	<b>(40,910)</b>	<b>913,075</b>

	Option 2 + Weekend					TOTAL
	METRO	OCTA	RCTC	SBCTA	VCTC	
Total Revenue	1,233,684	0	0	0	0	1,233,684
Total Expense	3,073,020	(164,497)	(75,677)	(117,744)	(40,761)	2,674,341
<b>Change in Member Support increase / (decrease)</b>	<b>1,839,336</b>	<b>(164,497)</b>	<b>(75,677)</b>	<b>(117,744)</b>	<b>(40,761)</b>	<b>1,440,657</b>

	Option 3 + Weekend					TOTAL
	METRO	OCTA	RCTC	SBCTA	VCTC	
Total Revenue	1,268,604	0	0	0	0	1,268,604
Total Expense	2,951,446	(193,459)	(90,608)	(137,577)	(47,209)	2,482,593
<b>Change in Member Support increase / (decrease)</b>	<b>1,682,842</b>	<b>(193,459)</b>	<b>(90,608)</b>	<b>(137,577)</b>	<b>(47,209)</b>	<b>1,213,989</b>



## Board Report

File #: 2023-0393, File Type: Program

Agenda Number: 14.

### PLANNING AND PROGRAMMING COMMITTEE SEPTEMBER 20, 2023

**SUBJECT: COUNTYWIDE CALL FOR PROJECTS**

**ACTION: APPROVE RECOMMENDATIONS**

#### **RECOMMENDATION**

CONSIDER:

- A. RECERTIFYING \$78.96 million in existing Fiscal Year (FY) 2023-24 commitments from previously approved Countywide Call for Projects (Call) and AUTHORIZING the expenditure of funds to meet these commitments as shown in Attachment A;
- B. DEOBLIGATING \$2.36 million of previously approved Call funding, as shown in Attachment B, and hold in RESERVE;
- C. REALLOCATING:
  - 1. \$1.31 million of Call funds remaining in the City of Los Angeles Century City Urban Design and Pedestrian Connection Plan (Call #F1612), to the City of Los Angeles Exposition West Bikeway - Northvale Project (Call #F3514); and
  - 2. \$13.39 million of Call funds in the City of Los Angeles: 1) Alameda Street Downtown LA - Goods Movement Phase 1 (Call #F5207), and 2) Alameda Street Improvements North Olympic Blvd to I-10 Freeway (Call #F9207) projects, to the City of Los Angeles 1) Boyle Heights Chavez Avenue Streetscape Pedestrian Improvements (Call #F3643), and 2) Soto Street Complete Streets (Call #F7109) projects;
- D. APPROVING changes to the scope of work for:
  - 1. City of Lancaster - Medical Main Street (Call #F9131); and
  - 2. County of Los Angeles - South Whittier Community Bikeway Access Improvements (Call #F9511);
- E. AUTHORIZING the Chief Executive Officer (CEO) or their designee to:
  - 1. Negotiate and execute all necessary agreements and/or amendments for previously awarded projects; and
  - 2. Amend the FY 2023-24 budget, as necessary, to include the 2023 Countywide Call Recertification and Extension funding in the Subsidies budget;

F. RECEIVING AND FILING:

1. Time extensions for 87 projects as shown in Attachment C; and
2. Reprogram for nine projects as shown in Attachment D.

**ISSUE**

Each year the Board must recertify funding for projects that were approved through prior Calls in order to release the funds to the project sponsors. The Board must also approve the deobligation of lapsing project funds after providing project sponsors with the opportunity to appeal staff's preliminary deobligation recommendations to Metro's Technical Advisory Committee (TAC). The Board must also approve changes to the project scope of work. Staff has evaluated the proposed changes and found that they are consistent with the intent of the original scope of work. The Board must also receive and file the extensions and reprogrammed funds granted through previously delegated Board authority. The background and discussion of each of these recommendations can be found in Attachment E.

**BACKGROUND**

The Call, an existing competitive grant program dating back to the early 1990s, programs transportation funds to local jurisdictions for regionally significant projects that are often beyond the fiscal capabilities of local sponsors. The latest Call cycle, including all funding commitments and project scopes of work, was approved by the Metro Board in September 2015.

The Call process implements Metro's multi-modal programming priorities and the adopted Long Range Transportation Plan (LRTP). The 2023 Call Recertification and Deobligation process reinforces the annual authorization and timely use of funds policies. Specifically, Board policy calls for the consideration of the deobligation of funding from project sponsors who have not met lapsing deadlines or have formally notified Metro that they no longer wish to proceed with the project (cancellation). All projects are subject to a close-out audit after completion.

**DISCUSSION**

**Technical Advisory Committee (TAC) Appeals**

On May 3, 2023, TAC heard sponsor appeals on the deobligation of funding from two projects (Attachment F). Initially, five projects were invited to the TAC appeals, but three of those projects requested project cancellations and decided not to appeal at the TAC. TAC recommended a one-year extension for the City of Downey project, and received and filed the status update for the City of Los Angeles project. Staff concurs with these recommendations.

Additionally, all proposed deobligated funds included in Attachment B are due to project cancellation requested by the project sponsors and would not be involuntarily deobligated by this proposed Board action, as further described in the attachment.

**Active Call for Projects as of June 30, 2023**

Annually since August 2020, Metro staff reported the completed assessments of the past and current recipient performance in project delivery (2007 to 2015 Call cycles). We updated the table as of June 30, 2023 (see below). There are approximately 149 active and/or upcoming Call projects totaling \$346.7 million yet to be fully implemented. Since July 2022, project sponsors have completed 29 projects with total expenditures of \$38.5 million. Staff will continue working with the project sponsors to expedite those projects' delivery.

Cycle	# of Awarded Projects	Original Programming Years	Total Prog Amount (\$000')	# of Active/Upcoming Projects	Remaining Balance (\$000')
2007 Call	169	FY08 - FY13	\$ 454,520	22	\$ 44,493
2009 Call	133	FY12 - FY15	337,551	24	67,272
2011 Call	72	FY15 - FY17	123,516	14	27,922
2013 Call	96	FY15 - FY19	199,390	35	87,049
2015 Call	88	FY17 - FY21	201,923	54	119,957
	<b>558</b>		<b>\$1,316,900</b>	<b>149</b>	<b>\$346,693</b>

**DETERMINATION OF SAFETY IMPACT**

The 2023 Call Recertification and Deobligation will not have any adverse safety impacts on Metro’s employees or patrons.

**FINANCIAL IMPACT**

The amount of \$45.9 million is included in the FY 2023-24 Adopted Budget in Cost Centers 0441 (Subsidies to Others) and 0442 (Highway Subsidies) for the Countywide Call. Since these are multi-year projects, the cost center managers and Chief Planning Officer will be responsible for budgeting in future years.

Impact to Budget

The sources of funds for these activities are Proposition C 25%, State Repayment of Capital Project Loan Funds, Congestion Mitigation and Air Quality (CMAQ), and Regional Surface Transportation Program (RSTP). Proposition C 25% funds are not eligible for Metro bus and rail operating and capital expenditures.

CMAQ funds can be used for both transit operations and capital. Los Angeles County must strive to fully obligate its share of CMAQ funding by May 1 of each year, otherwise, it risks its redirection to other California Regional Transportation Planning Agencies by Caltrans. Staff recommends the use of long lead-time CMAQ funds as planned to ensure the utilization of Metro’s federal funds.

RSTP funds in this action could be used for Metro’s transit capital needs. Also, while these funds cannot be used directly for Metro’s bus or rail operating needs, these funds could free up other such eligible funds by exchanging the funds used for Metro’s paratransit provider, Access Services Incorporated. Since these RSTP funds originate in the Highway portion (Title 23) of MAP-21, they are

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among the most flexible funds available to Metro and are very useful in meeting Call projects' requirements.

### **EQUITY PLATFORM**

The projects (and scopes) included in this action predate the Equity Platform (adopted in 2018). As such, Equity Platform criteria were not included in the evaluation of these projects. However, the third pillar of the Equity Platform, "Focus and Deliver" applies to these community-driven projects. Given that no equity analysis occurred during the initial grant process, staff are now working to evaluate the equity impacts on the existing grants. The Equity Focus Communities ("EFCs", adopted as part of the 2020 Long Range Transportation Plan, updated in 2022) are being applied to all current Call grants to support the first pillar of the Equity Platform "Define and Measure." Specifically, the EFCs are a mapping tool that has been added to the Call administration database since July 2021. The analysis of the EFC layer to the Call grants (within a 1-mile radius) provides information about the makeup of the communities being served by these projects. For example, the three City of Los Angeles projects that are recommended to receive the reallocated Call funds are all intended to benefit vulnerable road users such as people walking/biking, as part of the Call Bicycle and Pedestrian Improvements modal category. See Attachment G for details regarding 87% of the remaining 149 projects in EFCs and other demographic details.

### **IMPLEMENTATION OF STRATEGIC PLAN GOALS**

The recommendation supports the following goals of the Metro Vision 2028 Strategic Plan:

Goal 1: Provide high-quality mobility options that enable people to spend less time traveling by alleviating the current operational deficiencies and improving mobility along the projects.

Goal 4: Transform LA County through regional collaboration with the subregions and local jurisdictions in the implementation of the projects.

### **ALTERNATIVES CONSIDERED**

The Board could cancel all or some of the FY 2023-24 funding commitments rather than authorize their continued expenditures. This would be a change to the previous Board-approved Countywide Calls programming commitments and would disrupt ongoing projects that received multi-year funding.

With respect to deobligation, the Board could choose to deobligate funds from one or more project sponsors whose projects are beyond the lapse dates and are not moving forward consistent with the adopted Revised Lapsing Policy rather than extending the deadlines. A much stricter interpretation of the Revised Lapsing Policy might encourage project sponsors in general to deliver them in a timelier fashion. However, this would be disruptive to the process of delivering the specific projects currently underway, many of which are now very close to being delivered. On balance, the appeals process between the project sponsors and the Metro TAC is a significant reminder to project sponsors that these funded projects should not be further delayed thus ensuring policy objectives are achieved in expending the funds as intended by the Call program.



## **NEXT STEPS**


With Board approval of the 2023 Countywide Call Recertification, Deobligation, and Extension process, project sponsors will be notified. Amendments to existing Funding Agreements and Letters of Agreement will be completed for those sponsors receiving time extensions. Project sponsors whose funds are being deobligated and those receiving date-certain time extension deadlines for executing their agreements will be formally notified of the Board's action.

## **ATTACHMENTS**

Attachment A - FY 2023-24 Countywide Call Recertification  
Attachment B - FY 2022-23 Countywide Call Deobligation  
Attachment C - FY 2022-23 Countywide Call Extensions  
Attachment D - FY 2022-23 Countywide Call Reprogramming  
Attachment E - Background/Discussion of Each Recommendation  
Attachment F - Result of TAC Appeals Process  
Attachment G - Call and Equity-Focused Communities Map

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Stephanie N. Wiggins  
Chief Executive Officer



**LOS ANGELES COUNTY METROPOLITAN TRANSPORTATION AUTHORITY**  
**2023-24 CALL FOR PROJECTS RECERTIFICATION**  
**(\$000')**

PROJ #	AGENCY	PROJECT TITLE	\$ PROGRAMMED FY 2023-24
1 F1609	LA CITY	MAIN STREET BUS STOP AND PEDESTRIAN IMPROVEMENTS	\$ 528
2 F3514	LA CITY	EXPOSITION WEST BIKEWAY - NORTHVALE	1,308
3 F3630	LA CITY	MAIN STREET PEDESTRIAN ENHANCEMENTS	662
4 F3643	LA CITY	BOYLE HEIGHTS CHAVEZ AVENUE STRETSCAPE PEDESTRIAN IMPROVEMENTS	8,000
5 F7109	LA CITY	SOTO STREET COMPLETE STREET	5,392
6 F9805	LA CITY	VENICE - LA EXPRESS PARK	845
7 F9806	LA CITY	EXPOSITION PARK - LA EXPRESS PARK	916
8 F3136	LA COUNTY	THE OLD ROAD FROM MAGIC MOUNTAIN PARKWAY TO TURNBERRY LANE	15,001
9 F9302	LA COUNTY	SGV FORUM 2015 TRAFFIC SIGNAL CORRIDORS PROJECT	5,307
10 F9303	LA COUNTY	SOUTH BAY FORUM 2015 TRAFFIC SIGNAL CORRIDORS PROJECT	1,959
11 F9304	LA COUNTY	GATEWAY CITIES FORUM 2015 TRAFFIC SIGNAL CORRIDORS PROJECT	2,837
12 F9305	LA COUNTY	NORTH COUNTY TRAFFIC SIGNAL COMMUNICATIONS PROJECT	1,156
13 F9800	LA COUNTY	BIKE AIDE STATIONS	2,533
14 F9122	PICO RIVERA	TELEGRAPH ROAD BRIDGE REPLACEMENT	2,299
15 F1168	SANTA CLARITA	VIA PRINCESSA EXTENSION-GOLDEN VALLEY ROAD TO RAINBOW GLEN	11,577
16 F7105	SANTA CLARITA	13TH STREET/DOCKWEILER DRIVE EXTENSION	5,899
17 F9118	SANTA CLARITA	DOCKWEILER DRIVE GAP CLOSURE	5,475
18 F9513	SANTA CLARITA	RAILROAD AVENUE CLASS I BIKE PATH	2,265
19 8002	SGV COG	ALAMEDA CORRIDOR EAST	5,000
<b>TOTAL</b>			<b>\$ 78,959</b>



**LOS ANGELES COUNTY METROPOLITAN TRANSPORTATION AUTHORITY  
FY 2022-23 CALL FOR PROJECTS DEOBLIGATION RECOMMENDATIONS  
(\$000')**

PROJ #	AGENCY	PROJECT TITLE	FUNDING SOURCE	MODE	DOLLARS PROGRAMMED AND FISCAL YEARS					\$ EXPD/OBLG	TOTAL DEOB	REASON	
					Prior	FY 18	FY 19	FY 20	FY 21				
1	F7512	LA COUNTY	WEST CARSON COMMUNITY BIKEWAYS	LTF	BIKE			\$ 645			\$ -	\$ 645	CANCELLED
2	F7700	LA COUNTY	WILLOWBROOK INTERACTIVE INFORMATION KIOSKS	LTF	TDM		55	88			-	143	CANCELLED
3	F1528	LONG BEACH	SAN GABRIEL RIVER BIKE PATH GAP CLOSURE AT WILLOW STREET	CMAQ	BIKE	756					-	756	CANCELLED
3	F9807	SANTA MONICA	SANTA MONICA EXPO AND LOCALIZED TRAVEL PLANNING ASSISTANCE	LTF	TDM	127	123	126			-	376	CANCELLED
4	6347	SOUTH GATE	I-710/FIRESTONE BLVD. INTERCHANGE RECONSTRUCTION	PC25	RSTI	106	954	80	560	83	1,344	439	CITY REQUEST *
					<b>TOTAL</b>	<b>\$ 989</b>	<b>\$ 1,132</b>	<b>\$ 939</b>	<b>\$ 560</b>	<b>\$ 83</b>	<b>\$ 1,344</b>	<b>\$ 2,359</b>	

<b>TOTAL DEOBLIGATION RECOMMENDATION BY MODE</b>	
REGIONAL SURFACE TRANSPORTATION IMPROVEMENTS (RSTI)	\$ 439
BICYCLE IMPROVEMENTS (BIKE)	1,401
TRANSPORTATION DEMAND MANAGEMENT	519
<b>TOTAL</b>	<b>\$ 2,359</b>

\* The City requested to decrease Call for Projects grant funds and use Measure R funds to complete the Project.

**Reason for Extensions:**

1. Project delay due to an unforeseen and extraordinary circumstance beyond the control of the project sponsor (federal or state delay, legal challenge, Act of God, etc.);  
 2. Project delay due to Metro action that results in a change in project scope, schedule, or sponsorship that is mutually agreed; and  
 3. Project is contractually obligated, however, a time extension is needed to complete construction that is already underway (capital projects only).



**LOS ANGELES COUNTY METROPOLITAN TRANSPORTATION AUTHORITY**  
**2022-23 CALL FOR PROJECTS EXTENSION LIST**  
**AS OF JUNE 30, 2023**  
**(\$000')**

PROJ #	AGENCY	PROJECT TITLE	FUNDING SOURCE	LAPSING FUND YR(S)	TOTAL PROG \$	TOTAL \$ EXP/ OBLIG	AMT SUBJECT TO LAPSE	RECOM EXT MONTHS	REASON FOR EXT 1, 2 OR 3	NEW REVISED LAPSE DATE	
1	F7600	ALHAMBRA	ALHAMBRA PED IMPROVEMENT/WALKING VIABILITY PROJECT ON VALLEY	LTF	2018	\$665	\$652	\$13	12	3	2/29/2024
2	F7120	BELL GARDENS	EASTERN AVENUE AND FLORENCE AVENUE RSTI PROJECT (MR306.30 FOR MATCH)	PC25	2017 2018	2,200	584	1,616	12	3	2/29/2024
3	F9111	BELL GARDENS	FLORENCE AV. IMPROVEMENTS AT IRA AVENUE & JABONERIA RD.	PC25	2020 2021	992	51	941	20	1	2/28/2025
4	F1502	BURBANK	SAN FERNANDO BIKEWAY	CMAQ	2019	6,595	954	5,641	12	1	6/30/2024
5	F7506	BURBANK	CHANDLER BIKEWAY EXTENSION	CMAQ	2017 2018	2,639	456	2,183	12	1	6/30/2024
6	F9436	BURBANK	BURBANKBUS TRANSIT VEHICLE REPLACEMENT	CMAQ	2020 2021	1,221	-	1,221	20	3	2/28/2025
7	F9301	CALTRANS	I-210 CONNECTED CORRIDORS ARTERIAL SYSTEMS IMPROVEMENTS	PC25	2018 2019	6,456	4,787	1,669	12	3	2/29/2024
8	F9530	COMPTON	CENTRAL AVENUE REGIONAL COMMUTER BIKEWAY PROJECT	LTF PC25	2018 2019	1,438	-	1,438	12	3	2/29/2024
9	F3317	CULVER CITY	BUS SIGNAL PRIORITY IN CULVER CITY	PC25	2018	2,200	1,698	502	12	3	2/29/2024
10	F7303	CULVER CITY	NETWORK-WIDE SIGNAL SYNCH WITH VID AND ARTERIAL PERFORMANCE ME	PC25	2017	989	864	125	12	3	2/29/2024
11	F7507	CULVER CITY	BALLONA CREEK BIKE PATH CONNECTIVITY PROJECT AT HIGUERA BRIDGE	LTF	2016 2018	616	469	147	12	3	2/29/2024
12	F7118	DOWNEY	FLORENCE AVE. BRIDGE OVER SAN GABRIEL RIVER	CMAQ	2016 2017	1,917	-	1,917	12	1	6/30/2024
13	F7311	DOWNEY	DOWNEY CITYWIDE TRANSIT PRIORITY SYSTEM PROGRAM	PC25	2018 2019	1,292	157	1,135	12	3	2/29/2024
14	F9525	DOWNEY	DOWNEY BMP PHASE 1 DOWNTOWN/TRANSIT CLASS II IMPLEMENTATION	PC25	2019 2021	2,278	267	2,011	20	1	2/28/2025
15	F7520	EL MONTE	EL MONTE REGIONAL BICYCLE COMMUTER ACCESS IMPROVEMENTS	LTF	2017 2018	987	660	327	12	3	2/29/2024
16	F9534	GLENDALE	GLENDALE-LA RIVERWALK BRIDGE/ACTIVE TRANSPORTATION FACILITY	PC25	2021	3,070	257	2,813	20	1	2/28/2025
17	F9102	HAWTHORNE	HAWTHORNE BLVD MOBILITY PROJECT - PHASE 2	PC25	2020 2021	2,427	-	2,427	20	3	2/28/2025
18	F5100	INDUSTRY	SR57/60 CONFLUENCE, GRAND AVENUE AT GOLDEN SPRINGS DRIVE	PC25	2017	6,728	4,241	2,487	12	3	2/29/2024

**Reason for Extensions:**

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19	F7319	INGLEWOOD	ITS: PHASE V OF INGLEWOOD'S ITS UPGRADES	PC25	2018 2019	1,534	591	943	12	3	2/29/2024
20	F9202	INGLEWOOD	MANCHESTER AND LA CIENEGA GEOMETRIC IMPROVEMENTS	PC25	2018 2019 2021	1,185	-	1,185	20	1	2/28/2025
21	F9307	INGLEWOOD	INGLEWOOD ITS PHASE VI	PC25	2018 2019	1,206	213	993	12	3	2/29/2024
22	8046	LA CITY	BURBANK BLVD. WIDENING - LANKERSHIM BLVD. TO CLEON AVENUE (INCLUDE CALL #8048)	PC25	2019 2021	6,078	3,161	2,917	20	1	2/28/2025
23	F1129	LA CITY	WIDENING SAN FERNANDO RD AT BALBOA RD	PC25	2021	1,000	-	1,000	20	3	2/28/2025
24	F1205	LA CITY	OLYMPIC BL AND MATEO STREET GOODS MOVEMENT IMP-PHASE II	PC25	2021	4,624	3,630	994	20	3	2/28/2025
25	F3514	LA CITY	EXPOSITION-WEST BIKEWAY-NORTHVALE PROJECT	CMAQ	2014 2015	4,416	1,732	2,684	12	1	6/30/2024
26	F3516	LA CITY	LOS ANGELES RIVER BIKE PATH PHASE IV - CONSTRUCTION	CMAQ	2019	1,827	-	1,827	12	1	6/30/2024
27	F3643	LA CITY	BOYLE HEIGHTS CHAVEZ AVE STREETScape/PEDESTRIAN IMPROV.	CMAQ	2020	2,788	140	2,648	12	2	6/30/2024
28	F3646	LA CITY	ARTS DISTRICT/LITTLE TOKYO GOLD LINE STATION LINKAGES	MR	2016	869	729	140	12	3	2/29/2024
29	F3647	LA CITY	MENLO AVE/MLK VERMONT EXPO STATION PEDESTRIAN IMPROVEMENTS	CMAQ	2021	1,687	337	1,350	12	1	6/30/2024
30	F3656	LA CITY	CENTRAL AVENUE HISTORIC CORRIDOR STREETScape	CMAQ	2021	1,697	424	1,273	12	1	6/30/2024
31	F3726	LA CITY	FIRST AND LAST MILE TRANSIT CONNECTIVITY OPTIONS	CMAQ	2013 2014	1,313	105	2,475	12	2	6/30/2024
32	F5519	LA CITY	BICYCLE FRIENDLY STREETS (BFS)	CMAQ	2015 2016	586	110	476	12	1	6/30/2024
33	F5525/ F5709	LA CITY	BICYCLE CORRAL PROGRAM LAUNCH	CMAQ	2016 2017	972	-	972	12	1	6/30/2024
34	F5624	LA CITY	WASHINGTON BLVD PEDESTRIAN TRANSIT ACCESS(HOOPER/ALAMEDA) II	CMAQ	2019	1,492	178	1,314	12	1	6/30/2024
35	F7123	LA CITY	MAGNOLIA BL WIDENING (NORTH SIDE) -CAHUENGA BL TO VINELAND	RSTP	2017 2018	5,461	975	4,486	12	1	6/30/2024
36	F7207	LA CITY	IMPROVE ANAHEIM ST. FROM FARRAGUT AVE. TO DOMINGUEZ CHANNEL (MR312.51 FOR MATCH)	RSTP	2017 2018	3,141	-	3,141	12	1	6/30/2024

**Reason for Extensions:**

1. Project delay due to an unforeseen and extraordinary circumstance beyond the control of the project sponsor (federal or state delay, legal challenge, Act of God, etc.);
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**LOS ANGELES COUNTY METROPOLITAN TRANSPORTATION AUTHORITY**  
**2022-23 CALL FOR PROJECTS EXTENSION LIST**  
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37	F7622	LA CITY	LANI - WEST BOULEVARD COMMUNITY LINKAGES PROJECT	CMAQ	2021	1,379	531	848	12	1	6/30/2024
38	F7636	LA CITY	BROADWAY STREETScape IMPLEMENTATION (8TH-9TH)	CMAQ	2019	2,384	426	1,958	12	1	6/30/2024
39	F7707	LA CITY	LAST MILE FOLDING BIKE INCENTIVE PROGRAM	LTF	2017 2018 2019	695	-	695	12	1	2/29/2024
40	F7814	LA CITY	LADOT STREETS FOR PEOPLE: PARKLETS AND PLAZAS	LTF	2021	437	-	437	20	1	2/28/2025
41	F9123	LA CITY	COMPLETE STREETS PROJECT FOR COLORADO BLVD. IN EAGLE ROCK	PC25	2019	1,754	748	1,006	12	2	2/29/2024
42	F9206	LA CITY	INTERSECTION IMPROVEMENTS ON HYPERION AVENUE AND GLENDALE BOULEVARD	PC25	2018 2019 2021	6,986	808	6,178	20	1	2/28/2025
43	F9309	LA CITY	TRAFFIC SIGNAL RAIL CROSSING IMPROVEMENT PROJECT	PC25	2018 2019 2020	4,179	144	4,035	20	1	2/28/2025
44	F9439	LA CITY	WESTERN AVENUE BUS STOP IMPROVEMENTS - FWY 10 TO WILSHIRE BLVD	LTF	2021	547	3	544	20	1	2/28/2025
45	F9440	LA CITY	VERMONT AVENUE BUS STOP IMPROVEMENTS - MLK TO WILSHIRE BLVD	LTF	2021	547	13	534	20	1	2/28/2025
46	F9619	LA CITY	LANI - SANTA MONICA BOULEVARD IMPROVEMENT PROJECT	PC25	2021	1,146	302	844	20	3	2/28/2025
47	F9621	LA CITY	MELROSE AVENUE -FAIRFAX AVENUE TO HIGHLAND AVENUE PEDESTRIAN IMPROVEMENTS	PC25	2021	2,961	1,360	1,601	20	3	2/28/2025
48	F9623	LA CITY	AVENUE TO COMMONWEALTH AVENUE PEDESTRIAN IMPROVEMENTS	PC25	2020 2021	2,772	297	2,475	20	3	2/28/2025
49	F9803	LA CITY	BUILDING CONNECTIVITY WITH BICYCLE FRIENDLY BUSINESS DISTRICTS	LTF	2017 2018 2019	823	-	823	12	1	2/29/2024
50	F1310	LA COUNTY	INFORMATION EXCHANGE NETWORK PHASE II	PC25	2019 2020 2021	2,709	1,658	1,051	20	3	2/28/2025
51	F1312	LA COUNTY	GATEWAY CITIES FORUM TRAFFIC SIGNAL CORRIDORS, PHASE V	PC25	2021	13,399	11,164	2,235	20	3	2/28/2025
52	F1321	LA COUNTY	SAN GABRIEL VALLEY FORUM TRAFFIC SIGNAL CORRIDORS PROJECT	PC25	2021	14,929	13,118	1,811	20	3	2/28/2025
53	F3308	LA COUNTY	SAN GABRIEL VALLEY FORUM TRAFFIC SIGNAL CORRIDORS PROJECT	PC25	2020 2021	19,849	6,155	13,694	20	1	2/28/2025
54	F3309	LA COUNTY	GATEWAY CITIES FORUM TRAFFIC SIGNAL CORRIDORS PROJ, PHASE VI	PC25	2019 2020 2021	13,419	4,422	8,997	20	1	2/28/2025

**Reason for Extensions:**

1. Project delay due to an unforeseen and extraordinary circumstance beyond the control of the project sponsor (federal or state delay, legal challenge, Act of God, etc.);
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**LOS ANGELES COUNTY METROPOLITAN TRANSPORTATION AUTHORITY**  
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55	F3310	LA COUNTY	SOUTH BAY FORUM TRAFFIC SIGNAL CORRIDORS PROJECT	PC25	2019 2020 2021	10,383	3,414	6,969	20	1	2/28/2025
56	F5111	LA COUNTY	COLIMA ROAD - CITY OF WHITTIER LIMITS TO FULLERTON ROAD	PC25	2020 2021	4,423	-	4,423	20	1	2/28/2025
57	F7305	LA COUNTY	GATEWAY CITIES FORUM TRAFFIC SIGNAL CORRIDORS PROJECT, PHASE	PC25	2020 2021	3,238	185	3,053	20	1	2/28/2025
58	F7306	LA COUNTY	FOOTHILL BOULEVARD TRAFFIC SIGNAL CORRIDOR PROJECT	PC25	2019 2020 2021	2,928	221	2,707	20	1	2/28/2025
59	F7307	LA COUNTY	SAN GABRIEL VALLEY FORUM TRAFFIC SIGNAL CORRIDOR PROJECT	PC25	2019 2020 2021	3,624	285	3,339	20	1	2/28/2025
60	F7308	LA COUNTY	EAST LOS ANGELES TRAFFIC SIGNAL CORRIDOR PROJECT.	PC25	2019 2020 2021	2,744	211	2,533	20	1	2/28/2025
61	F7310	LA COUNTY	ITS: IMPROVEMENTS ON SOUTH BAY ARTERIALS (MR312.52 FOR MATCH)	PC25	2020 2021	3,062	199	2,863	20	1	2/28/2025
62	F7412	LA COUNTY	LOS ANGELES COUNTY/USC MEDICAL CENTER TRANSIT VEHICLE	CMAQ	2016	282	233	49	12	2	6/30/2024
63	F7806	LA COUNTY	VERMONT AVENUE STREETSCAPE IMPROVEMENT PROJECT	LTF	2017 2018 2019	765	-	765	12	3	2/29/2024
64	F9116	LA COUNTY	MICHILLINDA AVENUE INTERSECTION IMPROVEMENT PROJECT	PC25	2018 2021	907	-	907	20	1	2/28/2025
65	F9131	LANCASTER	MEDICAL MAIN STREET	PC25	2019 2021	5,263	881	4,382	20	3	2/28/2025
66	F7314	LONG BEACH	SANTA FE AVENUE SYNCHRONIZATION ENHANCEMENT PROJECT	PC25	2018	1,920	1,381	539	12	3	2/29/2024
67	F7316/ F9130	LONG BEACH	ARTESIA "GREAT" STREET PROJECT (CFP F7316/F9130 + MR312.70/MR315.70 + MM5509.09)	PC25	2020 2021	6,527	-	6,527	20	1	2/28/2025
68	8211	MONROVIA	HUNTINGTON DRIVE PHASE II PROJECT (OLD TOWN PEDESTRIAN IMPROVEMENTS)	RSTP	2017	1,242	-	1,242	12	1	6/30/2024
69	F7304	PALMDALE	NORTH COUNTY ITS - PALMDALE EXTENSION	CMAQ	2017 2018 2019	3,000	-	3,000	12	1	6/30/2024
70	F3302	PASADENA	INTELLIGENT TRANSPORTATION SYSTEM (ITS) PHASE III	PC25	2015	4,235	4,058	177	12	3	2/29/2024
71	F3522/ E1722	PASADENA	CORDOVA STREET ROAD DIET PROJECT	PC25	2020	350	-	350	12	3	6/30/2024
72	F7317	PASADENA	PASADENA AREA RAPID TRANSIT SYSTEM - TRANSIT SIGNAL PRIORITY	PC25	2019	1,158	244	914	12	3	2/29/2024

**Reason for Extensions:**  
 1. Project delay due to an unforeseen and extraordinary circumstance beyond the control of the project sponsor (federal or state delay, legal challenge, Act of God, etc.);  
 2. Project delay due to Metro action that results in a change in project scope, schedule, or sponsorship that is mutually agreed; and  
 3. Project is contractually obligated, however, a time extension is needed to complete construction that is already underway (capital projects only).



**LOS ANGELES COUNTY METROPOLITAN TRANSPORTATION AUTHORITY  
 2022-23 CALL FOR PROJECTS EXTENSION LIST  
 AS OF JUNE 30, 2023  
 (\$000')**

PROJ #	AGENCY	PROJECT TITLE	FUNDING SOURCE	LAPSING FUND YR(S)	TOTAL PROG \$	TOTAL \$ EXP/OBLIG	AMT SUBJECT TO LAPSE	RECOM EXT MONTHS	REASON FOR EXT 1, 2 OR 3	NEW REVISED LAPSE DATE	
73	F7318	PASADENA	ADAPTIVE TRAFFIC CONTROL NETWORK - PHASE II	PC25	2019	1,658	763	895	12	3	2/29/2024
74	F9613	PASADENA	LAKE AVENUE GOLD LINE STATION PEDESTRIAN ACCESS IMPROVEMENTS	PC25	2021	2,309	398	1,911	20	1	2/28/2025
75	F7204/ F9203	PORT OF LONG BEACH	PIER B STREET FREIGHT CORRIDOR RECONSTRUCTION	RSTP CMAQ	2018 2019 2020	16,309	-	16,309	12	1	6/30/2024
76	F3502	REDONDO BEACH	REDONDO BEACH BICYCLE TRANSPORTATION PLAN IMPLEMENTATION	CMAQ	2016	1,559	-	1,559	12	1	6/30/2024
77	F5301	REDONDO BEACH	GRANT AVENUE SIGNAL IMPROVEMENTS	PC25	2017	1,222	-	1,222	12	3	2/29/2024
78	F1804	SAN GABRIEL	LAS TUNAS DRIVE STREETSCAPE ENHANCEMENT PROJECT	CMAQ	2019	641	-	641	12	3	6/30/2024
79	F7301	SANTA CLARITA	ITS PHASE VI	PC25	2018 2019	1,944	1,926	18	12	3	2/29/2024
80	F9306	SANTA CLARITA	ITS PHASE VII	PC25	2018	2,123	2,034	89	12	3	2/29/2024
81	F9533	SANTA MONICA	BEACH BIKE PATH RAMP CONNECTION TO SANTA MONICA PIER	CMAQ	2021	1,050	138	912	20	1	2/28/2025
82	F5516	SOUTH EL MONTE	CIVIC CENTER AND INTERJURISDICTIONAL BICYCLE LANES (+ MM4703.09)	CMAQ	2016	485	-	485	12	1	6/30/2024
83	F3124	SOUTH GATE	FIRESTONE BOULEVARD CAPACITY IMPROVEMENTS	PC25	2015	9,424	8,399	1,025	12	3	2/29/2024
84	F7309	SOUTH GATE	TWEEDY BOULEVARD AND SIGNAL SYNCHRONIZATION PROJECT	PC25	2018 2019	1,317	177	1,140	12	3	2/29/2024
85	F5308	SOUTH PASADENA	SOUTH PASADENA'S ATMS, CENTRAL TCS AND FOIC FOR FAIR OAKS AV	PC25	2017	464	91	373	12	3	2/29/2024
86	F9400	TORRANCE TRANSIT SYSTEM	TORRANCE TRANSIT SYSTEM - FLEET MODERNIZATION FINAL PHASE	CMAQ	2020 2021	1,903	-	1,903	20	1	2/28/2025
87	F9601	WEST HOLLYWOOD	WEST HOLLYWOOD - MELROSE AVENUE COMPLETE STREET PROJECT	PC25	2019	3,142	2,513	629	12	3	2/29/2024





**LOS ANGELES COUNTY METROPOLITAN TRANSPORTATION AUTHORITY  
2022-23 CALL FOR PROJECTS REPROGRAMMING  
(\$000')**

*Reprogrammed Years are listed in Bold and Italic*

	PROJ	AGENCY	PROJECT TITLE	DOLLARS PROGRAMMED AND FISCAL YEARS					TOTAL	FUND SOURCE
				2019-20 & Prior	2020-21	2021-22	2022-23	2023-24		
1	F1609	LA CITY	MAIN STREET BUS STOP AND PEDESTRIAN IMPROVEMENTS	528					528	CMAQ
								<b><i>528</i></b>	<b><i>528</i></b>	
2	F3630	LA CITY	MAIN STREET PEDESTRIAN ENHANCEMENTS	662					662	CMAQ
								<b><i>662</i></b>	<b><i>662</i></b>	
3	F9805	LA CITY	VENICE - LA EXPRESS PARK	713	132				845	PC25
								<b><i>845</i></b>	<b><i>845</i></b>	
4	F9806	LA CITY	EXPOSITION PARK - LA EXPRESS PARK	784	132				916	PC25
								<b><i>916</i></b>	<b><i>916</i></b>	
5	F3136	LA COUNTY	THE OLD ROAD FROM MAGIC MOUNTAIN PARKWAY TO TURNBERRY LANE		15,001				15,001	PC25
								<b><i>15,001</i></b>	<b><i>15,001</i></b>	
6	F7115	LA COUNTY	THE OLD ROAD-LAKE HUGHES RD TO HILLCREST PKWY PHASE I	2,746	1,261	1,592			5,599	PC25
								<b><i>5,599</i></b>	<b><i>5,599</i></b>	
7	F9122	PICO RIVERA	TELEGRAPH ROAD BRIDGE REPLACEMENT	2,299					2,299	PC25
								<b><i>2,299</i></b>	<b><i>2,299</i></b>	
8	F1168	SANTA CLARITA	VIA PRINCESSA EXTENSION-GOLDEN VALLEY ROAD TO RAINBOW GLEN		11,577				11,577	PC25
								<b><i>11,577</i></b>	<b><i>11,577</i></b>	



LOS ANGELES COUNTY METROPOLITAN TRANSPORTATION AUTHORITY  
 2022-23 CALL FOR PROJECTS REPROGRAMMING  
 (\$000')

*Reprogrammed Years are listed in Bold and Italic*

	PROJ	AGENCY	PROJECT TITLE	DOLLARS PROGRAMMED AND FISCAL YEARS					TOTAL	FUND SOURCE
				2019-20 & Prior	2020-21	2021-22	2022-23	2023-24		
9	F9513	SANTA CLARITA	RAILROAD AVENUE CLASS I BIKE PATH	2,265					\$ 2,265	PC25
								<b>2,265</b>	<b>2,265</b>	
ORIGINAL PROGRAMMED AMOUNT				\$ 9,997	\$ 28,103	\$ 1,592	\$ -	\$ -	\$ 39,692	
<b>REPROGRAMMED AMOUNT</b>				<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 39,692</b>	<b>\$ 39,692</b>	
DELTA				9,997	28,103	1,592	-	(39,692)	-	

## Background/Discussion of Each Recommendation

### A. Recertify

The \$78.96 million in existing FY 2023-24 Board approved commitments and programmed through previous Countywide Call processes are shown in Attachment A. The action is required to ensure that funding continues in FY 2023-24 for those ongoing projects for which Metro previously committed funding.

### B. Deobligate

Attachment B shows the \$2.36 million of previously approved Countywide Calls funding that is being recommended for deobligation. This represents canceled projects requested by the project sponsors.

### C. Reallocate

1. The City of Los Angeles requested to cancel the Call grant originally programmed for Century City Urban Design and Pedestrian Connection Plan (Call #F1612) and reallocate \$1,308,200 (with the City's local match commitment of \$327,050) to the City of Los Angeles Exposition West Bikeway – Northvale Project (Call #F3514) to fulfill the funding gap.

The City of Los Angeles is concurrently working on deobligating the unspent balance of \$286,122 in Call - CMAQ funds, previously obligated with Caltrans. If that is successful, the City requested to reallocate this amount (with the City's local match commitment of \$71,530) to the same Project (Call #F3514).

2. The City of Los Angeles requested to cancel the following two Call grants originally programmed to:
  - 1) Alameda Street Downtown LA: Goods Movement, Phase I (Call #FF5207); and
  - 2) Alameda Street Widening: North Olympic Boulevard to I-10 Freeway (Call #F9207)

And reallocate a total of \$13,391,668 canceled funds to fund the City of Los Angeles:

- 1) Boyle Heights Chavez Avenue Streetscape Pedestrian Improvements (Call #F3643), in the amount of \$8,000,000 (with the City's local match commitment of \$2,000,000) to fulfill the funding gap; and
- 2) Soto Street Complete Streets (Call #F7109), in the amount of \$5,391,668 (with City's local match commitment of \$3,765,186) to fulfill the funding gap.

### C. Authorize

Projects receiving their first year of funding are required to execute Funding Agreements or Letter of Agreements with Metro. Projects receiving time extensions are required to execute Amendments with Metro. This recommendation will authorize the CEO or their designee to negotiate and execute any agreements and/or amendments with the project sponsors, based on the project sponsors showing that the projects have met the Project Readiness Criteria and timely use of funds policies.

**D. Approve Project Scope Change**

1. The City of Lancaster – Medical Main Street (Call #F9131) was programmed through the 2015 Call. As approved, the project includes new roadways, intersection improvements, roundabouts, bicycle lanes and other amenities, pedestrian amenities, a jogging path, 3R improvements, complete street features, and transit access amenities to enhance access to existing and planned medical facilities bounded by 12th Street West on the east, Avenue J on the north, 20th Street West on the west, and SR-14 and Avenue J-8 on the south. The City is requesting to revise the scope of work by relocating and renaming multiple street segments, making minor adjustments to other proposed street segments, and changing the number of proposed roundabouts to four locations. After the execution of the project Funding Agreement, changes were proposed to the design concept of the planned medical facilities, including the proposed hospital location. The revised development concept requires a re-alignment of proposed roads and associated Call scope elements. The staff has evaluated the proposed change in scope and found that it is consistent with the intent of the original scope of work. Metro will maintain its funding commitment of \$5,262,742, and the City will maintain its local match commitment of \$7,667,828 (59%). In addition, the City is committed to covering any future project cost overruns, if occur.
  
2. The County of Los Angeles – South Whittier Community Bikeway Access Improvements (Call #9511) was programmed through the 2015 Call. As approved, the project calls for 3.1 miles of Class II bike lanes and 1.8 miles of Class III bike boulevards to build out Los Angeles County's Master Bicycle Plan bicycle network with connections to Norwalk/Santa Fe Metrolink Station. After securing funding from other sources, the County is requesting to revise the scope of work by increasing the mileage to 5.7 miles of Class II bike lanes and 3.8 miles of Class III bike boulevards, a net increase of 4.6 miles. The increase in mileage is the result of adding bike lanes along both sides of Leffingwell Road. The staff has evaluated the proposed change in scope and found that it is consistent with the intent of the original scope of work. Metro will maintain its funding commitment of \$3,191,000, and the County will maintain its local match commitment of \$800,000 (20%). In addition, the County is committed to covering any future project cost overruns, if occur.

**E. Receive and File**

1. During the 2001 Countywide Call Recertification, Deobligation, and Extension, the Board authorized the administrative extension of projects based on the following reasons:
  - 1) Project delay due to an unforeseen and extraordinary circumstance beyond the control of the project sponsor (federal or state delay, legal challenge, Act of God);
  - 2) Project delay due to Metro action that results in a change in project scope, schedule, or sponsorship that is mutually agreed upon; and

- 3) The project is contractually obligated, however, a time extension is needed to complete construction that is already underway (capital projects only).

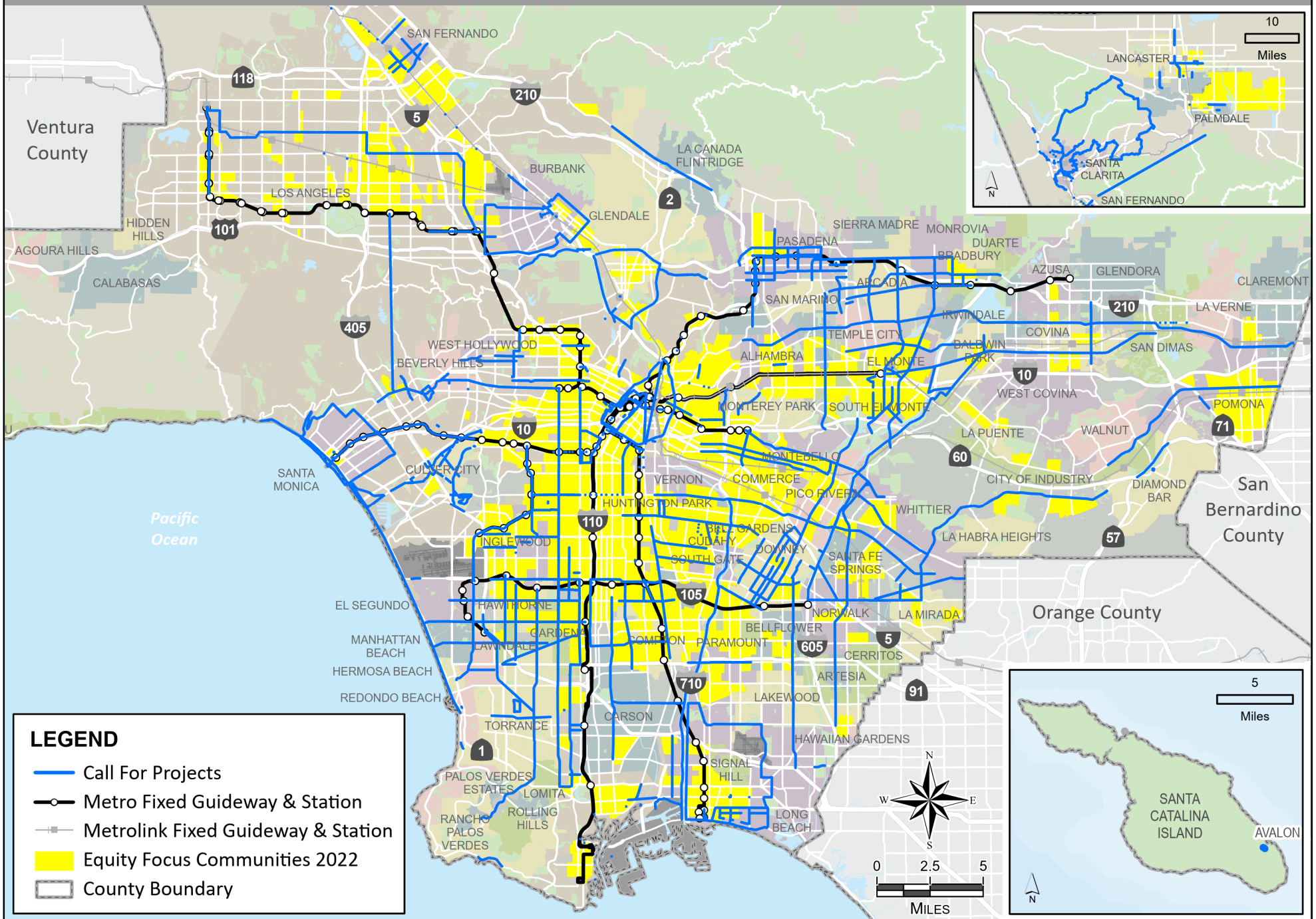
Based on the above criteria, extensions for the 87 projects shown in Attachment C are being granted.

2. Since the March 2016 Metro TAC approval of the Proposed Revised Call Lapsing Policy, several project sponsors have informed staff that their projects will not be able to be completed within the one-time, 20-month extension. Through the 2016 Call Recertification and Deobligation process, the Board delegated authority to reprogram currently programmed Call funds to a later year. Reprograms for the nine projects shown in Attachment D are being granted.



June 2023 Metro Technical Advisory Committee (TAC) Appeals  
 Sorted by Agency  
 (\$000')

	PROJ #	AGENCY	PROJECT TITLE	FUND SOURCE	PROG YR(S)	TOTAL METRO PROG \$	LAPSING FUND YR(S)	PROG \$ SUBJECT TO LAPSE	TOTAL YRS EXT	REASON FOR APPEAL	TAC RECOMMENDATIONS	METRO RESPONSE
1	F7118	DOWNEY	FLORENCE AVE. BRIDGE OVER SAN GABRIEL RIVER	CMAQ	2016 2017	\$ 1,917	2016 2017	\$ 1,917	4	Did not meet Lapsing Policy	One-year extension to June 30, 2024.	Concur with TAC recommendation.
2	F7205	LA CITY	ALAMEDA ST. WIDENING FROM ANAHEIM ST. TO 300 FT SOUTH OF PCH	RSTP	2017 2018	\$ 5,874	2017 2018	\$ 4,860	4	Status Update per June 2022 TAC Appeal	Received and filed	Received and filed



**LEGEND**

- Call For Projects
- Metro Fixed Guideway & Station
- Metrolink Fixed Guideway & Station
- Equity Focus Communities 2022
- County Boundary



## Board Report

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File #: 2023-0441, File Type: Program

Agenda Number: 15.

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### PLANNING AND PROGRAMMING COMMITTEE SEPTEMBER 20, 2023

**SUBJECT: MEASURE M 3% LOCAL CONTRIBUTION GUIDELINES REVISIONS**

**ACTION: APPROVE RECOMMENDATIONS**

#### **RECOMMENDATION**

ADOPT revised Measure M Guidelines, Section VIII - 3% Local Contribution to Major Transit Projects (Attachment A).

#### **ISSUE**

In June 2023, the Board directed staff to release the draft revised Measure M Guidelines, Section VIII - 3% Local Contribution to Major Transit Projects (Guidelines) for a 30-day public comment period. As a result of completion of the public comment period, the revised guidelines are ready for adoption by the Board.

#### **BACKGROUND**

The Measure M Ordinance (Ordinance) requires local jurisdictions to pay three percent (3%) of the total cost of new major rail projects. The Measure M Guidelines adopted by the Board in 2017 guide Metro's implementation of this requirement. In April 2022, the Board requested that staff make several revisions to the Guidelines for consistency and flexibility. The Board adopted these revisions in February 2023 and directed Metro via Motion 10.1 by Directors Hahn, Dutra, Butts, and Sandoval (Attachment B) to make several additional revisions and clarifications. Staff presented the draft revisions to the Board in June 2023 and has circulated them for public comment.

#### **DISCUSSION**

##### **Measure M Guideline Revisions**

The current revisions make a substantive change to allow Metro competitive grant funds (e.g. Metro Active Transport, Transit, and First/Last Mile (MAT)) to be credited toward a jurisdiction's 3% local contribution. These types of funds were previously ineligible as a local contributions source. The additional flexibility may benefit some jurisdictions that are able to secure competitive funds for in-kind or FLM improvements supporting a major rail project.



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All other revisions are clarifications of existing practice and were discussed in detail prior to the public comment period . These include: clarifying that a jurisdiction without a contribution obligation may credit qualifying in-kind/FLM investments toward a neighboring jurisdiction's local contribution; clarifying that projects or elements added after 30% design would not impact the current project segment's local contribution; and clarifying that in-kind contributions are allowed even if they were constructed prior to 30% design.

Metro released the draft Guideline revisions for public review on June 23, 2023, and advertised the public comment opportunity via mass email and an article in The Source. Six comment letters were received, five of them addressing the Measure M Guidelines revisions. One letter discussed other matters and Metro addressed them separately. The comments and responses have been summarized in Attachment C. Some comments requested changes to the Guidelines or Metro policy that are not acceptable. A request to eliminate the up-to-15-year sales tax withholding, for example, is inconsistent with the Measure M Ordinance. Others suggested adding discussion on information available elsewhere or on case-specific items not appropriate for a guideline document. None of the comments resulted in changes to the Guidelines, but Metro remains committed to collaborating with jurisdictions to develop feasible approaches to satisfying the local contribution.

### Regionally Significant Project Elements

Directive C in Motion 10.1 requested that staff “evaluate a way to exclude the costs associated with regionally significant project elements - such as a new I-105 C Line station on the C Line (Green) or a Maintenance and Storage Facility (MSF) on the Gold Line Eastside Phase 2 - from the total project's cost's 3% local contribution calculation.” Metro's evaluation found that excluding the costs of these facilities from the 3% contribution cost basis was not financially advisable. However, since part of the cost for these facilities is related to other capital projects or existing rail lines, the full cost should not necessarily be allocated to the corridor project facilitating their construction. Instead, Metro will allocate part of the cost of these facilities to the other projects or rail lines that they serve.

In a recent example, costs for the Southwestern Yard were sub-allocated to various projects and operations based on the proportion of vehicles required for the specific project/operation out of the number of vehicles for which the yard was designed. This resulted in 49% of the cost of the yard being allocated to the Crenshaw/LAX Project (K Line) budget. The remaining costs were allocated to future projects (23%) and existing operations (13%), or were unallocated (16%). The Airport Metro Connector Project, for example, assumed 7% of the yard cost and included \$20M in the project budget accordingly. As Metro develops cost estimates for the other projects their share of the Southwestern Yard cost should also be included in the corridor life of project budget. Consistent with past practice, Metro may reevaluate the cost allocations as relevant project scopes are refined.

For the MSF on the future E Line Eastside Extension Phase II Project, Metro will determine the number of vehicles needed for the initial operable segment and will allocate part of the MSF cost to the project based on the proportion of vehicles required out of the number of vehicles for which the yard is designed. The remainder of the cost will be allocated to future projects, such as the Eastside Extension to Whittier, or existing operations. Metro will present these cost allocations for Board consideration when the facility design process reaches 30% completion.

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For the I-105 C Line infill station, Metro will estimate the cost of accommodating and constructing the new station on the existing C Line. This could include, as needed, utility relocations, temporary trackwork, platforms, special track, station access, etc. The share of these costs benefiting other rail lines would be identified and the 3% contribution for the jurisdictions along the West Santa Ana Branch Corridor would be reduced accordingly. At this time no funding for the infill station as a separate project has been identified.

This approach is intended to accurately calculate the share that local jurisdictions should contribute toward major rail projects by excluding elements that can be attributed to other parts of the Metro system. It focuses on Metro project elements and would not include jurisdiction-led improvements that may receive in-kind credit toward a 3% contribution. Such improvements would still be included in the total project cost at 30% design, which is the basis for the 3% contribution.

### **DETERMINATION OF SAFETY IMPACT**

The proposed approval will not have any adverse safety impacts on employees or patrons.

### **FINANCIAL IMPACT**

Approving the recommendations will have no impact on the FY 2023-24 Budget. However, the additional flexibility the revised Guidelines offer may increase the funding gap for rail capital projects.

### **EQUITY PLATFORM**

The substantive changes resulting from this action include expanding eligible funding sources to include Metro competitive grant funds. This will provide additional flexibility to jurisdictions owing a 3% contribution, including those within Equity Focus Communities (EFCs), which is intended to support jurisdictions with fewer financial resources. The remainder of the revisions to the Guidelines clarify existing practices and enhance consistency of current policy with the Measure M Ordinance, and therefore have no impact on equity opportunities. The 3% local contribution is one of the financial resources supporting Metro's major rail transit projects program in the Measure M Expenditure Plan.

These projects will benefit communities by adding new high-quality reliable transit services, many of which will increase mobility, connectivity, and access to opportunities for historically underserved and transit-dependent communities. Metro will continue to conduct outreach and provide technical assistance on the 3% contribution requirement to affected jurisdictions, including assisting with identifying viable financing strategies.

### **IMPLEMENTATION OF STRATEGIC PLAN GOALS**

The recommendation supports the following strategic plan goals identified in Vision 2028: Goal 1: Provide high-quality mobility options that enable people to spend less time traveling, Goal 3: Enhance communities and lives through mobility and access to opportunity and Goal 5: Provide responsive, accountable, and trustworthy governance within the Metro organization.

### **ALTERNATIVES CONSIDERED**

The Board could elect not to adopt the final revised Guidelines. This is not recommended as the proposed revisions resulted from Board direction and will ensure consistency between Metro's published guidance and the Measure M Ordinance.

### **NEXT STEPS**

The final revised Guidelines will be posted on the Metro website, and Metro staff will continue working closely with cities and the county to implement the 3% contribution requirement, including focused outreach to present the Guideline revisions.

### **ATTACHMENTS**

Attachment A - Measure M 3% Local Contribution Guidelines Final Revisions

Attachment B - Motion 10.1

Attachment C - Summary of Public Comments Received


Prepared by: Adam Stephenson, Deputy Executive Officer, Countywide Planning & Development,  
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Stephanie N. Wiggins  
Chief Executive Officer

**REVISED MEASURE M GUIDELINES, SECTION VIII. 3% LOCAL CONTRIBUTION TO MAJOR TRANSIT PROJECTS**

*The following shall replace Section VIII. in its entirety.*

**INTRODUCTION**

The Measure M Ordinance includes a provision for 3% local contribution to major rail transit capital projects. The rationale for the contribution is that local communities with a rail station receive a direct benefit due to the increased access to high-quality transit service that is above and beyond the project's benefit to the County as a whole. Countywide, the 3% local funding contribution represents more than \$1 billion in funding to support the project delivery identified in the Expenditure Plan. The 3% local funding contribution is a critical element of a full funding plan for these rail transit projects. These Guidelines provide multiple opportunities for jurisdictions to contribute non-monetary assets such as in-kind improvements constructed by the jurisdiction or in some cases a neighboring jurisdiction. While this flexibility reduces the financial burden on the jurisdiction, it also increases the funding gap for the overall project, with cost and schedule impact to Metro.

The Ordinance includes provisions that allow development of a mutual agreement between a jurisdiction and Metro, and a default payment mechanism if such an agreement cannot be reached. The agreements shall be in accordance with these guidelines.

**PROGRAM METHODOLOGY**

The Ordinance calculates the local contribution based upon the percent of project total centerline track miles to be constructed within a local jurisdiction's borders if one or more new stations are to be constructed within that jurisdiction. These guidelines reflect the nexus between mobility benefits provided to a jurisdiction based on the presence of a new station within the jurisdiction. The local contribution will be calculated by distributing 3% of the total project cost, estimated at the conclusion of thirty percent (30%) of final design, to jurisdictions based on centerline track miles per the Ordinance. For projects along a larger transit corridor with more than one operable segment, each operable segment will have its own "total project cost" for purposes of calculating the 3% local contribution for each segment. Jurisdictions will incur a 3% local contribution obligation only for operable segments that include station construction within their borders. Contributions for future segments, future stations on the current segment, other future projects, or project scope identified after 30% design will follow applicable policies to determine any required local contribution for those improvements. Other

arrangements agreed upon by every local jurisdiction in a project corridor with a local contribution obligation are also acceptable, provided that the total of all jurisdictions' contributions equals 3% of the estimated total project cost. A list of jurisdictions that may be affected, subject to changes determined by the environmental process, is included as Appendix A.

An agreement approved by both Metro and the governing body of the jurisdiction shall specify the total project cost as determined at the conclusion of thirty percent (30%) of final design, the amount to be paid by the local jurisdiction, and a schedule of payments. Once approved, the amount to be paid by the local jurisdiction shall not be subject to future cost increases.

#### Eligible Fund Contributions

Eligible fund sources to satisfy 3% local contribution include any funds controlled by the local agency or local agencies (e.g., General Fund, State Gas Tax Subventions, Prop. A, Prop. C and Measure R and Measure M Local Return Funds, Measure M Subregional Program Funds), or any funds awarded from ~~non-Metro~~ competitive grant process funding. Measure M Subregional Program Fund contributions must be accompanied by documented agreement from all jurisdictions that would otherwise be eligible for those sub-regional funds. Contributions, including in-kind and FLM investments, are eligible for credit with Metro approval even if made prior to 30% design.

In-kind contributions eligible to satisfy 3% local contribution include, but are not limited to, project specific right-of-way, waiver of permitting fees, local agency staff time (incurred and forecast) and other subregional investments that support a Metro transit corridor if those costs are specifically included in the project cost and contribution amount by the conclusion of thirty percent (30%) of final design. While the contributing jurisdictions are ultimately responsible for fulfilling the financial obligation per the Measure M Ordinance, they may receive credit for eligible in-kind, FLM, or other contributions made by non-contributing jurisdictions. Metro will not be responsible for implementing any part of interjurisdictional agreements that facilitate such credit.

In-kind contributions consistent with this section will not be considered "betterments" for the purposes of these Guidelines and are eligible to satisfy local contribution obligations in lieu of Metro withholding up to 15 years of Measure M Local Return.

#### Betterments

Betterments are defined consistent with existing policy adopted by the Metro Board on Supplemental Modifications to Transit Projects (October 2013). A “betterment” is defined “as an upgrade of an existing city or utility’s facility or the property of a Third Party, be it a public or private entity, that will upgrade the service capacity, capability, appearance, efficiency or function of such a facility or property of a third party.” Once the 30% design project scope and cost have been determined as the basis of the 3% contribution calculation, subsequent betterments cannot be included in that calculation, nor counted toward a jurisdiction’s eligible contribution. However, they may be included in the project scope if carried at the jurisdiction’s expense.

#### Active Transportation and First/Last Mile Investments

These guidelines reflect provisions adopted by the Board that allow and incentivize local jurisdictions, through an agreement with Metro, to meet all or a portion of their 3% local contribution obligation through first/last mile (FLM) investments. All local FLM improvements must be consistent with station area plans that will be developed and adopted by Metro in coordination with the affected jurisdiction(s). The criteria for local FLM investments for FLM contributions are described in full in the First/Last Mile Guidelines adopted by the Metro Board of Directors on May 27, 2021 (File #2020-0365), specifically to carry out integration of FLM within transit capital projects.

FLM improvements consistent with this section will not be considered “betterments” for the purposes of these Guidelines and are eligible to satisfy local contribution obligations in lieu of Metro withholding up to 15 years of Measure M Local Return.

#### Local Contribution Limits

The 3% local contribution will only be calculated against the overall project scope and cost determined at the conclusion of thirty percent (30%) of final design and will not include costs for FLM improvements delivered by entities other than Metro. Local agencies cannot count other transportation investments that are not included in the project scope and cost estimate after the conclusion of thirty percent (30%) of final design. Metro staff will provide written notice to the affected jurisdiction(s) and a report to the Metro Board after the completion of thirty percent (30%) of final design.

Contributions for calculations assigned to the County of Los Angeles are to be determined by the County.

#### Opt-Out Option

Metro will withhold up to 15 years of Measure M Local Return Funds from local agencies that fail to reach a timely agreement with Metro on their 3% contribution prior to the award of any contract authorizing construction of the project within the borders of that jurisdiction. Local return funds from Proposition A, Proposition C, and Measure R are not subject to withholding. In some cases, principally in smaller cities, the default withholding of 15 years of local return from Measure M Local Return Funds will be less than a full 3% contribution. In these cases, Metro may accept either amount as the 3% contribution, and may execute a corresponding agreement with the jurisdiction. The cities that fulfill the 3% contribution requirement through the Local Return withholding mechanism, including offsets for approved FLM improvements and in-kind contributions, will suffer no further financial impact.

### AUDIT REQUIREMENTS

Use of Measure M funds will be subject to audit and oversight, and all other applicable state and local laws.

### REPORTING REQUIREMENTS

Metro will provide annual reports to the Measure M Independent Taxpayer Oversight Committee describing how uses of the Measure M Funds are contributing to accomplishing the program objectives.

### REVISIONS TO PROGRAM GUIDELINES

These program guidelines may be revised by the Metro Board of Directors.

## Metro



## Board Report

File #: 2023-0104, File Type: Motion / Motion Response

Agenda Number: 10.1.

**EXECUTIVE MANAGEMENT COMMITTEE  
FEBRUARY 16, 2023**

**Motion by:**

**DIRECTORS HAHN, DUTRA, BUTTS, AND SANDOVAL**

Related to Item 10: Measure M 3% Local Contribution Guidelines Revisions

In response to Metro Board direction (File No 2022-0258), Metro staff have undertaken substantial revisions to the Measure M guidelines, specific to the 3% Local Contribution requirement for transit capital projects. Staff's proposed guidelines (File No. 2022-0828) incorporate requests from jurisdictions to increase flexibility, provide more opportunities for in-kind contributions, and further incentivize the first-/last-mile investments that will make these major transit investments in our region more successful.

While the revisions represent a welcome change to those originally drafted and approved in 2017, there are still some clarifications that should be offered in order to fully address concerns from jurisdictions that welcome the future transit capital investments and want to ensure they are fully engaged and able to participate.

**SUBJECT: MEASURE M 3% LOCAL CONTRIBUTION GUIDELINES REVISIONS MOTION**

**RECOMMENDATION**

APPROVE Motion by Directors Hahn, Dutra, Butts, and Sandoval that the Board direct the Chief Executive Officer to make the following revisions to the proposed Local Contribution guidelines:

- A. Add language to allow cost-sharing, so that jurisdictions who have qualifying first-/last-mile or in-kind improvements, but do not have a 3% local contribution requirement, can credit those investments they make toward neighboring jurisdictions' 3% local contribution obligations;
- B. Provide jurisdictions with maximum flexibility in all sources of funding for first-/last-mile investments by striking the words "non-Metro" from the first sentence in the "Eligible Funds" section, so that Metro competitive grants may also be an eligible fund source to make qualifying investments, which would be consistent with grant-making policy such as Federal and State funds where local match must come from sources other than those Federal and State funds;
- C. Evaluate a way to exclude the costs associated with regionally significant project elements -



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**File #:** 2023-0104, **File Type:** Motion / Motion Response

**Agenda Number:** 10.1.

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such as a new I-105 C Line station on the C Line (Green) or a maintenance and storage facility on the Gold Line Eastside Phase 2 - from the total project's cost's 3% local contribution calculation;

- D. Clarify the local contribution obligation responsibility for any future station, such as a Rio Hondo Confluence Station, that is not part of a project's 30% design but may be added at a later date, to ensure that any 3% obligation for any such station will be borne solely by the jurisdiction (s) in which it is located;
- E. Confirm that qualifying first-/last-mile investments and in-kind contributions shall be considered eligible to credit toward a jurisdiction's 3% local contribution obligation, even if implemented prior to 30% design; and,
- F. Report back to the Board in no more than 120 days on the above requests, including a fact sheet for affected cities.

## Summary Table of Public Comments Received

The table below summarizes and responds to the substantive comments submitted during the public comment period (6/23/23 – 7/24/23) for the Measure M 3% Guideline Revisions.

COMMENT	COMMENTER	RESPONSE	EDITS
<b>General</b>			
We are pleased that the revised local contribution guidelines for future rail projects provides requested clarifications on existing 3% contribution tools to meet our needs, along with new ways for local entities to provide their 3% local contribution.	West Santa Ana Branch City Managers Technical Advisory Committee	Thank you for your comment.	N
The City is pleased to see that the Metro Board of Directors adopted many of the recommendations proposed in October 2022 by the West Santa Ana Branch City Manager Technical Advisory Committee of the Gateway Cities Council of Governments.	City of Artesia	Thank you for your comment.	N
However, it is distressing to see that the revision where Metro can withhold 15 years of Measure M funds if a city fails to reach a timely agreement on the 3% local contribution with Metro remains. ... Measure M funds provide vital financial support to the City's General Fund, especially since it collects minimal property taxes and heavily depends on sales tax revenue.	City of Artesia	The up-to-15-year withholding requirement is included in the Measure M Ordinance and cannot be changed with a revision to the Guidelines. Metro recognizes the importance of local sales tax revenue for cities and is committed to working with jurisdictions to ensure transparency and a workable plan for satisfying the local contribution.	N

COMMENT	COMMENTS	RESPONSE	EDITS
<p>None of the previous transit line projects of similar scale were local cities required to pay a share of the construction costs. While the City understands the funding model has changed with the passage of Measure M, as the last region to receive a large-scale transportation project, it furthers the unequitable distribution of transportation to the region by burdening the WSAB corridor cities with the local 3% match. We respectfully request that cities along the line work with Metro to conduct the required first/last mile improvements near and around the station, and that any funding gaps be requested as part of the federal project funding submission.</p>	<p>City of Artesia</p>	<p>Jurisdictions were required to make local contributions for previous major rail projects. Metro will continue to work with jurisdictions to identify possible funding sources, including first-last mile improvements. However, for Federal grants Metro will need to demonstrate local financial commitment as a prerequisite to receiving Federal funding support. The 3% local contribution is a key component of that local financing.</p>	<p>N</p>
<b>Calculation and Distribution</b>			
<p>The 3% calculation for the local contribution should not include the segments where another jurisdiction has opted to not have a station constructed in their city boundary.</p>	<p>City of Torrance</p>	<p>Per the Ordinance, the local contribution is determined by the percentage of track miles within a jurisdiction's borders for jurisdictions where station construction occurs. Where a jurisdiction has track mileage but no station, that mileage would be extracted from the length of the project prior to determining the percentages for the jurisdictions containing station construction. Per the Ordinance the percentage will be applied to the total project cost at 30% design.</p>	<p>N</p>
<p>No jurisdiction should be required to pay for more than their share of 3% contribution based on centerline track miles within their own jurisdiction.</p>	<p>City of Torrance</p>	<p>Per the Ordinance, jurisdictions with station construction will share the local contribution according to the percentage of track mileage within their borders.</p>	<p>N</p>

COMMENT	COMMENTS	RESPONSE	EDITS
<b>Funding Sources</b>			
The guidelines should recognize in some in-kind capacity the dollar value of the air rights that we would be relinquishing when Metro builds the maintenance yard(s). If they are unwilling to consider this as an “in-kind” contribution towards the 3%, perhaps we can negotiate the air rights into an adjacent development opportunity and use the transaction to pay down the 3% contribution. In either scenario, I hope Metro can recognize the developmental impact of the maintenance facilities	City of Montebello	Metro will work with jurisdictions to evaluate in-kind contributions on a case-by-case basis as the transit project design progresses. Generally, however, credit toward a jurisdiction’s 3% contribution will be given for items that add value, and/or offsets costs, for the Metro project.	N
The City of Torrance also requests consideration for the inclusion of newly constructed transit centers (built by the local jurisdiction) and their amenities to qualify as part of the required three-percent (3%) local contribution for new rail lines and major transit projects.	City of Torrance	Locally led improvements may receive credit if they are included in the project scope and cost by 30% design or are qualifying FLM projects.	N
<b>Timeline/Process</b>			
There is no mention of a proposed time frame as to when a local jurisdiction must start the 3% contribution payment and the length of time the local jurisdiction has to pay off it’s 3% contribution. With no such time frame provided in these proposed guidelines, will each local jurisdiction be subjected to negotiating an individual payback schedule with Metro?	City of Bellflower	These procedural elements remain unchanged and are included in Metro’s publicly available Measure M Administrative Procedures. Payment of the local contribution should begin at the start of construction and end when construction is halfway complete. Metro will work with jurisdictions individually to develop a payment plan that works for both parties.	N



# Measure M 3% Local Contribution Guidelines Revisions

Planning and Programming Committee  
September 20, 2023



Metro

# Measure M Guidelines Revisions

## Current Revisions

- Clarify existing policy and expand eligible fund sources.
- Released for public review and comment from June 23, 2023 to July 24, 2023
- Five comment letters received by the deadline.
  - Main themes: financial burden; listing specific in-kind contribution; policy requests that are inconsistent with the Measure M Ordinance
- Responses in summary table (Attachment C)

# Measure M Guidelines

## Revisions

### Regionally Significant Project Elements

- (Past) Southwestern Yard:
  - 49% allocated to Crenshaw/LAX Line project budget
  - Remaining allocated to other projects or operations based on vehicle need
  - E.g. 7% to Airport Metro Connector
- (Future) E Line Eastside Extension MSF costs to be allocated according to the vehicles needed for the current project segment
- (Future) I-105 C Line infill station costs to be allocated between WSAB and existing operations or other capital project; methodology TBD

# Measure M Guidelines Revisions

## Next Steps

- Publish final Guidelines revisions
- Outreach and workshops with project corridor cities





**Board Report**

**File #:** 2023-0440, **File Type:** Program

**Agenda Number:** 16.

**PLANNING AND PROGRAMMING COMMITTEE  
SEPTEMBER 20, 2023**

**SUBJECT: MEASURE M MULTI-YEAR SUBREGIONAL PROGRAM & MEASURE R TRANSIT INVESTMENTS PROGRAM UPDATE - SOUTH BAY SUBREGION**

**ACTION: APPROVE RECOMMENDATIONS**

**RECOMMENDATION**

CONSIDER:

A. APPROVING:

1. Programming of an additional \$20,438,600 within the capacity of Measure M Multi-Year Subregional Program (MSP) - Transportation System and Mobility Improvements Program (Expenditure Line 50), as shown in Attachment A;
2. Programming of an additional \$11,856,223 within the capacity of Measure M MSP - South Bay Highway Operational Improvements Program (Expenditure Line 63), as shown in Attachment B;
3. Inter-program borrowing and programming of an additional \$8,864,097 from Transportation System and Mobility Improvements Program (Expenditure Line 50) to Measure M MSP - Transportation System and Mobility Improvements Program (Expenditure Line 66), as shown in Attachment C;
4. Reprogramming of two previously awarded projects in the Measure R South Bay Transit Investments Program, shown in Attachment D; and

B. AUTHORIZING the CEO or their designee to negotiate and execute all necessary agreements and/or amendments for approved projects.

**ISSUE**

Measure M MSPs and Measure R South Bay Transit Investments Programs, whose funds are limited to capital uses, are included in the Measure M and/or Measure R Expenditure Plans. The update approves additional eligible projects for funding and allows the South Bay Subregion and implementing agencies to revise scopes of work, schedules, and project budgets.

This update includes changes to projects that previously received Board approvals and funding allocations for new projects. The Board's approval is required, to program additional funds and acknowledge the updated project lists, which will serve as the basis for Metro to enter into funding agreements and/or amendments with the respective implementing agencies.

## **BACKGROUND**

In September 2019, the Metro Board of Directors approved South Bay Subregion's first MSP Five-Year Plan and programmed funds in: 1) Transportation System and Mobility Improvements Program (expenditure line 50); 2) South Bay Highway Operational Improvements (expenditure line 63); and 3) Transportation System and Mobility Improvements Program (expenditure line 66). Since the first Plan, staff provided annual updates to the Board in August 2020, September 2021, and September 2022.

Based on the amount provided in the Measure M Expenditure Plan, a total of \$380.6 million was forecasted for programming for Fiscal Years (FY) 2017-18 to FY 2026-27. In prior actions, the Board approved programming of \$254.4 million. Therefore, \$126.2 million is available to the Subregion for programming as part of this update.

In July 2021, the Metro Board of Directors approved the Measure R Ordinance Amendment that authorized the transfer of up to \$400 million from the Measure R Highway Capital Subfund to eligible Transit Capital projects. The South Bay Transit Investments Program was added to the Measure R Expenditure Plan, and the Measure R Transit Investments Program Guidelines were also approved. In September 2021, the Metro Board of Directors approved the project list and programmed funds for ten projects. In September 2022, staff provided the first annual update on the Program.

## **DISCUSSION**

Metro staff worked closely with the SBCCOG and the implementing agencies on project eligibility reviews for this annual update, including changes to the scope of work requests. To confirm project eligibility, reconfirm funding eligibility for those that request changes to the scope of work, and establish the program nexus during project reviews, Metro requested, among other things, detailed scopes of work, project location information, schedules, total estimated expenses, and links between provided information and funding requests. Staff expects the collection of these project details in advance of Metro Board action to enable the timely execution of project Funding Agreements for approved projects. For those proposed projects with funds programming in FY 2025-26 and beyond, Metro accepted higher-level, relevant project details for the review process. Through an annual process, Metro staff will work with the SBCCOG and the implementing agencies to update and refine project details. Those projects are proposed for conditional approval as part of this action. Final approval of funds for those projects shall be contingent upon the implementing agency demonstrating the eligibility of each project as required in the Measure M Master Guidelines and/or the Measure R Transit Investments Program Guidelines. Additionally, all projects are subject to close-out audit after completion, per the Guidelines.

The changes in this annual update include additional programming in the Transportation System &

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Mobility Improvement Program (Attachment A), South Bay Highway Operational Improvements Program (Attachment B), Transportation System & Mobility Improvement Program (Attachment C), and Transit Investments Program (Attachment D).

Transportation System and Mobility Improvements Program (Expenditure Line 50)

This update includes funding adjustments to three existing and eight new projects as follows:

*Carson*

- Program \$5,256,700 in FY 24, FY 25, and FY 26 for MM4601.09 - Bike Lane Installation - Carson St., Figueroa St., Main St., Victoria St. The funds will be used for the project's construction phase.
- Program \$5,384,400 in FY 24, FY 25, and FY 26 for MM4601.10 - Bike Lane Installation - 223<sup>rd</sup> St., Avalon Blvd., Central Ave., Del Amo Blvd., University Dr. The funds will be used for the project's construction phase.

*El Segundo*

- Program \$925,000 in FY 24 for MM4601.11 - South Bay Local Travel Network in El Segundo. The funds will be used for the project's Plans, Specifications, and Estimates (PS&E) and construction phases.

*Inglewood*

- Reprogram \$13,120,000 to FY 27 for MM5502.09 - Prairie Ave. Dynamic Lane Control System. The funds will be used for the project's PS&E and construction phases.

*LA County*

- Program \$1,206,000 in FY 24, FY 25, FY 26, and FY 27 for MM4601.12 - Lennox Vision Zero Traffic Enhancements. The funds will be used for the project's Project Approval/Environmental Document (PAED) and PS&E phases.

*Manhattan Beach*

- Program \$500,000 in FY 24 and 25 for MM4601.13 - Highland Ave. Corridor Improvements. The funds will be used for the project's PAED and PS&E phases.

*Redondo Beach*

- Program \$1,500,000 in FY 25, FY 26, and FY 27 for MM4601.14 - Pedestrian Enhancements on Aviation Blvd. The funds will be used for the project's PS&E and construction phases.

- Program \$4,000,000 in FY 25, FY 26, and FY 27 for MM4601.15 - Rivera Village Pedestrian and Multi-modal Enhancements. The funds will be used for the project's PAED and PS&E phases.
- Program \$1,272,700 in FY 25 and FY 26 for MM4601.16 - South Bay Local Travel Network in Redondo Beach. The funds will be used for the project's PS&E and construction phases.

### *SBCCOG*

- Program additional \$393,800 in FY 24 for MM5502.10 - Planning Activities for the South Bay local Travel Network. The funds will be used for the project's planning phase.

### *Torrance*

- Reprogram previously approved \$7,185,000 as follows: \$51,600 in FY 20, \$146,394 in FY 22, \$34,051 in FY 23, \$4,704,200 in FY 24, and \$2,248,755 in FY 25 for MM4601.05 - Torrance Schools Safety and Accessibility Program. The funds will be used for the project's PS&E and construction phases.

### South Bay Highway Operational Improvements Program (Expenditure Line 63)

This update includes funding adjustments to three existing and seven new projects as follows:

### *Gardena*

- Program additional \$5,675,000 and reprogram previously approved as follows: \$104,000 in FY 21, \$516,000 in FY 22, \$2,320,000 in FY 23, \$5,802,000 in FY 24, and \$2,500,000 in FY 25 for MM5507.04 - Redondo Beach Blvd. Arterial Improvements. The funds will be used for the project's PAED, PS&E, and construction phases.

### *Hawthorne*

- Program \$200,000 in FY 24, FY 25, FY 26, and FY 27 for MM5507.16 - Jack Northrop Improvements. The funds will be used for the project's PAED and PS&E phases.
- Program \$200,000 in FY 24, FY 25, FY 26, and FY 27 for MM5507.17 - Van Ness Improvements. The funds will be used for the project's PAED and PS&E phases.
- Program \$160,000 in FY 24, FY 25, FY 26, and FY 27 for MM5507.18 - 135<sup>th</sup> Street Improvements. The funds will be used for the project's PAED and PS&E phases.
- Program \$130,000 in FY 24, FY 25, FY 26, and FY 27 for MM5507.19 - Inglewood Avenue Improvements. The funds will be used for the project's PAED and PS&E phases.

### *Inglewood*

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- Reprogram previously approved \$1,500,000 to FY 25 for MM5507.05 - Manchester Blvd./Prairie Ave. ITS & Traffic Signal Improvements. The funds will be used for the project's PAED and PS&E phases.

*LA County*

- Program additional \$1,071,223 in FY 24, FY 25, and FY 26 for MM5507.07 - Avalon Blvd. TSSP in the City of Carson. The funds will be used for the project's PAED, PS&E, and construction phases.
- Program \$2,130,000 in FY 24 and FY 25 for MM5507.20 - Advanced Traffic Control Upgrades. The funds will be used for the project's PAED, PS&E, and construction phases.

*Redondo Beach*

- Program \$160,000 in FY 25 and FY 26 for MM5507.21 - Advanced Traffic Signal System on Aviation Blvd. The funds will be used for the project's PS&E phase.
- Program \$2,130,000 in FY 24 and FY 25 for MM5507.22 - Traffic Signal Communications and Network System Phases 2. The funds will be used for the project's PAED and PS&E phases.

Transportation System and Mobility Improvements Program (Expenditure Line 66)

This update includes funding adjustments to nine existing projects and one new project as follows:

*Beach Cities Health District*

- Reduce \$98,903 from \$1,833,877 to \$1,734,974 for MM4602.01 and rename the project to Diamond Street Bike Path Project. The reduction of funds is the result of changes in the project scope of work. The agency made the request and the SBCCOG Board concurred. The funds will be used for the project's PS&E and construction phases.

*Inglewood*

- Reprogram previously approved \$6,500,000 as follows: \$500,000 in FY 22 and \$6,000,000 in FY 24 for MM4602.06 - First/Last Mile Improvements. The funds will be used for the project's PAED, PS&E, and construction phases.
- Reprogram previously approved \$1,000,000 as follows: \$100,000 in FY 25 and \$900,000 in FY 26 for MM5508.10 - Changeable Message Signs. The funds will be used for the project's PAED and PS&E phases.

*LA City*

- Reprogram previously approved \$3,260,625 as follows: \$185,531 in FY 20, \$314,679 in FY 21, \$275,000 in FY 22, \$687,769 in FY 23, and \$1,797,646 in FY 24 for MM4602.04 - Crossing Upgrades and Pedestrian Improvements. The funds will be used for the project's PAED, PS&E, and construction phases.
- Reduce \$250,000 from \$2,500,000 to \$2,250,000 and reprogram all funds to FY 24 for MM5508.02 - ATSAC Communication System Improvement in San Pedro. The City requested to reduce the funds and reallocate to a new project. The SBCCOG Board concurred. The funds will be used for the project's PAED, PS&E, and construction phases.
- Reduce \$250,000 from \$2,000,000 to \$1,750,000 and reprogram all funds to FY 24 for MM5508.03 - ATSAC Communication Network Integration with LA County. The City requested to reduce the funds and reallocate to a new project. The SBCCOG Board concurred. The funds will be used for the project's PAED, PS&E, and construction phases.

#### *LACMTA*

- Program \$500,000 in FY 24 for MM5508.18 - RIITS Network Enhancements. The funds will be used for the project's construction phase.

#### *Manhattan Beach*

- Program additional \$4,963,000 and reprogram previously approved as follows: \$1,100,000 in FY 20, \$2,540,000 in FY 21, \$1,800,000 in FY 22, \$5,310,000 in FY 23, \$3,000,000 in FY 24 and \$3,963,000 in FY 25 for MM5508.04 - Advanced Traffic Signal System. The funds will be used for the project's PS&E and construction phases.

#### *Redondo Beach*

- Program an additional \$500,000 in FY 24 for MM5508.05 - Redondo Beach Transit Center and Park and Ride. The funds will be used for the project's Right-of-Way (ROW) and construction phases.
- Program an additional \$3,000,000 in FY 24 for MM5508.13 - Traffic Signal Communication and Network System. The funds will be used for the project's PAED, PS&E, and construction phases.

#### Measure R Transit Investments Program

This update includes funding adjustments to two existing projects as follows:

#### *Gardena*

- Reprogram previously approved \$12,375,000 as follows: \$8,375,000 in FY 25 and \$4,000,000 in FY 26 for MR524.03 - GTRANS: Purchase of Up To 15 Expansion Buses. The funds will be

used for the project's construction capital phase.

### *Inglewood*

- Reprogram previously approved \$233,700,000 as follows: \$26,575,570 in FY 22, \$76,863,918 in FY 23, and \$130,260,512 in FY 24 for MRINGITC - Inglewood Transit Connector Project. The funds will be used for the project's PAED, PS&E, ROW, and construction phases.

## **DETERMINATION OF SAFETY IMPACT**

Programming of Measure M MSP and Measure R Transit Investments funds to the South Bay Subregion projects will not have any adverse safety impacts on Metro's employees or patrons.

## **FINANCIAL IMPACT**

In FY 2023-24, \$12.9 million is budgeted in Cost Center 0441 (subsidies budget - Planning) for the Active Transportation Program (Project #474401), \$114.7 million is budgeted in Cost Center 0441 (subsidies budget - Planning) for South Bay Transit Investment Program (Project #465524) and \$8.3 million is budgeted in Cost Center 0442 (Highway Subsidies) for the Transportation System Mobility Improvement Program (Project #475502). Upon approval of this action, staff will reallocate necessary funds to appropriate projects within Cost Centers 0441 and 0442. Since these are multi-year projects, Cost Centers 0441 and 0442 will be responsible for budgeting the cost in future years.

### Impact to Budget

The sources of funds for these projects are Measure M Highway Construction 17% and Measure R Transit Capital. These fund sources are not eligible for Metro bus and rail operating and capital expenditures.

## **EQUITY PLATFORM**

The South Bay subregion comprises 15 cities and the adjacent unincorporated area of Los Angeles County. Equity Focus Communities (EFCs) are concentrated in Gardena, Hawthorne, Inglewood, the City of Los Angeles, and the unincorporated County of Los Angeles. Eighteen percent of census tracts are defined as EFC in the Subregion. The jurisdictional requests are proposed by the cities and approved/forwarded by the subregion. In line with the Metro Board adopted guidelines and June 2022 Objectives for Multimodal Highway Investments, cities provide documentation demonstrating community support, project need, and multimodal transportation benefits that enhance safety, support traffic mobility, economic vitality, and enable a safer and well-maintained transportation system. Cities lead and prioritize all proposed transportation improvements, including procurement, the environmental process, outreach, final design, and construction. Each city and/or agency, independently and in coordination with the subregion undertakes their jurisdictionally determined community engagement process specific to the type of transportation improvement they seek to develop. These locally determined and prioritized projects represent the needs of cities.

## **IMPLEMENTATION OF STRATEGIC PLAN GOALS**

The recommendation supports the following goals of the Metro Vision 2028 Strategic Plan:

Goal 1: Provide high-quality mobility options that enable people to spend less time traveling by alleviating the current operational deficiencies and improving mobility along the projects.

Goal 4: Transform LA County through regional collaboration by partnering with the Council of Governments and the local jurisdictions to identify the needed improvements and take the lead in development and implementation of their projects.

## **ALTERNATIVES CONSIDERED**

The Board could elect not to approve the additional programming of funds for the Measure M MSP and Measure R Transit Investments Program projects for the South Bay Subregion. This is not recommended as the Subregion developed the proposed projects in accordance with the Measure M Ordinance, Guidelines, and Administrative Procedures, as well as the Measure R Transit Investments Program Guidelines.

## **NEXT STEPS**

Metro staff will continue to work with the Subregion to identify and deliver projects. Funding Agreements will be executed with those who have funds programmed in FY 2023-24. Program/Project updates will be provided to the Board annually.

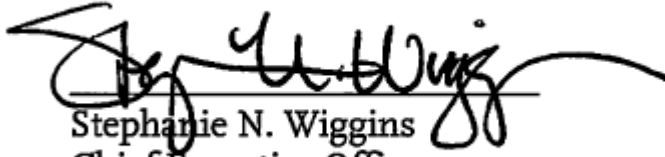
## **ATTACHMENTS**

- Attachment A - Transportation System and Mobility Improvements Program (expenditure line 50) Project List
- Attachment B - South Bay Highway Operational Improvements Program (expenditure line 63) Project List
- Attachment C - Transportation System and Mobility Improvements Program (expenditure line 66) Project List
- Attachment D - Measure R Transit Investments Program Project List

Prepared by: Fanny Pan, Executive Officer, Countywide Planning & Development, (213) 418-3433  
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Stephanie N. Wiggins  
Chief Executive Officer

South Bay Subregion  
 Measure M Multi-Year Subregional Plan - Transportation System & Mobility Improvements Program (Expenditure Line 50)

	Agency	Project ID No.	Project/Location	Funding Phases	Note	Pror Alloc	Alloc Change	Current Alloc	Prior Year Prog	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
1	CARSON	MM4601.09	BIKE LANE INSTALLATION - CARSON ST., FIGUEROA ST., MAIN ST., VICTORIA ST.	CONSTRUCTION	New	\$ -	\$ 5,256,700	\$ 5,256,700			\$ 1,056,700	\$ 3,000,000	\$ 1,200,000	
2	CARSON	MM4601.10	BIKE LANE INSTALLATION - 223RD ST., AVALON BLVD., CENTRAL AVE., DEL AMO BLVD., UNIVERSITY DR.	CONSTRUCTION	New	-	5,384,400	5,384,400			884,400	3,500,000	1,000,000	
3	EL SEGUNDO	MM4601.11	SOUTH BAY LOCAL TRAVEL NETWORK IN EL SEGUNDO	PS&E, CONSTRUCTION	New	-	925,000	925,000			925,000			
4	INGLEWOOD	MM5502.02	ITS (GAP) CLOSURE IMPROVEMENTS	CONSTRUCTION		\$ 13,500,000		\$ 13,500,000	13,500,000					
5	INGLEWOOD	MM5502.03	INGLEWOOD INTERMODAL TRANSIT/PARK AND RIDE FACILITY	PAED, PS&E, CONSTRUCTION		4,933,310		4,933,310	4,933,310					
6	INGLEWOOD	MM5502.09	PRAIRIE AVE. DYNAMIC LANE CONTROL SYSTEM	PS&E, CONSTRUCTION	Chg	13,120,000		13,120,000						13,120,000
7	LA CITY	MM4601.01	SAN PEDRO PEDESTRAIN IMPROVEMENTS	PAED, PS&E, CONSTRUCTION		7,245,710		7,245,710	398,606	809,013	3,372,445	2,665,646		
8	LA CITY	MM4601.02	WILMINGTON NEIGHBORHOOD STREET IMPROVEMENTS	PAED, PS&E, CONSTRUCTION		3,000,600		3,000,600	362,573	2,638,027				
9	LA CITY	MM4601.03	AVALON PROMENADE AND GATEWAY	CONSTRUCTION		10,207,400		10,207,400			3,157,400	5,880,000	1,170,000	
10	LA COUNTY	MM4601.04	WESTMONT/WEST ATJENS PEDESTRIAN IMPROVEMENTS	PAED, PS&E, CONSTRUCTION		6,682,000		6,682,000	306,000	942,400	831,809	3,660,000	941,791	
11	LA COUNTY	MM4601.06	EL CAMINO VILLAGE TRAFFIC AND PEDESTRIAN SAFETY ENHANCEMENTS	PAED, PS&E		1,038,000		1,038,000		114,000	264,000	264,000	396,000	
12	LA COUNTY	MM4601.12	LENNOX VISION ZERO TRAFFIC ENHANCEMENTS	PAED, PS&E	New	-	1,206,000	1,206,000			179,000	300,000	300,000	427,000
13	LA COUNTY	MM5502.04	182ND ST/ ALBERTONI ST. TRAFFIC SIGNAL SYNCH PROGRAM	PAED, PS&E, CONSTRUCTION		4,228,500		4,228,500		200,000	370,000	380,000	3,278,500	
14	LA COUNTY	MM5502.06	VAN NESS TRAFFIC SIGNAL SYCH PROGRAM	PAED, PS&E, CONSTRUCTION		1,702,000		1,702,000		80,000	135,000	320,000	1,167,000	
15	LA COUNTY	MM5502.07	DEL AMO BLVD. (EAST) TRAFFIC SIGNAL SYCH PROGRAM	PAED, PS&E, CONSTRUCTION		1,324,500		1,324,500		70,000	110,000	280,000	864,500	
16	MANHATTAN BEACH	MM4601.13	HIGHLAND AVE CORRIDOR IMPROVEMENTS	PAED, PS&E	New	-	500,000	500,000			50,000	450,000		
17	REDONDO BEACH	MM4601.14	PEDESTRIAN ENHANCEMENTS ON AVIATION BLVD.	PS&E, CONSTRUCTION	New	-	1,500,000	1,500,000				125,000	687,500	687,500

	Agency	Project ID No.	Project/Location	Funding Phases	Note	Pror Alloc	Alloc Change	Current Alloc	Prior Year Prog	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
18	REDONDO BEACH	MM4601.15	RIVIERA VILLAGE PEDESTRIAN AND MULTI-MODAL ENHANCEMENTS	PAED, PS&E	New	-	4,000,000	4,000,000				1,500,000	2,000,000	500,000
19	REDONDO BEACH	MM4601.16	SOUTH BAY LOCAL TRAVEL NETWORK IN REDONDO BEACH	PS&E, CONSTRUCTION	New	-	1,272,700	1,272,700				78,320	1,194,380	
20	ROLLING HILLS ESTATES	MM5502.08	PALOS VERDES DRIVE NORTH AT DAPPLEYGRAY SCHOOL	PAED, PS&E, ROW, CONSTRUCTION		2,880,252		2,880,252	114,300	1,581,802	1,184,150			
21	SBCCOG	MM5502.01	PLANNING ACTIVITIES FOR MEASURE M MULTI-YEAR SUBREGIONAL PROGRAMS ^	PLANNING DEVELOPMENT		738,513		738,513	738,513					
22	SBCCOG	MM5502.05	SOUTH BAY FIBER NETWORK	CONSTRUCTION		6,889,365		6,889,365	6,889,365					
23	SBCCOG	MM5502.10	PLANNING ACTIVITIES FOR THE SOUTH BAY LOCAL TRAVEL NETWORK ^	PLANNING DEVELOPMENT	Chg	357,520	393,800	751,320	357,520		393,800			
24	TORRANCE	MM4601.05	TORRANCE SCHOOLS SAFETY AND ACCESSIBILITY PROGRAM	PS&E CONSTRUCTION	Chg	7,185,000		7,185,000	197,994	34,051	4,704,200	2,248,755		
25	TORRANCE	MM4601.07	TRANSPORTATION OPEN SPACE CORRIDOR MULTI-USE TRAIL	PAED, PS&E		650,000		650,000		650,000				
26	TORRANCE	MM4601.08	TORRANCE SCHOOL SAFETY AND ACCESSIBILITY PROGRAM - PHASE II	PS&E, CONSTRUCTION		10,372,609		10,372,609		768,600	9,604,009			
27	TORRANCE	MM5502.11	TORRANCE FIBER NETWORK AND TRAFFIC SIGNAL OPTIMIZATION	PS&E		1,050,000		1,050,000		70,000	980,000			
<b>TOTAL PROGRAMMING AMOUNT</b>						<b>\$ 97,105,279</b>	<b>\$ 20,438,600</b>	<b>\$117,543,879</b>	<b>\$27,798,181</b>	<b>\$ 7,957,893</b>	<b>\$28,201,913</b>	<b>\$24,651,721</b>	<b>\$14,199,671</b>	<b>\$14,734,500</b>

^ Subregion Planning Activities (0.5%) for MSPs. Planning scope of works under development and to be confirmed and approved before Funding Agreement is executed.

South Bay Subregion  
 Measure M Multi-Year Subregional Plan - South Bay Highway Operational Improvements (Expenditure Line 63)

	Agency	Project ID	Project/Location	Funding Phases	Note	Pror Alloc	Alloc Change	Current Alloc	Prior Year Prog	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
1	CARSON	MM5507.02	CARSON STREET ITS PROJECT	PAED, PS&E, CONSTRUCTION		\$ 700,000		\$ 700,000	\$ 700,000					
2	CARSON	MM5507.03	SEPULVEDA BLVD. WIDENING FROM ALAMEDA ST. TO ICTF	PS&E, CONSTRUCTION		11,897,999		11,897,999		5,473,078	5,830,014	594,907		
3	CARSON	MM5507.10	TRAFFIC SIGNAL UPGRADE -- AVALON BLVD. AND GARDENA BLVD.	PAED, PS&E, CONSTRUCTION		350,000		350,000		2,000	130,000	218,000		
4	GARDENA	MM5507.04	REDONDO BEACH BLVD. ARTERIAL IMPROVEMENTS	PAED, PS&E, CONSTRUCTION	Chg	5,567,000	5,675,000	11,242,000	620,000	2,320,000	5,802,000	2,500,000		
5	HAWTHORNE	MM5507.01	NORTH EAST HAWTHORNE MOBILITY IMPROVEMENT PROJECT	PS&E, ROW, CONSTRUCTION		2,000,000		2,000,000	1,200,000	800,000				
6	HAWTHORNE	MM5507.16	JACK NORTHROP IMPROVEMENTS	PAED, PS&E	New	-	200,000	200,000			40,000	40,000	40,000	80,000
7	HAWTHORNE	MM5507.17	VAN NESS IMPROVEMENTS	PAED, PS&E	New	-	200,000	200,000			40,000	40,000	40,000	80,000
8	HAWTHORNE	MM5507.18	135TH STREET IMPROVEMENTS	PAED, PS&E	New	-	160,000	160,000			40,000	40,000	40,000	40,000
9	HAWTHORNE	MM5507.19	INGLEWOOD AVENUE IMPROVEMENTS	PAED, PS&E	New	-	130,000	130,000			40,000	40,000	40,000	10,000
10	INGLEWOOD	MM5507.05	MANCHESTER BLVD./PRAIRIE AVE. ITS & TRAFFIC SIGNAL IMPROVEMENTS	PAED, PS&E	Chg	1,500,000		1,500,000				1,500,000		
11	INGLEWOOD	MM5507.06	DOWNTOWN ITS	PAED, PS&E, CONSTRUCTION		11,100,000		11,100,000		800,000	10,300,000			
12	INGLEWOOD	MM5507.11	CRENSHAW BLVD. ITS	CONSTRUCTION		8,800,000		8,800,000			2,000,000	6,800,000		
13	LA COUNTY	MM5507.07	AVALON BLVD. TSSP IN THE CITY OF CARSON	PAED, PS&E, CONSTRUCTION	Chg	1,530,000	1,071,223	2,601,223	830,000	700,000	214,245	685,583	171,395	
14	LA COUNTY	MM5507.20	ADVANCED TRAFFIC CONTROL UPGRADES	PAED, PS&E, CONSTRUCTION	New	-	2,130,000	2,130,000			1,278,000	852,000		
15	MANHATTAN BEACH	MM5507.12	MANHATTAN BEACH BLVD. AT PACIFIC AVE. IMPROVEMENTS	PS&E, CONSTRUCTION		1,200,000		1,200,000		160,000	720,000	320,000		
16	MANHATTAN BEACH	MM5507.13	MANHATTAN BEACH BLVD. AT PECK AVE. TRAFFIC SIGNAL IMPROVEMENTS (MR312.87)	CONSTRUCTION		740,000		740,000		740,000				

	Agency	Project ID	Project/Location	Funding Phases	Note	Pror Alloc	Alloc Change	Current Alloc	Prior Year Prog	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
17	MANHATTAN BEACH	MM5507.14	MAHATTAN BEACH BLVD. TRANSPORTATION CORRIDOR IMPROVEMENTS	PS&E		400,000		400,000		150,000	250,000			
18	METRO	MM5507.08	I-110 SOUTHBOUND OFF-RAMP TO PCH	PAED, PS&E		5,781,000		5,781,000	3,450,000	800,000	1,531,000			
19	METRO	MM5507.09	405/110 SEPERATION	PAED, PS&E		17,500,000		17,500,000	6,000,000	6,500,000	5,000,000			
20	REDONDO BEACH	MM5507.21	ADVANCED TRAFFIC SIGNAL SYSTEM ON AVIATION BLVD.	PS&E	New	-	160,000	160,000				80,000	80,000	
21	REDONDO BEACH	MM5507.22	TRAFFIC SIGNAL COMMUNICATIONS AND NETWORK SYSTEM PHASE 2	PAED, PS&E	New	-	2,130,000	2,130,000			1,278,000	852,000		
22	TORRANCE	MM5507.15	RIGHT TURN LANE AT LOMITA BLVD./182ND ST.	PAED, PS&E, CONSTRUCTION		1,000,000		1,000,000		75,000	200,000	480,000	245,000	
<b>TOTAL PROGRAMMING AMOUNT</b>						<b>\$ 70,065,999</b>	<b>\$ 11,856,223</b>	<b>\$ 81,922,222</b>	<b>\$ 12,800,000</b>	<b>\$ 18,520,078</b>	<b>\$ 34,693,259</b>	<b>\$ 15,042,490</b>	<b>\$ 656,395</b>	<b>\$ 210,000</b>

South Bay Subregion  
 Measure M Multi-Year Subregional Plan - Transportation System & Mobility Improvements Program (Expenditure Line 66)

	Agency	Project ID	Project/Location	Funding Phases	Note	Pror Alloc	Alloc Change	Current Alloc	Prior Year Prog	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
1	BEACH CITIES HEALTH DISTRICT	MM4602.01	DIAMOND STREET BIKE PATH PROJECT	PS&E CONSTRUCTION	Chg	\$ 1,833,877	\$ (98,903)	\$ 1,734,974	\$ 1,734,974					
2	EL SEGUNDO	MM4602.02	EL SEGUNDO BLVD	PAED, PS&E, CONSTRUCTION		4,050,000		4,050,000	4,050,000					
3	HAWTHORNE	MM4602.03	HAWTHORNE MONETA GARDEN MOBILITY IMPROVEMENTS	PS&E, ROW, CONSTRUCTION		3,320,000		3,320,000	50,000	150,000	349,400	2,770,600		
4	HAWTHORNE	MM5508.07	ROSECRANS AVE MOBILITY IMPROVEMENT PROJECT, PHASE II FROM PRAIRIE AVE TO CRENSHAW BLVD	PAED, PS&E		260,000		260,000	40,000	40,000	180,000			
5	HAWTHORNE	MM5508.08	CRENSHAW BLVD SIGNAL IMPROVEMENT AND INTERSECTION	PAED, PS&E		260,000		260,000	40,000	40,000	180,000			
6	HERMOSA BEACH	MM5508.09	MOBILITY AND ACCESSIBLTY IMPROVEMENTS PROJECT	PID, PAED		1,800,000		1,800,000	700,000	600,000	500,000			
7	INGLEWOOD	MM4602.06	FIRST/LAST MILE IMPROVEMENTS	PAED, PS&E, CONSTRUCTION	Chg	6,500,000		6,500,000	500,000		6,000,000			
8	INGLEWOOD	MM5508.10	CHANGEABLE MESSAGE SIGNS	PAED, PS&E	Chg	1,000,000		1,000,000				100,000	900,000	
9	LA CITY	MM4602.04	CROSSING UPGRADES AND PEDESTRIAN IMPROVEMENTS	PAED, PS&E, CONSTRUCTION	Chg	3,260,625		3,260,625	775,210	687,769	1,797,646			
10	LA CITY	MM5508.01	SIGNAL OPERATIONAL IMPROVEMENTS	PAED,PS&E, CONSTRUCTION		2,500,000		2,500,000	560,000	1,940,000				
11	LA CITY	MM5508.02	ATSAC COMMUNICATION SYSTEM IMPROVEMENT IN SAN PEDRO	PS&E, CONSTRUCTION	Chg	2,500,000	(250,000)	2,250,000			2,250,000			
12	LA CITY	MM5508.03	ASTAC COMMUNICATIONS NETWORK INTEGRATION WITH LA COUNTY	PAED, PS&E, CONSTRUCTION	Chg	2,000,000	(250,000)	1,750,000			1,750,000			
13	LA CITY	MM5508.14	ALAMEDA ST (SOUTH) WIDENING FROM ANAHEIM ST TO HARRY BRIDGES BLVD (MR312.48)	CONSTRUCTION		17,518,670		17,518,670		3,000,000	10,000,000	4,518,670		
14	LA COUNTY	MM4602.05	DOMINGUEZ CHANNEL GREENWAY	PAED, PS&E, CONSTRUCTION		3,600,000		3,600,000		408,000	259,500	1,492,500	1,440,000	
15	LA COUNTY	MM4602.07	WESTMONT/WEST ATHENS PEDESTRIAN IMPROVEMENTS, PHASE II	PAED, PS&E, CONSTRUCTION		1,165,000		1,165,000		80,000	80,000	625,000	380,000	
16	LACMTA	MM5508.18	RIITS NETWORK ENHANCEMENTS	CONSTRUCTION	New	-	500,000	500,000			500,000			

ATTACHMENT C

	Agency	Project ID	Project/Location	Funding Phases	Note	Pror Alloc	Alloc Change	Current Alloc	Prior Year Prog	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
17	MANHATTAN BEACH	MM5508.04	ADVANCED TRAFFIC SIGNAL SYSTEM	PS&E, CONSTRUCTION	Chg	12,750,000	4,963,000	17,713,000	5,440,000	5,310,000	3,000,000	3,963,000		
18	MANHATTAN BEACH	MM5508.15	AVIATION BLVD. EAST BOUND LEFT-TURN IMPROVEMENTS	PAED, PS&E, CONSTRUCTION		1,200,000		1,200,000	200,000	1,000,000				
19	PALOS VERDES ESTATES	MM5508.11	PALOS VERDES DRIVE WEST CORRIDOR EXPANSION PROJECT	PAED, PS&E		5,517,000		5,517,000	677,000	3,000,000	1,840,000			
20	RANCHO PALOS VERDES	MM5508.12	WESTERN AVE CONGESTION IMPROVEMENTS (25TH TO PV DR) **	PSR, PAED		1,330,000		1,330,000	210,000	120,000	1,000,000			
21	REDONDO BEACH	MM4602.08	NORTH REDONDO BEACH BIKEWAY (NRBB) EXTENSION -- FELTON LN TO INGLEWOOD AVE	PAED, PS&E, CONSTRUCTION		1,000,000		1,000,000	1,000,000					
22	REDONDO BEACH	MM4602.09	NORTH REDONDO BEACH BIKEWAY (NRBB) EXTENSION -- INGLWOOD AVE.	PAED, PS&E, ROW		1,735,000		1,735,000	200,000	1,535,000				
23	REDONDO BEACH	MM5508.05	REDONDO BEACH TRANSIT CENTER AND PARK AND RIDE	ROW, CONSTRUCTION	Chg	7,250,000	500,000	7,750,000	7,250,000		500,000			
24	REDONDO BEACH	MM5508.13	TRAFFIC SIGNAL COMMUNICATIONS AND NETWORK SYSTEM	PAED, PS&E, CONSTRUCTION	Chg	2,000,000	3,000,000	5,000,000	2,000,000		3,000,000			
25	ROLLING HILLS ESTATES	MM4602.10	ROLLING HILLS ROAD BIKE LANES ***	PAED, PS&E		229,450		229,450	30,250	182,700	16,500			
26	TORRANCE	MM5508.06	TRANSPORTATION MANAGEMENT SYSTEM IMPROVEMENTS	PS&E, CONSTRUCTION		390,000		390,000	390,000					
27	TORRANCE	MM5508.16	TORRANCE TRANSIT PARK AND RIDE REGIONAL TERMINAL (MR312.23)	CONSTRUCTION		1,631,000		1,631,000	1,631,000					
28	TORRANCE	MM5508.17	IMPROVMENTS FROM DEL AMO TO DOMINGUEZ ST (MR312.60)	CONSTRUCTION		609,000		609,000	609,000					
<b>TOTAL PROGRAMMING AMOUNT</b>						<b>\$ 87,209,622</b>	<b>\$ 8,364,097</b>	<b>\$ 95,573,719</b>	<b>\$ 28,087,434</b>	<b>\$ 18,093,469</b>	<b>\$ 33,203,046</b>	<b>\$ 13,469,770</b>	<b>\$ 2,720,000</b>	<b>\$ -</b>

\*\* Metro may procure services for the project development phases.

\*\*\* Further design details are subject to Metro approval.

South Bay Subregion  
Measure R South Bay Transit Investments Program

	Agency	Project ID No.	Project/Location	Funding Phases	Note	Pror Alloc	Alloc Change	Current Alloc	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29
1	CARSON	MR524.02	CARSON CIRCUIT: FASHION OUTLET REGIONAL TRANSIT CENTER	PAED, PS&E ROW, CON		\$ 3,525,000		\$ 3,525,000	\$ 1,380,000	\$ 2,145,000						
2	GARDENA	MR524.03	GTRANS: PURCHASE OF UP TO 15 EXPANSION BUSES	Construction Capital	Chg	\$12,375,000		12,375,000				8,375,000	4,000,000			
3	GARDENA	MR524.04	GTRANS: SOLAR ENERGY GENERATION/BUS FUELING INFRASTRUCTURE PROJECT	PS&E CON		\$6,000,000		6,000,000		3,000,000	3,000,000					
4	INGLEWOOD	MRINGITC	INGLEWOOD TRANSIT CONNECTOR PROJECT	PAED, PS&E ROW, CON	Chg	233,700,000		233,700,000	26,575,570	<b>76,863,918</b>	<b>130,260,512</b>					
5	REDONDO BEACH	MR524.05	BEACH CITIES TRANSIT: TRANSIT OPERATIONS & MAINTENANCE FACILITY	Env, PS&E CON		\$32,090,555		32,090,555					5,150,000	8,838,734	17,677,469	424,352
6	TORRANCE	MR524.06	TORRANCE TRANSIT: RETURN OF THE RED CAR URBAN CIRCULATOR TROLLEY	Construction Capital		\$4,500,000		4,500,000	2,000,000	2,500,000						
7	TORRANCE	MR524.07	TORRANCE TRANSIT: EXPANSION BUSES	Construction Capital		\$20,000,000		20,000,000	17,100,000	2,900,000						
8	TORRANCE	MR524.08	TORRANCE TRANSIT: REGIONAL TRANSIT CENTER PARKING STRUCTURE	Construction Capital		\$35,000,000		35,000,000	35,000,000							
9	TORRANCE	MR524.09	MICROTRANSIT EXPANSION OF THE TORRANCE COMMUNITY TRANSIT	Construction Capital		\$240,000		240,000	60,000	180,000						
10	TORRANCE	MR524.10	CONSTRUCTION OF HEAVY-DUTY ELECTRIC VEHICLE CHARGING STATION	Construction Capital		\$3,500,000		3,500,000	3,000,000	500,000						
<b>TOTAL PROGRAMMING AMOUNT</b>						<b>\$350,930,555</b>	<b>\$ -</b>	<b>\$350,930,555</b>	<b>\$85,115,570</b>	<b>\$88,088,918</b>	<b>\$133,260,512</b>	<b>\$8,375,000</b>	<b>\$ 9,150,000</b>	<b>\$8,838,734</b>	<b>\$17,677,469</b>	<b>\$ 424,352</b>





## Board Report

File #: 2023-0409, File Type: Contract

Agenda Number: 17.

### PLANNING AND PROGRAMMING COMMITTEE SEPTEMBER 20, 2023

**SUBJECT: VERMONT TRANSIT CORRIDOR**

**ACTION: APPROVE RECOMMENDATIONS**

#### **RECOMMENDATIONS**

CONSIDER:

- A. AWARDING AND EXECUTING up to a 60-month, firm fixed price Contract No. AE97976000 to Vermont Corridor Partners Joint Venture, a joint venture between AECOM Technical Services, Inc., Terry A. Hayes Associates, Inc., and RAW International, Inc., in the amount of \$55,668,537, to prepare the Planning and Environmental Study for the Vermont Transit Corridor, subject to resolution of any properly submitted protest(s), if any, and;
- B. AUTHORIZING the CEO to execute individual Contract Modifications within the Board-approved Contract Modification Authority.

#### **ISSUE**

The Vermont Transit Corridor is a Measure M project with a projected opening date within Fiscal Years (FY) 2028 to 2030. Currently, there is \$425 million (2015\$) allocated for this project. To advance the project in accordance with the Measure M schedule, a Locally Preferred Alternative (LPA) needs to be identified and environmentally cleared.

On February 6, 2023, Metro issued a Request for Proposal (RFP No. AE97976) seeking a qualified consultant for planning, environmental, and engineering services for the Vermont Transit Corridor Project (Project). Board approval is needed to award Contract No. AE97976000 to allow the consultant to begin work.

#### **BACKGROUND**

Vermont Avenue is the second busiest transit corridor in Los Angeles County with nearly 71,000 daily boardings (pre-Covid) served by Metro Local Line 204 and Metro Rapid Line 754, as well as the Metro B, D, E, and C rail lines. The corridor also connects some of the region's most economically and socially diverse communities. Between Hollywood Boulevard and 120th Street (Attachment A), 100% of the Vermont corridor is contained within Metro Equity-Focus Communities. The Vermont

Transit Corridor Project will not only improve mobility through better connections to the regional transit system but will also improve equity by bringing long-awaited transit improvements to these traditionally underserved communities.

In April 2019, staff presented the findings and recommendations from the Vermont Transit Corridor - Rail Conversion/Feasibility Study. Overall, the study found that: BRT continues to be feasible in the Vermont Corridor; BRT does not preclude conversion to rail transit in the future; BRT has the capacity to serve ridership demand at least until 2042; rail transit would maximize the mobility benefits along the corridor and in the region; and three rail alternatives were identified and determined feasible for future implementation. Additionally, at its April 2019 meeting, the Board approved a Motion 16.1 by Directors Garcetti, Dupont-Walker, Hahn, Solis and Butts (Attachment B) directing staff to advance three BRT alternatives and the three rail concepts identified in the study into the environmental review. The current Measure M ordinance includes the future potential conversion to rail on the Vermont Corridor after FY 2067 and based on passenger demand. The inclusion of rail alternatives in the environmental study provides an opportunity to deliver rail transit sooner should additional funding materialize.

In June 2021, Metro adopted its new Community Based Organization (CBO) Partnering Strategy that established consistent and equitable processes for Metro to utilize when engaging CBOs for professional services. As a result, in November 2021, Metro conducted a pre-environmental public outreach and Community Based Organization (CBO) engagement program to align with the goals of the Equity Platform Framework and ensure that the community's needs and concerns were identified early in the planning process to inform potential transit improvements for the Vermont corridor. The CBO engagement program included partnering with 20 CBOs and engaging over 6,000 stakeholders. Outreach activities were designed to engage and inform stakeholders through traditional and non-traditional approaches, including in-person and virtual meetings with flexible dates, times, and locations, surveys, and interactive and accessible information, providing community members the opportunity to offer input and help shape the next phase for the project.

At its August 25, 2022 meeting, the Board received a status report on the Vermont Transit Corridor Project's Community Based Partnership Program (CPP). The CPP provided stakeholders who live, work, play, study, and/or worship along Vermont with an opportunity to express their thoughts about possible transit improvements they envision for the corridor and ensured that Metro staff received comments from a diverse group of stakeholders who do not often participate in helping shape their communities. It also informed a planning approach supported by the communities along the corridor that includes near-term (quick build), medium-term (BRT), and long-term (rail) transit improvements.

At its September 2022 meeting, based on the community feedback received, the Board approved a motion by Directors Dupont-Walker, Najarian, Mitchell, Solis, and Butts, (Attachment C) directing staff to advance the Vermont Transit Corridor with a three-pronged approach, consisting of near-term bus service improvements, a medium-term BRT project, and a longer-term rail project subject to funding availability. This approach addresses the more immediate transit needs on the corridor while planning for the mid-term and longer-term improvements that will provide even greater community benefits and address future ridership demands.

## **DISCUSSION**

In response to the Board motion, the contract for the planning and environmental work for the Vermont Transit Corridor will be executed in two parts. The base contract covers Part 1 which includes an Alternatives Analysis (AA), a California Environmental Quality Act (CEQA) exemption under Senate Bill 922, and Advanced Conceptual Engineering (ACE) for BRT. Part 1 also includes an optional task for National Environmental Policy Act (NEPA) review should federal funding be pursued and subject to coordination with the Federal Transit Administration (FTA).

Part 2 includes the AA, ACE and CEQA environmental review of the rail alternatives and will commence following the CEQA clearance of BRT. The NEPA optional task, consistent with Board direction to develop a strategy for rail, including funding and delivery, will be authorized based on identifying additional funding and coordination with FTA.

#### Planned Outreach Efforts

Public and stakeholder engagement throughout the planning and environmental process will provide valuable feedback that will inform the environmental review process, including the evaluation of alternatives and the selection of the medium-term LPA by the Metro Board. A series of meetings will be conducted as part of the alternatives analysis and environmental review process. Individual briefings with key stakeholders and elected officials will also be conducted. All outreach activities will be managed through a separate contract issued under the Board-approved On-call Communications Bench. The selected planning and environmental firm will work collaboratively with the outreach contractor throughout the study period.

#### Status of Near Term Bus Service Improvements

One of the key outcomes from the CPP also included implementing near-term bus service improvements on the corridor. Metro Operations is leading this effort, which proposes peak period curb-running bus lanes between Sunset and Wilshire Boulevards and full-time curb-running bus lanes between Gage Avenue and the Vermont/Athens C Line Station. Staff will conduct briefings and presentations to interested stakeholders, community groups, and neighborhood councils, as well as outreach to businesses along Vermont. Community engagement is slated to begin in [Fall /Winter 2023](#), followed by design work in Spring 2024. Implementation of the bus lanes is anticipated for [Summer 2025](#). This project will be discussed further at the September 21, 2023, Operations, Safety, and Customer Experience Committee.

#### **DETERMINATION OF SAFETY IMPACT**

Approval of this item will not impact the safety of Metro's customers or employees.

#### **FINANCIAL IMPACT**

The FY24 Budget includes \$4.9 million in Cost Center 4240 (Mobility Corridors Team 4), Project 471402 (Vermont Transit Corridor Project). Since this is a multi-year contract, the Cost Center Manager and Chief Planning Officer will be responsible for budgeting in future years for the balance of the remaining project budget.

### Impact to Budget

The funding source for the Vermont Transit Corridor project is Measure M 35% Transit Construction. As these funds are earmarked for the Vermont Transit Corridor project, they are not eligible for Metro bus and rail capital and operating expenditures.

### EQUITY PLATFORM

The Vermont Transit Corridor Planning and Environmental Review contract was solicited as an open solicitation and included a Disadvantaged Business Enterprise (DBE) goal of 27%. The solicitation was posted on Metro's Vendor Portal and in local publications with geographic and sociodemographic relevance to the project corridor. Evaluation of the proposals considered a number of criteria, including an understanding of local institutional issues, political dynamics, community concerns, and needs of the Vermont corridor. In addition, as part of the scope of work, the Contractor will conduct a comprehensive cultural needs assessment. The recommended firm exceeded the goal by making a 41.16% DBE commitment. The Vermont Transit Corridor is consistent with the Metro Equity Platform in that the alternatives help enhance accessibility and connectivity for residential and employment centers, support for transit-oriented communities' policies, support for first/last-mile connections, and investment in disadvantaged communities. The Vermont Transit Corridor is located entirely within Equity Focus Communities (EFCs). The Project will provide new benefits of enhanced mobility and improved regional access for transit-dependent and minority and/or low-income populations within the study area. Going forward, the Project will continue to use Metro's EFC definition along with other metrics (seniors, school-age students, single moms, low-income households, people with disabilities-all who are likely to be more transit-dependent), as appropriate, to guide analyses and to conduct robust and inclusive community engagement.

Throughout the planning and environmental review of this project, advancing transit equity will be a critical part in setting up project objectives in evaluating alternatives, developing design elements, and engaging the community and stakeholders. In addition, we will continue to partner with CBOs to support this work and advance equity in alignment with Metro's CBO Partnering Strategy.

### IMPLEMENTATION OF STRATEGIC PLAN GOALS

The project will support the goals of the strategic plan by enhancing communities and lives through improved mobility and access to opportunities through the addition of a new high-quality mobility option, closing a gap in the transit network and enhancing communities and lives through improved mobility and access to opportunity.

### ALTERNATIVES CONSIDERED

The Board could consider environmentally clearing the LPA for the corridor using in-house resources. This option is not recommended as there are insufficient in-house resources to conduct a study of this magnitude, placing the Measure M schedule at risk.

### NEXT STEPS

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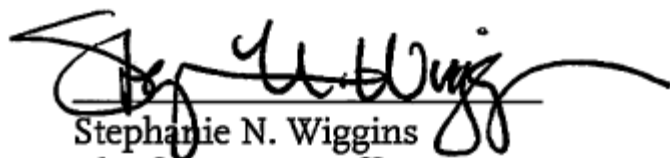
Upon Board approval, staff will execute Contract No. AE97976000 with Vermont Corridor Partners Joint Venture to initiate work on the planning, environmental, and design work needed for the Vermont Transit Corridor Project.

### **ATTACHMENTS**

- Attachment A - Vermont Transit Corridor Map
- Attachment B - Board Motion (April 17, 2019)
- Attachment C - Board Motion (September 22, 2022)
- Attachment D - Procurement Summary
- Attachment E - DEOD Summary

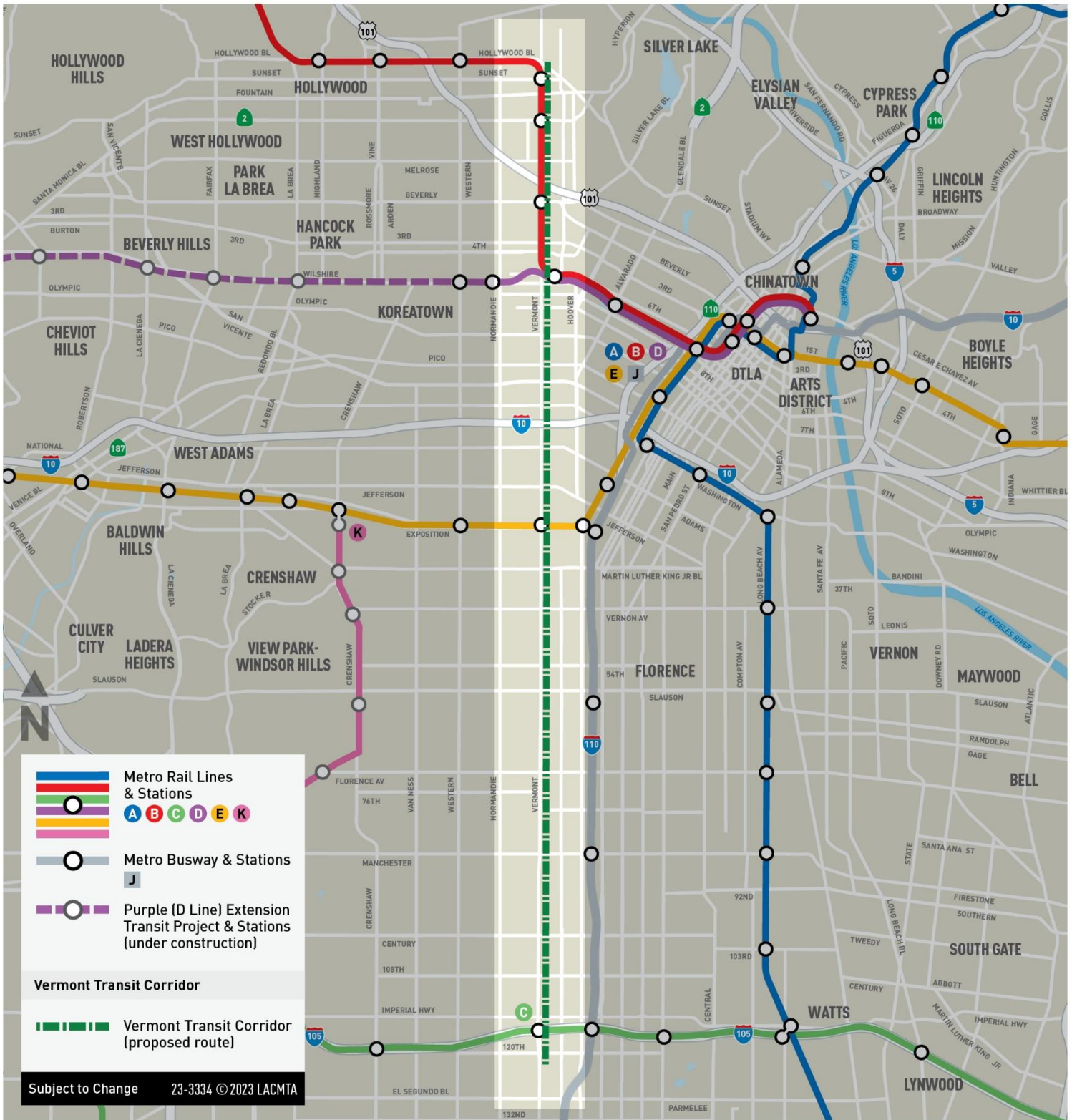
Prepared by: Fulgene Asuncion, Sr. Manager, (213) 922-3025  
Martha Butler, Sr. Director, (213) 922-7651  
Cory Zelmer, Deputy Executive Officer, (213) 922-1079  
Allison Yoh, Executive Officer, (213) 922-4812  
David Mieger, Senior Executive Officer (213) 922-3040  
Debra Avila, Deputy Chief Vendor/Contract Management Officer,  
(213) 418-3051

Reviewed by: James de la Loza, Chief Planning Officer, Countywide Planning & Development,  
(213) 922-2920



Stephanie N. Wiggins  
Chief Executive Officer

# ATTACHMENT A – Vermont Transit Corridor Map





Metro

## Board Report

Los Angeles County  
Metropolitan Transportation  
Authority  
One Gateway Plaza  
3rd Floor Board Room  
Los Angeles, CA

File #: 2019-0259, File Type: Motion / Motion Response

Agenda Number: 16.1

**PLANNING AND PROGRAMMING COMMITTEE  
APRIL 17, 2019**

**Motion by:**

**GARCETTI, DUPONT-WALKER, HAHN, SOLIS AND BUTTS**

**Related to Item 16: Vermont Transit Corridor - Rail Conversion/Feasibility Study**

MTA should always strive to deliver the best transit project possible and not prematurely eliminate warranted project alternatives.

The Vermont Transit Corridor is a significant Measure M project intended to improve mobility along Vermont Avenue. Vermont Avenue is MTA's highest-ridership bus corridor. Vermont connects some of the most economically and socially diverse communities and several major destinations in the Los Angeles region.

Historically, Vermont Avenue was the second priority for rail transit investment after Wilshire Boulevard, as seen by the current Red Line route north of Wilshire Boulevard. Current and future Vermont Transit Corridor users deserve a world-class, reliable, and convenient transportation option. While the Bus Rapid Transit (BRT) concepts recommended by MTA will improve bus operations and travel times, the Vermont Transit Corridor rail concepts would deliver superior customer experience, connectivity, reliability, and capacity.

Exposition Park in particular is one of the significant destinations served by the Vermont Transit Corridor. Exposition Park currently draws about four million visitors per year and is developing a new master plan in anticipation of additional growth.

Exposition Park is experiencing nearly \$2 billion in new and recent investments, including the Lucas Museum of Narrative Art, the Oschin Air and Space Center, the Los Angeles Memorial Coliseum renovation, and an addition to the Natural History Museum. The Lucas Museum alone is a \$1 billion investment forecasted to draw an additional one million visitors per year to the regional park. Additionally, the Los Angeles Football Club's Banc of California Stadium is a \$350 million investment with a significant transit-patron attendance. Lastly, Exposition Park will be a major venue for the future 2028 Olympic and Paralympic Games.

The Vermont Transit Corridor also connects to the University of Southern California (USC). USC is LA County's second-largest private employer and eighth-largest employer in LA County overall. USC

serves about 47,500 students, over 20,100 faculty and staff, and many more visitors, whom share a highly constrained parking capacity.

With ongoing development along the corridor, MTA could draw significant public-private partnership interest and private infrastructure investment. The Vermont Transit Corridor Project is a historic opportunity for LA County to close a transit service connectivity gap and to provide a world-class, reliable transportation option for people to access education, employment, and entertainment. This critical corridor connects multiple MTA rail lines, serves various regional employment centers, and connects populous, lower-income communities who rely on transit as well as emerging transit-oriented communities.

Bus service quality and reliability improvements on Vermont Avenue are much needed. MTA should continue to develop world-class Bus Rapid Transit alternatives for Vermont Avenue to ensure transit riders experience a high-quality, seamless ride.

However, given high transit ridership and constrained, congested conditions on Vermont Avenue, MTA must also study all technically feasible rail alternatives during environmental review and explore innovative funding mechanisms to accelerate their effectuation. Additionally, should MTA recommend congestion pricing in the Downtown LA area, a Vermont rail alternative will ensure a high-quality transit option. Lastly, given that MTA seeks to advance BRT concepts that would not preclude future rail conversion, evaluating all technically feasible rail alternatives should not significantly affect the environmental analysis budget and schedule.

MTA should preserve the ability to deliver the Vermont Transit Corridor as a rail project should additional funding materialize. Historically, there is precedent for this. The Expo Phase 1 and Crenshaw/LAX projects included both BRT and rail alternatives in their respective environmental documents.

## **SUBJECT: VERMONT TRANSIT CORRIDOR - RAIL CONVERSION/FEASIBILITY STUDY**

### **RECOMMENDATION**

APPROVE Motion by Garcetti, Dupont-Walker, Hahn, Solis and Butts that the Board direct the CEO to:

- A. Advance technically feasible rail concepts previously identified through the 2017 Vermont Bus Rapid Transit (BRT) Technical Study into environmental review to preserve the ability to deliver rail transit if additional funding materializes;
- B. Include a feasibility study of extending the Vermont Transit Corridor to the South Bay Silver Line Pacific Coast Highway transitway station to ensure regional connectivity via Minimum Operable Segments, including identification of potential maintenance facility sites; and
- C. Report back to the MTA Board in July 2019 with a Public Private Partnership business case approach for each Minimum Operable Segment.





## Metro



## Board Report

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**File #:** 2022-0676, **File Type:** Motion / Motion Response

**Agenda Number:** 51.

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**REGULAR BOARD MEETING  
SEPTEMBER 22, 2022**

**Motion by:**

**DIRECTORS DUPONT-WALKER, NAJARIAN, MITCHELL, SOLIS, AND BUTTS**

Vermont Transit Corridor Motion

Vermont Avenue is a principal transit corridor in Southern California that will benefit immensely from Metro investments.

Vermont Avenue is the second-busiest transit corridor in Southern California after Wilshire Blvd. According to Metro ridership data, Vermont currently carries more transit trips than any of Metro's rail and BRT lines except the A Line (Blue) and B Line (Red).

Likewise, the neighborhoods along Vermont contain some of the most densely populated, diverse, and highest transit-dependent communities in the region, many of which have a legacy of severe historical underinvestment. Race and class have had a glaring involvement. Nine out of ten riders on lines 204 and 754 identify as black, indigenous, and people of color. Additionally, over 60% of these riders live below the poverty line and 84% do not have access to a car. With that makeup, intentional action supporting safe, reliable service along Vermont could represent a dramatic shift toward equity for these communities.

With this existing high ridership and high need, Vermont will benefit from new investment more than any other existing transit corridor in the Metro system. Metro buses on Vermont travel at just 10 miles per hour and have an on-time performance of about 70 percent, highlighting the need for improvements.

To address these needs, the Metro included the Vermont Transit Corridor in the Measure M Expenditure Plan. Following studies to identify technically feasible bus and rail alternatives, Metro recently completed an innovative Community-Based Partnership Program engagement effort. Across all engagement methods, feedback from the entire Vermont corridor showed clear support for short-, medium-, and long-term improvements.

Accordingly, Metro plans to advance the Vermont Transit Corridor through a three-pronged approach:

- Short-term: quick-build improvements, including new bus shelters, more bus service, and bus-only lanes
- Medium-term: a full BRT corridor project

- Long-term: a rail project to be delivered as funding becomes available

This smart approach balances tangible bus improvements with future plans for rail. Additionally, this approach also prevents the Board from being forced to select one mode at the conclusion of a single project development process.

Historically, Vermont was the second priority for rail transit investment after Wilshire. Rapid Transit along the Vermont Corridor has been part of Southern California transit master plans since the mid-1970s, including part of a proposed 1976 rail “Starter Line.” After Rapid Transit service north of Wilshire was realized in the 1990s, Metro continued to evaluate Vermont south. In the lead-up to Measure R and the 2009 Long Range Transportation Plan (LRTP), Metro found that rail on Vermont would have more boardings than any other then-unfunded rail corridor except Wilshire. Consequently, Metro included Vermont rail in the 2009 LRTP’s Strategic Unfunded project list. This high performance was further reinforced by the initial Vermont Transit Corridor studies in the 2010s.

The Board should act now to reaffirm this three-pronged strategy and take steps to ensure that rail remains a longer-term priority, even as Metro aggressively advances bus improvements.

**SUBJECT: VERMONT TRANSIT CORRIDOR MOTION**

**RECOMMENDATION**

APPROVE Motion by Directors Dupont-Walker, Najarian, Mitchell, Solis, and Butts that the Board direct the CEO to:

- Advance the Vermont Transit Corridor with a three-pronged strategy, completing immediate-term quick-build improvements as soon as is practicable, a medium-term BRT project opening for revenue service no later than FY27, and a longer-term rail transit project thereafter;
- Evaluate the medium-term BRT project for a federal Small Starts application;
- Of the \$425 million included for the Vermont Transit Corridor in the Measure M Expenditure Plan (line item 17; 2015\$), reserve no less than ten percent for the development of the long-term rail transit project. If it ever becomes necessary for Metro to recommend this funding for a shortfall on the Vermont BRT project, Metro will work with the subregion to identify replacement funds that ensure the rail transit project continues to meaningfully advance;
- Identify a strategy to make the Vermont rail project shovel-ready consistent with voter- and Board-adopted Measure M project sequencing or acceleration priorities (Measure M Project Evaluation Readiness Tool). Without affecting existing voter- and Board-adopted project sequencing or acceleration priorities (except as allowed by the Measure M decennial process), make the Vermont rail project a first priority for any future new capital funding;
- Explore new opportunities to optimize bus service offered by municipal operators on the Vermont corridor, including evaluation of overlapping and connecting lines and schedule coordination to allow for seamless timed transfers; and

- F. Include an extension south of 120th Street in Metro's forthcoming list of future strategic unfunded projects, building off of the recently-completed Vermont Transit Corridor South Bay Extension Feasibility Study.

## PROCUREMENT SUMMARY

VERMONT TRANSIT CORRIDOR PLANNING AND ENVIRONMENTAL  
STUDY/AE97976000

1.	<b>Contract Number:</b> AE97976000	
2.	<b>Recommended Vendor:</b> Vermont Corridor Partners Joint Venture (AECOM Technical Services, Inc., Terry A. Hayes Associates, Inc., and RAW International, Inc.)	
3.	<b>Type of Procurement (check one):</b> <input type="checkbox"/> IFB <input type="checkbox"/> RFP <input checked="" type="checkbox"/> RFP-A&E <input type="checkbox"/> Non-Competitive <input type="checkbox"/> Modification <input type="checkbox"/> Task Order	
4.	<b>Procurement Dates:</b>	
	<b>A. Issued:</b> February 6, 2023	
	<b>B. Advertised/Publicized:</b> February 6, 2023	
	<b>C. Pre-Proposal Conference:</b> February 22, 2023	
	<b>D. Proposals Due:</b> March 23, 2023	
	<b>E. Pre-Qualification Completed:</b> June 22, 2023	
	<b>F. Conflict of Interest Form Submitted to Ethics:</b> March 24, 2023	
	<b>G. Protest Period End Date:</b> September 27, 2023	
5.	<b>Solicitations Picked up/Downloaded:</b> 134	<b>Proposals Received:</b> 5
6.	<b>Contract Administrator:</b> Yamil Ramirez Roman	<b>Telephone Number:</b> (213) 922-1064
7.	<b>Project Manager:</b> Fulgene Asuncion	<b>Telephone Number:</b> (213) 922-3025

**A. Procurement Background**

This Board Action is to approve Contract No. AE97976000 issued in support of the Planning and Environmental Study for the Vermont Transit Corridor project. Board approval of contract awards are subject to resolution of any properly submitted protest.

The Request for Proposals (RFP) was issued in accordance with Metro's Acquisition Policy and the contract type is firm fixed price. The RFP was issued with a DBE goal of 27%.

Five (5) amendments were issued during the solicitation phase of this RFP:

- Amendment No. 1, issued February 7, 2023 included the Exhibit 3 – Evaluation Criteria which was invertedly left out of the solicitation package.
- Amendment No. 2, issued February 7, 2023 provided clarification on the Exhibit Numbers in the RFP document to align with the Exhibits provided.
- Amendment No. 3, issued February 14, 2023 provided further clarification on the Exhibit Forms required to be submitted with a proposal.
- Amendment No. 4, issued February 24, 2023 provided clarification on the RC DBE Program that incorrectly listed the goal at 30% instead of 27%.
- Amendment No. 5, issued March 7, 2023 included an updated Exhibit 6 – Proposal Letter to include the length of time the proposal would be valid, and provided clarification on the General Format of the proposal submissions.

A total of 134 firms downloaded the RFP and were included in the planholder's list. A virtual pre-proposal conference was held on February 22, 2023 and was attended by 73 participants representing 44 companies. There were 24 questions asked, and responses were released prior to the proposal due date.

A total of five (5) proposals were received on March 23, 2023 from the following firms:

1. HNTB Corporation (HNTB)
2. Arcadis IBI Group, A California Partnership (IBI)
3. Jacobs Engineering Group, Inc. (Jacobs)
4. Vermont Corridor Partners – a Joint Venture between AECOM Technical Services, Inc., Terry A. Hayes Associates, Inc., and RAW International, Inc. (VCP)
5. WSP USA Inc. (WSP)

## **B. Evaluation of Proposals**

A Proposal Evaluation Team (PET) consisting of staff from Metro's Mobility Corridors Countywide Planning and Development Department, Metro's Major Capital Project Engineering Department, and the Los Angeles Department of Transportation (LADOT) was convened and conducted a comprehensive technical evaluation of the proposals received.

The proposals were evaluated based on the following evaluation criteria and weights:

- |   |     |
|---|-----|
| • Experience and Qualifications of the Contractor Team                | 25% |
| • Experience and Qualifications of the Proposed Personnel on the Team | 25% |
| • Effectiveness of the Project Management Plan                        | 15% |
| • Understanding of Work and Project Approach for Implementation       | 35% |

The evaluation criteria are appropriate and consistent with criteria developed for other, similar Architect and Engineers (A&E) procurements. Several factors were considered when developing these weights, giving the greatest importance to the understanding of work and project approach for implementation. The PET evaluated the proposals according to the pre-established evaluation criteria.

This is an A&E, qualifications-based procurement; therefore, price cannot be used as an evaluation factor pursuant to state and federal law.

During the period of April 10, 2023 to May 1, 2023, the PET independently evaluated and scored the technical proposals. Of the five proposals received, four firms were determined to be within the competitive range. They are listed below in alphabetical order:

1. HNTB Corporation (HNTB)
2. Jacobs Engineering Group, Inc. (Jacobs)

3. Vermont Corridor Partners – a Joint Venture between AECOM Technical Services, Inc., Terry A. Hayes Associates, Inc., and RAW International, Inc. (VCP)
4. WSP USA Inc. (WSP)

One firm was determined to be outside the competitive range and was excluded from further consideration as their proposal did not thoroughly demonstrate the team's experience in planning and environmental review and focused mostly on support efforts such as design and construction activities.

On May 12, 2023, all firms within the competitive range were invited for oral presentations which provided them the opportunity to present their qualifications, and to respond to questions from the PET.

Following the oral presentations, the PET finalized and submitted their technical scores based on both the written proposal and input received during the oral presentation. On May 17, 2023, the PET completed their evaluation of the proposals and determined Vermont Corridor Partners to be the highest ranked proposer.

### **Qualifications Summary of Firms within the Competitive Range:**

#### **HNTB Corporation**

HNTB Corporation (HNTB) has provided relevant experience including planning, design, environmental documents and advanced conceptual engineering (ACE) for the Sepulveda Transit Corridor Feasibility Study and Metro K Line project.

HNTB demonstrated understanding of the work and approach, provided tools, visuals, and high-quality data collection to inform planning, design, urban design of BRT and rail. The proposal assigned a Professional Engineer and Structural Engineer to be the PM on the Project, along with key staff with relevant technical and community outreach/engagement experience working on similar projects.

HNTB's proposal included an equity tool dashboard that has been developed for the Vermont Transit Corridor for the Cultural Needs Assessments and Corridor Definition. However, HNTB's proposal did not clearly demonstrate planning and environmental experience for some key personnel on projects of similar scope.

#### **Jacobs Engineering Group, Inc.**

Jacobs Engineering Group, Inc. (Jacobs) has provided relevant experience including planning, engineering, and environmental capabilities delivering environmental documents and conceptual design for multi-modal transit corridor projects.

Jacobs demonstrated proven ability to plan, design and analyze the various alternatives under consideration for this project and their interfaces. The proposal

showed a strong understanding of local institutional issues, political dynamics, community concerns and the needs of the Vermont Corridor.

Jacobs' proposal demonstrated clear knowledge and understanding of the Scope of Services including all required tasks, deliverables, and project management. However, Jacobs' proposal did not include tasks for Cultural Needs Assessment into the overall project approach.

### **Vermont Corridor Partners Joint Venture**

Vermont Corridor Partners (VCP) Joint Venture (JV) is comprised of AECOM Technical Services, Inc., Terry A. Hayes Associates, Inc., and RAW International, Inc. and collectively has provided relevant services including planning, environmental and architecture.

VCP JV demonstrated experience in all modes of transit, environmental studies including a number of Metro projects and demonstrated understanding and experience working on the Vermont Corridor, politics and its diverse communities. Their proposal also included the incorporation of technology as tools for innovating methods for data gathering, organization and dissemination.

VCP JV's proposal included a summary of the Vermont corridor and how past policies affected the inequity in the present day which reflected a depth of understanding of the issues and how they might be approached during the project. The proposal demonstrated the corridor challenges and opportunities, provided proposed solutions and benefits for each and cited prior experience of where similar challenges were addressed in other relevant projects.

### **WSP USA Inc.**

WSP USA Inc. (WSP) has provided relevant experience in large-scale transit planning and environmental Light Rail Transit projects such as the Metro K Line Northern Extension and East San Fernando Valley Light Rail project.

WSP provided a detailed management plan and document control procedures that clearly defined the contractor's responsibilities. The proposal reflects a substantial investment by the contractor to understand the VTC sufficiently to identify technical and operational issues and opportunities.

WSP demonstrated the ability for the team to meet the schedule anticipated in the Scope of Services and provided a plan for coordination with Metro's consultant selected under a separate contract to carry out the community outreach. However, WSP's key personnel did not demonstrate relevant experience leading transit projects similar in scope and demonstrated limited BRT experience managing BRT projects.

A summary of the PET scores is provided below:



1	Firm	Average Score	Factor Weight	Weighted Average Score	Rank
2	<b>Vermont Corridor Partners</b>				
3	Experience and Qualifications of the Contractor Team	77.88	25.00%	19.47	
4	Experience and Qualifications of the Proposed Personnel on the Team	79.16	25.00%	19.79	
5	Effectiveness of the Project Management Plan	76.73	15.00%	11.51	
6	Understanding of Work and Project Approach for Implementation	79.80	35.00%	27.93	
7	<b>Total</b>		<b>100.00%</b>	<b>78.70</b>	<b>1</b>
8	<b>HNTB Corporation</b>				
9	Experience and Qualifications of the Contractor Team	77.00	25.00%	19.25	
10	Experience and Qualifications of the Proposed Personnel on the Team	76.52	25.00%	19.13	
11	Effectiveness of the Project Management Plan	76.27	15.00%	11.44	
12	Understanding of Work and Project Approach for Implementation	80.20	35.00%	28.07	
13	<b>Total</b>		<b>100.00%</b>	<b>77.89</b>	<b>2</b>
14	<b>Jacobs Engineering Group, Inc.</b>				
15	Experience and Qualifications of the Contractor Team	78.76	25.00%	19.69	
16	Experience and Qualifications of the Proposed Personnel on the Team	76.84	25.00%	19.21	
17	Effectiveness of the Project Management Plan	75.00	15.00%	11.25	
18	Understanding of Work and Project Approach for Implementation	76.20	35.00%	26.67	
19	<b>Total</b>		<b>100.00%</b>	<b>76.82</b>	<b>3</b>
20	<b>WSP USA Inc.</b>				
21	Experience and Qualifications of the Contractor Team	74.36	25.00%	18.59	
22	Experience and Qualifications of the Proposed Personnel on the Team	73.32	25.00%	18.33	
23	Effectiveness of the Project Management Plan	74.53	15.00%	11.18	
24	Understanding of Work and Project Approach for Implementation	76.60	35.00%	26.81	
25	<b>Total</b>		<b>100.00%</b>	<b>74.91</b>	<b>4</b>

**C. Cost Analysis**

The recommended price of \$55,668,537 has been determined to be fair and reasonable based upon MAS audit findings, an independent cost estimate (ICE), cost analysis, technical evaluation, fact finding, and negotiations. Staff successfully negotiated a savings of \$3,429,567.

<b>Proposer Name</b>	<b>Proposal Amount</b>	<b>Metro ICE</b>	<b>Negotiated Amount</b>
Vermont Corridor Partners	\$59,098,104	\$57,907,009	\$55,668,537

**D. Background on Recommended Contractor**

The recommended firm, Vermont Corridor Partners Joint Venture (VCP JV), is located in Los Angeles County and have been in business for 120 years collectively (50 years for AECOM Technical Services, Inc., 40 years for Terry A. Hayes Associates, Inc., and 30 years for RAW International, Inc.). VCP JV offers cross-disciplinary services across various sectors including BRT and LRT planning and delivery, station planning and architecture, and environmental clearance.

The proposed team is comprised of staff from VCP JV, of which two of the JV firms are DBE certified (Terry A. Hayes Associates, Inc. and RAW International, Inc.), and thirteen (13) subcontractors, of which eight (8) are certified DBE firms.

## DEOD SUMMARY

VERMONT TRANSIT CORRIDOR PLANNING AND ENVIRONMENTAL  
STUDY/AE97976000**A. Small Business Participation**

The Diversity and Economic Opportunity Department (DEOD) established a 27% Disadvantaged Business Enterprise (DBE) goal for this solicitation. Vermont Corridor Partners Joint Venture exceeded the goal by making a 41.16% DBE commitment.

<b>Small Business Goal</b>	<b>27% DBE</b>	<b>Small Business Commitment</b>	<b>41.16% DBE</b>
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	<b>DBE Subcontractors</b>	<b>Ethnicity</b>	<b>% Committed</b>
1.	RAW International, Inc.	African American	15.74%
2.	Terry A. Hayes Associates	African American	16.55%
3.	CR Associates	Subcontinent Asian American	0.96%
4.	Intueor Consulting	Subcontinent Asian American	1.43%
5.	Mariposa Community Outreach	Hispanic American	0.60%
6.	MLA Green	Hispanic American	0.86%
7.	Systems Consulting LLC	African American	0.33%
8.	TransLink Consulting LLC	Asian Pacific	0.45%
9.	V&A, Inc.	Hispanic American	2.92%
10.	Vicus LLC	Hispanic American	1.32%
<b>Total DBE Commitment</b>			<b>41.16%</b>

**B. Local Small Business Enterprise (LSBE) Preference**

The LSBE preference is not applicable to this FTA federally funded procurement. Federal law (49 CFR § 661.21) prohibits the use of local procurement preferences on FTA-funded projects.

**C. Living Wage and Service Contract Worker Retention Policy Applicability**

The Living Wage and Service Contract Worker Retention Policy is not applicable to this contract.

**D. Prevailing Wage Applicability**

Prevailing Wage requirements are applicable to this project. DEOD will monitor contractors' compliance with the State of California Department of Industrial

Relations (DIR), California Labor Code, and, if federally funded, the U S Department of Labor (DOL) Davis Bacon and Related Acts (DBRA).

**E. Project Labor Agreement/Construction Careers Policy**

Project Labor Agreement/Construction Careers Policy is not applicable to this Contract. Project Labor Agreement/Construction Careers Policy is applicable only to construction contracts that have a construction contract value in excess of \$2.5 million.



# We're planning a new way to ride on Vermont.

## Planning & Programming Committee

VERMONT TRANSIT CORRIDOR

Legistar File 2023-0409  
September 20, 2023



# Recommendation

AUTHORIZE the Chief Executive Officer (CEO) to:

- A. AWARD AND EXECUTE up to a 60-month, firm fixed price Contract No. AE97976000 to Vermont Corridor Partners Joint Venture, a joint venture between AECOM Technical Services, Inc., Terry A. Hayes Associates, Inc., and RAW International, Inc., in the amount of \$55,668,537, to prepare the Planning and Environmental Study for the Vermont Transit Corridor, subject to resolution of any properly submitted protest(s), if any, and;
- B. AUTHORIZE the CEO to execute individual Contract Modifications within the Board-approved Contract Modification Authority.

# Background

- > Measure M Project - \$425M for transit improvements
- > Metro has completed two technical studies evaluating BRT and rail options along the corridor
- > June 2022: Completed community engagement and Community Based Partnership Program (CPP)
- > September 2022: Board direction to advance the Vermont Transit Corridor with a three-pronged strategy:
  - Near-term: improved bus service and bus-only lanes on select segments
  - Medium-term: a full BRT corridor project
  - Long-term: a rail project to be delivered as funding becomes available



# Environmental Contract Award

## > Part 1: BRT Alternatives

- Base Contract: Alternatives Analysis, Advanced Conceptual Engineering (ACE), and CEQA Exemption per SB 922
- Optional Tasks: NEPA environmental analysis and preliminary engineering

## > Part 2: Rail Alternatives

- Base Contract: CEQA EIR/ACE
- Optional Task: NEPA EIS
- Will commence upon completion of environmental clearance of BRT

> 41.16% Commitment for Disadvantaged Business Enterprise (DBE), goal set at 27%





# Alternatives Under Consideration

## > Bus Rapid Transit (BRT) Alternatives

- End-to-end side-running concept
- End-to-end center-running concept
- Combo side & center-running concept

## > Rail Alternatives

- Light Rail Transit with grade separations
- Two Heavy Rail Transit options: one connected to Metro B (Red) Line and stand-alone option from Wilshire/Vermont south



# Next Steps

October 2023 – Execute contract and initiate work on the planning, environmental, and design work needed for the Vermont Transit Corridor Project





## Board Report

File #: 2023-0526, File Type: Program

Agenda Number: 18.

### PLANNING AND PROGRAMMING COMMITTEE SEPTEMBER 20, 2023

**SUBJECT: AWARD RECOMMENDATIONS FOR VISIONARY SEED FUND COMPETITIVE GRANT PROGRAM**

**ACTION: APPROVE RECOMMENDATIONS**

#### **RECOMMENDATION**

CONSIDER:

- A. APPROVING the recommended Visionary Seed Fund competitive grant program funding awards totaling \$2,559,090 (Attachment A);
- B. AUTHORIZING the Chief Executive Officer (CEO) or her designee to negotiate and execute all necessary agreements for approved projects; and
- C. AUTHORIZING the CEO or her designee the authority to administratively approve minor changes to the scope of work of approved Visionary Seed Fund awards.

#### **ISSUE**

Measure M allocates \$20 million over 40 years to the Visionary Seed Fund (VSF), and the Measure M Final Guidelines give Metro authority to make \$1.5 million available every three years through a competitive grant process to fund Metro, Municipal Operator, and Local Operator pilot projects that "help spark and develop innovative mobility concepts in Los Angeles County." In March 2023, Metro launched the first competitive grant cycle. Since unused VSF funds had rolled over from 2017, Metro released \$3 million for grant awards.

#### **BACKGROUND**

On November 15, 2022, at CoMotion LA, Metro announced that the first VSF grant cycle would seek pilots that test and assess strategies that demonstrate through measurable outcomes how to grow ridership to pre-COVID levels and beyond. Staff briefed the Policy Advisory Council (PAC), Bus Operations Subcommittee (BOS), Local Transit Systems Subcommittee (LTSS), and local transit General Managers about the grant program. Further, staff hosted two Metro internal webinars, and on March 8, 2023, Metro hosted a VSF Innovation Forum, attended by local operators, community-

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based organizations, and private companies interested in learning more about the program. Staff released a Notice of Funding Opportunity (NOFO) following the Forum.

## **DISCUSSION**

The first VSF grant cycle made three million available using accumulated unspent funds from 2017. Eligible applicants are Metro, Municipal Operators, and Local Operators. Applicants were encouraged to team with private, public, and/or non-profit partners to deliver their proposed pilot project. Applicants were required to team with at least one research partner to evaluate the effectiveness of the pilot. Project eligibility was broad, with requirements that projects be visionary, innovative, and provide a clear solution for addressing transit ridership.

Metro received four applications from eligible applicants: two applications from Metro, one from Torrance Transit, and one from the City of West Covina. A matrix of applications received from eligible applicants is included in this report as Attachment A. (Metro received eight applications in total; however, four applications were received from ineligible applicants, meaning an application that did not include an LA County-based public transit operator.) The evaluation criteria are included in this report as Attachment B.

### **Recommended Awards**

The evaluation committee, comprised of three Metro staff and two external evaluators, recommended Torrance Transit, the City of West Covina, and Metro TEAMSUN to be awarded the full amount of requested funds.

#### ***Torrance Transit - Connect Torrance***

Microtransit service that delivers first-last mile connections to Old Town Torrance, Giordano Transit Center, and El Camino College, as well as citywide service for targeted populations (e.g. Seniors and Dial-A-Ride Program participants). Staff recommend awarding the project a full award of \$1,000,000.

#### ***City of West Covina - West Covina On-Demand***

Microtransit service to supplement city shuttle service as well as provide a first-last mile connection to Metrolink. Staff recommend awarding the project a full award of \$659,090.

#### ***Metro - Transit Entrepreneurship Arts Mobility & Safety Uplift Network (TEAMSUN)***

A multi-pronged approach to station intervention at Westlake / MacArthur Park, Leimert Park, and Willowbrook / Rosa Parks Stations. The evaluation committee requested clarifications on the scope and project partner roles and responsibilities. Given Metro TEAMSUN's compliance with this request, staff recommend awarding the project a full award of \$900,000.

The evaluation committee did not recommend awarding funds to the Metro Call Point application as it did not sufficiently demonstrate how the project would increase transit ridership. Unallocated available funds will roll over to future grant cycles.

### **Administrative Scope Changes**

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Grant recipients may request minor amendments to their project after the Board approves this item. The proposed recommendation will delegate to the CEO or her designee the authority to administratively approve minor changes to the scope of work. Minor changes include those which meet all the following criteria: 1) The scope change is consistent with the defined project limits as approved by the Board; 2) the scope of work, as modified, continues to meet the original intent of the approved project scope; and 3) the parties shall maintain the original grant to grantee funding commitment ratio.

### Program Participation, Evaluation, and Recommendations

Staff engaged in informal outreach to LA County-based transit agencies to understand why they did not apply to the program. Feedback from local agencies suggests that the 40% local match requirement was too high, and the administrative burden on staff for the available funds was too great. Staff will further explore what future changes to VSF activities would result in making more funds accessible to local transit operators. Staff will return to the Board before the next grant cycle with recommendations for suggested program improvements.

### **DETERMINATION OF SAFETY IMPACT**

There is no direct safety impact associated with the recommended action.

### **FINANCIAL IMPACT**

Adoption of Award Recommendations for the Visionary Seed Fund competitive grant program would have a not-to-exceed \$3 million impact on the agency over the 30-month grant period of performance.

#### Impact to Budget

Measure M allocates \$20 million over 40 years for VSF. The first grant cycle made three million available for eligible applicants. The FY24 Budget includes funds to disburse to award recipients. Awarded projects agree to a 30-month period of performance, and the Office of Strategic Innovation will be responsible for budgeting funds in future years.

### **EQUITY PLATFORM**

The recommended action awards funds to three eligible projects. VSF applications were scored on a 100-point scale, with up to 15 points awarded for projects that benefit riders and communities, especially Equity Focus Communities (EFCs), and improve system accessibility. Applicants were also required to submit an Equity Statement describing how the project addressed equity, accessibility, and/or environmental justice concerns within the community.

The Torrance Transit project will establish a new microtransit zone that connects with six Torrance Transit fixed-route bus lines that serve 15% of Metro EFCs. 70% of Metro EFCs served by these lines are identified as Very High Need. Metro EFCs comprise nearly one-quarter of the West Covina microtransit zone and SB 535 Disadvantaged Communities comprise nearly one-third. Metro

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TEAMSUN will provide multiple resources aimed at delivering a positive equity impact in the communities surrounding West Lake / MacArthur Park, Leimert Park, and Willowbrook / Rosa Parks Stations. All three stations are located within EFCs, two of which are designated as Very High Need. All three projects test and assess strategies that demonstrate through measurable outcomes how to grow ridership to pre-COVID levels and beyond.

### **IMPLEMENTATION OF STRATEGIC PLAN GOALS**

The selected projects advance several Strategic Plan goals, including the following:

- Goal 1: Provide high-quality mobility options that enable people to spend less time traveling. Awarded projects will deliver new mobility options for riders as well as enhance stations areas and multimodal connections.
- Goal 3: Enhance communities and lives through mobility and access to opportunity. Awarded projects will increase community connectivity as well as generate new opportunities for economic empowerment.

### **ALTERNATIVES CONSIDERED**

The board could elect not to approve the recommended project awards for funding; however, this is not recommended as Visionary Seed Fund is a Measure M multi-year subregional program that aims to increase transit ridership in LA County.

### **NEXT STEPS**

With Board approval, Staff will negotiate and execute grant agreements with awardees and work with award recipients to ensure their projects comply with VSF program requirements and Measure M Guidelines. Staff will return to the Board before the next grant cycle with recommendations to improve the VSF program and increase accessibility to program funds.

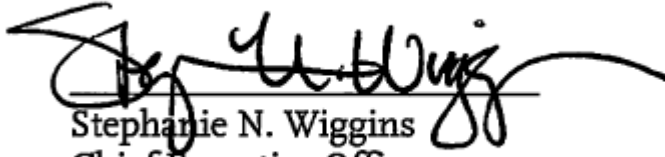
### **ATTACHMENTS**

Attachment A - Visionary Seed Fund Competitive Grant Program Award Recommendations

Attachment B - Visionary Seed Fund Competitive Grant Program Evaluation Criteria

Prepared by: Henry Phipps, Sr. Transportation Planner, (213) 922-3738  
Shaun Miller, Sr. Director, Special Projects, (213) 922-4952

Reviewed by: Seleta Reynolds, Chief Innovation Officer, (213) 922-4098



Stephanie N. Wiggins  
Chief Executive Officer

## ATTACHMENT A

### Visionary Seed Fund Competitive Grant Program Award Recommendations

<b>Applicant</b>	<b>Project Name</b>	<b>Evaluation Score</b>	<b>Funding Request</b>	<b>Award Recommendation</b>
<b>City of Torrance</b>	Connect Torrance	77.9	\$1,000,000	\$1,000,000
<p>Microtransit service that delivers first-last mile connections to Old Town Torrance, Giordano Transit Center, and El Camino College, as well as citywide service for targeted populations (e.g. Seniors and Dial-A-Ride Program participants). The project would deploy seven fully electric shuttles, three of which are wheelchair accessible. Torrance will operate wheelchair accessible vehicles (WAVs) at an equivalent level of service as non-WAV. The service is designed to support community anchors as well as regional Torrance Transit bus lines that connect to surrounding cities. Torrance Transit estimates that the service will result in approximately 36,500 unlinked passenger trips for local travel and 33,500 first-last-mile trips in connection with the Mary K. Giordano Regional Transit Center. Torrance fixed-route service carried approximately two million riders in 2022, which was approximately 60% of pre-pandemic levels. The proposed service area is comprised of several SB 535 Disadvantage Communities and connecting bus routes serve 15% of Metro’s Equity Focused Communities (EFCs). Staff recommend awarding the project a full award of \$1,000,000.</p>				
<b>City of West Covina</b>	West Covina On-Demand	70.0	\$659,090	\$659,090
<p>Microtransit service to supplement city shuttle service as well as provide a first-last mile connection to Metrolink. The project would deploy five shuttles, one of which is wheelchair accessible. The project seeks to further address equity by increasing access to employment opportunities as well as accessibility for residents who do not own a car or who choose to drive. West Covina fixed-route ridership in FY21 was 19% of FY16 and 30% of FY19. The applicant seeks to use Microtransit to foster community connections. West Covina estimates the service will generate 1,470 rides per week (6,000 rides per month). If successful, the City anticipates the service will surpass current annual fixed-route ridership. Nearly one-third of the proposed service area is considered an SB 535 Disadvantaged Community. Staff recommend awarding the project a full award of \$659,090.</p>				
<b>LA Metro</b>	Transit Entrepreneurship Arts Mobility & Safety Uplift Network (TEAMSUN)	68.5	\$900,000	\$900,000
<p>A multi-pronged approach to station intervention at Westlake / MacArthur Park, Leimert Park, and Willowbrook / Rosa Parks Stations. The application proposes to increase transit ridership by fostering a people-connected transit system that strengthens the local economy through cultural tourism, micro-entrepreneurism, and support for local small businesses. The evaluation committee requested clarifications on the scope and project partner roles and responsibilities. Given Metro TEAMSUN’s compliance with this request, staff recommend awarding the project a full award of \$900,000.</p>				
<b>LA Metro</b>	Metro Call Point (MCP)	66.2	\$1,800,000	\$0
<p>Call point units to replace P-TELS, E-TELS, and G-TELS. Staff do not recommend awarding funds to the project.</p>				



## **ATTACHMENT B**

### Visionary Seed Fund Competitive Grant Program Evaluation Criteria

#### Impact (50 Points)

- Project contributes to ridership growth (25 Points)
- Project demonstrates innovation (10 Points)
- Project benefits riders and local communities, especially Equity Focus Communities, and improves system accessibility (15 Points)

#### Scalability & Collaboration (50 Points)

- Project demonstrates readiness and/or feasibility (10 Points)
- Project demonstrates realistic and achievable schedule (10 Points)
- Project demonstrates scalability and potential for wider adoption (10 points)
- Project team demonstrates experience and expertise for implementing the project (10 Points)
- Project demonstrates alignment with [Vision 2028](#) and other regional transportation goals (10 Points)

TOTAL: 100 Points

# ◆ Award Recommendations for Visionary Seed Fund Competitive Grant Program

Planning and Programming Committee  
September 20, 2023



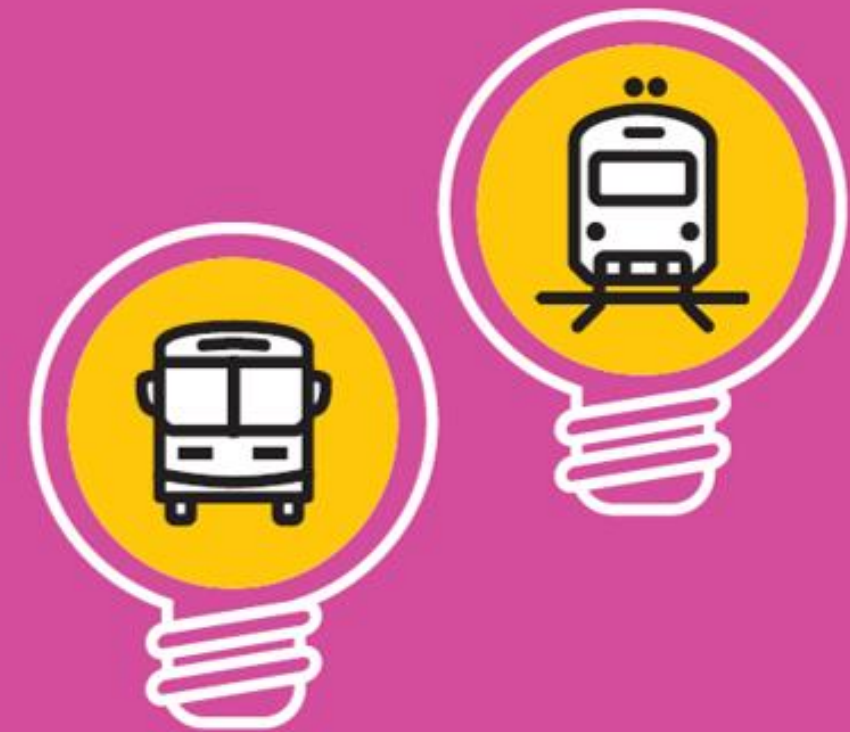
# Visionary Seed Fund (VSF) Background

- Measure M makes \$20 million available over 40 years (FY2018-2057)
  - Multi-year Subregional Program
  - Measure M Final Guidelines makes \$1.5 million available every three years through a competitive grant process and unused funds roll over
- Goal to “help spark and develop innovative mobility concepts for Los Angeles County.”
- Eligible applicants include Metro, Municipal Operators, and Local Operators

# Visionary Seed Fund (VSF) Background

- Hosted Innovation Forum and released NOFO in March
  - \$3 million available for projects focused on ridership recovery
- Four applications from eligible applicants
  - Metro (2), Torrance Transit, and City of West Covina
- ~\$5 million requested from eligible applicants
- Three project themes:
  - Microtransit (2)
  - Rail station / community activation
  - Safety / communications equipment replacement

## Visionary Seed Fund *Innovation Forum*

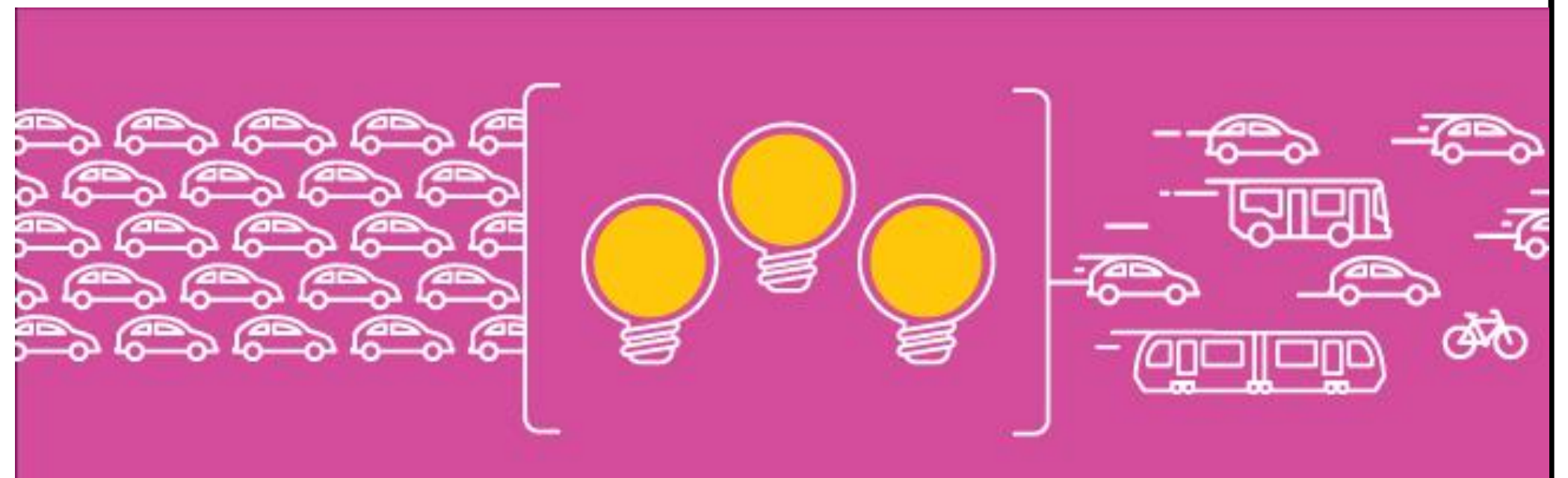


## Recommended Awards

- Connect Torrance Microtransit
  - Microtransit service that delivers first-last mile connections to Old Town Torrance, Giordano Transit Center, and El Camino College and citywide service for targeted populations
  - \$1 million awarded (full amount requested)
- West Covina On-Demand
  - Microtransit service to supplement city shuttle service as well as first-last mile connection to Metrolink
  - \$659,090 awarded (full amount requested)
- Metro Transit Entrepreneurship Arts Mobility and Safety Uplift Network (TEAMSUN)
  - A multi-pronged approach to station intervention at Westlake/MacArthur Park, Leimert Park, and Willowbrook/Rosa Parks Stations that includes cultural tourism, micro-entrepreneurism, and support for local small businesses
  - \$900,000 awarded (full amount requested)

# Next Steps

- Staff to negotiate and execute grant agreements with awardees
  - Work with award recipients to ensure their projects comply with VSF program requirements and Measure M Guidelines
- Staff will return to the Board before the next grant cycle with recommendations to improve the VSF program and increase accessibility to program funds



## Recommendations

- APPROVING the recommended Visionary Seed Fund competitive grant program funding awards totaling \$2,559,090.
- AUTHORIZING the Chief Executive Officer (CEO) or her designee to negotiate and execute all necessary agreements for approved projects; and
- AUTHORIZING the CEO or her designee the authority to administratively approve minor changes to the scope of work of approved Visionary Seed Fund awards.





## Board Report

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**File #:** 2023-0520, **File Type:** Informational Report

**Agenda Number:** 19.

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### PLANNING AND PROGRAMMING COMMITTEE SEPTEMBER 20, 2023

**SUBJECT: STATUS REPORT ON METRO VMT MITIGATION PROGRAM**

**ACTION: RECEIVE AND FILE**

#### **RECOMMENDATION**

RECEIVE AND FILE status report on Metro's Vehicle Miles Traveled (VMT) Mitigation Program.

#### **ISSUE**

Metro is developing a framework to mitigate induced Vehicle Miles Traveled (VMT) impacts from projects on the State Highway System (SHS). This work is being conducted in compliance with Caltrans' California Environmental Quality Act (CEQA) transportation impact metric determination, pursuant to Senate Bill (SB) 743, an unfunded mandate. This framework will allow Metro to mitigate any potential induced VMT impacts by investing in our own Metro VMT-reducing operations, projects, and programs, or those of our public agency partners, including active transportation, bus-only lanes, bike share expansion, increased service frequency for our transit operations or those of our partner transit agencies, and affordable housing, among others.

This report builds on the July 2023 presentation to the Board of Directors and provides further updates on the development of this framework, including the preliminary project cost increases to satisfy compliance with SB 743, using either the current Caltrans Guidance (California Induced Travel Calculator) or the Los Angeles (LA) County-specific quantification approach, with a comparative summary of the strengths and limitations of both approaches included as Attachment A. This quantification approach will identify the mitigation obligation for individual projects as well as influence the broader mitigation framework development.

#### **BACKGROUND**

In September 2020, Caltrans released statewide guidance for analyzing the CEQA VMT impacts of projects on the SHS. In response, Metro pursued and was awarded Fiscal Year (FY) 2021-22 Caltrans Sustainable Transportation Planning Grant Program funds, with the Board authorizing the CEO to execute a Resolution (Attachment B, File# 2021-0471). These funds were awarded to develop a VMT Mitigation Program (Program) which would analyze, identify, and quantify VMT



attributable to Metro's projects on the SHS and develop a framework to mitigate those impacts. Following Board approval of the Resolution, execution of the grant fund agreement, and procurement of a consultant, Metro Complete Streets & Highways staff, in collaboration with a comprehensive list of internal Metro, regional, and statewide stakeholders, including Metro's Office of Sustainability, began work on the Program.

The VMT Mitigation Program aims to reduce the impacts of VMT while simultaneously providing greater mobility options for the County's residents by investing in Metro VMT-reducing operations, projects, and programs, or those of our public agency partners. The approach aligns with Metro's "Modernizing the Highway Program" Board direction and the Board adopted "Objectives for Multimodal Highway Investment". Additional policies guiding the development of this Program are those advanced by the Metro Office of Sustainability, including the LA Metro Climate Action and Adaptation Plan (2019) and the goals and next steps prescribed in the "Climate Emissions Analysis: Metro's Indirect Impact on Greenhouse Gas Emissions" (2022). The current framework design is in alignment with and represents the further implementation of climate-related policies previously adopted by the Board, which recognizes that lowering per capita VMT is a central component of reducing Greenhouse Gases (GHG) from the transportation sector and thus meeting regional climate action goals.

Some of the VMT-reducing options under review and consideration include, but are not limited to improved access to transit, pedestrian, or bicycle networks; construction or improvement of bike facilities or bike boulevards; implementation or access to a commute reduction program; provision of bike-sharing and ride-sharing programs; provision of subsidized transit passes; telework options; implementation of management strategies (e.g., pricing, vehicle occupancy requirements); improved transit network coverage or hours; improved transit service frequency; Bus Rapid Transit (BRT) or bus-only lanes; e-bike subsidies; and acceleration of transit-oriented, affordable housing joint development land use projects.

Through this Program, Metro is leading efforts to measure and mitigate VMT impacts equitably and strategically in a manner that allows for public investment in VMT-reducing projects of our agency and municipal partners. Metro's ongoing, significant investment in multimodal options delivered through Propositions A and C and Measures R and M, including transit, rail, and bus service, and the strategic deployment of multimodal ExpressLanes throughout the County, have contributed to a wealth of travel options that are not available in other regions in the State and which are already reducing VMT and VMT per capita Countywide, leading to suppressed demand for road travel and changing travel patterns and relationships, in furtherance of Metro's climate policies.

## **DISCUSSION**

The development of this Program will bring transparency and efficiency to the delivery of Measure R and M highway improvement projects in collaboration with Caltrans Headquarters (HQ), Caltrans District 7, the subregional Councils of Governments, and local jurisdictions. These projects require individual environmental clearance, necessitating VMT impact analysis, and potential mitigation, consistent with Caltrans guidance. Some of these projects will be starting their environmental review

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phase in the immediate future; therefore, the development of guidance and the ultimate adoption of the Program, including the LA County-specific quantification approach and mitigation quantification tool, will provide a timely roadmap for constructing and/or funding meaningful VMT-offsetting projects on and off the SHS, in parallel to the larger highway project implementation timeframe. Assessment of how and where VMT mitigation strategies can be located also offers the opportunity to consider direct investment in historically disadvantaged communities with decades of underinvestment, significantly advancing social equity. After this effort, the approved Program would identify and prioritize projects and programs that would provide broader VMT reductions at a local and/or regional level and facilitate funding to construct or implement them.

### **VMT Regulatory and Policy Guidance**

The first major completed deliverable is the *VMT Regulatory and Policy Guidance* memorandum (Attachment C), which summarizes a literature review related to VMT quantification and mitigation strategies. Policy guidance reviewed included VMT impact and mitigation estimation documents at the state and federal levels. This memo lists the project types currently assumed to increase (induce) or not increase VMT, summarizes several mitigation options, and closes with a review of methodological guidance to VMT quantification, including a description of the available tools, including elasticity-based methods (like the “one size fits all” California Induced Travel Calculator), travel demand models (such as the Southern California Association of Governments activity-based regional travel demand model [SCAG ABM]), and qualitative assessments when neither is useful.

The memo documents the strengths and limitations of each tool. For example, elasticity-based methods are not sensitive to land use context, geographic constraints, congestion levels, and availability of multimodal options, including transit and active transportation, with these tools viewed as a rapid response approach that could result in an over or underestimation of VMT. In comparison, travel demand models forecast VMT changes based on variables such as population and employment growth and income changes and can better reflect context sensitivity for existing land uses and the transportation network, including available high-quality transit options. A draft of this memo was shared with the Policy Working Group (PWG), which includes a comprehensive list of internal Metro, regional, and statewide stakeholders informing the policy-related aspects of the Program, including mitigation criteria, mitigation selection, and framework development. The PWG provided minor comments to the draft, which were incorporated into the final memo.

### **VMT Quantification Tools and Preferred Methodology**

The second major completed deliverable is the *VMT Quantification Tools and Preferred Methodology* memorandum (Attachment D), which builds on the previous memo. Recognizing that unique local conditions exist within LA County, a “one size fits all” approach may not account for local context and could over or underestimate VMT impacts. This precision matters not only in accurately accounting for the anticipated VMT impacts and mitigations but also in acting as responsible stewards of public funds provided by the voters. To commence this work, Metro assembled a Project Development Team (PDT) comprised of the authors of the relevant guiding documents or developers of the local modeling tool for VMT estimation. The PDT is composed of the California Governor’s Office of

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Planning and Research (OPR), Caltrans HQ, Caltrans District 7, and SCAG.

The second memo outlines a locally refined, context-sensitive, LA County-specific quantification approach to VMT analysis, better balancing Caltrans' priorities with Metro's subregional priorities, developing stakeholder consensus on project VMT analysis, and informing the subsequent selection of VMT mitigation strategies. The memo evaluates existing VMT quantification tools, presents recommendations on travel demand model improvements, and assesses the quantification methods established by Caltrans for projects on the SHS specific to the context in LA County. This evaluation addresses Caltrans' current VMT quantification practice, which is based on the statewide application of national research on induced travel during an era where VMT experienced almost uninterrupted growth. The memo notes that the Caltrans VMT quantification tool does not consider differences between widened highways or new highways, project location or project type (General Purpose vs. High Occupancy Vehicle vs. High Occupancy Toll/ExpressLanes), nor the VMT dampening effects or synergistic benefits of existing Countywide multimodal options which are further envisioned in Metro's Long Range Transportation Plan (LRTP).

Metro convened the PDT four times from May 2022 through February 2023 to develop and present the quantification approach from concept to final proposal. In addition, Metro held two focus meetings with SCAG in June and September 2022 to address concerns regarding induced travel, with SCAG indicating general support for the approach. Furthermore, Metro held two focus meetings with Caltrans HQ in August 2022 and February 2023 to daylight concerns with the statewide VMT modeling tool and review Metro's quantification approach to try to resolve differences. In June 2023, Metro met with the Los Angeles Department of Transportation (LADOT) to discuss the proposed approach, with LADOT expressing no objections related to the work conducted. Finally, in August 2023, Metro presented the quantification approach to the PWG, with the PWG providing no comments or objections to the approach.

It should also be noted that SCAG has indicated concern with what the Caltrans VMT guidance may mean for the development of the regionwide ExpressLanes network. In response to this concern, SCAG has convened an expert panel including researchers from the University of California-Los Angeles and other academic institutions to explore if there is any difference in induced travel effects between General Purpose, High Occupancy Vehicle, and High Occupancy Toll/ExpressLanes additions. As of August 2023, the expert panel is working to finalize a research report on their findings with a target publication date of fall/winter 2023.

### Findings

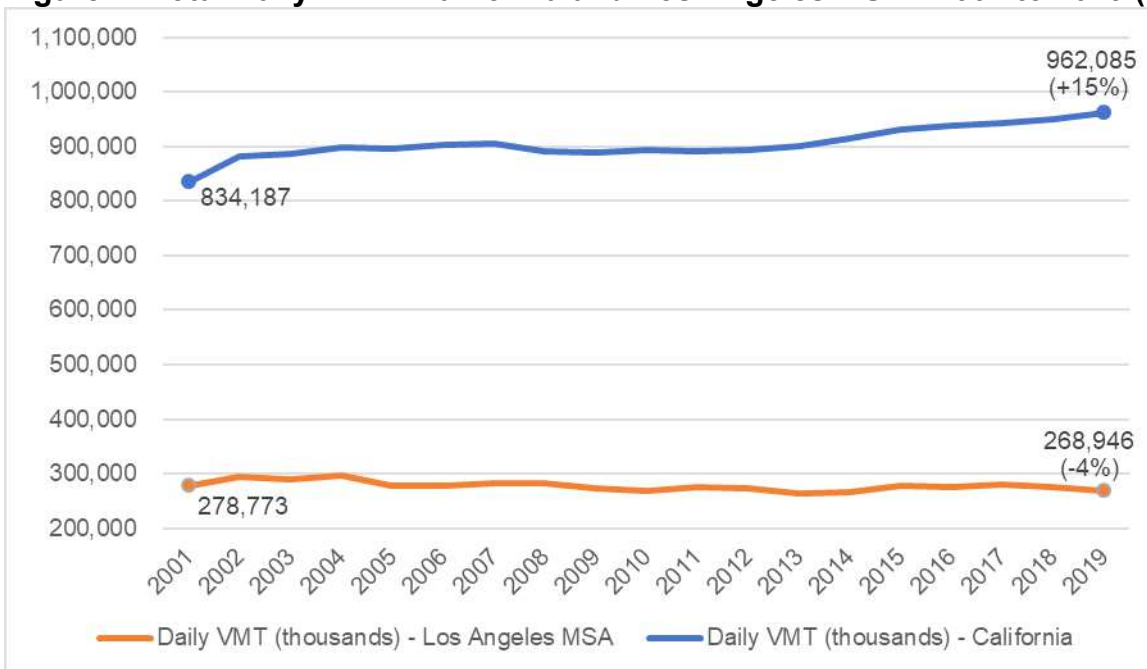
Travel in LA County and changes in local travel patterns over the last two decades are inconsistent with national trends and different than other regions in California. Based on population estimates from the United States Census and VMT estimates from the Highway Performance Monitoring System (HPMS) data between 2001-2019, the observed changes in VMT and VMT per capita in LA County differ significantly from national and statewide trends. VMT and VMT per capita in LA County are lower than national averages, the lowest in the SCAG region, and on the lower end of VMT per capita statewide, with these declining VMT trends due in part to Metro's significant investment in rail

and bus transit, with the Metro A (Blue), B (Red), C (Green), D (Purple), E (Expo), L (Gold), and K lines entering service starting in 1990, 1993, 1995, 2003, 2012, and 2022, respectively. The tables and charts that illustrate these differing relationships are presented below:

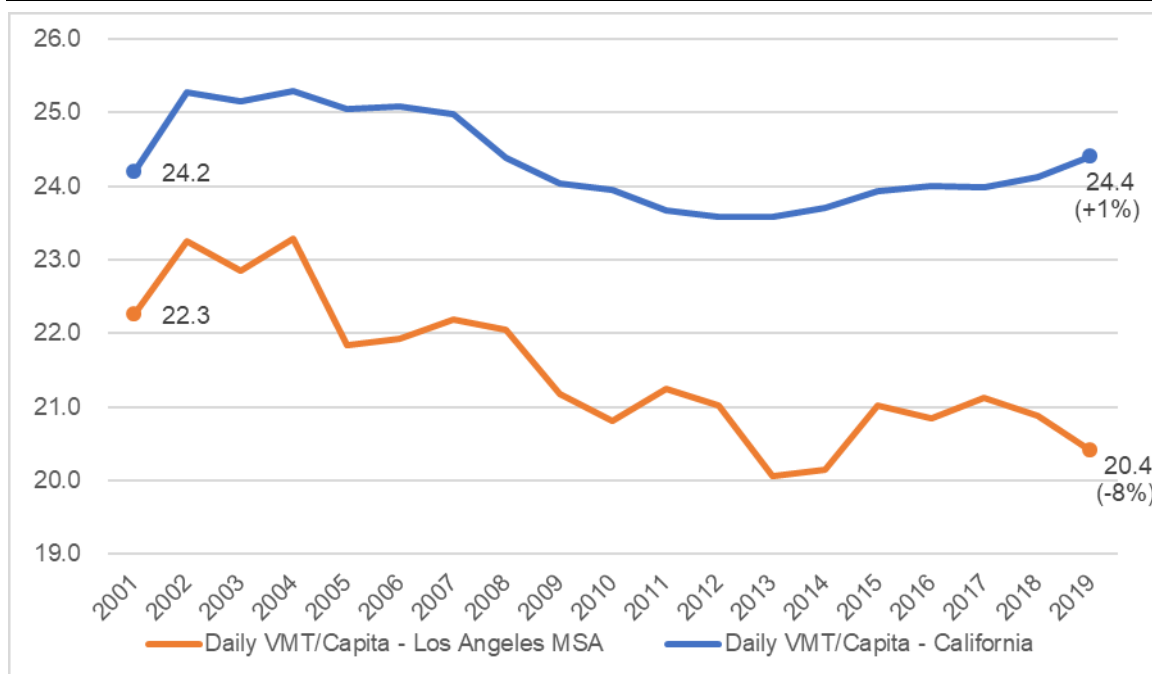
**Table 1: Comparison of HPMS and Population Data - 2001 to 2019**

	California	Los Angeles MSA
<b>Change in Total VMT</b>	+15%	-4%
<b>Change in Total Population</b>	+14%	+5%
<b>Change in Per Capita VMT</b>	+1%	-8%

**Figure 1: Total Daily VMT - California and Los Angeles MSA - 2001 to 2019 (HPMS)**



**Figure 2: VMT Per Capita - California and Los Angeles MSA - 2001 to 2019 (Census & HPMS)**



By not fully considering the LA County context, the Caltrans approach does not account for the multimodal advances Metro has made in creating modal alternatives to vehicular travel. Building on this analysis, the memo outlines proposed refinements to VMT quantification methods applied to SHS projects at a program and project level within LA County, detailing an evidence-based, locally specific, context-sensitive quantification approach to estimating long-term induced VMT, in alignment with the California OPR and Caltrans Transportation Analysis Framework (TAF) SB 743 guidance that state that “the studies on induced travel reveal a range of elasticities” and that “knowledge of local conditions can help contextualize the calculator’s estimates”. Metro will continue to refine the quantification approach in the next 6 months to ensure that induced VMT effects are captured accurately, reflective of LA County conditions, and accounting for Metro’s current and ongoing investments in transit and multimodal transportation, offsetting the induced VMT effects of strategic ExpressLanes and mobility and safety improvement projects on the SHS.

**Caltrans Response to Metro’s LA County-Specific Quantification Approach**

Caltrans HQ reviewed Metro’s LA County-specific quantification approach and responded to the locally-specific substantial evidence contained within. These responses were limited to addressing the proposed elasticity values, with Caltrans HQ declining to deviate from the existing statewide guidance without undertaking their further research. Metro staff continues to work with Caltrans HQ to explore the range of published academic research demonstrating divergent long-term induced VMT elasticity values (0.1 to 0.4), including those research efforts that explicitly control for reassignment/diversion effects that move vehicles off of local roadways and onto highways and do not constitute new VMT, the observed declining VMT trends in the LA County MSA over the last 20 years, and the percentage of induced VMT that comprises the closest-aligned category with the legislative intent of SB 743. Caltrans HQ also stated that they prefer reviewing methodologies on a

project-by-project basis and Metro, with concurrence from Caltrans HQ, will be conducting a more detailed analysis using Metro’s proposed LA County-specific quantification approach for evaluation of upcoming projects and for the development of mitigation strategies, both of which must be CEQA defensible.

**Project Cost Implications**

The VMT mitigation requirements for all highway projects will depend on what methodology is ultimately accepted for use in project-level analysis. An order of magnitude estimate of the mitigation requirements and the resulting financial impacts is presented below using recently published costs for VMT mitigation per daily VMT reduced and the LA County-specific quantification approach elasticity factor of 0.29 or the Caltrans preferred California Induced Travel Calculator elasticity factor of 0.75. These costs include \$860 for Transportation Demand Management (TDM) programs and \$3,000 to \$46,000 for programmatic and capital projects, including shared mobility hubs, express bus service, and Class IV two-way cycle tracks per daily VMT reduced. To use an example of a Metro project, the potential financial impacts of the Board-directed State Route (SR) 14 Traffic Safety Improvement Project are shown in the table below using the cost of \$3,000 per daily VMT reduced:

**Table 2: SR-14 Traffic Safety Improvement Project - Potential Mitigation Requirements**

Project Cost	LA County-Specific Quantification	California Induced Travel Calculator
<b>Estimated Capital Cost</b>	\$168 million	
<b>Mitigation Cost</b>	\$97.7 million	\$252.6 million
<b>Total Project Cost</b>	\$265.7 million	\$420.6 million
<b>Mitigation Cost Difference</b>		\$154.9 million
<b>Total Project Cost % Increase with Mitigation</b>	+58%	+150%

Based on two projects currently under environmental review (I-680 Northbound Express Lane Completion Project in Contra Costa County and I-5 Managed Lanes Project [SR-55 to OC/LA County Line] in Orange County), Caltrans HQ has approved the circulation of the CEQA environmental documents with VMT mitigation costs equal to or exceeding the capital cost of each project, at a minimum doubling project costs based on VMT mitigation requirements.

This is compounded by the fact that the passage of Proposition A and C and Measure R and M pre-date the release of the Caltrans VMT guidance, which states that mitigation must not already be included in planning documents or previously funded. As a result, Metro is unable to leverage our broader program of VMT reducing projects, including our major transit investments, to balance or offset the VMT impacts of our highway program of projects, effectively penalizing Metro for being proactive in advancing local sales tax measures that fund alternative modes of transportation that are already reducing VMT and VMT per capita Countywide.

Importantly, while these potential mitigation requirements represent potential increases in the capital costs of any one project, these mitigation actions represent benefits regarding the multimodal

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programs that can be created or enhanced through mitigation, increasing potential opportunities to pursue State and Federal grant funding for subsequent phases of projects. After the Board considers the implications of the divergent technical approach and potential project cost impacts, Metro staff will present this information to the PWG for their review and consideration.

## **EQUITY PLATFORM**

Staff has worked closely with the Office of Equity and Race (OER) from the inception of the Program to understand and address the equity implications of the Program. This critical analysis has been conducted using OER's pilot Equity Planning and Evaluation Tool (EPET) as the guide. Staff seeks to balance the economic, access, and mobility benefits of increased VMT with the intended Program outcome of reducing VMT burdens, including emission of air pollution, collisions, and a built environment that can feel hostile for people traveling by non-auto modes.

The development of the Program aims to prioritize the ways in which Metro can influence people traveling to reduce their VMT but with the goal of ensuring that the Program does not create new inequities in who bears the burden of VMT reduction and who benefits from VMT-reducing mobility investments. Due to the built environment in LA County and the high cost of housing, vehicles greatly improve mobility for low-income individuals who cannot afford to live near their daily destinations. While the American Community Survey (ACS) year 2019 estimates indicate that most transit riders are low-income (80%), the ACS also shows that most low-income individuals drive (81% of low-income workers drive versus 7% who take transit), with highway improvements benefiting both automobile and transit users, with ExpressLanes and HOV lanes prioritizing transit use and carpool and vanpool formation.

The Program team is evaluating the potential benefits of these VMT mitigation measures and resulting investments to Metro's updated 2022 Equity Focus Communities (EFCs) by comparing Countywide VMT patterns from the SCAG ABM Traffic Analysis Zones (TAZs) and how they relate to EFCs. This data reveals several interesting findings that can help inform where VMT mitigation actions are geographically targeted to have the greatest impact:

- The average daily home-based VMT per capita is lower in EFC-TAZs (18.4) than in Non-EFC-TAZs (23.2).
- Across all TAZs, the average daily home-based VMT per capita is just under 5 miles higher in Non-EFC TAZs than in EFC-TAZs.
- Across high VMT TAZs, defined as those that exceed the Countywide average daily VMT per capita (~20.4), that difference is less than 2 miles (24.8 for EFC-TAZs vs 23.0 for Non-EFC-TAZs).
- Over 75% of the non-EFC population resides in high-VMT TAZs, while about 27% of the EFC population resides in high-VMT TAZs.

Specifically, the data and maps (Attachments E and F) show that there are disparities in VMT per capita between EFCs and non-EFCs, including in high VMT TAZs, which will help inform where VMT mitigation actions are geographically targeted to have the greatest impact on reducing VMT while

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avoiding over-burdening EFCs with undue responsibility to mitigate VMT. Secondly, the Program team is developing criteria for evaluating, validating, and prioritizing potential VMT mitigation options and evaluating if the criteria will ensure an equitable approach by confirming that EFCs receive their fair share of benefits and are protected from disproportionate impacts. This approach guides the policy-related aspects of the Program, including prioritization of mitigation predicated on EFC-based needs, with the viability of these priorities specifically analyzed and weighted against other evaluation criteria.

Staff has prioritized the inclusion of a diverse set of stakeholders, including Metro's Office of Sustainability, through the active involvement of both a PDT, working on the technical methodologies, and the PWG, informing the development of mitigation options and the framework structure, with both guiding the Program development. Coordination with OER is ongoing throughout the Program development, including their active participation in the PWG as well as over a dozen focus meetings or reviews of key equity-related deliverables.

Staff has built on the PDT and PWG internal and external regional and statewide stakeholder input by undertaking a comprehensive outreach strategy targeting other Countywide stakeholders, including chambers of commerce, community-based organizations, advocacy groups, councils of governments/joint powers authorities, and environmental and social justice organizations, among others, to inform the selection and prioritization of mitigation options, with this outreach effort currently underway. This outreach will conclude by the end of 2023.

## **IMPLEMENTATION OF STRATEGIC PLAN GOALS**

The Program supports the implementation of the following Strategic Plan Goals:

### *1. Provide high-quality mobility options that enable people to spend less time traveling*

The Program will allow Metro to continue to fund important, voter-approved highway improvement projects, delivering significant investments to further the goals identified in Metro's Vision 2028 Strategic Plan, LRTP, and Goods Movement Strategic Plan, supporting a vibrant economy, goods movement efficiency, and enhanced mobility for people and goods. These projects will simultaneously result in investments in ongoing VMT and GHG reducing projects, including active transportation and safety-focused projects, consistent with Metro's Complete Streets policy.

### *4. Transform LA County through regional collaboration and national leadership.*

Consistent application of a locally refined method provides clarity for project teams working on environmental compliance for projects on the SHS and a consistent approach against which Caltrans HQ and District 7 can conduct their review of Metro's environmental documents for SHS projects. The Program goals include directly expanding the toolbox of VMT quantification approaches and mitigation strategies available to our public sector partners throughout the County and state. The research resulting from the Program is expanding the knowledge base overall and setting the stage for Metro and its public agency partners to provide further innovation in the field.



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*5. Provide responsive, accountable, and trustworthy governance within the Metro organization.*

The Program's goals of accurately quantifying VMT resulting from Metro's Measure R and Measure M SHS projects ensures that project impact mitigation actions and associated costs are both fair and reasonably related to expected changes in local travel patterns based on locally specific substantial evidence. This approach ensures that Metro will prioritize limited funds to provide the most value to the public while maintaining a high standard of fiscal responsibility and achieving the highest return on investment for taxpayers.

### **NEXT STEPS**

Staff will continue to report back at key milestones throughout the Program development. The final Program will be presented to the Board for consideration in early 2024. Metro will continue to work with Caltrans to evaluate project VMT impacts and develop corresponding mitigation strategies. Metro, through this Program, intends to utilize its existing transit operations, projects, and programs, and possibly those of our public agency partners, as VMT mitigation strategies for subregional highway project priorities while also coordinating and partnering with other municipal agencies to support and continue their ongoing VMT mitigation efforts. Future updates will include working with the PDT and PWG and through the broader Countywide stakeholder outreach effort to continue progress on the following critical items:

1. Development of a VMT mitigation quantification tool and guidance.
2. Further identification of eligible Metro and/or countywide programs that demonstrate CEQA-defensible and quantifiable VMT reductions.
3. Development of a series of criteria for evaluating, validating, and prioritizing potential VMT mitigation options.
4. Development of preliminary mitigation action cost estimates.
5. The development of a pilot VMT mitigation strategy, including preliminary administrative cost estimates to run the pilot.

### **ATTACHMENTS**

Attachment A - Strengths and Limitations of Caltrans Guidance and LA County-Specific Quantification Approach

Attachment B - Grant Award Resolution

Attachment C - VMT Regulatory and Policy Guidance Memorandum

Attachment D - VMT Quantification Tools and Preferred Methodology

Attachment E - Metro EFCs & TAZ VMT Data - Countywide

Attachment F - Metro EFCs & Highway Projects & Programs - Countywide

Prepared by:

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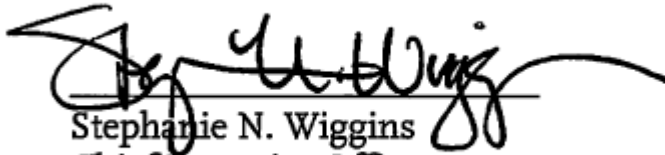
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Stephanie N. Wiggins  
Chief Executive Officer

**Attachment A: Strengths and Limitations of Caltrans Guidance and LA County-Specific Quantification Approach**

<p align="center"><b>Caltrans Guidance (California Induced Travel Calculator)</b></p>	<p align="center"><b>LA County-Specific Quantification Approach</b></p>
<b>Strengths</b>	
<ol style="list-style-type: none"> <li>1. Forecasts long-term induced Vehicle Miles Traveled (VMT) changes while controlling for variables such as population/employment growth and income changes</li> <li>2. Best used to understand order-of-magnitude induced VMT impacts</li> <li>3. Caltrans' preferred methodology with broad applicability across the entire state of California</li> <li>4. Meets California Environmental Quality Act (CEQA) defensibility requirements</li> <li>5. Simple to use</li> </ol>	<ol style="list-style-type: none"> <li>1. Combines the advantages of the Southern California Association of Governments (SCAG) Activity-Based Model (ABM) and elasticity-based methodology to calculate combined short/long-range induced VMT</li> <li>2. Calibrated/validated to LA County-specific data sources, and context, incorporating Metropolitan Statistical Area (MSA)-by-MSA VMT differences</li> <li>3. Forecasts VMT changes based on variables such as population/employment growth, automobile operating costs, and income changes</li> <li>4. Reflects context sensitivity for land use (infill vs. greenfield, high vs. low density), the transportation network (available multimodal travel options including off-peak bus service, bus rapid transit, and rail transit), congestion levels, and network effects (i.e., building a bridge)</li> <li>5. Measures VMT of passenger (light-duty) cars and trucks, aligning with legislative intent of Senate Bill (SB) 743</li> <li>6. Presumes High Occupancy Vehicle (HOV)/High Occupancy Toll (HOT)/General Purpose (GP) lanes have different induced VMT effects</li> <li>7. Provides information about a "without project" condition and cumulative impacts, required by CEQA and National Environmental Policy Act (NEPA)</li> <li>8. Provides VMT by speed bin, required for federal air quality conformity analysis</li> </ol>
<b>Limitations</b>	
<ol style="list-style-type: none"> <li>1. Does not provide precise, project-specific outcomes</li> <li>2. Ignores MSA-by-MSA VMT variations and declining LA County VMT trends</li> <li>3. Academic research utilizes demographic data (1973-2003) that does not reflect recent changes (COVID-19, Transportation Network Companies (TNCs), internet shopping, etc.)</li> <li>4. Does not reflect context sensitivity for land use (infill vs. greenfield, high vs. low density), the transportation network (available multimodal travel options including off-peak bus service, bus rapid transit, and rail transit), congestion levels, and network effects (i.e., building a bridge)</li> <li>5. Presumes HOV/HOT/GP lanes have the same induced VMT effect</li> <li>6. Presumes only remedy to both congestion and induced VMT is congestion pricing while ignoring other solutions (e.g., bus and rail transit, telecommuting, car/vanpooling, etc.)</li> <li>7. Does not provide information about a "without project" condition or cumulative impacts, required by CEQA and NEPA</li> <li>8. Does not provide VMT by speed bin, required for federal air quality conformity analysis</li> <li>9. Per University of California, Davis, developers of the Calculator, long-term validation likely not possible</li> </ol>	<ol style="list-style-type: none"> <li>1. Increased complexity compared to the California Induced Travel Calculator</li> <li>2. Requires additional time, resources, and technical analysis to produce results</li> <li>3. Requires additional study and concurrence by Caltrans prior to deployment</li> <li>4. Has not been CEQA tested to prove CEQA defensibility</li> </ol>

**LOS ANGELES COUNTY METROPOLITAN TRANSPORTATION AUTHORITY  
BOARD RESOLUTION AUTHORIZING THE CHIEF EXECUTIVE OFFICER TO EXECUTE  
AGREEMENTS WITH THE CALIFORNIA DEPARTMENT OF TRANSPORTATION FOR THE  
METRO VEHICLE MILES TRAVELED (VMT) MITIGATION PROGRAM**

**WHEREAS**, the Sustainable Transportation Planning Grant Program was created by the California Department of Transportation (Caltrans) to provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability; and

**WHEREAS**, Metro is eligible to receive Federal and/or State funding through the Sustainable Transportation Planning Grant Program; and

**WHEREAS**, Metro was awarded a \$700,000 Sustainable Transportation Planning Grant in Fiscal Year (FY) 2021-2022 from Caltrans for the Metro Vehicle Miles Traveled (VMT) Mitigation Program; and

**WHEREAS**, a Restricted Grant Agreement is needed to be executed with Caltrans before such funds can be claimed through the Sustainable Transportation Planning Grant Program; and

**WHEREAS**, Metro wishes to delegate authorization to execute this agreement and any amendments thereto necessary to claim funds awarded through the FY 2021-22 Sustainable Transportation Planning Grant Program to the Chief Executive Officer or her designee.

**NOW, THEREFORE, BE IT RESOLVED** by the Board of Directors of the Los Angeles County Metropolitan Transportation Authority that:

1. The Chief Executive Officer (CEO) or her designee is authorized to execute all Restricted Grant Agreements and any amendments thereto with Caltrans.

**CERTIFICATION**

The undersigned, duly qualified and serving as Board Clerk of the Los Angeles County Metropolitan Transportation Authority, certifies that the foregoing is a true and correct representation of a Resolution adopted at a legally convened meeting of the Board of Directors of the Los Angeles County Metropolitan Transportation Authority held July 22, 2021.

  
COLLETTE LANGSTON  
Metro Board Clerk

DATED: 7/22/2021

# Memorandum

Date: July 25, 2022  
To: Julio Perucho, Metro  
From: Amanda Chapman and Chelsea Richer, Fehr & Peers  
Subject: **VMT Regulatory and Policy Guidance (Task 3)**

LA22-3343

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## Introduction

The purpose of this memorandum is to summarize a literature review of regulatory and policy guidance related to Vehicle Miles Traveled (VMT) quantification and mitigation strategies, in the context of potential applications to highway improvement projects included in Los Angeles County Metropolitan Transportation Authority's (Metro's) Sales Tax Measures Expenditure Plans/Ordinances and corresponding subregional programs.

## Statement of Purpose

Metro, in partnership with the California Department of Transportation (Caltrans), is developing the VMT Mitigation Program to support the region's Assembly Bill (AB) 32 and Senate Bill (SB) 375 goals by reducing the impacts of VMT and correlated greenhouse gas (GHG) emissions while affording greater mobility and access for the County's residents. Aligning Metro's highway investments with the spirit of SB 743 that emphasizes multi-modal and smart growth strategies to reduce VMT, this program will allow Metro to support the region's goal of reducing VMT impacts; provide Metro, Caltrans, and other project delivery partners within the County of Los Angeles with refined tools to determine project VMT impacts more accurately; and provide feasible and enforceable VMT mitigation strategies.

## History of SB 743 Policy

Signed into law on September 27, 2013, California State SB 743 directed the Governor's Office of Planning and Research (OPR) to "prepare, develop, and transmit to the Secretary of the Natural Resources Agency for certification and adoption proposed revisions to the guidelines adopted pursuant to Section 21083 establishing criteria for determining the significance of transportation impacts of projects within transit priority areas... Upon certification of the guidelines by the



Secretary of the Natural Resources Agency pursuant to this section, automobile delay, as described solely by Level of Service (LOS) or similar measures of vehicular capacity or traffic congestion within a transit priority area, shall not support a finding of significance pursuant to this division...”

On August 11, 2015, OPR released a preliminary draft of changes to California Environmental Quality Act (CEQA), revising the Guidelines based on public comments received at that time. In October 2015, OPR and the Natural Resources Agency conducted a public workshop based on this draft.

On January 20, 2016, OPR updated the CEQA Guidelines via the *Revised Proposal on Updates to the CEQA Guidelines on Evaluating Transportation Impacts in CEQA*, with the evaluation of vehicle miles traveled (VMT) recognized as “generally the most appropriate measure of transportation impacts.” OPR also stated that lead agencies may tailor their analysis to include other measures.

On November 2017, OPR proposed a new section, 15064.3, to help determine the significance of transportation impacts. This section was updated July 2, 2018, and finalized on December 28, 2018, with criteria for analyzing transportation impacts, and is seen below in the [“Thresholds of Significance”](#) section. Its purpose is to describe specific elements for considering the transportation impacts of a given project given the use of VMT as the primary measurement.

In December 2018, OPR shared its comprehensive update to the CEQA guidance per the proposed updates to analysis of GHG emissions, with a particular focus on the shift in how transportation impacts would be analyzed, among other items. This document codified that in the State of California, environmental analysis under CEQA of a project’s transportation impacts would be done through analysis of VMT. VMT was already being used to study other impacts such as air quality, GHGs, and energy use. This major shift in approach clearly prioritized projects that reduce the number of miles that cars travel and increased use of other modes. The Guidelines allowed for two years for cities and lead agencies to update their process.

Per the guidance from OPR, “a lead agency may elect to be governed by the provisions of this section immediately. Beginning on July 1, 2020, the provisions of this section shall apply statewide.” In order to comply with the guidelines understood to become the standard in our state, environmental impact reports must evaluate vehicle trips and VMT consistent with the intent of SB 743.

### **Vehicle Miles Traveled (VMT) and Level of Service (LOS)**

The shift towards VMT reflects a major change of the State’s priorities, emphasizing the reduction of GHGs by encouraging high-occupancy, multi-modal, and active transportation modes and infill land use development, discouraging urban sprawl. The metrics with which transportation impacts are measured inherently direct the future of the built environment. SB 743 initiated the change of



primary metric from LOS to VMT; this change in the way of analyzing potential impacts necessitated new ways of considering project VMT quantification and mitigation strategies.

VMT is a measure of the number of miles traveled within a defined area and are based on the number of vehicle trips (VT) multiplied by the average trip length in miles for various trip types. It measures miles traveled (e.g., private automobiles, trucks and buses<sup>1</sup>) generated by all land uses (e.g., residential, retail, office). It can be studied by population, employment, or service population. To obtain an average VMT per service population, the total VMT is divided by the total population and employees within the area of analysis. While the total VMT is expected to increase as growth occurs in a given area, a reduction in per-capita or total VMT over time can be used as an indicator of reduced reliance on single-occupancy automobiles. Reducing VMT can help meet the State's goals of reducing GHG emissions, as mandated by AB 32 and SB 375.

LOS was used previously as the primary method for determining CEQA transportation-related impacts. LOS is a measure used to describe the condition of traffic flow, ranging from excellent conditions at LOS A to overloaded conditions at LOS F. Congested conditions and poor LOS is generally associated with the highest pollutant emission intensity.<sup>2</sup> Traditional mitigation measures to address the LOS impact often involved increasing capacity (i.e., the width of a roadway or intersection), which has the potential to induce more trips/VMT and reduce some of the emissions benefits gained from congestion relief. The concept of induced travel demand will be discussed further in this memorandum.

## Policy Guidance

This section of the memorandum discusses policy guidance related to VMT quantification and mitigation strategies, as well as project types currently assumed to increase or induce VMT, and project types currently assumed to not increase VMT. It also outlines potential challenges and considerations.

### **Caltrans' SB 743 Environmental Essentials for Project Development & Delivery**

As part of a three-part series (parts two and three forthcoming), Caltrans' *SB 743 Environmental Essentials for Project Development & Delivery* acknowledges the gaps in existing state-wide experience as of yet in avoiding and mitigating induced travel and summarizes current best-practices in planning and project delivery. It exists less as a policy document and more as general guidance given the common themes and questions Caltrans has come across in projects requiring

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<sup>1</sup> For SB743 purposes, only automobile VMT is required to be analyzed. Total VMT including heavy trucks and buses is only required for other resource sections such as energy and air quality.

<sup>2</sup> Zhang, Kai & Batterman, Stuart & Dion, Francois. (2011). Vehicle emissions in congestion: Comparison of work zone, rush hour and free-flow conditions.



CEQA analysis since the establishment of SB 743. The following is a brief summary of the sections of this document:

1. *Balancing Transportation and Environmental Outcomes* – Caltrans as an agency must balance the need for improving the statewide transportation system, while aiming to reduce VMT and GHG emissions. Previously the agency focused on projects that primarily advanced transportation outcomes specifically, but now Caltrans has several guiding documents that reflect the current statewide environmental goals as well. Per the “plan consistency” requirement of CEQA, these documents can help proposers of projects achieve balanced outcomes and focus on projects that “can facilitate access to desired destinations, for both travelers and freight, without inducing VMT through the construction of additional capacity.”<sup>3</sup>
2. *Avoidance and Minimization in Project Alternatives* – All components of a project, from alternatives to design, should consider environmental effects, with an approach that minimizes these impacts from the purpose and needs statements onwards as opposed to assuming mitigation will be possible. If a project can endeavor to avoid these effects during scoping, project design, alternative development, and construction materials and process, the EIR process will be much more streamlined.
3. *Full Disclosure and Informed Decision-Making* – While CEQA requires the use of the best available information (such as the Transportation Analysis under CEQA [TAC] and Transportation Analysis Framework [TAF]), discussed later in this memorandum), it is also imperative that we disclose VMT as well as any other metrics and information critical to telling the whole story, and explain unknowns, assumptions, and technical challenges in a way that understandable to a broad audience.
4. *Good Faith Effort and Substantial Evidence* – Schedule pressure is not a good reason to reduce the analysis, as we must show that we took all reasonable and feasible approaches to balancing transportation and environmental needs in a project. Similarly, budget pressures are not a good reason to discount mitigation, as the cost of such must be incorporated into the total project cost. The conclusions of analysis are much better supported by demonstration of due diligence.
5. *An Overview of Significance Determinations* – While mitigation strategies should be considered a last resort more than an assumed part of a project, features or design elements can be incorporated into the project such as those that encourage mode shift away from single occupancy vehicles. Additionally, projects should be evaluated based on the VMT potentially induced by the project and its effects on land development.
6. *Mitigation Adequacy and Implementation Assurance* – Mitigation measures must be “reasonable, feasible, effective, and our commitment to their implementation needs to be

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<sup>3</sup> SB 743 Environmental Essentials, Accessed on 3.30.22, <https://dot.ca.gov/-/media/dot-media/programs/sustainability/documents/sb-743-environmental-essentials-for-project-development-and-delivery-a11y.pdf>





assured." They do not need to be confined to one jurisdiction or agency. For mitigation measures that are considered and determined ill-suited, similar analysis should be explored and conveyed.

## **VMT Impact Estimation: Regional & State Documents**

### *OPR CEQA Guidelines Update (2018)*

Following the SB 743 history shared earlier in this memorandum, OPR shared its comprehensive update to the CEQA guidance in December 2018 per the proposed updates to analysis of GHG emissions, with a particular focus on the shift in how transportation impacts would be analyzed, among other items. This document codified that in the State of California, environmental analysis under CEQA of a project's transportation impacts would be done through analysis of VMT. VMT was already being used to study other impacts such as air quality, GHGs, and energy use. This major shift in approach clearly prioritized projects that reduce the number of miles that cars travel and increased use of other modes. The Guidelines allowed for two years for cities to update their process.

### *OPR Technical Advisory on Evaluating Transportation Impacts in CEQA (2018)*

This document includes recommendations on how to assess and analyze VMT under the 2018 CEQA Guidelines update, how to approach thresholds of significance, and consideration of mitigation measures. Referencing the California Air Resources Board (CARB) *2016 Mobile Source Strategy*, this document notes that it will not be possible to meet statewide emissions goals without reducing VMT, as well as documenting the benefits of those reductions to public health. Examples of environmental, health, and fiscal benefits are documents at [OPR's website](#).<sup>4</sup>

Thresholds of significance are often used to determine impact significance, and should be "quantitative, qualitative, or performance level of a particular environmental effect".<sup>5</sup> Section 21099 of the *California Public Resources Code* requires that these thresholds must promote reduction of GHG emissions, development of multimodal networks, and diversity of land uses. Lead agencies may define their own, and can look towards a variety of state policies to help create their thresholds (as listed in this document), but OPR itself recommends a threshold "of per capita or per employee VMT that is fifteen percent below that of existing development"<sup>6</sup>. The overall analysis should address:

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<sup>4</sup> <https://opr.ca.gov/ceqa/sb-743/>

<sup>5</sup> Governor's Office of Planning and Research. 2018, April. *Technical Advisory on Evaluating Transportation Impacts in CEQA*. Note, Note, the use of the term "performance level" is intended to provide guidance for impacts that may have a less direct quantitative connection to environmental harm.

<sup>6</sup> Governor's Office of Planning and Research. 2018, April. *Technical Advisory on Evaluating Transportation Impacts in CEQA*.



- Direct, indirect and cumulative effects of the transportation project (CEQA Guidelines, § 15064, subds. (d), (h))
- Near-term and long-term effects of the transportation project (CEQA Guidelines, §§ 15063, subd. (a)(1), 15126.2, subd. (a))
- The transportation project's consistency with state greenhouse gas reduction goals (Pub. Resources Code, § 21099)
- The impact of the transportation project on the development of multimodal transportation networks (Pub. Resources Code, § 21099)
- The impact of the transportation project on the development of a diversity of land uses (Pub. Resources Code, § 21099)

Screening thresholds may be used to streamline review based on a presumption of no VMT impacts. For example, projects generating less than 110 trips per day, residential and office projects in areas that already have low VMT, and projects near transit stations with certain stipulations can often be presumed to have a less-than-significant VMT impact.

Transportation projects "would need to quantify the amount of additional vehicle travel in order to assess air quality impacts, greenhouse gas emissions impacts, energy impacts, and noise impacts"<sup>7</sup> and analyze and report induced growth and change in VMT. Estimation of the VMT impacts and induced travel is necessary to understanding the full effects of the project. This should be done by estimating the "change in total VMT" method, described further in the [Methodological Guidance](#) below.

*SCAG Connect SoCal 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) (2020)*

Per requirements from SB 375, the Southern California Association of Governments (SCAG) regularly produces an RTP/SCS to convey a vision for the six-county region across many aspects, including mobility, economy, and sustainability. This document also includes projections for future growth in households, population and jobs, an important baseline from which VMT impacts may be compared against. The latest RTP/SCS, adopted in September 2020 and titled *Connect SoCal*, estimates an increase of 1.6 million households, 3.7 million people, and 1.6 million jobs from 2020-2045. It also reported that the mode split in 2016 across the region was 36% single-occupancy vehicle (SOV) across all trip types and has a goal of increasing non-SOV work trips by 3%. Other relevant goals include reducing VMT per capita by 5%, vehicle hours traveled by 9%, reducing delay per capita, and creating new jobs. Key aspects of the plan include investment in broadband to enable people to access opportunities through virtual technology, increasing job density in sub-regional centers where housing is already located, housing supportive infrastructure, accelerated electrification, shared mobility as a service, and "Go Zones", where

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<sup>7</sup> Governor's Office of Planning and Research. 2018, April. *Technical Advisory on Evaluating Transportation Impacts in CEQA*.



mobility options are housed together, and tolls are used to reduce reliance on SOVs. The plan laid out in *Connect SoCal* is projected to decrease daily per capita VMT from 21.8 miles to 20.7 miles.

*California Air Resources Board's Mobile Source Strategy (2020)*

This document demonstrates how the State can meet several goals through the advancement of cleaner technology and alternative fuels, identifying that the transportation sector is a major contributor to GHG emissions in the state. The 2020 Strategy includes goals of 100% of California registered medium and heavy-duty to be zero-emission vehicles by 2045 where feasible, 100% of light-duty vehicle sales to be zero-emission vehicles by 2035, and 100% of off-road vehicles and equipment to be zero emission by 2035. These goals would be accomplished through the detailed plan outlined in the 2020 Strategy, including manufacturing requirements, in-use requirements, incentive programs, enforcement strategies, outreach and education, and infrastructure planning.

*CalSTA's Climate Action Plan for Transportation Infrastructure (CAPTI, 2021)*

Acknowledging the role that transportation systems and infrastructure play in GHG emissions and building on California executive orders related to reducing emissions from transportation specifically, this document outlines the recommendation to invest the state's transportation dollars to combat climate change and support public health, safety, and equity.

The CAPTI approach to highway expansion projects addresses how these projects further dependency on SOV travel, have not reduced overall congestion, and are very costly. Accordingly, a guiding investment principle for this entity is promoting projects that do not significantly increase passenger vehicle travel, alternatively emphasizing investment in multimodal options, pricing strategies, and using technology to optimize operations.<sup>8</sup>

Among the strategies CAPTI plans to employ, some relevant ones include:

- Develop and Utilize Equity Index to Assist in Evaluation or Prioritization of Caltrans Projects
- Develop and Implement the Caltrans Strategic Investment Strategy (CSIS)
- Update the 2023 State Highway System Management Plan (SHSMP) to Meaningfully Advance CAPTI Investment Framework
- Develop and Implement Caltrans Climate Action Plan (CCAP)
- Explore a statewide VMT mitigation bank
- Convene a Roadway Pricing Working Group
- Explore a "Highways to Boulevards" Conversion Pilot Program

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<sup>8</sup> CalSTA Climate Action Plan for Transportation Infrastructure (CAPTI), 2021



### *California Air Resources Board (CARB) Climate Change Scoping Plan (2022)*

This document outlines how California can become carbon neutral by 2045. Previous plans aimed to get the state to 1990 levels of emissions or 40% below that; this plan expands on those actions to capture and store carbon and further actions to reduce emissions. To accomplish this, carbon must be edged out of use in every sector of the economy. This must be done for the benefit of everyone in the State, but particularly for the low-income communities hit hardest by environmental justice issues. Relevant to this study, a large part of the Scoping Plan includes movement towards zero-emission transportation, providing communities with enhanced options for use of active modes of travel that decrease reliance on cars, and the preservation of natural lands to help sequester carbon. Per the TAC (described below), Caltrans expects this document to be referred to when following the CEQA requirement of being consistent with other plans.

### **VMT Impact Estimation: Caltrans Documents**

#### *Caltrans Transportation Analysis under CEQA (TAC) (2020)*

This document provides guidance on how to analyze induced travel associated with transportation projects on State Highways System (SHS) specifically, reflecting a major shift in approach. It is related to the Caltrans SB 743 Transportation Analysis Framework (TAF) in that once a project has been screened to likely induce travel using the TAC, one should refer to the TAF for the process that follows. Several project types are identified in the TAC as not being affected by this guidance, as they are assumed by Caltrans not to have an impact. See the section of this document titled *Project Types Assumed Not to Increase VMT* for the complete list.

SB 743 influenced two major areas of Caltrans' activities: proposed project or plan's potential impact on the SHS, and the CEQA analysis of capacity-increasing projects on the SHS. Caltrans states here that VMT is the most appropriate metric for analysis of SHS project impacts, and has chosen to express it in absolute terms. To accomplish this analysis, quantitative methods such as forecasting and calculator tools are preferred, which are outlined in the [Methodological Guidance](#) section of this document. Qualitative methods are appropriate in specific instances, such as the application of travel demand management (TDM) strategies. Capacity-increasing projects should consider including investment in multi-modal transportation infrastructure and expansion of existing/exploration of new pricing strategies. A separate project EIR may not be necessary if it is deemed appropriate to tier from the local RTP/SCS.

Generally speaking, VMT impacts should be anticipated when a project:

- Induces travel, often via:
  - o Route changes (may increase or decrease overall VMT)
  - o Mode shift to automobile use (increases overall VMT)
  - o Longer trips (increases overall VMT)
  - o More trips (increases overall VMT)



- Location and land use changes (increases or decreases overall VMT)

*Caltrans SB 743 Transportation Analysis Framework (TAF) (2020)*

This document provides guidance on how to determine impact significance under CEQA on the SHS. It should be consulted “when a transportation project on the SHS could lead to a measurable and substantial increase in vehicle travel.”<sup>9</sup> As a general rule, projects that result in a reduction in the cost of travel, whether time or money, leads to an increase in VMT. This increase manifests in longer trips, changes in mode choice, route changes, newly generated trips, and location and land use changes – a wider area than the project boundary itself. There are various tools for estimating this induced travel, which are discussed in the [Methodological Guidance](#) below.

*Caltrans Strategic Plan (2021)*

This document lays out goals for management and guidance of Caltrans for 2020-2024, focusing on safety, cultivating excellence, enhancing and connecting the multimodal transportation network, strengthening stewardship and driving efficiency, leading climate action, and advancing equity and livability in all communities. Strategies relevant to this effort include:

- Using operational incentives to reduce VMT through high occupancy modes, active transportation, and TDM
- Optimize and expand equitable pricing
- Establish a VMT monitoring and reduction program

*Caltrans SB 743 Review Process Summary (Internal Caltrans document, April 2022)*

This document outlines when and how to submit for SB 743 Review. In addition to the VMTDD document described below, projects must submit their VMT study methodology, induced travel study, mitigation scoping plan, and induced travel risk assessment. These analyses should include details on how the NCST calculator or travel model was used, details on tolling for pricing projects, and land-use considerations for interchange projects.

*Caltrans Vehicle-Miles Traveled Decision Document (VMTDD) (Internal Caltrans document, April 2022)*

This three-page form is used as an element of Project Initiation Documents (PIDs) to determine CEQA requirements. It includes the following questions in order to determine whether a project is anticipated to have VMT impacts:

- Are all project alternatives screened as not likely to induce travel per Section 5.1.1 of Transportation Analysis Under CEQA?

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<sup>9</sup> Caltrans SB 743 Transportation Analysis Framework (TAF), 2020



- Do any of the project alternatives add lane-miles (mainline or aux lanes greater than 1 mile) to the SHS?
- Do any of the proposed alternatives add other capacity to the SHS (e.g., a new or widened interchange)?
- Has induced VMT been estimated, as prescribed in TAF, TAC, or other methods, for the project alternatives?
- Have VMT-reducing project elements or mitigation measures been identified?
- What is the budget for VMT mitigation? Provide the dollar figure and rationale.
- Provide estimated completion dates and points of contacts for any applicable technical studies to be produced in Project Approval & Environmental Document (PA&ED) stage and submitted to HQ.

#### *Caltrans' 2022 State Highway Operation and Protection Program (SHOPP, 2022)*

This document outlines a four-year program of projects to improve sustainability of the SHS and related infrastructure. This includes \$17.9 billion in projects over those four years, which came from the proposed list of projects from Caltrans in early 2022 and is based in asset management. Expected accomplishments from these projects include improvements to 6,347 lane miles of pavement, improvements to 9.2 million square feet of bridges, rehabilitation of 397,724 linear feet of culverts, and addressing 2,803 field elements. Several projects also promote active transportation and sustainability.

#### **Caltrans Policy Guidance Under Development**

The following guiding documents are under development. The first two have been summarized above as they are currently functioning similar to other adopted policy documents published by Caltrans; however, it is possible the guidance and policy direction contained therein may shift before formal publication. Upon formal publication, we recommend these are reviewed again to assess whether they provide further insight into the quantification of VMT:

- Caltrans SB 743 Review Process Summary
- Caltrans Vehicle-Miles Traveled Decision Document (VMTDD)
- Caltrans Mitigation Playbook (Draft July 2022)
- Caltrans When Are VMT Impacts from A Project Acceptable?
- Caltrans VMT Analysis of Auxiliary Lanes

Additional information is made available regularly on the Caltrans website ([dot.ca.gov](http://dot.ca.gov)) as guidance is developed and formalized.

#### **Project Types Assumed to and Assumed Not to Increase VMT (per Caltrans and OPR)**

The following project types are assumed to increase VMT, per the TAC:



- New general purpose (GP)/mixed flow lanes
- New high occupancy vehicle (HOV) lanes
- New peak period lanes
- New express/toll lanes
- New auxiliary lanes that serve the through traffic (over a mile long)
- New lanes through grade-separated interchanges
- Other projects adding capacity to SHS

The following project types are assumed not to increase VMT, per the TAC:

- Rehabilitation, maintenance, replacement, safety, and repair projects
- Roadside safety devices or hardware installation
- Roadway shoulder enhancements for use only by transit vehicles or bicycles or to improve traffic safety
- Addition of an auxiliary lane of less than one mile in length designed to improve roadway safety
- Installation, removal, or reconfiguration of traffic lanes that are not for through traffic
- Addition of roadway capacity on local or collector streets provided the project also substantially improves conditions for pedestrians, cyclists, and, if applicable, transit
- Conversion of existing general-purpose lanes (including ramps) to managed lanes or transit lanes, or changing lane management in a manner that would not substantially increase vehicle travel
- Addition of a new lane that is permanently restricted to use only by transit vehicles
- Reduction in number of through lanes
- Grade separation
- Installation, removal, or reconfiguration of traffic control devices
- Installation of traffic metering systems, detection systems, cameras, changeable message signs and other electronics
- Timing of signals
- Installation of roundabouts or traffic circles
- Installation or reconfiguration of traffic calming devices
- Adoption of or increase in tolls
- Initiation of new transit service
- Conversion of streets from one-way to two-way operation with no net increase in number of through lanes
- Removal or relocation of off-street or on-street parking spaces
- Adoption or modification of on-street parking or loading restrictions
- Addition of traffic wayfinding signage
- Addition of new or enhanced bike or pedestrian facilities on existing streets/highways or within existing public rights-of-way



- Addition of Class I bike paths, trails, multi-use paths, or other off-road facilities that serve non-motorized travel
- Installation of publicly available alternative fuel/charging infrastructure
- Addition of passing lanes, truck climbing lanes, or truck brake-check lanes in rural areas
- HOV bypass lanes on on-ramps
- Local and collector roads in rural areas that don't include sidewalks where there would be no pedestrian traffic to use them
- Lanes through grade-separated interchanges without additional receiving lanes downstream
- Adding vehicle storage to a ramp without further reconfiguration
- Park and Ride facilities
- Truck size and weight inspection stations

### **VMT Mitigation Estimation: Policy Summaries by Document**

#### *OPR Technical Advisory on Evaluating Transportation Impacts in CEQA (2018)*

When capacity-increasing roadway projects induce travel, mitigation measures an agency can consider include tolling or increasing tolling, converting GP lanes to HOV or high occupancy toll (HOT), TDM programs, or implementing Intelligent Transportation Systems (ITS) for better passenger throughput. When any kind of significant impact is determined, several mitigation measures are recommended by OPR:

- Improve or increase access to transit.
- Increase access to common goods and services, such as groceries, schools, and daycare.
- Incorporate affordable housing into the project.
- Incorporate neighborhood electric vehicle network.
- Orient the project toward transit, bicycle, and pedestrian facilities.
- Improve pedestrian or bicycle networks, or transit service.
- Provide traffic calming.
- Provide bicycle parking.
- Limit or eliminate parking supply.
- Unbundle parking costs.
- Provide parking or roadway pricing, or cash-out programs.
- Implement or provide access to a commute reduction program.
- Provide car-sharing, bike sharing, and ride-sharing programs.
- Provide transit passes.
- Shifting single occupancy vehicle trips to carpooling or vanpooling, for example providing ridematching services.
- Providing telework options.





- Providing incentives or subsidies that increase the use of modes other than single-occupancy vehicle.
- Providing on-site amenities at places of work, such as priority parking for carpools and vanpools, secure bike parking, and showers and locker rooms.
- Providing employee transportation coordinators at employment sites.
- Providing a guaranteed ride home service to users of non-auto modes.

Project alternatives should also be considered for reduction in VMT (several of which are only applicable to land use development projects), including:

- Locate the project in an area of the region that already exhibits low VMT.
- Locate the project near transit.
- Increase project density.
- Increase the mix of uses within the project or within the project's surroundings.
- Increase connectivity and/or intersection density on the project site.
- Deploy management strategies (e.g., pricing, vehicle occupancy requirements) on roadways or roadway lanes.

*Caltrans VMT Program Bulletin 21-01: VMT Mitigation Funding Status & Additionality (2021)*

This document discusses VMT mitigation funding for programmed projects, those in a fiscally constrained portion of an RTP, and those in an unconstrained portion. Generally, "Caltrans' investment strategy seeks to minimize any induced traffic that would generate VMT, which would reduce or eliminate the need for mitigation."<sup>10</sup> However, when SHS projects do generate VMT, mitigation strategies must be employed per CEQA.

In order to qualify as a mitigation strategy, the investment must be able to demonstrate a negative effect on VMT and be relatively likely to come to fruition. However, the mitigation does not need to be specific to the project, such as investment in a transit project that is already on a Caltrans district or partner wish list of VMT-reducing projects. Such a project being counted as a mitigation measure must pass the "additionality test", or ensure that the funding provided via the project looking for mitigation must provide additional resources by dollars or time that would not have otherwise been available. Support for a VMT-reducing project that is already on a jurisdictional or regional wish-list is a reasonable way to mitigate SHS VMT, but not projects that are already built or not in need of support. Evaluation of funding status is key to determining whether a project on an existing list may be leveraged as mitigation for another VMT inducing project.

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<sup>10</sup> Caltrans VMT Program Bulletin 21-01: VMT Mitigation Funding Status & Additionality (2021)



## Potential Challenges and Considerations

Several challenges currently exist when considering the guidance related to VMT quantification, owing to the fact that understanding of the metric of VMT and the implications of induced travel conceptually and temporally are still being studied and understood. Caltrans as an agency is still evolving in their approach to VMT impact assessment and mitigation expectations, and more recent documents are inconsistent with the more formalized TAC and TAF documents. While some of these documents still inform the process and may be treated during environmental review as formalized policy, several of the more recent publications are still in draft or have not yet gone through the same internal vetting process to create “one voice”, and as such there are competing guidelines at present. With final policy guidance on induced travel still forthcoming, there are persistent challenges in anticipating whether and how projects’ environmental analysis will fulfill Caltrans guidance or not.

## Methodological Guidance

This section of the memorandum discusses methodological guidance on VMT quantification and related estimation tools, mitigation methods, and strategies.

### General Quantification of VMT Methods Approach

*OPR Technical Advisory on Evaluating Transportation Impacts in CEQA (2018)*

As explained in the CEQA guidelines update and related documents, CEQA defers to the lead agency to determine the method of analyzing impacts. This document provides suggestions regarding those methodology options, including considerations of:

- *Vehicle types* – The CEQA Guidelines specifically call out “For the purposes of this section, ‘vehicle miles traveled’ refers to the amount and distance of automobile travel attributable to a project”<sup>11</sup>, referring specifically to cars and light-duty trucks. Should heavy-duty trucks be included as they are combined in the input data, it is important to be consistent with their inclusion throughout the process.
- *Truncation of space and time* – analysis should not be limited to the jurisdictional area if the project may have broader reaching impacts, ensuring that the good faith effort is taken per CEQA guidelines. Projects should also look at both short and long-term effects on VMT.

When considering which VMT to count, an analysis can be trip-based (basic and traditional method of counting each leg of a journey, compiling them into home-based VMT) or tour-based (counting all legs of a journey into tours, compiling them into household VMT). It can also be

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<sup>11</sup> Governor’s Office of Planning and Research. 2018, December 28. *CEQA Guidelines*.



assessed as “change in total VMT”, looking at the net difference on the project area VMT with and without a project.

Transit and active transportation projects are assumed not to increase VMT, nor are roadway capacity reduction projects. However, adding new roadway capacity where there is currently or may be congestion should be assumed to induce travel. The figure below shows a method of determining these impacts in many but not all scenarios. VMT impacts can also be analyzed at a programmatic level.

**To estimate VMT impacts from roadway expansion projects:**

1. Determine the total lane-miles over an area that fully captures travel behavior changes resulting from the project (generally the region, but for projects affecting interregional travel look at all affected regions).
2. Determine the percent change in total lane miles that will result from the project.
3. Determine the total existing VMT over that same area.
4. Multiply the percent increase in lane miles by the existing VMT, and then multiply that by the elasticity from the induced travel literature:

$$\text{[% increase in lane miles]} \times \text{[existing VMT]} \times \text{[elasticity]} = \text{[VMT resulting from the project]}$$

*Figure 1 – Method recommended for estimating VMT impacts on roadway expansion projects. Governor’s Office of Planning and Research. 2018, April. Technical Advisory on Evaluating Transportation Impacts in CEQA.*

## **Methodological Discussion of Transportation Projects Known to Increase VMT**

When considering projects that have multiple aspects or could be analyzed in different ways, it is valuable to consider the variation in methodological approaches that are possible. In general, a project is expected to cause an increase in VMT when travel is induced or SOV travel becomes more time or cost effective, and a project would be expected to decrease VMT when travel by car is made less attractive. However, goals of a project might be met that are also important for the region when VMT goals are not, such as an increase in VMT with a decrease in congested peak hours or a decrease in average travel time. As projects are reviewed for their VMT impacts, efficiency and maximization of existing infrastructure through better timing and tolling mechanisms should not be discounted as beneficial to the region. This is particularly relevant for ITS enhancements and projects focused on increase accessibility in infill development locations.

## **VMT Estimation Tools**

As noted in the TAF, there are three primary categories of tools for estimating induced travel:



- Elasticity-based methods, which look at the percent increase of VMT associated with a given percent increase in roadway lane miles.
- Travel demand models, which spatially locate socio-economic data into analysis zones and forecast trips to and from those zones based on the related data.
- Qualitative assessments, which are appropriate in limited circumstances, primarily when neither the NCST calculator (described below) nor a travel demand model is useful, such as when a project type is on the screened-out list from the TAC.

### *NCST Travel Calculator*

This tool puts into practice an elasticity-based method developed at The National Center for Sustainable Transportation at UC Davis. It calculates VMT specifically in relation to addition of new GP or HOV lanes on the SHS. Originally, it was not used for high occupancy toll lanes, managed lanes, or truck lanes, but a 2021 update has clarified that those types of projects be analyzed using the calculator as well.<sup>12</sup> It is based on statistical studies that quantify VMT for both short and long term effects.

In general, the calculator reflects the change in total VMT attributable to the project while controlling for other factors that contribute to VMT growth based on research-derived elasticities from nation-wide studies.

### *Travel Demand Models*

Models estimate travel by inputting socio-economic data into Transportation Analysis Zones (TAZs) and setting up networks that accurately reflect roadway conditions (number of lanes, availability of turns, etc.). When looking at different scenarios with a model, such as No Project and With Project, it is vital that comparable data and methods are used for inputs in both.

When utilizing a travel demand model (possibly with off-model post processing), the requirements for analyzing the full impacts of vehicle travel from a capacity-increasing project include changes in VMT due to changes in:

- Trip length (generally increases VMT)
- Mode shift (generally shifts from other modes toward automobile use, increasing VMT)
- Route choice (can act to increase or decrease VMT but is likely to decrease emissions because more direct or preferred facility routing occurs)
- Newly generated trips (generally increases VMT)

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<sup>12</sup> Memo: Changes to NCST Tool for VMT Analysis (Nov 2021)



## Potential Challenges, Limitations, and Considerations

### *NCST Travel Calculator*

As described above, the NCST Calculator forecasts long-term VMT changes while controlling for variables such as population and employment growth, income changes, etc. This tool uses MSA-specific lane miles as baseline for elasticity calculations. However, the NCST calculator and elasticity models in general are not sensitive to land use context, geographic constraints, or the amount of existing congestion. Additionally, it produces an annual forecast, while project analysis typically requires a weekday forecast, and does not distinguish between GP and HOV/HOT lanes. As a result, use of the NCST Calculator and the elasticity approach in general should be viewed as a rapid-response but oversimplified analysis approach and could result in an over-estimation or under-estimation of induced VMT with a high degree of uncertainty, depending on project context.

### *Travel Demand Models*

Travel models forecast VMT changes based on variables such as population and employment growth, and income changes, and therefore can reflect context sensitivity for land use and the network. They can be locally calibrated and validated to observed local VMT conditions. Travel models vary in their setup, whether they are activity or trip based, and whether they are able to estimate induced travel related to highway projects. This results more often in underestimation than overestimation of induced VMT and makes them more complicated and time-intensive to run than an elasticity-based calculator. They may not include a process for capturing potential changes in trip generation or land use growth allocation depending on setup. Some limitations can be addressed by incorporating the land use feedback loop and dynamic traffic assignment module. Models also often lack commercial driving sensitivity.

## Relationship to Metro's SHS Project List

Metro's SHS Project List contains 55 projects at the writing of this memo and includes projects and programs from several sources such as Measure R, Measure M, and the 2020 Long Range Transportation Plan (LRTP). The projects and programs are currently in varying phases, ranging from pre-planning to in planning, environmental review, final design, and construction. Due in part to the variety in origin and status, the current level of detail also varies widely in these projects, which has an effect on how accurately presumptions can be made regarding potential impacts. Project types on this list include grade separations, soundwalls, interchange and ramp modifications, ITS and other technological upgrades, addition of HOV lanes, HOT lanes, or ExpressLanes, auxiliary lanes, collector-distributor roads, various efficiency and safety upgrades, and new highways.



The above guidance is intended to set the context for a review of Metro's SHS Project List in order to understand the analysis needs and starting assumptions for each type of project. For example, projects on the SHS Project List that also fall on the list of projects assumed to increase VMT may require a more extensive analysis approach to understanding induced VMT than a project that is comprised of elements on the list of Projects Assumed Not to Increase VMT (though these projects may also be subject to induced VMT analysis as the complexities between Caltrans guidance continue to evolve).

Next steps in the Metro VMT Mitigation Program project include reaching a decision on how to categorize, evaluate, and quantify the VMT impacts of projects on the SHS so that a mitigation program can be developed. Understanding the magnitude of mitigation needs is a crucial first step in development of a mitigation program for the agency. Through a series of meetings with the Project Development Team (PDT) comprised of representatives from Metro, Caltrans, OPR, and SCAG, the approach to evaluating projects on the SHS will be determined.

# Memorandum

Date: February 21, 2023  
To: Julio Perucho, Metro  
From: Anna Luo, Chelsea Richer, Ron Milam, and Jeremy Klop, Fehr & Peers  
Subject: **VMT Quantification Tools and Preferred Methodology (Task 4)**

LA22-3343

## Executive Summary

This memorandum establishes an evidence-based approach to refine the VMT quantification methods established by Caltrans for projects on the State Highway System (SHS) specific to the context in Los Angeles County. Current VMT quantification practice is based on statewide application of national research on induced travel. While these efforts and prior research are robust, travel in Los Angeles County and changes in local travel patterns over the last two decades are inconsistent with national trends and different than other regions in California. The observed changes in total Vehicle Miles Traveled (VMT) and VMT per capita in Los Angeles County outperform national and statewide trends: lower than national averages, lowest in the Southern California Association of Governments (SCAG) region, and on the lower end of VMT per capita growth statewide.<sup>1,2</sup> These trends are elaborated in this memorandum.

This memorandum outlines notable and consequential differences in induced travel effects that are unique to Los Angeles County, and which justify refinements to VMT quantification methods applied to projects on the SHS in Los Angeles County. Consistent application of this locally refined method provides clarity for project teams working on environmental compliance for projects on the SHS and a consistent approach against which Caltrans' District 7 and Headquarters can conduct their review of Metro's environmental documents for SHS projects. A locally specific VMT quantification method also ensures that project impact mitigation actions and associated costs

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<sup>1</sup> US DOT Transportation and Health Tool, 2015. Available at <https://www7.transportation.gov/transportation-health-tool>.

<sup>2</sup> California Air Resources Board. Draft 2022 Progress Report: California's Sustainable Communities and Climate Protection Act (SB 375). Available at [https://ww2.arb.ca.gov/sites/default/files/2022-07/2022\\_SB\\_150\\_Main\\_Report\\_Draft\\_ADA.pdf](https://ww2.arb.ca.gov/sites/default/files/2022-07/2022_SB_150_Main_Report_Draft_ADA.pdf).



are both fair and reasonably related to expected changes in local travel patterns and locally specific substantial evidence.

Key issues addressed in this memo, and their corresponding recommended approaches, include:

- The types of projects that are presumed to not result in a VMT impact (i.e., screened from VMT quantification)
  - This memo recommends the addition of five types of projects to the list of projects that are presumed not to result in a VMT impact.<sup>3</sup>
- Selection of the appropriate quantification method to estimate long-term induced VMT (i.e., a simpler approach using an elasticity factor, that only works for projects with lane-mile additions, or a more complex approach using a travel demand model that works for all types of projects but may not fully capture long-term induced VMT)
  - For projects that include lane-mile additions, this memo recommends the use of a hybrid approach, using both the elasticity method and the SCAG 2020 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) Activity Based Model (SCAG 2020 ABM).
  - For projects that do not include lane-mile additions, this memo recommends the use of the SCAG 2020 ABM.
- Approach to modifying selected quantification method (i.e., local refinement of the elasticity factors used in the Caltrans-preferred National Center for Sustainable Transportation (NCST) Induced Travel Calculator (NCST Calculator) to better align the elasticity factor with CEQA statute, published research, and Los Angeles County context)
  - For program-level VMT quantification, this memo recommends using a modified elasticity factor of 0.39 for Class 1 facilities and 0.29 for Class 2 and 3 facilities, which reflects local context, is supported by multiple sources of published literature, and is consistent with the category of induced VMT that aligns most closely to the CEQA statute.
  - For project-level VMT quantification, this memo recommends further adjusting the elasticity factor to reflect differences in project location and project type, which would be derived by deploying the SCAG 2020 ABM in conjunction with the above long-term elasticity factors.

## Introduction

The Los Angeles County Metropolitan Transportation Authority (Metro), in partnership with the California Department of Transportation (Caltrans), is developing the VMT Mitigation Program to

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<sup>3</sup> This list can be found in the Caltrans policy document *Transportation Analysis under CEQA for Projects on the State Highway System (TAC)*, 2020, pages 13-15. Available at <https://dot.ca.gov/-/media/dot-media/programs/sustainability/documents/2020-09-10-1st-edition-tac-fnl-a11y-new-nov2021.pdf>.





support the region's Senate Bill (SB) 743 goals of reducing the impacts of VMT and correlated greenhouse gas (GHG) emissions while affording greater mobility and access for Los Angeles County's residents. Aligning Metro's highway investments with the legislative intent of SB 743 that emphasizes multi-modal and smart growth strategies to reduce VMT, this program will allow Metro to support the region's goal of reducing VMT impacts, provide Metro, Caltrans, and other project delivery partners within the County with refined tools to determine project VMT impacts more accurately, and provide feasible and enforceable VMT mitigation strategies.

The purpose of this memorandum is to summarize an evaluation of VMT quantification tools and present recommendations on model improvements and a suggested approach to forecast VMT, in the context of potential application to SHS improvement projects included in Metro's Sales Tax Measures Expenditure Plans/Ordinances and corresponding subregional programs. Although the CEQA Guidelines [Section 15064.3(a)] only require the evaluation of automobile VMT (light-duty cars and trucks), the quantification tool recommended by Caltrans includes all types of VMT, including medium and heavy-duty vehicles (reflecting commercial or freight activity), and applies a state-wide approach that imposes extra cost on projects in low-VMT areas. Therefore, to best respond to CEQA requirements and to calibrate the quantification to local context in the Los Angeles MSA, a modification to the Caltrans-recommended tool is warranted.<sup>4</sup>

This memorandum also provides recommended project types as additions to the induced VMT screening list outlined in the first version of the Caltrans policy document *Transportation Analysis under CEQA for Projects on the State Highway System* (TAC) as they are projects not likely to lead to measurable and substantial increases in VMT.<sup>5</sup> Per the scope of work for this effort, this memorandum is not intended to, and does not, quantify the VMT impacts of Metro's program of highways and complete streets projects.

Finally, this memorandum offers a brief discussion of alignment of this effort with other efforts underway at Metro that relate to VMT quantification, including how the proposed California Environmental Quality Act (CEQA) methodology included herein relate to other published estimates of induced travel and VMT increases over time.

## Background

In response to recent revisions to the CEQA Guidelines, CEQA case law, and guidance issued by the California Governor's Office of Planning and Research (OPR), Caltrans has determined that VMT is the most appropriate metric for determining transportation impacts for capacity-

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<sup>4</sup> CEQA Guidelines Section 15064.3(b)(2) and (4) do provide lead agency discretion in setting a different form of the metric; however, Caltrans' policy documents do not establish the requirement to include commercial trips.

<sup>5</sup> Transportation Analysis under CEQA for Projects on the State Highway System. Caltrans, 2020. Retrieved from <https://dot.ca.gov/-/media/dot-media/programs/sustainability/documents/2020-09-10-1st-edition-tac-fnl-a11y-new-nov2021.pdf>.



increasing transportation projects on the SHS. VMT impact analysis may also be required for National Environmental Policy Act (NEPA) purposes.

For roadway capacity projects on local roadways not on the SHS, lead agencies have the discretion to select their preferred metric consistent with CEQA expectations. This has traditionally been the case for NEPA projects as well. Beyond transportation impacts, VMT is also a required input for air quality, GHG, and energy impact analysis.

Induced vehicle travel effects are the underlying forces behind VMT changes associated with roadway capacity expansion projects. The concept of induced demand for VMT is well-established by transportation planning research, dating back to a 1962 paper by Anthony Downs.<sup>6</sup> However, the best approach to estimating the effects of building new lane miles, and the potential magnitude of such effects, is still widely debated.<sup>7</sup> These effects can potentially diminish expected congestion relief benefits of building new non-priced capacity improvements. Note, congestion relief is only one possible benefit gained from capacity improvements, along with the accommodation of additional travelers, improved access, and safety enhancements. The main resources on induced vehicle travel for environmental impact analysis of transportation projects are listed below.

- OPR's Technical Advisory on Evaluating Transportation Impacts in CEQA, December 2018.
  - [https://opr.ca.gov/docs/20190122-743\\_Technical\\_Advisory.pdf](https://opr.ca.gov/docs/20190122-743_Technical_Advisory.pdf)
- Caltrans' Transportation Analysis Framework (TAF) First Edition: Evaluating Transportation Impacts of State Highway System Projects, September 2020.<sup>8</sup>
  - <https://dot.ca.gov/-/media/dot-media/programs/sustainability/documents/2020-09-10-1st-edition-taf-fnl-a11y-new-.pdf>
- Caltrans' Transportation Analysis Under CEQA (TAC) First Edition: Evaluating Transportation Impacts of State Highway System Projects, September 2020.<sup>9</sup>
  - <https://dot.ca.gov/-/media/dot-media/programs/sustainability/documents/2020-09-10-1st-edition-tac-fnl-a11y-new-nov2021.pdf>
- CARB 2017 Scoping Plan – Identified VMT Reductions and Relationship to State Climate Goals, January 2019.
  - [https://ww2.arb.ca.gov/sites/default/files/2019-01/2017\\_sp\\_vmt\\_reductions\\_jan19.pdf](https://ww2.arb.ca.gov/sites/default/files/2019-01/2017_sp_vmt_reductions_jan19.pdf)

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<sup>6</sup> The Law of Peak-Hour Expressway Congestion. Anthony Downs, Traffic Quarterly, 1962. Volume 16, pp393-409.. Retrieved from [https://babel.hathitrust.org/cgi/pt?id=uc1.\\$b3477&view=1up&seq=457](https://babel.hathitrust.org/cgi/pt?id=uc1.$b3477&view=1up&seq=457).

<sup>7</sup> Induced Demand: An Urban and Metropolitan Perspective. Robert Cervero, 2001. Prepared for Policy Forum: Working Together to Address Induced Demand. Retrieved from <https://escholarship.org/uc/item/5pj337gw>.

<sup>8</sup> Updates to the TAF and the TAC are periodically posted as Bulletins and Hot Topics at <https://dot.ca.gov/programs/sustainability/sb-743/sb743-resources>.

<sup>9</sup> Updates to the TAC and the TAF are periodically posted as Bulletins and Hot Topics at <https://dot.ca.gov/programs/sustainability/sb-743/sb743-resources>.



- CARB Research on Effects of Transportation and Land-Use Related Policies
  - [https://ww2.arb.ca.gov/sites/default/files/2020-06/Impact\\_of\\_Highway\\_Capacity\\_and\\_Induced\\_Travel\\_on\\_Passenger\\_Vehicle\\_Use\\_and\\_Greenhouse\\_Gas\\_Emissions\\_Policy\\_Brief.pdf](https://ww2.arb.ca.gov/sites/default/files/2020-06/Impact_of_Highway_Capacity_and_Induced_Travel_on_Passenger_Vehicle_Use_and_Greenhouse_Gas_Emissions_Policy_Brief.pdf)
  - [https://ww2.arb.ca.gov/sites/default/files/2020-06/Impact\\_of\\_Highway\\_Capacity\\_and\\_Induced\\_Travel\\_on\\_Passenger\\_Vehicle\\_Use\\_and\\_Greenhouse\\_Gas\\_Emissions\\_Technical\\_Background\\_Document.pdf](https://ww2.arb.ca.gov/sites/default/files/2020-06/Impact_of_Highway_Capacity_and_Induced_Travel_on_Passenger_Vehicle_Use_and_Greenhouse_Gas_Emissions_Technical_Background_Document.pdf)
- NEPA Travel and Land Use Forecasting
  - [https://www.environment.fhwa.dot.gov/env\\_topics/other.aspx](https://www.environment.fhwa.dot.gov/env_topics/other.aspx)
- Ronald T. Milam, et al., Closing the Induced Vehicle Travel Gap between Research and Practice, Transportation Research Record (TRR) #2653, 2017, p10-16.
  - <https://pdfs.semanticscholar.org/48aa/57a40a71f7c6ba90106f0acdbfccb37de0b2.pdf>
- Ronald T. Milam and Jerry Walters, et al. Induced Travel Technical Investigation. Caltrans TAG/TISG Induced Demand Subcommittee – Status Summary, April 24, 2016.
- Dowling Associates for the California Air Resources Board. Effects of Increased Highway Capacity on Travel Behavior, 1994.

Importantly, establishment of a VMT impact presumes the future plus project condition results in VMT levels that are higher than the existing conditions. A review of HPMS data from the past 20 years – aligning with the timeframe along which the effects of long-term induced VMT should be visible – demonstrates a different trend in the Los Angeles-Long Beach-Anaheim MSA (previously referred to as the Los Angeles, Long Beach, Pomona, Ontario MSA or simply, the Los Angeles MSA which captures both Los Angeles and Orange counties). As shown in Table 1, below, between 2001-2019, HPMS data experienced a decline in daily total VMT (-4%) despite a smaller decline in lane miles (-0.28%) and an increase in population (+5%). In contrast, California has seen an increase in lane miles, VMT, and population state-wide.

**Table 1: Comparison of HPMS and Population Data, Los Angeles MSA & California**

	Los Angeles MSA	California
<b>Change in Total Lane Miles, 2001-2019</b>	-0.28%	+7.7%
<b>Change in Total VMT, 2001-2019</b>	-4%	+15%
<b>Change in Total Population, 2001-2019</b>	+5%	+14%

Source: Fehr & Peers, 2023.

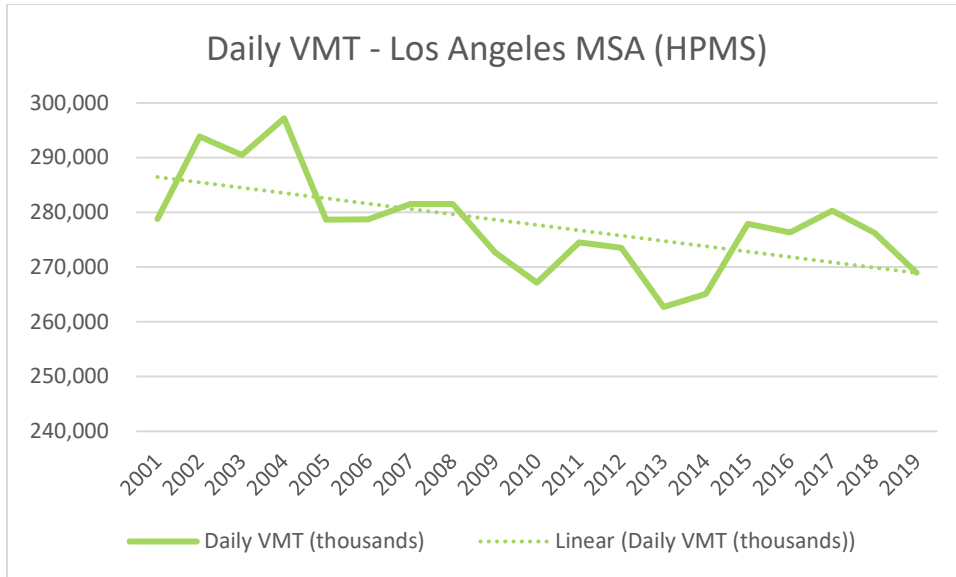


Figure 1: Daily VMT (Los Angeles MSA), 2001-2019

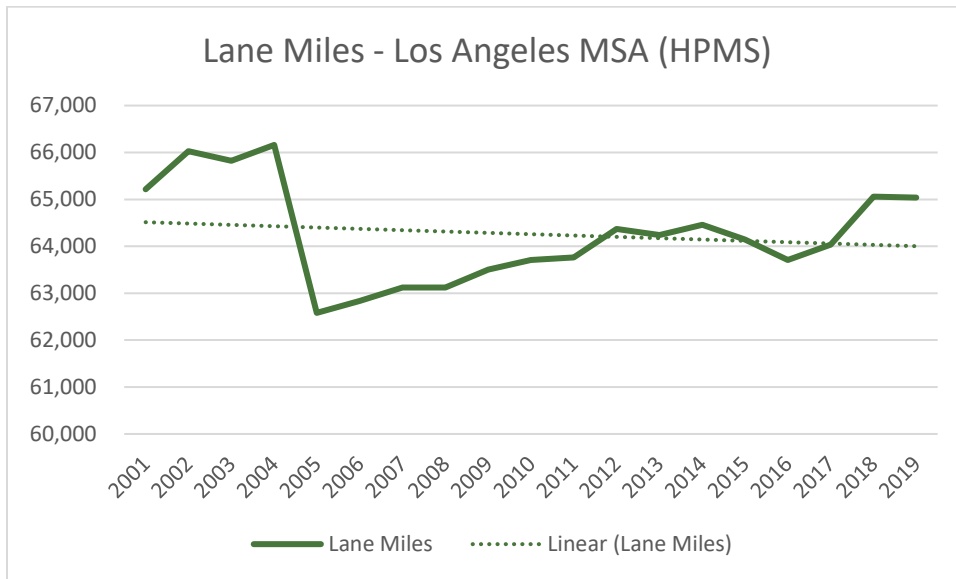


Figure 2: Total Lane Miles (Los Angeles MSA), 2001-2019

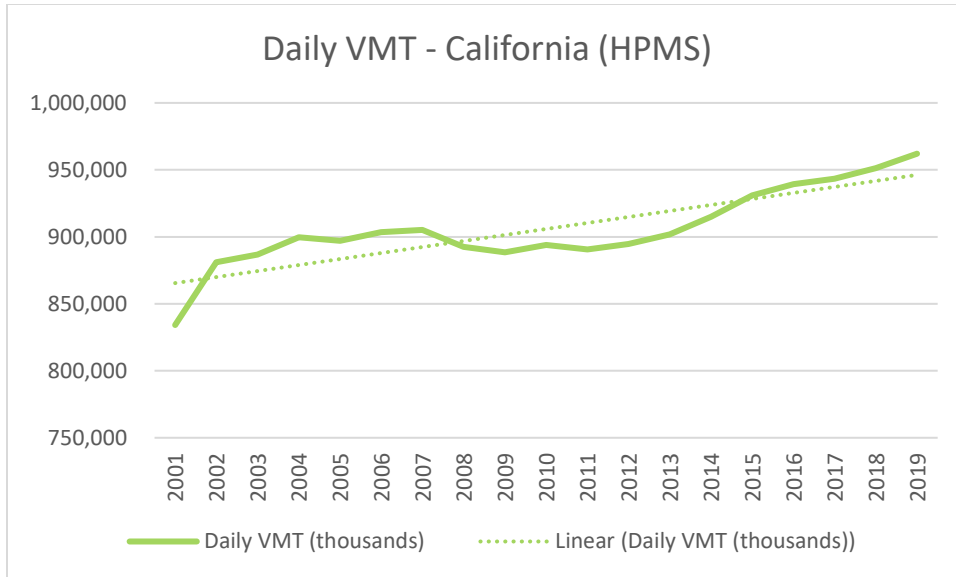


Figure 3: Daily VMT (California), 2001-2019

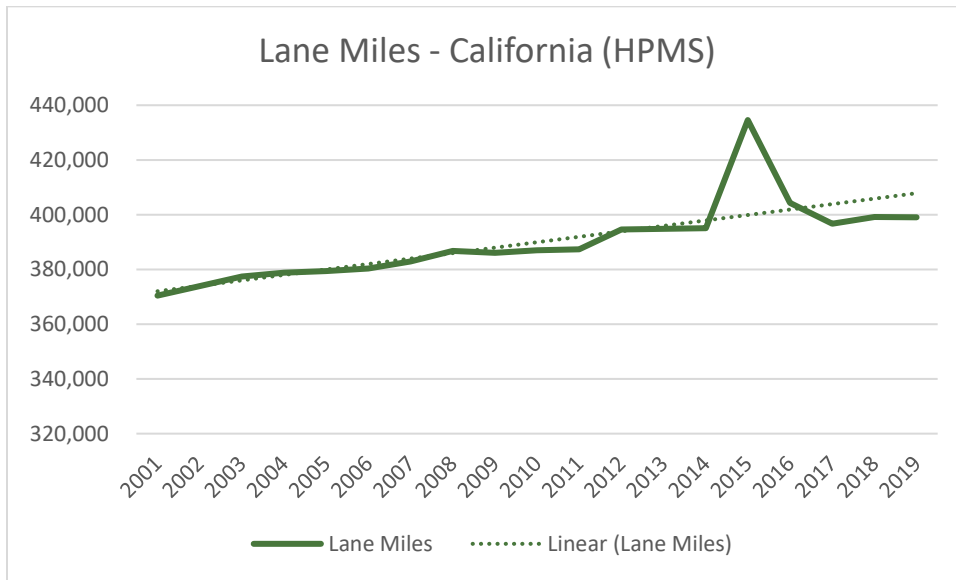


Figure 4: Total Lane Miles (California), 2001-2019

This data points to a more efficient travel pattern in Los Angeles compared to other parts of the California, as well as other parts of the US and past periods of Southern California’s history (as documented in the induced VMT literature), where rapid expansion of developed land and expansion of the vehicle transportation system to connect to those areas led to less efficient travel patterns and induced demand as a result. These notable and consequential differences in induced travel effects that are unique to Los Angeles County justify refinements to VMT quantification methods applied to projects on the SHS in Los Angeles County. The following



sections explain the locally specific quantification methodology to forecast induced VMT for Metro's highway projects based on the above documents and CEQA compliance.

## VMT Quantification Tools

As indicated in the OPR's Technical Advisory and Caltrans' Transportation Analysis Framework (TAF) and TAC, two methods are highlighted to forecast induced VMT: 1) an empirical approach using elasticities, and 2) a travel demand model.

- **Elasticity-based methods**, which produce a percent increase in VMT associated with a given percent increase in roadway lane miles. The tool that is emerging as the most commonly used is the National Center for Sustainable Transportation (NCST) Induced Travel Calculator (NCST Calculator), based on national research and published literature on the relationship between lane miles and induced VMT. Although the concept and calculation is simple, the selection of the right elasticity number is debated.<sup>10</sup> Furthermore, an elasticity-based approach cannot be deployed on projects that do not have lane-mile additions.
- **Travel demand models**, which spatially locate socio-economic data into analysis zones and forecast trips to and from those zones based on the related data. Travel demand models aim to capture complex relationships between both land use and transportation changes and can vary in terms of their levels of calibration and validation as well as their associated reasonableness and sensitivity.

Each method has its merits and limitations, and this evaluation offers an approach to understanding and potentially reconciling these two methods to perform a complete analysis satisfying the CEQA (and NEPA) expectations, specific to the context in Los Angeles County.

### NCST Calculator

The elasticity method is based on statistical studies that aim to quantify induced vehicle travel that is exclusively associated with expanding roadway capacity (i.e., adding lane miles). The elasticity of VMT to lane miles includes short-term and long-term estimates of induced travel effects. Short-term effects occur in the short period of time (1-2 years) after a roadway capacity project is open to traffic. Long-term effects tend to occur within a 10- to 20-year timeframe, although the most recent research tends to focus on 20 years. In general, the elasticities reflect the change in total VMT attributable to lane mile increases while controlling for other factors that contribute to VMT growth such as population and economic growth.

Some researchers have also included an accounting of the specific sources of induced VMT including the proportion from passenger (light-duty) versus commercial (medium and heavy-

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<sup>10</sup> Cervero, 2001.



duty) vehicles. This accounting is relevant for CEQA purposes since different types of VMT may be required depending on the impact subject. For transportation impacts, only passenger VMT is required per CEQA Guidelines Section 15064.3(a).

Under the elasticity method, Caltrans recommends the use of the NCST Calculator (<https://travelcalculator.ncst.ucdavis.edu/>) to forecast long-term induced VMT. The process of calculating induced travel using elasticities is shown in Figure 5. The NCST Calculator includes 2016-2019 VMT and lane-mile data so the user only needs to input the baseline year (preferably the latest year), change in lane miles associated with a proposed project, and the type of functional classification (selected from a drop-down menu). For interstate highways (Class 1), the VMT forecast is based on inputs for the corresponding Metropolitan Statistical Area (MSA) and uses an elasticity of 1.0. For other freeways and expressways (Class 2) and other principal arterials (Class 3), the calculator uses county-level inputs and an elasticity of 0.75.

**To estimate VMT impacts from roadway expansion projects:**

1. Determine the total lane-miles over an area that fully captures travel behavior changes resulting from the project (generally the region, but for projects affecting interregional travel look at all affected regions).
2. Determine the percent change in total lane miles that will result from the project.
3. Determine the total existing VMT over that same area.
4. Multiply the percent increase in lane miles by the existing VMT, and then multiply that by the elasticity from the induced travel literature:

**[% increase in lane miles] x [existing VMT] x [elasticity] = [VMT resulting from the project]**

Figure 5: Method recommended for estimating VMT impacts on roadway expansion projects. Governor's Office of Planning and Research. 2018, April. Technical Advisory on Evaluating Transportation Impacts in CEQA.

According to the NCST, the NCST Calculator is applicable for General Purpose (GP), High Occupancy Vehicle (HOV), and high-occupancy toll (HOT) lane projects involving the addition of lanes to class 1, 2, and 3 facilities, which cover the SHS and most major arterials. For a specific map of class 1, 2, and 3 facilities, refer to the Caltrans statewide functional classification map available at the website - <https://dot.ca.gov/programs/research-innovation-system-information/office-of-highway-system-information-performance/functional-classification>. Users of the map need to zoom in closely to their study area for the map to reveal all functional classes.

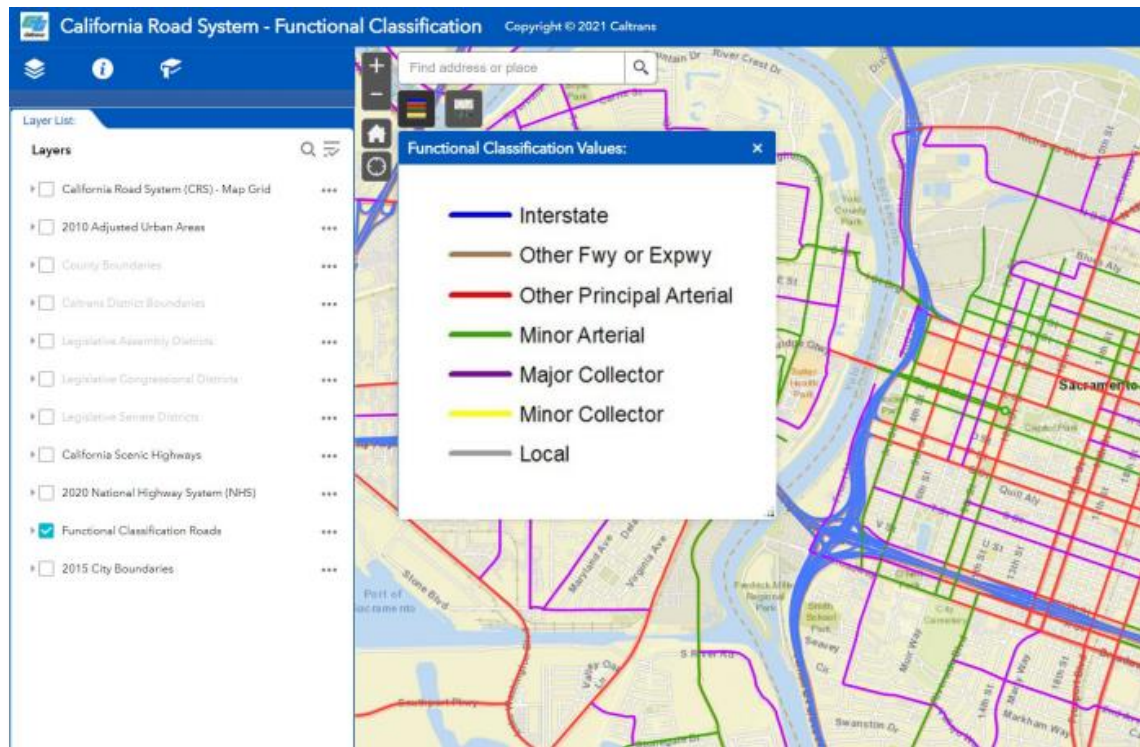


Figure 6: Caltrans Functional Classifications

The elasticities produce a forecast of total VMT attributable to a project, including all VMT (passenger and commercial). This is important because the CEQA Guidelines Section 15064.3(a) states, “For the purposes of this section, ‘vehicle miles traveled’ refers to the amount and distance of automobile travel attributable to a project.” (Emphasis added.)

Given that CEQA only requires evaluation of automobile VMT, the elasticity factor embedded within the likely overstates the VMT that would be necessary to evaluate transportation impacts associated with a project on the SHS. In addition, passenger/automobile VMT is the most closely associated with the legislative intent of SB 743, which aims to influence and encourage infill development, promote public health through active transportation, and enable California to build in a way that allows Californians to drive less.<sup>11</sup>

Modification of the elasticity factor does not solve all the limitations of using an elasticity-based approach and points to the need for a hybrid approach that also deploys a travel demand model to further refine estimates of long-term induced vehicle travel. Specifically, the limitations of the NCST Calculator are noted below.

<sup>11</sup> CEQA Transportation Impacts (SB 743). Governor’s Office of Planning and Research. Retrieved from <https://opr.ca.gov/ceqa/sb-743/>.





- Most of the data used in the research studies ranges from the 1980s to the early 2000s, although one study extended its data from 1981 to 2015. This period may not be reflective of current VMT trends and may not produce induced travel elasticities that accurately represent HOT/ExpressLane effects given their limited implementation during this time period in comparison to GP and HOV lanes.

This limitation is especially problematic for the Los Angeles MSA due to the introduction and expansion of ExpressLanes and rail transit<sup>12</sup> occurring since the early 2000s. Although one of the main research studies utilized in support of the NCST Calculator elasticities (Duranton & Turner<sup>13</sup>) concludes that extensions to public transit are not effective policies with which to combat traffic congestion or reduce VMT, this research only measured public transportation as the daily average peak service of large buses; other forms of transit such as railroads and subways were not accounted for in their estimations. In the Los Angeles MSA, it is possible the combination of rail expansion and ExpressLane implementation have resulted in different outcomes, as demonstrated by the recent HPMS data analysis in the introduction, which stands in contrast to statewide trends (and national trends) that form the basis of the studies that the NCST Calculator relies on.

- The elasticities are not sensitive to network effects associated with some roadway capacity projects such as bottlenecks that may have larger effects on travel times as well as bridges that can substantially reduce the distance between origins and destinations. Bridges that close a network gap have the greatest potential for reducing VMT due to shorter trip lengths.
- The elasticities are also not sensitive to project types (GP/HOV/HOT/Express Lanes), land use context, geographic constraints (e.g., water or topography barriers), or the amount of existing congestion. Without sensitivity to the project corridor context, the calculator results may over- or under-estimate induced VMT effects. Specifically, the Duranton & Turner study concludes that congestion pricing is the main candidate tool to curb traffic congestion and induced VMT, with HOT or ExpressLanes presently operating as congestion pricing in Los Angeles<sup>14</sup>, but no adjustments are made to account for these project types in the elasticities. This lack of sensitivity is also inconsistent with recent studies that demonstrated that the removal of HOV policies significantly increases traffic

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<sup>12</sup> The Metro A (Blue), B (Red), C (Green), D (Purple), E (Expo), L (Gold), and K lines entered service starting in 1990, 1993, 1995, 2003, 2012, and 2022, respectively, with the Express Lane network operational in 2012.

<sup>13</sup> The Fundamental Law of Road Congestion: Evidence from US Cities, Gilles Duranton and Matthew A. Turner, *American Economic Review* 101, October 2011.

<sup>14</sup> Congestion Pricing: Examples Around the U.S. Available at [https://ops.fhwa.dot.gov/congestionpricing/resources/examples\\_us.htm](https://ops.fhwa.dot.gov/congestionpricing/resources/examples_us.htm)



congestion<sup>15</sup> and project context, including project type and project location, result in large variations in elasticities.<sup>16</sup>

- Application of elasticities at the statewide level functionally penalizes projects in low-VMT areas by imposing additional mitigation costs to the project development process. This is directly in conflict with the legislative intent of SB 743, which is intended to encourage project development in areas that have low-VMT patterns, including infill areas. Local refinement to reflect observed VMT patterns is appropriate and consistent with SB 743 and is supported by recent research that concludes that to truly minimize the bias in the elasticity measurements, it is necessary to observe MSAs on a case-by-case basis<sup>17</sup>.
- The VMT forecast represents the project-generated effect and does not include information about the No Project condition. This is one of the bigger limitations of elasticity methods because understanding what would otherwise happen without the project is required for CEQA/NEPA impact analysis and essential information for decision making.
- The VMT forecast does not include a distribution of VMT by speed bin, which is commonly needed for air quality and GHG analysis.
- The VMT forecasts do not include potential VMT effects beyond the MSA or county boundaries.
- The elasticity values were derived from research data representing a period when substantial socioeconomic changes were contributing to increasing VMT per capita (e.g., 1980s to early 2000s). This period was also prior to widespread use of transportation network companies (TNCs), substantial internet shopping, expanded food delivery, and recent COVID-19 travel disruptions.
- In uncongested suburban areas, the VMT forecasts from the calculator may be unreasonably high and would not be compatible with observed trip rates and trip lengths. Without congestion, vehicle trip rates and lengths are not influenced or suppressed in these areas. This lack of sensitivity to corridor land use and congestion context means

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<sup>15</sup> R. Hanna, G. Kreindler, B. A. Olken (2017.) Citywide Effects of High-Occupancy Vehicle Restrictions: Evidence From “3-In-1” In Jakarta. Available at <https://dspace.mit.edu/bitstream/handle/1721.1/114521/CITYWIDE%20EFFECTS%20OF%20HIGH%20OCCUPANCY%20VEHICLE%20RESTRICTIONS.pdf>

<sup>16</sup> M. L. Anderson and L. W. Davis (2021). Estimating Induced Travel from Capacity Expansions on Congested Corridors. Available at <https://ww2.arb.ca.gov/sites/default/files/2021-04/18RD022.pdf>.

<sup>17</sup> J, Wang, G. Leovan, E. Arroyo (2022). The Fundamental Law of Road Congestion: Is it Truly Fundamental?



- that adding lane miles in a suburban area with no congestion will have the same proportional effect as adding lane miles in an urban area with multiple hours of congestion. As additional evidence to the lack of latent demand for travel in suburban environments, residential vehicle trip rates in suburban areas have been stable over time across multiple versions of the Institute of Transportation Engineers (ITE) Trip Generation Manual.
- The most recent input data for the calculator reflect 2019 conditions. Given CEQA Guidelines expectations that the baseline year is normally the year in which the notice of preparation (NOP) is released for a project, the induced vehicle travel analysis would be strengthened by using the most recent input data available. More current VMT and lane-mile estimates will become available in the future from the Caltrans Highway Performance Monitoring System (HPMS) and PeMS websites below.
    - <https://dot.ca.gov/programs/research-innovation-system-information/highway-performance-monitoring-system> <https://dot.ca.gov/programs/research-innovation-system-information/highwayperformance-monitoring-system>
    - <https://dot.ca.gov/programs/traffic-operations/mpr/pems-source>
  - Finally, Per the UC Davis NCST (the developers of the NCST Calculator) own research effort published in September 2022<sup>18</sup>, a “true validation (of the NCST calculator) may not be possible, given the long periods of time over which projects are constructed and induced travel effects occur, as well as the challenge of isolating the effect of a single capacity expansion from the effects of other capacity expansions as well as other factors in real-world settings (e.g., population changes, income changes, shifts in industries and job types, and global pandemics like we have seen with COVID-19).” This inability to validate the Calculator over the long-term time period it purports to measure could very likely result in mitigation investments that far exceed what is actually necessary to reduce a project impact to a level less than significant under CEQA.

## Travel Demand Models

Travel demand models estimate travel forecasts by inputting socio-economic data into Transportation Analysis Zones (TAZs) and setting up networks that accurately reflect roadway conditions (number of lanes, functional classification, capacity, speeds, availability of turns, etc.). When looking at different scenarios with a model, such as No Project and With Project, it is vital that comparable data and methods are used for inputs in both.

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<sup>18</sup> Updating the Induced Travel Calculator, 2022, p22. Retrieved from <https://escholarship.org/content/qt1hh9b9mf/qt1hh9b9mf.pdf>



When utilizing a travel demand model (possibly with off-model post-processing), the full impacts of induced vehicle travel from a capacity-increasing project should include changes in VMT due to changes in:

- Trip length (generally increases VMT)
- Mode shift (generally shifts from other modes toward automobile use, increasing VMT)
- Route choice (can increase or decrease VMT but is likely to decrease emissions because more direct or preferred facility routing occurs)
- Newly generated trips (generally increases VMT)

Travel demand models forecast short-term VMT changes based on variables such as population and employment growth, and income changes, and therefore can reflect context sensitivity for land use and transportation network features. They can be locally calibrated and validated to observed local VMT conditions. Travel models vary in their setup, whether they are activity or trip based, and whether they are able to estimate induced travel related to highway projects.

Travel demand models more often underestimate rather than overestimate induced vehicle travel and are more complicated and time-intensive to run than an elasticity-based calculator. In general, a major issue related to using the travel demand model approach in impact analysis is that most models in California, and the rest of the U.S., do not have feedback processes that influence trip generation rates or land use growth allocation.<sup>19</sup> Hence, these components of the models tend to be 'fixed' versus being dynamically linked to changes in accessibility associated with a transportation network modification. Models also tend to lack dynamic validation to help users understand their level of sensitivity to small network changes. Additional processing is required to handle these limitations of a model before applying to VMT analysis, which are described in the following section.

## Travel Demand Model Review

For the purpose of this project, two regional travel demand models were reviewed related to the VMT analysis competence, which are Metro's Travel Demand Model (TDM) (version CBM18B) and the SCAG 2020 ABM. Additional models were considered for review, including the City of Los Angeles, City of Culver City, and City of Pasadena models, but were eliminated early due to their inconsistency with the most recent 2020 SCAG RTP/SCS and the lack of county-wide geographic coverage.

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<sup>19</sup> For further discussion of model improvements, see page 18.



## Metro's TDM

The Metro TDM has a sophisticated mode choice procedure that estimates the mode shift due to changes in accessibility. The model assignment procedure is capable of reflecting the change in routing/path choice when the roadway congestion level varies.

From the perspective of induced travel, the Metro TDM can estimate induced travel demand due to mode shift between auto modes and other modes, and path shift (using different roadways). However, the Metro TDM does not have any module to estimate potential new trips due to a project, nor changes in origin-destination patterns of person trips due to a project. The overall travel demand (person trip tables) is initially derived from the SCAG Model (using a method that combines results from the 2016 RTP base year model and the 2020 RTP model inputs).

Given this relationship between the SCAG Model and the Metro Model, the evaluation of the Metro Model against the CEQA Guidelines is closely tied to the evaluation of the SCAG 2020 ABM, detailed further below.

## SCAG 2020 ABM

### *Model Assessment*

Based on the CEQA Guidelines, the following specific criteria were developed to assess the SCAG 2020 ABM performance related to SB 743 VMT analysis for highway projects on the SHS.

- Capable of producing regional, jurisdictional, and project-scale VMT estimates – VMT analysis for air quality, GHG emissions, energy, and transportation impacts requires comparisons to thresholds at varying scales.
- VMT estimates that do not reflect truncated trip lengths at model or political boundaries – The OPR Technical Advisory states that lead agencies should not truncate any VMT analysis because of jurisdictional or model boundaries. The intent of this recommendation is to ensure that VMT forecasts provide a full accounting of project effects.
- Model's Sensitivity in VMT changes from various model inputs, such as auto operating costs, transit services, transit fare, work from home/telecommute, freeway capacity, principal arterial capacity, household income, neighborhood household density, neighborhood bike lane density, job center parking price, and toll pricing.
- Inclusion of trip generation and land use feedback process – The TAF identified the checklist for evaluating model adequacy and stated that the travel demand model should have the capability to predict land use changes and trip generation changes resulted from transportation improvements projects.



The specific assessment findings for the SCAG 2020 ABM are contained in Table 2.

**Table 2: Assessment Summary of SCAG 2020 ABM**

<i>Assessment Criteria</i>	<i>Assessment Results</i>	<i>Notes</i>
Capable of producing regional, jurisdictional, and project-scale VMT estimates.	Regional VMT – yes	Scale of model may be too large for some project level applications. Subarea model calibration and validation may be required for project-scale VMT analysis.
	Jurisdictional VMT – yes	
	Project-scale VMT – uncertain; sensitivity tests have indicated some “noise” in the model	
VMT estimates that do not truncate trip lengths at model or political boundaries.	Depends on TAZ location.	The model includes the Counties of Los Angeles, Orange, Ventura, Riverside, and San Bernardino, but truncates trips leaving this area. TAZs central to the region will tend to have less truncation than TAZs at the model border. Other data sources such as household travel surveys or mobile device data may be required to understand the trip lengths and refine the model results.
Model’s sensitivity in VMT changes from various model inputs	<p>The model shows reasonable sensitivity in VMT changes from the tested model inputs.</p> <p>The VMT elasticity is shown to range from 0.28-0.40 for freeway capacity and 0.32-0.48 for principal arterial capacity.</p>	<p>The sensitivity results were obtained from the <i>SCAG’s Travel Demand Model Sensitivity Tests Report</i> dated August 2020.</p> <p>Sensitivity tests were conducted related to project type and project context and are detailed further in the following section.</p>
Inclusion of trip generation and land use feedback process	<p>The trip generation module is not sensitive to travel time and cost.</p> <p>No land use feedback has not been incorporated into model forecasting process at project level.</p> <p>Based on these limitations, the model results reflect short-term VMT sensitivity only.</p>	<p>The vehicle trip generation rates can be manually adjusted into the model, or off-model processing can be applied to refine the VMT forecasts.</p> <p>Follow OPR’s recommendations to incorporate the VMT effects that are caused by the subsequent land use changes.</p>



## Case Study Results

To evaluate whether the SCAG 2020 ABM is sensitive to local context and project type, and in response to input from the Project Development Team (PDT), a case study was conducted to evaluate the model's sensitivity using the following two highway projects located in an urban and suburban area.

### 1. Interstate 5 (I-5) High Occupancy Vehicle (HOV) Project in Santa Clarita (Suburban)

This project adds a new HOV lane in each direction along a 14-mile I-5 segment from Newhall Pass to Parker Road. It is currently under construction.

For this case study, three scenarios were evaluated for the I-5 corridor: 1) adding a GP lane in each direction; 2) adding an HOV lane in each direction as currently under construction; and 3) adding an HOT lane in each direction along the study segment.

### 2. I-10 Express Lane Project (Urban)

This project includes the addition of Express Lanes along a 16-mile I-10 segment from I-605 to the Los Angeles County border. It is currently under the project approval/environmental document (PA/ED) phase.

For this case study, three scenarios were also evaluated for the I-10 project: 1) adding a GP lane in each direction; 2) adding an HOV lane in each direction; and 3) converting the existing HOV lane to HOT lane and adding the 2<sup>nd</sup> HOT lane in each direction as currently proposed.

As a result, the following seven scenarios were assessed for the VMT analysis using the Future Year 2045 SCAG's 2020 ABM. The socioeconomic data was held constant under all analysis scenarios.

1. Baseline Scenario (without I-5 and I-10 projects)
2. I-5 GP Scenario (add the I-5 GP lanes)
3. I-5 HOV Scenario (add the I-5 HOV lanes as currently under construction)
4. I-5 HOT Scenario (add the I-5 HOT Lanes)
5. I-10 GP Scenario (add the I-10 GP lanes)
6. I-10 HOV Scenario (add the I-10 HOV lanes)
7. I-10 HOT Scenario (add the I-10 HOT Lanes as currently proposed)



The VMT results were calculated under each scenario for the combined freeway/expressway/principal arterial roadway facility group (which are equivalent to FHWA Class 1, 2, and 3 facilities) within the counties of Los Angeles and Orange (consistent with MSA). Additionally, VMT elasticity was calculated under Scenarios 2 through 7 using the percent change in VMT divided by percent change in lane miles. The VMT results are displayed in Figure 7 and Table 3.

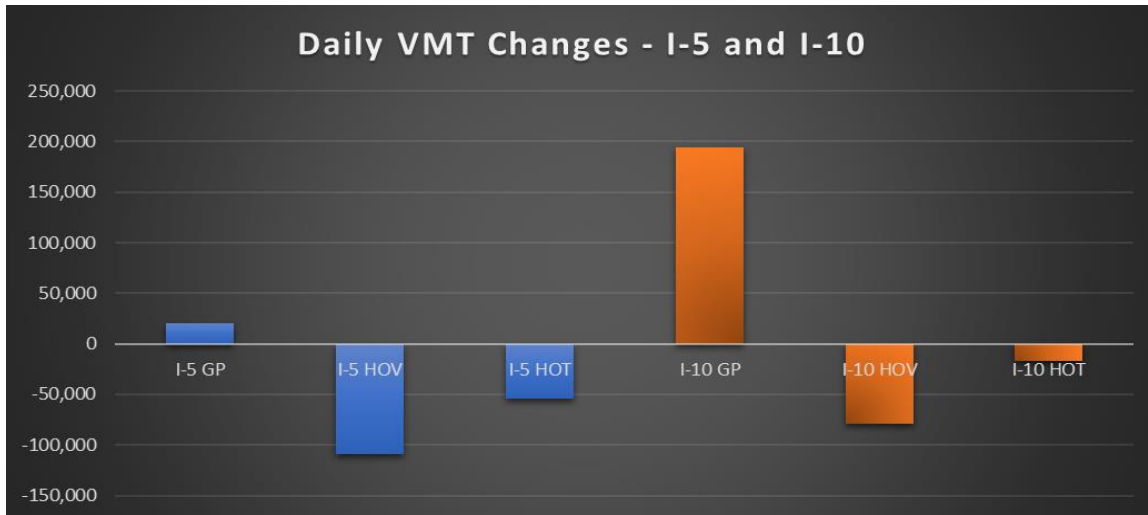


Figure 7: SCAG Model Case Study Results - Daily VMT Changes

**Table 3: Daily VMT Results in Los Angeles-Long Beach-Anaheim MSA (LA & OC Counties)**

Scenario	Daily VMT	VMT Change	VMT Change %	VMT Elasticity
Baseline	227,046,731	-	-	-
I-5 GP Lane	227,066,754	20,023	0.01%	0.06
I-5 HOV Lane	226,937,209	-109,522	-0.05%	-0.34
I-5 HOT Lane	226,992,941	-53,790	-0.02%	-0.17
I-10 GP Lane	227,240,528	193,797	0.09%	0.48
I-10 HOV Lane	226,967,641	-79,090	-0.03%	-0.20
I-10 HOT Lane	227,029,716	-17,015	-0.01%	-0.04

Source: Fehr & Peers, 2022.

The model shows sensitivity to local context as anticipated, with a greater VMT elasticity for the I-10 corridor in a more urban setting than the I-5 corridor located in a more suburban area. Project type also resulted in a variation in VMT changes, with increased VMT when adding GP lanes (higher in an urban area with latent demand due to currently-congested conditions) and a





reduction in VMT with inclusion of HOV or HOT lanes (smaller reduction in an urban area where latent demand exists due to currently-congested conditions). Note, these location-specific and type-specific changes are likely to be different as the land use and transportation network context varies. For example, in hyper-congested environments, demand for travel may not increase with new capacity as rapidly as in areas with less congestion.<sup>20</sup> In these environments, one explanation may be that the available time budgeted for household travel is already expended or over-extended and travel time savings from new managed capacity may not be substantial enough to make a difference in back-filling the new time that was created with new trips.<sup>21</sup>

### ***Model Improvements and Application Considerations***

Currently, the SCAG 2020 ABM – and therefore the Metro Model – does not clear the TAF model checklist. The requirements described in the TAF model checklist create a high bar to clear, should an agency prefer to use a model-based approach rather than an elasticity-based approach. Current models in use in California cannot meet all the criteria on the checklist without modification. If SCAG’s 2020 ABM is preferred to produce long-term induced travel, the<sup>19</sup> following improvements to the model are recommended to address the limitations identified in Table 1 and meet the TAF model checklist for VMT analysis.

**Sensitivity to trip generation** – If a trip generation module is not sensitive to travel time and cost, the analyst can manually adjust the vehicle trip generation rates or use off-model processing to increase the VMT forecasts. For example, using an “induced demand” sub-model, trips could be added or removed from the auto trip matrix using a logit equation that compares travel times of future years to travel times of the base year to determine the scale of trip additions/reductions. Other agencies across California have explored the development of such a sub-model to address this feedback loop need but have not yet implemented an approach.

Dowling Associates (1994) conducted a travel behavior survey of residents in San Francisco and San Diego to better understand direct traveler responses to travel time changes.<sup>22</sup> This study found that a five-minute time savings would cause survey respondents to make an extra stop or change their destination for only about 4% of their trips. This paper also cites a Dutch study that found that over 90% of the observed increase in traffic volumes on a new freeway in a congested

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<sup>20</sup> RAND and WSP. Latest Evidence on Induced Travel Demand: An Evidence Review (May 2018).

<sup>21</sup> For more information on the concept of a travel time budget, see Stopher, Ahmed & Liu (2016), available at <https://link.springer.com/article/10.1007/s11116-016-9694-6>.

<sup>22</sup> Dowling Associates for the California Air Resources Board. Effects of Increased Highway Capacity on Travel Behavior (1994).



area are the result of changes in the time a trip is made, and changes in the route taken.<sup>23</sup> Together, these indicate a limited sensitivity to new trips generated as a result of new capacity.

Adjustments may not be appropriate or necessary in suburban or rural areas where congestion is not severe enough to suppress existing vehicle trip making. In these settings, land uses are already generating vehicle trips at full demand levels (i.e., rates similar to those in the ITE Trip Generation Manual). A comparison to ITE rates could be used as evidence to determine whether an adjustment is necessary, and if so, the level of appropriate adjustment.

**Sensitivity to land use** – OPR’s recommendations can be followed to incorporate the VMT effects that are caused by the subsequent land use changes.

- Employ an expert panel, including local agencies’ land use planners, to develop a scenario of anticipated land use growth for project alternatives. This process should recognize whether land use effects are intra- or inter-regional. If population is attracted from an adjacent region, the difference in VMT per capita generation rates may also need to be addressed.
- Adjust model results to align with the short-term elasticity research. Note that this is only possible for short-term elasticities, which range from 0.1-0.60 as documented in the California Air Resources Board (CARB) research noted above. Please note that short-term VMT forecasts from travel models are not directly comparable to long-term VMT forecasts based on elasticity factors.
- Employ a land use model, running it iteratively with a travel demand model. A wide range of land use models exist but most are likely to be too time-consuming or costly to apply for an individual project. At the regional scale, options such as the University of California (UC) Davis’ UPlan regional land use model, CommunityViz, UrbanSim, and others can incorporate attractors such as highways, highway ramps, major arterial roads, minor arterial roads, transit lines, and existing land use development, assigning future regional growth to the areas around these attractors based on the strength of attraction of each feature and the distance from each feature.

**Fixed parameters for IX trips, XI trips, and medium/heavy-duty vehicle trips** – The SCAG 2020 ABM uses fixed parameters for internal-external (IX) and external-internal (XI) trips as well as medium/heavy-duty vehicle trips, which does not allow for any feedback to these variables based on changes to other model parameters. This can be rectified through model refinements and modifications.

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<sup>23</sup> A. L. Loos, P. H. L. Bovy, and T. Van Der Hooft (1991). The M10 Amsterdam Orbital Motorway: Effects of Opening upon Travel Behavior. Available at <https://repository.tudelft.nl/islandora/object/uuid%3A7c6c408c-b90f-4524-9d99-d827dccb70f>.



**Static versus dynamic traffic assignment** – A final issue that is whether (and how) a model uses static traffic assignment (STA) instead of dynamic traffic assignment (DTA), and how that affects VMT forecasts. One research paper directly comparing STA and DTA estimates revealed how the limited sensitivity of STA over-predicts traffic volumes, which would contribute to overestimates of VMT.<sup>24</sup>

Despite the noted model limitations, a model may still be useful to understand the incremental difference between project alternatives that the NCST Calculator or other elasticity methods will not reveal. The model's forecasts of VMT can also be stratified by speed bin, which is important for emissions analysis, and disaggregated to understand the relative share of VMT that is comprised by light duty (or passenger) vehicles relevant for transportation impact determination, and the relative share of medium or heavy-duty vehicles, reflecting commercial travel. Thus, use of a travel demand model may be useful under the following conditions.

1. Comparisons between no build and build alternatives in the same analysis year are useful for impact-related decisions. This comparison can be used to estimate a short-term induced vehicle travel elasticity that can be compared against the short-term academic elasticity estimates for reasonableness.
2. The NCST Calculator is not applicable due to project type, or has greater limitations than a travel demand model based on substantial evidence about the specific characteristics of the project.
3. VMT by speed bin or vehicle type is needed to evaluate emissions for air quality, transportation, or GHG analysis.

## **Suggested Quantification Approach for Metro's VMT Mitigation Program**

Metro's SHS Project List contains 55 projects at the writing of this memo and includes projects and programs from several sources such as Measure R, Measure M, and the 2020 Long Range Transportation Plan (LRTP). The projects and programs are currently in varying phases, ranging from pre-planning to planning, environmental review, final design, and construction. Due in part to the variety in originating plan and current status, the current level of detail about each project also varies widely. Thus, there is a limit to how accurately presumptions can be made regarding potential impacts at this stage.

Project types on this list include grade separations, soundwalls, interchange and ramp modifications, Intelligent Transportation Systems (ITS) and other technological upgrades, addition

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<sup>24</sup> Forecasting the impossible: The status quo of estimating traffic flows with static traffic assignment and the future of dynamic traffic assignment, *Research in Transportation Business & Management*, Vol. 29, pp 85-92. 2018.



of HOV lanes, HOT lanes, or Express Lanes, auxiliary lanes, collector-distributor roads, various efficiency and safety upgrades, and new highways.

Based on the assessments of VMT quantification tools and SCAG's 2020 ABM, the following quantification approaches are recommended at a program level and at a project level.

### **Program Level**

To refine the NCST Calculator results to align with the CEQA Guidelines and the legislative intent of SB 743, only the induced VMT related to automobile travel at the individual/household level should be included. Furthermore, the induced VMT elasticity factor should be more in line with the results of the SCAG model tests, which demonstrate an over-estimation of induced VMT compared to the observed VMT trends in the Los Angeles MSA.

One of the main research studies used to support the NCST Calculator's approach offers one approach to isolating the induced travel related to individual/household travel changes. Based on Duranton & Turner's analysis, changes in individual or household driving account for 9%-39% of all induced VMT associated with a 10% increase in lane miles.

Concentrating on the induced VMT effects associated only with automobile travel and applying these percentages to a 1.0 starting elasticity (the NCST Calculator's elasticity for Class 1 facilities) produces a range in elasticity values from 0.09 to 0.39 (9% of 1.0 to 39% of 1.0). Applied to a 0.75 starting elasticity (the NCST Calculator's elasticity for Class 2 and 3 facilities), the range becomes 0.07 to 0.29 (9% of 0.75 to 39% of 0.75).

An elasticity of 0.39 – the result of applying the high end of the 9%-39% range described above to the 1.0 elasticity in the NCST Calculator – is also aligned with research by Robert Cervero, who demonstrated a long-term elasticity of 0.39 based on California data and relying on a modeling methodology that accounted for the effect that previous development and roadway capacity investment had on influencing lane mile increases.<sup>25</sup> Other studies have also found an elasticity of lane-miles with respect to total VMT of 0.33 revealing a strong two-way relationship where every 10% increase in VMT, lane-miles grew by 3.3%.<sup>26</sup> Additionally, studies that estimate elasticities of demand with respect to road capacity considering all road types (and therefore controlling for reassignment/trip diversion effects) at the state or regional level find smaller induced demand effects, such that a 10% increase in capacity would result in induced demand in the range 1% to

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<sup>25</sup> Road Expansion, Urban Growth, and Induced Travel – A Path Analysis, Robert Cervero, APA Journal, Spring 2003, Vol. 69, No. 2.

<sup>26</sup> Induced Travel Demand and Induced Road Investment: A Simultaneous Equation Analysis, Journal of Transport Economics and Policy, Vol. 36, No. 3, pp 469-490. September 2002.



4%.<sup>27, 28</sup> Finally, where the impact of road capacity that adds to the length of the road network is distinguished from lane capacity increases for the existing network, the former can be interpreted as an accessibility effect.<sup>29, 30</sup> This is associated with a smaller elasticity (approximately 0.3). Finally, these elasticity factors are also more in line with the elasticity factors produced by the SCAG Model sensitivity tests and case studies.

Therefore, a refinement to the 1.0 elasticity factor embedded in the NCST Calculator can be used to generate long-term VMT changes at the MSA level while controlling for variables such as population growth, employment growth, and income changes. Substantial evidence exists across multiple research studies, SCAG Model tests, and observed VMT data to justify an elasticity closer to 0.39 to account only for long-term induced automobile travel for Class 1 facilities and a 0.29 elasticity factor for Class 2 and 3 facilities.

For the VMT Mitigation Program, rather than using the 1.0 elasticity factor for Class I facilities, the suggested approach would start with a modified elasticity factor and incorporate further adjustments from the SCAG 2020 ABM to establish a range of induced vehicle travel using the two available quantification tools discussed in the previous section.

1. Modify Elasticity Factors in the NCST Calculator to Exclude Freight VMT and Reflect Local Conditions

As described above, medium and heavy-duty vehicle VMT is embedded within the data that underpins the NCST Calculator. These vehicle classes capture regional freight and commercial travel which supports not only the Southern California region but the rest of the US as well, is not separated out from the NCST Calculator's elasticity factors and assumptions. In recognition of the regional and national nature of this type of driving, SB 743 only requires lead agencies to consider passenger travel (light duty vehicles and trucks) when determining VMT impacts, as this type of travel is the most influenceable by lead agencies' transportation and land use planning decisions.<sup>31</sup> As such, isolating automobile VMT helps communicate what is likely to be influenced by a project, and similarly, what could be influenced by mitigation actions. The NCST Calculator currently omits this important policy distinction in its calculations.

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<sup>27</sup> Hymel, Kent M., Kenneth A. Small, and Kurt Van Dender. 2010. "Induced demand and rebound effects in road transport." *Transportation Research Part B: Methodological* 44 (10): pp 1220-1241.

<sup>28</sup> Gonzalez, Rosa Marina, and Gustavo A. Marrero. 2012. "Induced road traffic in Spanish regions: A dynamic panel data model." *Transportation Research Part A: Policy and Practice* 46 (3): pp 435-445.

<sup>29</sup> Hsu, W-T and H. Zhang. 2014. "The fundamental law of highway congestion revisited: Evidence from national expressways in Japan." *Journal of Urban Economics* 81: 65-76.

<sup>30</sup> Pasidis, I. 2017. 'Urban transport externalities.' PhD Thesis, University of Barcelona.

<sup>31</sup> Note, total VMT is required for Air Quality, GHG, and Energy impact analysis under CEQA.



The final adjusted elasticity factor is consistent with the high end of the range for changes in VMT due to individual or household driving as presented in Duranton & Turner (2011), or 39% of the total induced VMT, for an elasticity factor of 0.39 or 0.29 depending on the facility classification. The modified VMT elasticity factors are shown in Table 4, in comparison to the original NCST elasticity factors. The modified VMT elasticity factor will then be applied to the total lane mile additions from the multi-modal highway program to calculate the induced vehicle travel.

These factors fall within the induced VMT range used by Metro's *Climate Emissions Analysis: Metro's Indirect Impact on Greenhouse Gas Emissions* (Climate Emissions Study) presented to the Board of Directors in August 2022.<sup>32</sup> The range used in that study was based on a short-term elasticity factor of 0.23 from SCAG-authored sensitivity tests and a long-term elasticity factor of 1.0 from the NCST Calculator. The Climate Emissions Study did not exclude medium or heavy-duty vehicle travel from the analysis.

**Table 4: NCST VMT Elasticities & Adjusted Elasticity Factor**

<i>Tool</i>	<i>Elasticity</i>	<i>Source</i>
NCST – Class 1 Facilities (Short + Long Term)	1.0	NCST
NCST – Class 2 and 3 Facilities (Short + Long Term)	0.75	NCST
Modified NCST - Class 1 Facilities (Short + Long Term) <b>VMT Only for Passenger (Light-Duty) Cars and Trucks</b>	0.39	NCST, Cervero, Duranton & Turner
Modified NCST – Class 2 and Class 3 Facilities (Short + Long Term) <b>VMT Only for Passenger (Light-Duty) Cars and Trucks</b>	0.29	NCST, Cervero, Duranton & Turner

The benefit of this method is that it requires a lower effort than a modeling-based approach and can be operationalized through a spreadsheet tool. However, it has the limitations noted in the previous section. Relying on this method alone may not provide a complete picture of potential VMT effects and may over-estimate the impact of induced vehicle travel by not accounting for other factors contributing to long-term traffic increases.

<sup>32</sup> LA Metro. Climate Emissions Analysis: Metro's Indirect Impact on Greenhouse Gas Emissions. August 2022. Retrieved from <https://metro.legistar.com/LegislationDetail.aspx?ID=5759433&GUID=230DEBE4-8769-4DE1-B67E-DD79194C2CA6&Options=&Search=>



## 2. SCAG's 2020 ABM

In addition, SCAG's 2020 ABM will be used to develop two model scenarios with and without the highway improvements projects, the VMT results of which will be obtained to determine the short-term induced VMT resulting from the program. As noted previously, this approach provides merits of reflecting the local context, but may underestimate induced VMT due to the revealed limitations. The results of this comparison will allow for further refinement of the elasticity factor used at the program level.

Results from the two quantification methodologies would establish a final range of induced VMT for the highway improvements projects at the program level, which will be used to develop the mitigation program that meets the program objectives and provides flexible and viable mitigation options. As noted in the introduction, this memorandum is intended to articulate the approach, and does not present the quantification results of this methodology. Task 6, development of a VMT Tool, will incorporate quantification results.

### **Project Level**

At a project level, since an elasticity-based approach (such as the modified NCST Calculator elasticity factor approach described above) is not directly applicable for many of the project types contained on Metro's project list, using a hybrid approach is likely to be more appropriate when quantification is required. The steps to estimate induced vehicle travel for a project on the SHS are described below.

#### *Step 1 – Project Screening for Quantification Needs*

The first step is to determine whether the project should be presumed to not result in a VMT impact and therefore excluded from needing to perform an induced travel analysis, following the project screening guidance provided in the TAC. The TAC states that the emphasis of this guidance is to identify those projects that will lead to a measurable and substantial increase in vehicle travel. Projects not likely to lead to a measurable and substantial increase in VMT generally should not require an induced travel analysis per OPR's Technical Advisory. While the TAC provides a list of 32 project types that are screened from induced travel analysis, it also states additional project types could be added to the screening list if they are not likely to lead to a measurable and substantial increase in VMT.

The following project types are anticipated to meet this criterion and therefore are recommended to include to the screening project list in TAC.

- A. **Auxiliary lanes:** Auxiliary lanes (also known as acceleration/deceleration lanes and speed change lanes), allow drivers to either increase or decrease their speed in an area where high-speed highway mainline traffic is not present and are supplementary



to through-traffic movement. The speed difference between the highway mainline and on- and off-ramps or surrounding streets can be significant, introducing turbulence resulting in stop-and-go traffic and increased collision rates. Regardless of length, auxiliary lanes that are designed primarily to improve safety of existing lanes by facilitating weaving may add miles but are not likely to influence travel behavior in terms of number of trips or trip distance because they do not change the fundamental availability of the roadway once the vehicle is on the mainline of the freeway.

- B. **Truck only lanes in the urban context:** Adding lane miles for trucks (commercial) travel is not likely to translate meaningfully to additional capacity for the general public such that new travel is induced. Truck only lanes serve to increase truck travel time reliability, increasing efficiency of passenger and transit vehicles on main traffic lanes by removing turbulence introduced by slower moving heavy trucks, and increase safety by removing heavy trucks from main traffic flow. Truck (commercial) travel is also insensitive to roadway capacity with this demand unable to use alternative modes in the absence of new capacity. Truck only lanes primarily serving safety-related goals rather than travel time related goals are not likely to influence travel behavior.
- C. **Operational improvements:** Projects that improve operations through and do not add through-traffic lane miles to the freeway mainline, in addition to those operational projects listed in the TAC (such as collector-distributor roads), are not likely to translate meaningfully to additional capacity. These projects may solve bottleneck issues during a peak period and address operational issues of traffic backing up onto neighborhood streets, which both have safety implications, but are not likely to induce new trip-making or change the length of trips already on the network.
- D. **Ramp reconfiguration projects:** Projects that add lane miles by reconfiguring on/off ramps but do not change the fundamental availability of the roadway once a person is on the mainline are unlikely to translate to additional capacity and induced VMT. Any additional VMT resulting from the additional length of the reconfigured ramps would be analyzed at the project level and disclosed.
- E. **Congestion pricing and lane management projects that are intended to manage traffic to reduce VMT:** While some roadway management projects are designed to maintain certain travel speeds or result in congestion reduction primarily, projects





that include pricing and high-occupancy features designed to influence travel behavior can counter-balance induced travel effects.<sup>33</sup>

### Step 2 – Identify VMT Quantification Method

If induced vehicle travel quantification is required for a project on the SHS, the appropriate method will be identified based on project types, knowing an elasticity-based approach is not directly applicable to many types. A hybrid method can integrate both the SCAG 2020 ABM, and future iterations of the ABM, and the modified NCST elasticity-based methods. This approach allows the same land uses for all alternatives but should acknowledge the limitation of using fixed land use inputs. Notably, the discussion would describe which alternative the land use forecasts best reflect and how the accessibility differences between the alternatives could affect the allocation of future growth. The SCAG 2020 ABM will be used to forecast the short-term induced travel effect for the build condition of project alternatives, while the modified elasticities from the NCST calculator will be used to forecast long-term VMT effects of the project build alternatives. The elasticity will be modified to address limitations as described in Table 3 above and is anticipated to produce a low-end and high-end of a long-term induced vehicle travel range.

The details of this method are listed below.

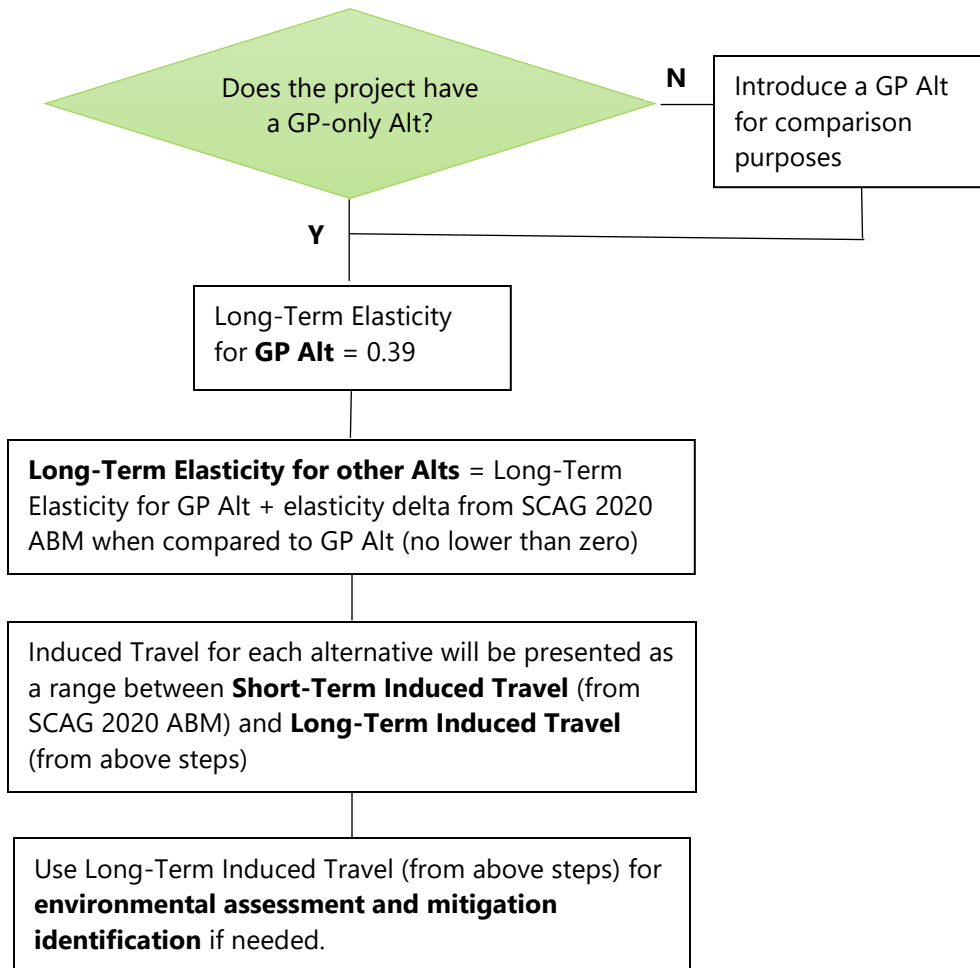
1. The SCAG 2020 ABM will be used to generate volume forecasts and VMT information for No Build and Build alternatives with a fixed set of land use forecasts.
  - Metro will inform the analyst whether these land use forecasts represent the build or no build condition.
  - Typically, project development and environmental impact analysis is only performed on projects that have already been included in a regional transportation plan, so SCAG's land use forecasts are most likely to represent build conditions.
  - The environmental document will disclose the limitations of the model with an acknowledgement that the actual land use will likely differ among alternatives. Where appropriate, the analyst can qualitatively explain how the project could affect land use and what the likely outcome would be in terms of the direction of change with respect to vehicle trips and VMT.
  - Short-term induced vehicle travel effects will be generated for each of build alternatives, using the SCAG 2020 ABM.

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<sup>33</sup> This type of managed lane has not yet been implemented in California, but has been suggested on at least one project in Caltrans District 4, which had a Draft EIR circulated at the time of writing this memorandum. DEIR available at <https://dot.ca.gov/-/media/dot-media/district-4/documents/37-corridor-projects/sr37-draft-eir-ea-1q7600-sears-pt-mare-island-proj-vol1-a11y.pdf>, with information about the tolling scenarios described on page 2-56.



- For base year and open year with project scenarios, the Home-based Work and Home-based University/School trips should be held constant as in the corresponding No-Build scenarios, because the work and university/school locations will not change immediately due to the project.
2. A modified long-term elasticity factor will be employed to generate the long-term induced travel effect for VMT, following the steps shown in the flowchart on the next page and described below.
- A. If multiple alternatives are involved, a modified long-term elasticity of 0.39 will be used to generate the long-term induced travel for the "Base" Build Alternative, e.g., the GP Alternative. The elasticity of 0.39 was derived from the "individual and household travel" component part of induced travel only, as described above. This approach represents the GP capacity improvement projects in a typical urban area. In the event that the short term induced vehicle travel effects produced in the step above exceeds a 0.39 elasticity factor, the higher of the two values should be used to ensure all potential long-term impacts are accounted for. An example of these two cases is shown below.
  - B. The SCAG 2020 ABM results described in the earlier section (I-5 and I-10 case study analysis) showed there is a difference in the elasticity values between urban and suburban areas when determining the short-term induced travel. However, the recent UC Davis update to the NCST research and Calculator indicated no difference in long-term elasticity values for urban versus suburban context. Therefore, to consider the conservative approach, the same elasticity of 0.39 will be applied to determine the long-term induced travel for both urban and suburban projects.
  - C. For projects in which the GP Alternative is not considered, a GP scenario will be introduced only to establish the "Base" Build Alternative for comparison purpose.
  - D. For other build alternatives, such as HOV or HOT scenarios, the long-term induced travel effect for VMT will pivot from the "Base" Build Alternative's VMT estimate by applying an incremental difference between each alternative and the "Base" Build Alternative derived by evaluating the alternatives using the SCAG 2020 ABM. That incremental difference will then be applied to the "Base" Build's long-term induced travel estimate to generate the long-term induced travel effects for each other alternative.
  - E. The SCAG 2020 ABM results (short-term induced VMT) and the elasticity-factor results (long-term induced VMT) can then be reported as a range, and the environmental assessment could be based on the higher long-range VMT estimate for the purposes of identifying mitigation needs. This minimizes the risk associated with potential underestimation of induced vehicle travel.



### Elasticity Calculations for I-5 Corridor Case Study

#### Long-Term Elasticity for Alternatives

GP Alt	0.39
HOV Alt	$= 0.39 - \text{Delta of Elasticity Values from SCAG 2020 ABM (GP Alt - HOV Alt)}$ $= 0.39 - (0.06 - (-0.34))$ $= 0.39 - (0.4) = \mathbf{-0.01}$ Since the calculated value is below zero, the long-term elasticity value is set to be zero under the HOV Alt.
HOT Alt	$= 0.39 - \text{Delta of Elasticity Values from SCAG 2020 ABM (GP Alt - HOT Alt)}$ $= 0.39 - (0.06 - (-0.17))$ $= 0.39 - (0.23) = \mathbf{0.16}$ The long-term elasticity value is set at 0.16 under the HOT Alt.



### Elasticity Calculations for I-10 Corridor Case Study

#### Long-Term Elasticity for Alternatives

GP Alt            0.48

HOV Alt            =0.48 – Delta of Elasticity Values from SCAG 2020 ABM (GP Alt – HOV Alt)  
                          =0.48 – (0.48 - (-0.20))  
                          =0.48 – (0.68) = **-0.20**

Since the calculated value is below zero, the long-term elasticity value is set to be zero under the HOV Alt.

HOT Alt            =0.48 – Delta of Elasticity Values from SCAG 2020 ABM (GP Alt – HOT Alt)  
                          =0.48 – (0.48 - (-0.04))  
                          =0.48 – (0.52) = **-0.04**

Since the calculated value is below zero, the long-term elasticity value is set to be zero under the HOT Alt.

For projects on the SHS, this method should be reviewed with Caltrans staff prior to application given the TAF recommendations and the potential for the TAF to continuously be updated as new information and research is published. Please note that the induced vehicle effects not captured by the travel demand model could influence the peak hour design volumes used in traffic operations analysis and the VMT by speed bin estimates used for emissions analysis. At a minimum, these limitations will be acknowledged and disclosed in the environmental documents.

To help facilitate future Caltrans reviews of the model or induced vehicle travel analysis conducted with the SCAG 2020 ABM, it is suggested that Metro conduct an early review of the model against the TAF First Edition model checklist noted above for each project as it advances through the environmental review process. The intent of this review is to demonstrate the model's ability to meet the sensitivity expectations set forth in the checklist for the specific project under study. This review can be coordinated with Caltrans Headquarters and District 7 staff to build consensus around the findings. If the review reveals any limitations of the model beyond the limitations described here, they could be addressed to help prepare the model for future applications on subsequent projects and/or incorporated into the scoping for the next major project required to apply the model.

#### Step 3 – Identify VMT Mitigation Opportunities

For projects with significant induced vehicle travel impacts, the final step is to identify appropriate mitigation strategies that match the project needs, which could be specific mitigation opportunities/strategies or through the established VMT Mitigation Program. Where possible, project features may be able to be incorporated as part of an evaluated alternative that may reduce the magnitude of VMT mitigation needed.



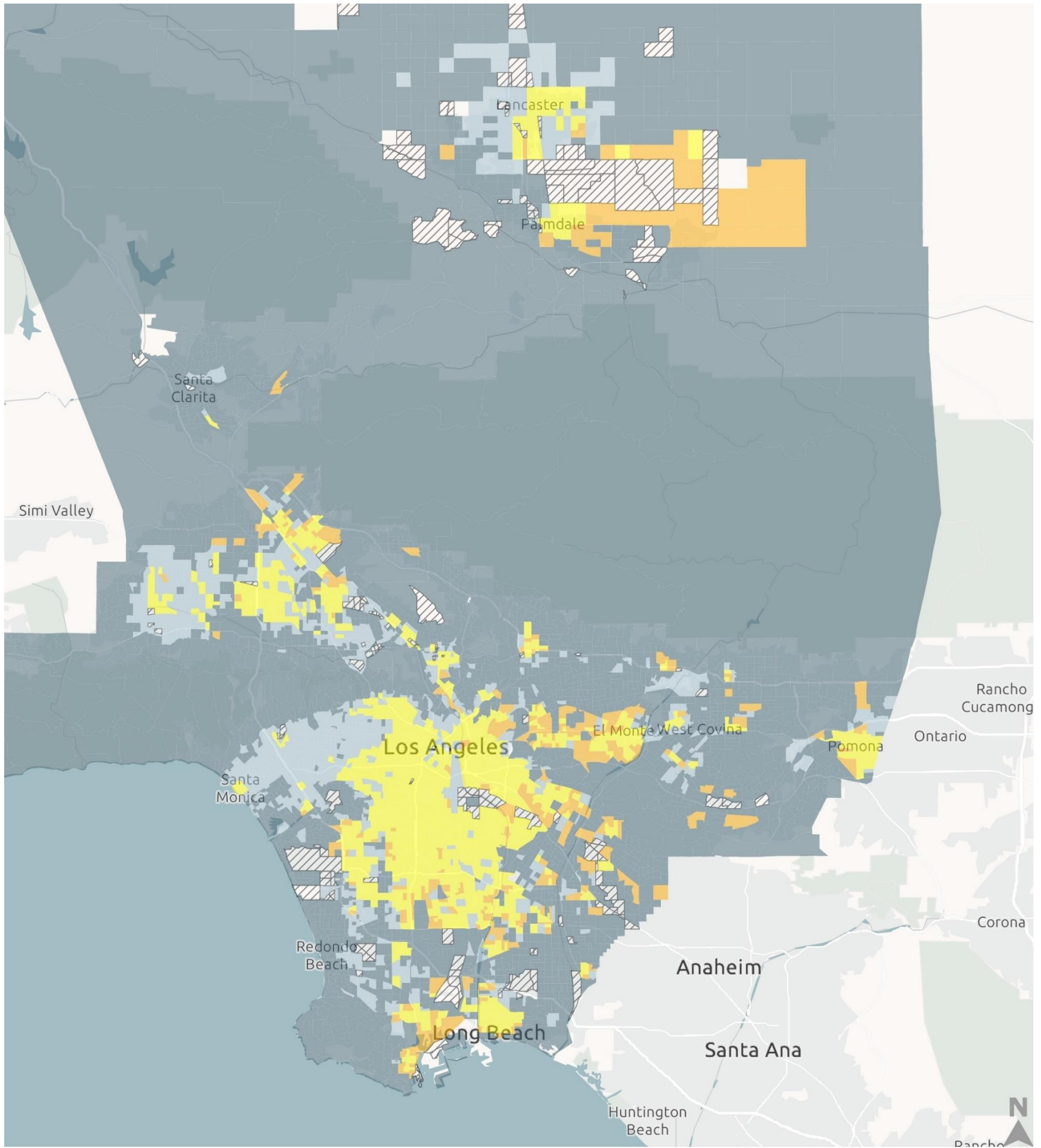
## Conclusion & Next Steps

This memorandum is intended to provide clarity on an approach to quantifying induced vehicle travel at a program level and at a project level for future environmental review of projects on the SHS in Los Angeles County. Recognizing that the policy and regulatory landscape in this space is evolving, this document outlines a hybrid approach to setting a lower and upper boundary of a range for project-related VMT impacts that is in line with recent applications of the policy guidance.

For the purposes of developing the VMT Mitigation Program, quantifying the magnitude of how much VMT mitigation may be necessary to fully mitigate Metro's SHS project list is difficult to define at this time due to lack of specific details for each potential project alternative, due to the flexibility afforded to subregions in how to scope projects. In addition, project specifics would be defined through upstream phases of project development which would include close coordination and partnership with Metro's subregional project leads and Caltrans. These upstream phases may directly incorporate VMT reduction strategies or may define a Purpose and Need that would influence project approvals regardless of the project's ability to mitigate VMT impacts. Regardless of these upstream project development activities, Metro anticipates a need for future projects to have mitigation options available to them that currently do not exist.

The forthcoming development of the VMT quantification tool in Task 6 will allow individual projects to test ways to mitigate associated VMT through quantified mitigation actions. By the conclusion of the VMT Mitigation Program, the program framework will help provide clarity in quantifying VMT impacts, pathways to mitigation on a project level, and information to help the agency make informed decisions about project alternatives and tradeoffs between the benefits of capacity increasing highway improvement projects and the cost of VMT mitigation.

Metro EFCs & TAZ VMT Data - Countywide



EFC TAZs: Home-Based VMT per Capita

Below Countywide Average

Above Countywide Average

Non-EFC TAZs: Home-Based VMT per Capita

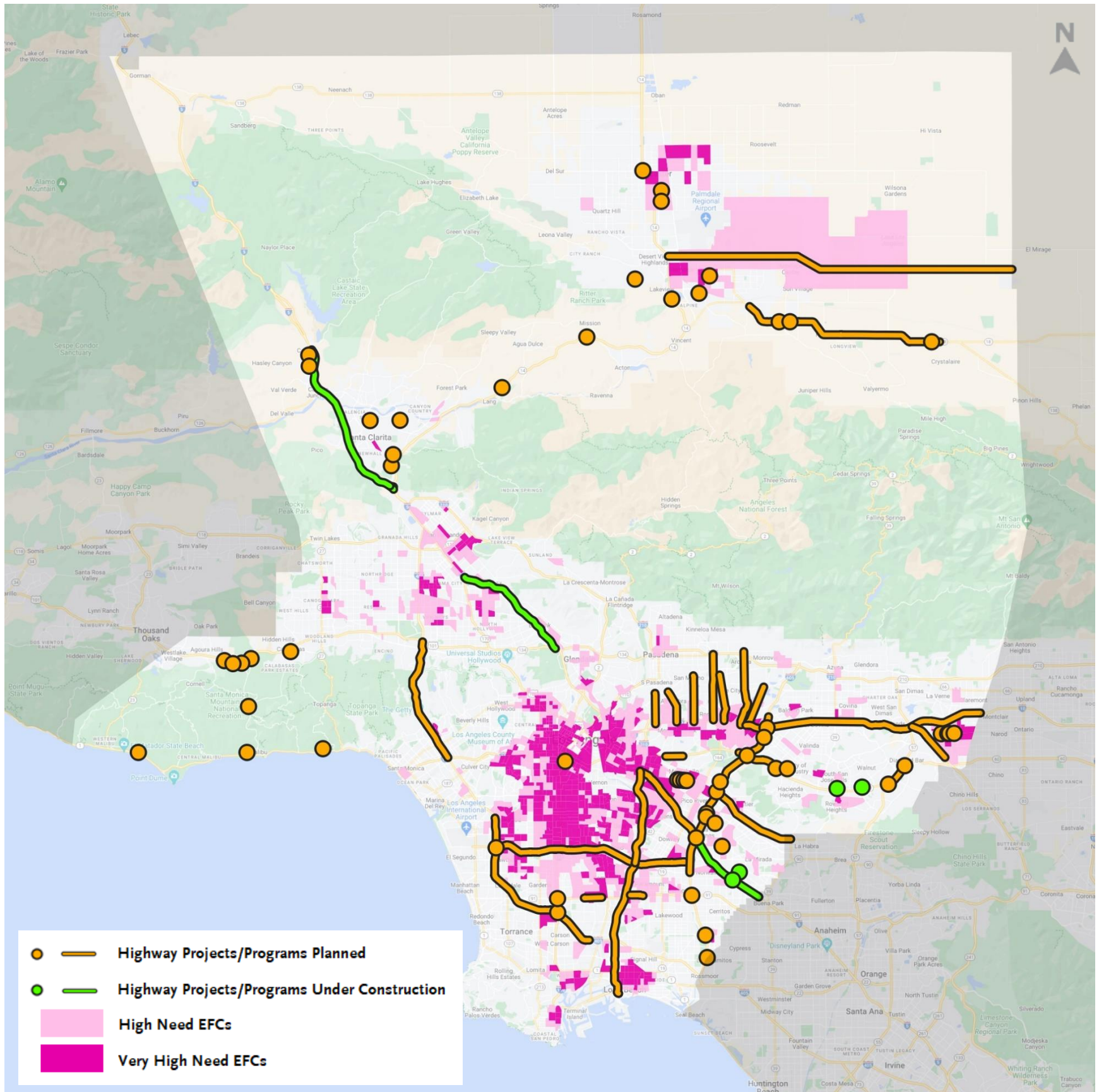
Below Countywide Average

Above Countywide Average

No Population



### Metro EFCs & Highway Projects & Programs – Countywide





We're working on greater mobility options.

VMT MITIGATION PROGRAM

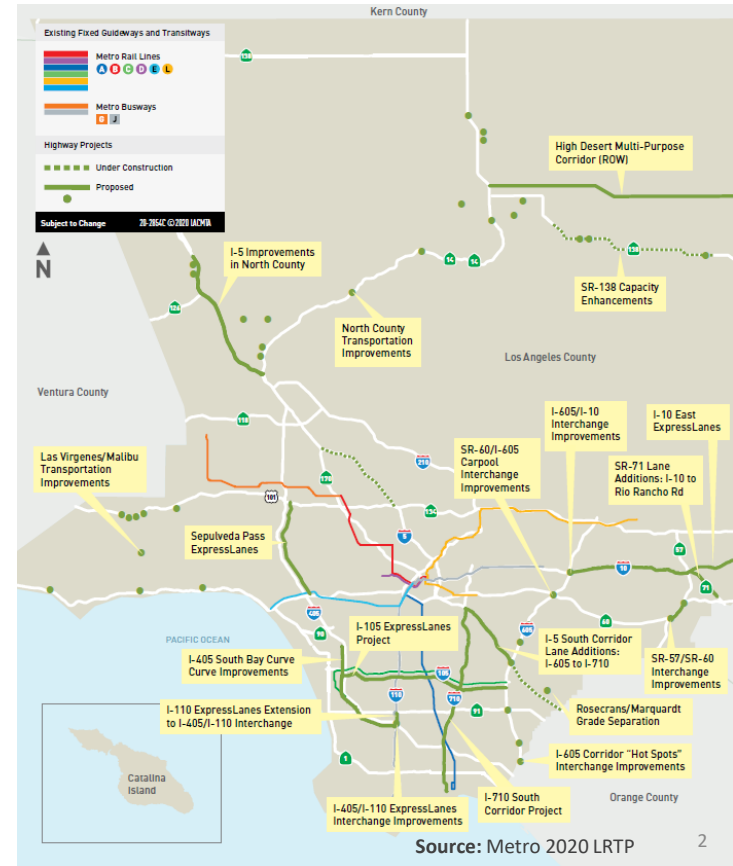
SEPTEMBER 2023





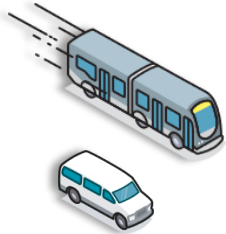
# Overview

- > **RECEIVE & FILE** to update Board on Metro VMT Mitigation Program
- > **Program Goals**
  - Understand and apply SB 743 policy to highway projects
  - Define approach to quantify potential Vehicle Miles Traveled (VMT) impacts
  - Establish VMT Mitigation Program (March 2024)
- > **Consistency with Board Directives**
  - **2021:** Modernizing the Highway Program
  - **2022:** Objectives for Multimodal Highway Investment



# Potential Mitigation Strategies

## Transit & Vanpool



**Operational:** More service hours, better service coverage  
**Programmatic:** Fare subsidies, TDM programs, expansion of vanpool and shuttle programs  
**Capital:** Bus-only lanes, bus stop improvements, more rail or bus vehicles

## Active Transportation



**Programmatic:** Bikeshare and scooter-share membership subsidies, e-bike purchase subsidies  
**Capital:** Active transportation corridors, first/last mile improvements



**Land Use:** Affordable housing; transit-oriented housing; transit-oriented mixed-use neighborhoods

## Land Use

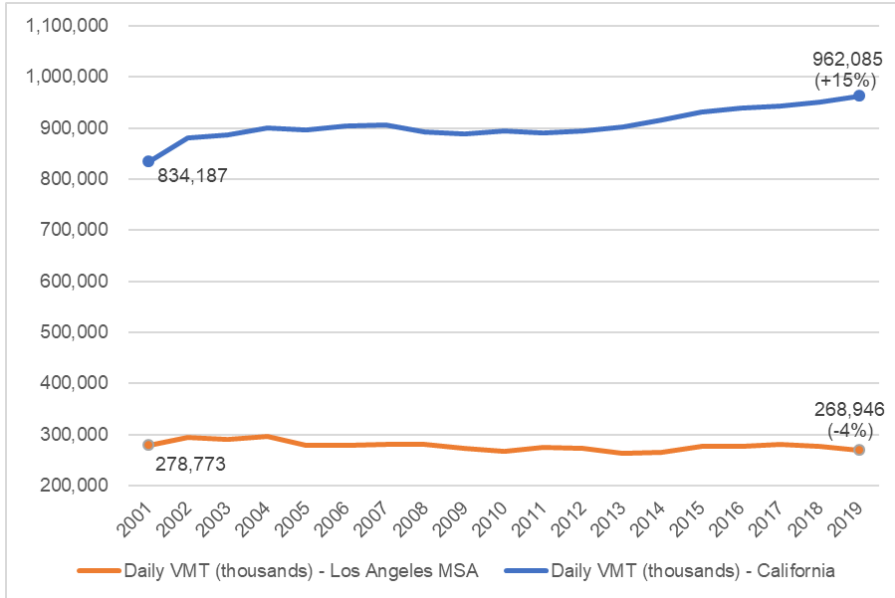


**Pricing:** Corridor/cordon pricing, VMT tax, parking pricing

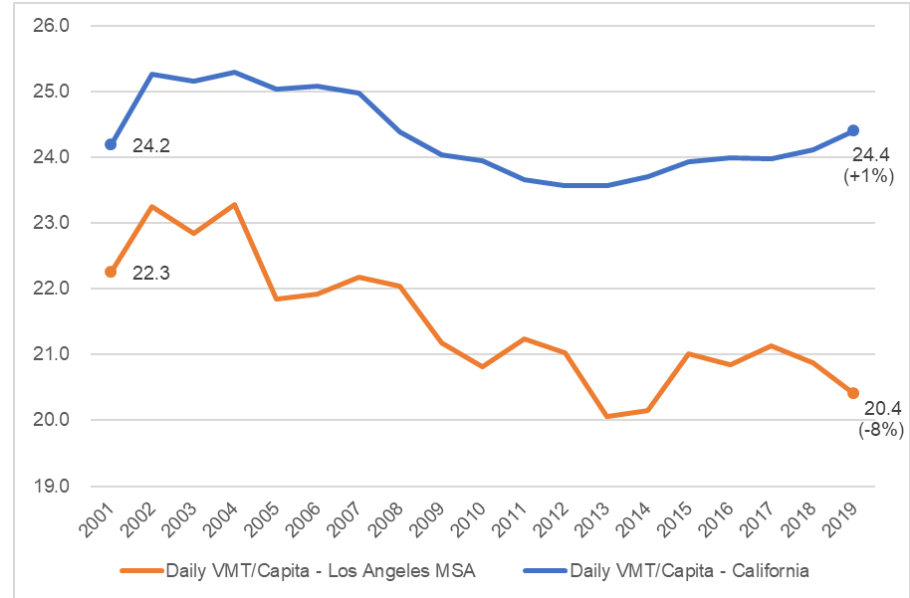
## Pricing

# Quantification Approach

## Total Daily VMT



## Per Capita VMT



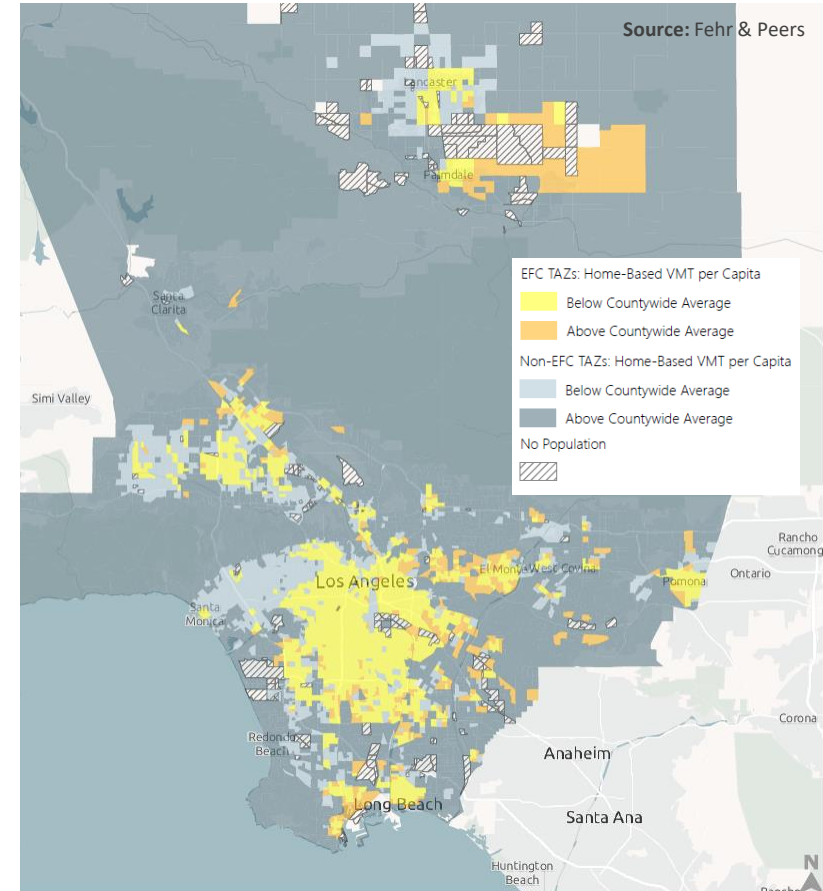
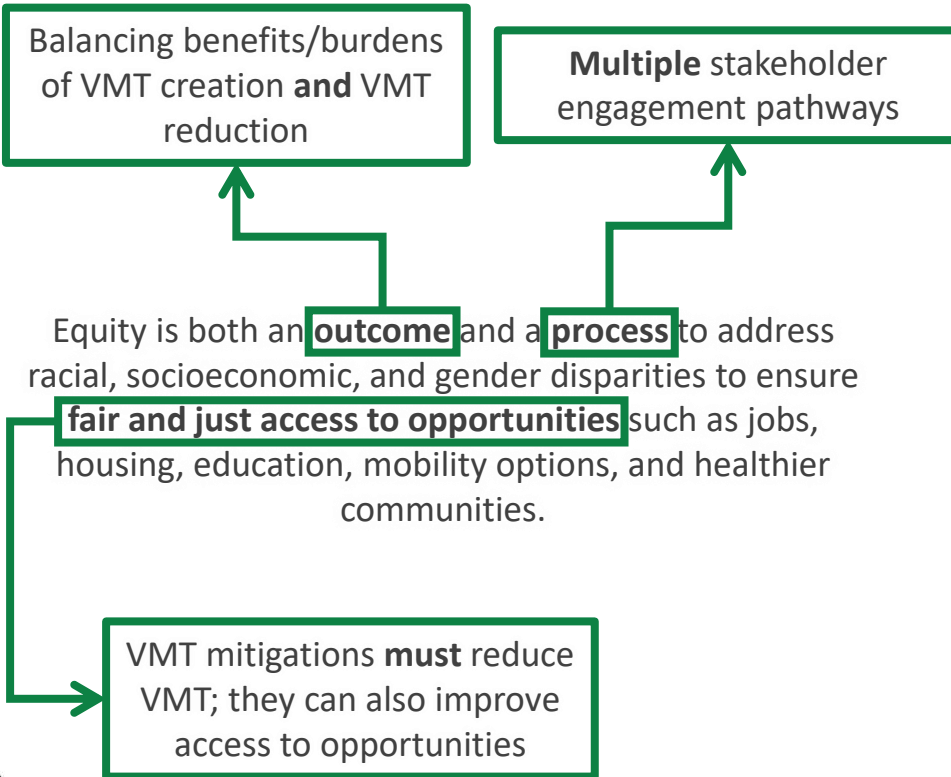
# Project Cost Implications

Project Cost	LA County-Specific Quantification Approach	California Induced Travel Calculator
Estimated Capital Cost	\$168 million	
Mitigation Cost <sup>1</sup>	\$97.7 million	\$252.6 million
Total Project Cost	\$265.7 million	\$420.6 million
Mitigation Cost Difference		<b>+ \$154.9 million</b>
Total Project Cost % Increase with Mitigation	+58%	+150%

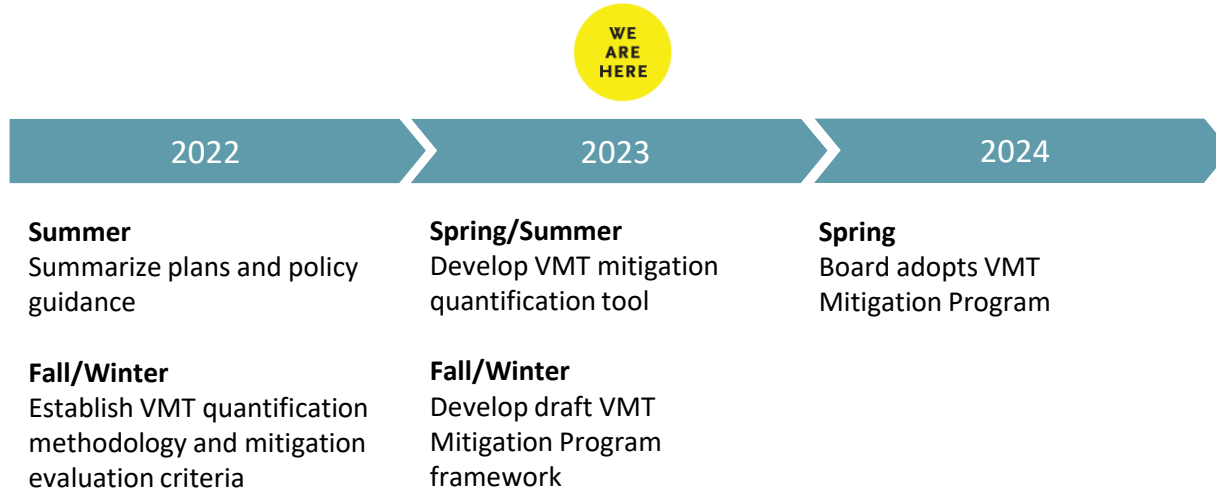
<sup>1</sup> Based on mitigation costs included as part of the Interstate 680 Northbound Express Lane Completion Project in Contra Costa County, CA.



# Equity Analysis



# Project Schedule



ONGOING PUBLIC PARTICIPATION



## Board Report

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**File #:** 2023-0443, **File Type:** Informational Report

**Agenda Number:** 20.

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**PLANNING AND PROGRAMMING COMMITTEE  
SEPTEMBER 20, 2023  
EXECUTIVE MANAGEMENT COMMITTEE  
SEPTEMBER 21, 2023**

**SUBJECT: C LINE EXTENSION TO TORRANCE UPDATE REPORT**

**ACTION: RECEIVE AND FILE**

**RECOMMENDATION**

RECEIVE AND FILE status report on the Metro C (Green) Line Extension to Torrance Project.

**ISSUE**

This report provides an update on the Metro C Line Extension to Torrance Project (Project), summarizing regional and local benefits, results from a recent community poll, public comments on the Draft Environmental Impact Report (EIR), and a technical comparison of the Proposed Project, Options, and Alternatives to the Project studied through the environmental process under the California Environmental Quality Act (CEQA).

**BACKGROUND**

The Metro C Line Extension to Torrance would provide rapid, high-capacity transit connecting the South Bay, a major jobs center, with the rest of LA County's growing Metro rail network. The Proposed Project would extend light rail 4.5 miles south from the Redondo Beach (Marine) Station through the cities of Lawndale, Redondo Beach, and Torrance, terminating at the new Mary K. Giordano Regional Transit Center (Torrance Transit Center). By linking the Metro rail system with two new bus transit centers in the cities of Redondo Beach and Torrance, the Project would extend the reach of transit to the greater South Bay region. The Project has funding from Measure R (\$272M in 2008), Measure M (\$619M in 2016), and a grant (\$231M in 2018) from the California State Transportation Agency (CalSTA).

The first concept of a rail connection to the South Bay was envisioned as part of the regional rail network in Proposition A (1980) with the goal of connecting LA County via rapid rail service. In 1993, Metro purchased the 26-mile Harbor Subdivision freight corridor from the BNSF Railway (BNSF) predecessor with the goal of providing rail service between Downtown Los Angeles and the South Bay and Ports of Los Angeles and Long Beach. In 2009, Metro published the Harbor Subdivision Alternative Analysis (AA) Study, which evaluated various travel markets, modes, and routes to

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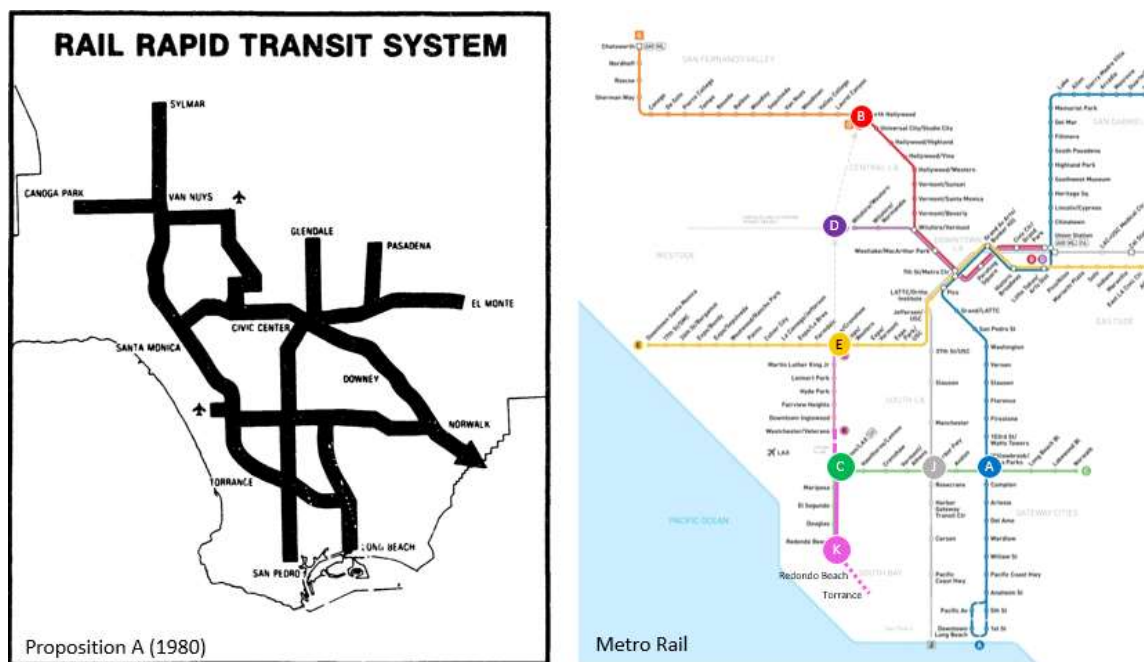
connect Downtown Los Angeles with the South Bay and Ports via rapid transit. The AA Study prioritized a segment of the Harbor Subdivision corridor between Redondo Beach and Torrance with light rail as the preferred mode. Since 2009, Metro has prepared several transportation studies to validate and advance the Project.

Below is a brief timeline of the studies, funding awarded, and Board actions:

- 2008: Measure R approved by voters, allocated \$272M to the Project.
- 2010-2012: Environmental study started for the Project, then paused due to funding uncertainty after Measure J failed.
- 2016: Measure M approved by voters, allocated \$619M to Project, identified opening year as 2030-2033.
- 2017-2018: Metro reinitiated planning with Supplemental Alternatives Analysis (SAA) Study and evaluated four light rail alignments for the Project.
- 2018: Metro Board approved two alignments from the SAA Study (Metro ROW and Hawthorne) to move into environmental review and removed proposed stations in the City of Lawndale from further study based on the City's request.
- 2018: Project awarded \$231M TIRCP grant from Cal-STA to broaden and modernize transit connectivity in LA County.
- 2019: Metro Board designated the Project as one of four "pillar projects," reflecting the priority to connect South Bay to LA County.
- 2021: Metro started public scoping for environmental study under CEQA.
- 2023: Metro published Draft EIR and solicited public comments.

On a parallel track, the cities of Redondo Beach and Torrance invested in real estate adjacent to the Metro-owned Harbor Subdivision (Metro ROW) to plan new regional bus transit centers with the assumption that the bus centers would connect to future rail stations as part of the proposed light rail extension. After many years of planning and design, the Redondo Beach Transit Center and Torrance Transit Center opened this spring (2023), both partially funded by Metro grants. Both transit centers are adjacent to the proposed rail stations along the Metro ROW. The Redondo Beach Transit Center is on the west side of planned redevelopment for the South Bay Galleria to allow for easy transit access to a planned hotel, housing, and commercial development. Similarly, the City of Torrance purchased land with plans for transit-oriented development adjacent to the new bus center and planned terminus rail station.





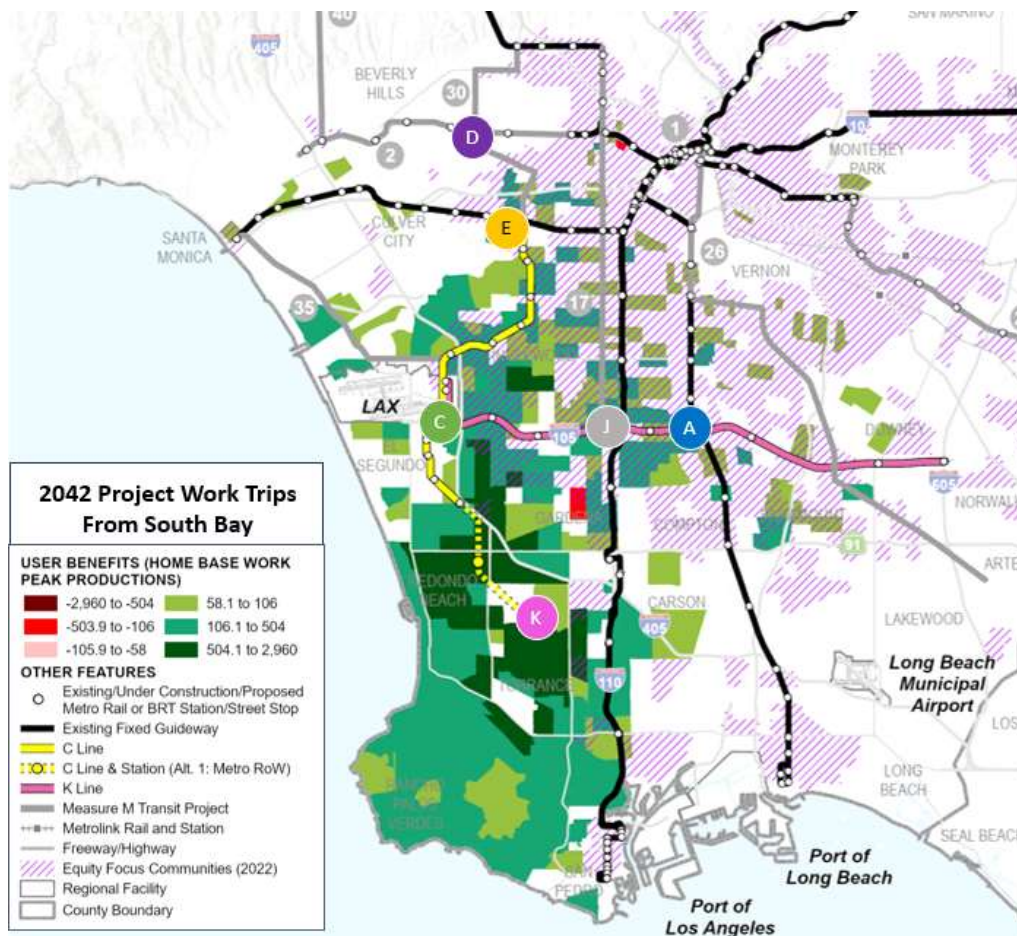
**DISCUSSION**

The South Bay is a significant jobs center, particularly in the industrial and technology sectors. Like much of LA County, the subregion suffers from heavy vehicle congestion, a constrained housing supply, and limited transit options. Data from the Southern California Association of Governments (SCAG) anticipates the existing jobs/housing imbalance to worsen in the coming decades, with employment growing twice as fast as the population in the South Bay. By providing a fast, frequent transit option to the South Bay, by 2042, the Project is expected to:

- Expand access and improve mobility with between 11,570 and 15,648 daily project trips,
- Reduce 19.5 million vehicle miles traveled (VMT) per year, and
- Reduce air pollution and greenhouse gas (GHG) emissions, which contribute to climate change, by shifting drivers to transit with 2,369 metric tons of carbon dioxide equivalent (MTCO<sub>2</sub>e) saved per year.

With the recent Metro Board-adopted K Line operating plan, the Project would serve as a southern extension of the K Line, providing travelers a one-seat ride from the South Bay to Los Angeles International Airport (LAX), Inglewood, and the Metro E (Expo) Line. The light rail extension would link many Equity Focus Communities (EFCs) to employment centers along the C and K Lines while providing far-reaching benefits for people traveling between the South Bay and Central LA. In addition to expanding access, the Project would provide significant travel time savings between the South Bay and greater LA. As part of a separate Measure M project, there are plans to extend the K-Line further north to the Metro D (Purple) and B (Red) Line, providing access further north to the San Fernando Valley via the Metro G (Orange) Line. When fully built out, the K Line would connect to the

Metro C, E, D, and B Lines, making it one of the most connected rail lines in the Metro system, providing an attractive alternative to driving along congested streets and the I-405. The existing C and K Lines run two-car light rail trains. The Project is designed with longer station platforms and power to serve three-car trains and five-minute service during peak periods in the future to accommodate anticipated growth in ridership with the northern K Line extension.



Source: Metro

	Travel Time From Torrance Transit Center via Project (Light Rail in 2042)	Travel Time From Torrance Transit Center by Vehicle (Afternoon Peak in 2023)
LAX (AMC/96 <sup>th</sup> St)	19 minutes	30-66 minutes
Downtown Inglewood	23.5 minutes	25-55 minutes
Metro E Line (Expo/Crenshaw)	34.5 minutes	30-66 minutes
Downtown LA (7 <sup>th</sup> /Metro Center)	58.5 minutes	40-85 minutes
Downtown Santa Monica	63.5 minutes	45-110 minutes

Source: AECOM, STV, 2020, Travel time by vehicle-based on Google maps driving times in 2023.

### Draft EIR & Technical Studies

In early 2021, Metro started the environmental review process for the Proposed Project and held public scoping meetings. Metro published the Draft EIR in January and held five public hearings during the 61-day comment period. The Draft EIR outlines the Project objectives, describes the Project design, operations, and maintenance, discloses potential environmental impacts in the short-term (construction) and long-term (operations), and identifies mitigation measures to reduce or eliminate potential environmental impacts from the Project.

The Draft EIR evaluates three light rail alignments to connect the existing C Line terminus at the Redondo Beach (Marine) Station southeast to the Torrance Transit Center:

- Metro ROW (Elevated/At-Grade) travels on Metro ROW
- Trench Option travels on Metro ROW below street level and open to the sky
- Hawthorne Option travels along a section of the I-405 and Hawthorne Blvd

South of 190<sup>th</sup> Street, all three alignments are the same and travel along the Metro ROW to end at the Torrance Transit Center.

In addition to the Draft EIR, Metro prepared several technical studies and reports to further analyze the Project and address areas of public interest not evaluated under CEQA. These include advanced conceptual engineering plans and related studies such as geotechnical, hydrogeology, drainage, traffic and parking, ridership, cost, real estate acquisitions, urban design, purpose and need, and alternatives considered and dismissed over the years.

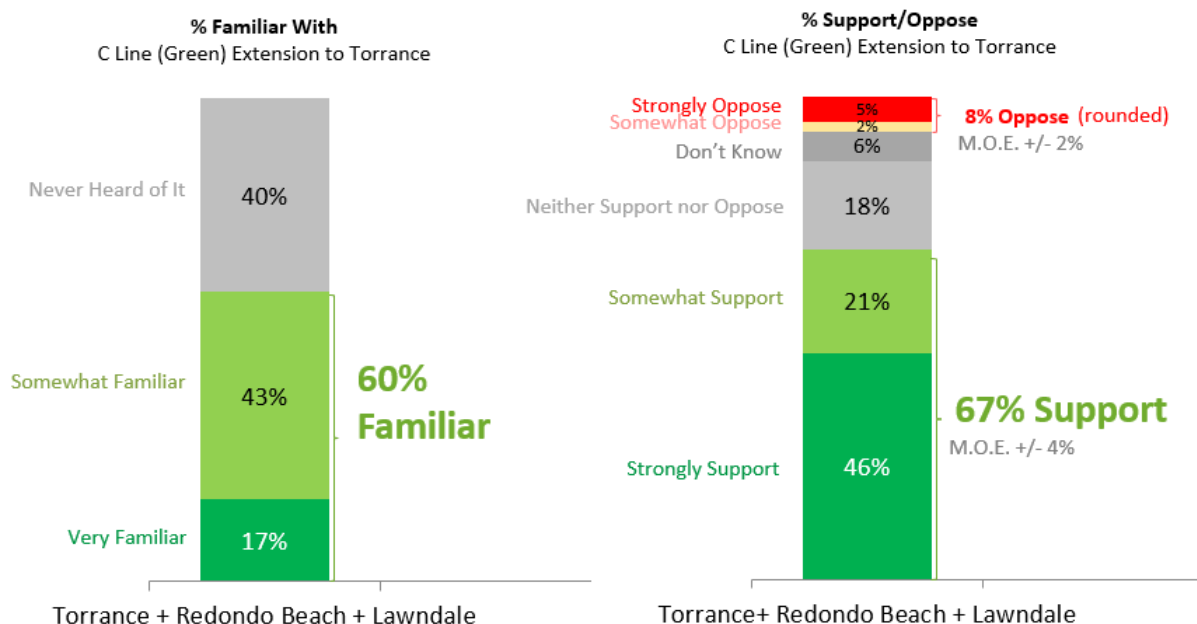
### Community Engagement & Input

Between 2021 - 2023, the project team led extensive outreach to engage the community virtually and in-person when it was safe to do so during the pandemic. Metro expanded the radius of notifications from 750 feet to a 1-mile area around the corridor, which includes over 47,000 addresses. Metro held virtual walking tours and surveys, in-person walking tours, open houses, and public hearings to invite the public to provide feedback and hosted dozens of targeted stakeholder briefings. Over 1,800 individuals attended multiple rounds of public meetings. To reach transit-dependent riders and groups that do not typically attend public meetings, Metro held pop-up booths at local events, interviewed over 100 transit riders at busy bus stops in the area, and reached out to over 500 businesses through door-to-door outreach. All outreach materials were prepared in English and Spanish, and enhanced outreach tools were used during COVID to engage through non-traditional means. Since early 2021, Metro has tracked over 23,000 project video views and over 11,000 views of project websites.

Over the course of public engagement, Metro received input from the community that coalesced around the following concerns: noise and vibration, construction disruptions, public safety, freight safety, effects to properties and property values, changes to neighborhood character, parking and traffic, access to stations, connections to bus centers, ridership, and utility relocations and soil conditions. Summaries of public outreach events are published on the project website at [www.metro.net/clineext](http://www.metro.net/clineext).

Public Support for Project

In Spring 2023, Metro worked with a market research firm to survey residents on their level of awareness and support for the Project. The purpose of the poll was to reach individuals who are less likely or unable to attend public meetings and comment on environmental documents to understand their perceptions of the Project. The poll surveyed 670 residents through randomized phone calls (landline and cell phones) across the three project cities of Lawndale, Redondo Beach, and Torrance. The survey found that 60% of residents are familiar with the Project and 67% are supportive of the Project. On average, 8% of residents across the three cities oppose the Project and 24% had no opinion.



M.O.E indicates the margin of error.

Draft EIR Comments

Between January and March 2023, Metro collected approximately 2,200 comments on the Draft EIR over the 61-day public comment period. A small percentage (~13%) of the comments address specific environmental concerns or impacts within the Draft EIR. The vast majority (1,850 comments) focused on alignment preferences. Almost two-thirds of alignment comments (66%) were in support of the Metro ROW Elevated At-Grade Alignment.

Support for Draft EIR Alignment/Alternative	# Comments	% of Total
Metro ROW Elevated/At-Grade	1,228	66%

Hawthorne Option	355	19%
Trench Option	135	7%
High-Frequency Bus Alternative	39	<1%
ROW Hybrid Alternative	3	<1%
No Project Alternative	119	6%

Source: Metro, The Robert Group

Both the poll and the Draft EIR comments show high levels of community support for the Project and low levels of opposition, although some vocal opponents who live adjacent to the Metro ROW have attended public meetings regularly.

### Local Agency Support

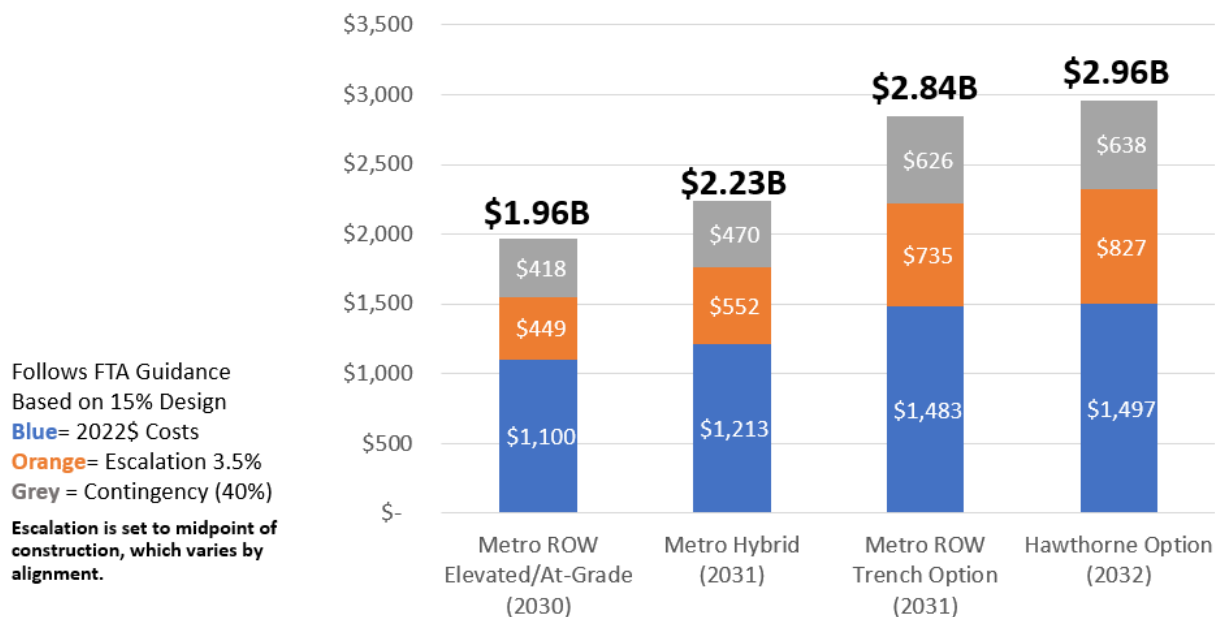
During the Draft EIR comment period, all three cities in the Project area provided comment letters. The City of Lawndale noted opposition to the Project in a letter (March). However, in May, the City Council voted in a closed session to change its position and support the Hawthorne Option. The City of Redondo Beach expressed support for the Hawthorne Option to avoid impacts on residential neighborhoods along the Metro ROW. The City of Torrance indicated its support for the Proposed Project (Metro ROW Elevated/At-Grade Alignment) as it is the most cost effective and fastest to complete. Caltrans submitted a letter supporting the Project and noted that it would require encroachment permit approvals for any work on Caltrans ROW. The South Bay Council of Governments (COG) has not yet taken a position on the Project.

### Cost Estimates & Construction Schedule

With support from the Metro Early Intervention Team (EIT) and Metro Cost Estimating Department, Metro worked with two firms to prepare and peer review construction cost estimates for the light rail alignments, following Federal Transit Administration (FTA) guidance for transit projects based on the level of design. The cost estimates include three key components:

- 1) construction costs in 2022\$ including labor and materials,
- 2) escalation (3.5% annual assumed), and
- 3) contingency to account for known and unknown project risks.

Escalation is tied to the midpoint of construction, based on a preliminary construction schedule (see below), which includes a buffer (25%) between the start of the final design and the start of operations, per FTA guidance. The cost estimates include approximately 30% allocated and 10% unallocated (40% total) contingencies per FTA, given that the project is at 15% design. As the project advances, the cost estimates will be updated, and the recommended contingencies will be revised based on more detailed engineering and risk assessment.



Project Schedule*	Measure M (2030-2033)													
	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
Metro ROW (Elevated/At-Grade)	CEQA		Design/RE Contract Award		BNSF & Utility Relocation		Construction							Sep-33
Metro ROW (Hybrid) Alternative	CEQA		Design/BID/RE Contract Award		BNSF & Utility Relocation		Construction							Dec-34
Trench Option	CEQA		Design/RE Contract Award		BNSF & Utility Relocation		Construction							Jan-36
Hawthorne Option	CEQA	Caltrans PA&ED	Design/RE Contract Award		BNSF & Utility Relocation		Construction							Sep-35
Hawthorne Option	CEQA	Caltrans PA&ED	Design/RE Contract Award		BNSF & Utility Relocation		Construction							Sep-35
High Frequency Bus Alternative**	CEQA		Design/RE Contract Award		Construction/ Vehicle Procurement									

\*Rail alignments include 25% construction contingency in schedule between start of Final Design and start of Operations per FTA.

\*\*HFB Alternative estimate is high level and less detailed than rail estimates

Source: Metro,

STV, and Jacobs

Abbreviations: CEQA: California Environmental Quality Act; BID: Bidding process for contract; RE: Real Estate; PA&ED: Project Approval and Environmental Document

Project Funding

The Project has funding from local sources, including Measure R, Measure M, a TIRCP grant, and 3% local contributions. While Measure M funds escalate over time, Measure R and the TIRCP grant do not. Metro is developing a funding and project sequencing plan to address the funding gap.

Funding Sources	Funding Amount (Millions)	Estimate in 2031\$ (Millions)
Measure R (2008)	\$272	\$272
Measure M (2015)	\$619	\$993*
TIRCP Grant (2018)	\$231	\$231
3% Local Match Requirement <i>Current estimate is based on 15% design for Metro ROW Elevated/At-Grade. Final estimate to be prepared at 30% design based on LPA.</i>	\$59	\$59
Total	\$1.12B	\$1.55B*

\*3% annual escalation used for calculation. Actual funding amount for Measure M will depend on when Measure M is expended and the actual increase in sales tax.

Project Implementation Approach

Given the funding gap, which ranges from approximately \$410 million (Metro ROW Elevated/At-Grade) to \$1.55 billion (Hawthorne Option), Metro is exploring a sequenced project implementation approach. This may, for example, include relocating utilities and freight track as the first sequence, followed by a light rail contract to construct stations, tracks, and related infrastructure and equipment. A sequenced approach would allow Metro to move the project forward to meet Measure M commitments and reduce construction risks for the light rail contractor while Metro pursues additional funding to complete the Project.

Summary of Draft EIR Alignments & Alternatives Studied

The tradeoffs between the alignments and alternatives studied in the Draft EIR are summarized below. Staff will present a recommendation to the Metro Board to consider in October for selecting a Locally Preferred Alternative.

**Metro ROW (Elevated/At-Grade):** would travel along the Metro ROW for the entire 4.5-mile length and two new stations would be constructed adjacent to the Redondo Beach Transit Center and Torrance Transit Center for convenient transfers between the bus and rail networks. The alignment is elevated between Inglewood Ave and 162<sup>nd</sup> Street to avoid major traffic impacts and street closures, per Metro’s Grade Separation Policy. South of 162<sup>nd</sup> Street, the alignment travels at street level (at-grade) within the ROW. Where there is enough room in the Metro ROW, Metro would add new three new neighborhood walking paths (one in each city).

Two at-grade light rail crossings are proposed at 170<sup>th</sup> and 182<sup>nd</sup> Street, which would include gates, bells, and other safety measures. The presence of the light rail bells results in a significant and unavoidable long-term noise impact on residential properties near 170<sup>th</sup> Street. In other areas, Metro can mitigate light rail noise impacts through sound walls, special trackwork, and other design tools along the corridor.

Existing freight tracks would be shifted in locations and rebuilt at-grade as they are today within the Metro ROW alongside new light rail tracks. Metro would design and install enhanced safety

equipment and treatments at all freight crossings to be “quiet zone ready” per the Federal Railroad Administration (FRA). A quiet zone corridor would mitigate freight noise impacts by eliminating the need for freight trains to blow their horns along the corridor, which would significantly reduce noise in residential neighborhoods. Metro would support the local cities in the application process for a quiet zone corridor in coordination with California Public Utilities Commission (CPUC) and FRA. The nature of the shared freight and light rail corridor, limited freight service, and proximity to homes make this corridor a good candidate for a quiet zone. The Metro ROW Alignment has the shortest construction period of the rail alignments studied. No residential properties would need to be acquired to construct the Project. The Metro ROW has the lowest construction cost of the rail alignments studied.

Topic Area	Metro ROW Elevated/At-Grade Alignment
Significant & Unavoidable Environmental Impacts	Construction (Short-term): Noise and Vibration Operation (Long-term): Noise impact at 170 <sup>th</sup> Street due to light rail bells
Other Environmental Concerns	Delays to emergency responders at 182 <sup>nd</sup> Street Light rail crossings near schools at 170 <sup>th</sup> and 182 <sup>nd</sup> Street Freight track shifted closer to a senior living community (Breakwater Village) near Grant Ave
Freight Improvements	Quiet zone-ready improvements at eight (8) freight crossings and upgraded trackwork to reduce noise/vibration along the corridor and enhance safety
Ridership & Access	Two rail stations with direct connections to two bus centers New Daily Riders: 4,694; Daily Project Trips: 11,579
Real Estate Needs & Construction Staging	Limited acquisitions north of 190 <sup>th</sup> Street Majority of construction would occur on Metro-owned land No residential properties would be acquired
Traffic & Parking	No changes to travel lanes or parking
Construction Cost & Timeframe	\$1.98 Billion (2030\$), Opening Year 2033

**Trench Option:** would travel along the Metro ROW for its entirety but would be constructed in a recessed concrete trench (open to the sky) for 1.8-miles of the alignment. Existing freight tracks would remain at-grade and be shifted and rebuilt alongside the light rail above the trench. The Trench Option would lessen light rail noise impacts but would still require sound walls to mitigate noise to a less than significant level, like the Metro ROW Elevated/At-Grade Alignment. Freight noise would be mitigated through “quiet zone ready” improvements. The Trench Option fully grade separates light rail from streets with eight under-crossings. This avoids significant long-term noise impacts to residential properties near 170<sup>th</sup> Street, eliminates delays to emergency responders at 182<sup>nd</sup> Street, and avoids shifting freight closer to Breakwater Village, a senior living community adjacent to the ROW between Artesia Blvd and Grant Ave.

Due to extensive excavation, the Trench Option would result in a significant and unavoidable air



quality impact during construction. To avoid major underground utilities that cannot be relocated, the Trench Option would require deep excavation (between 35-45 feet below ground) in the northern section of Lawndale. This area has a high-water table requiring specialized construction techniques and the installation and operation of permanent sump pumps. Excavation near residential properties while maintaining freight operations would be a slow and complex construction process. The Trench Option has the longest construction schedule and second highest cost.

Topic Area	Trench Option
Significant & Unavoidable Environmental Impacts	Construction (Short-term): Noise & Vibration; Air quality due to extensive excavation and truck hauling trips Operation (Long-term): Less than significant after mitigation
Other Environmental Concerns	Deep excavation (35-45 feet) to avoid major storm drain and other utilities High water table requires sump pump Lengthy construction and major excavation adjacent to homes and freight
Freight Improvements	Quiet zone ready improvements at eight freight crossings and upgraded trackwork to reduce noise/vibration along corridor and enhance safety
Ridership & Access	Two rail stations with direct connections to two bus centers New Daily riders: 4,694; Daily project trips: 11,579
Real Estate Needs & Construction Staging	Majority of construction would occur on Metro-owned land No residential properties would be acquired
Traffic & Parking	No changes to travel lanes or parking
Construction Cost & Timeframe	\$2.84B (2031\$), Opening Year 2036

**Hawthorne Option:** travels along the western embankment of I-405 before turning onto Hawthorne Blvd and traveling in the center of the street. As part of the technical analysis and design work to support the Draft EIR, the Hawthorne Option was revised to be fully elevated based on engineering and safety analysis. A station would be located near the South Bay Galleria south of Artesia Blvd (instead of the Redondo Beach Transit Center), which is about a half-mile walk for riders transferring between bus to rail.

The Hawthorne Option encroaches into Caltrans ROW along I-405 to avoid acquiring homes. Caltrans also has jurisdiction over sections of Hawthorne Blvd, which is a state highway (SR-107) and serves approximately 70,000 vehicles per day. Many intersections along Hawthorne Blvd are highly congested today with a level of service (LOS) between C to F. Caltrans has not yet approved an encroachment permit and would require Metro to complete federal environmental documentation per the National Environmental Policy Act (NEPA) before Caltrans would consider approval of an encroachment permit. This would add approximately two additional years of planning work. The lack of approval from Caltrans on the Hawthorne Option poses a significant risk to the Project implementation. In addition, Caltrans has requested that Metro consider widening existing travel

lanes along Hawthorne Blvd as part of the project, which would require acquiring slivers of properties along Hawthorne Blvd. Several major utilities would need to be relocated, including a storm drain in the center of Hawthorne Blvd and three sets of high-tension overhead power lines that need to be raised. Most of the construction would be staged in the street (Caltrans ROW), reducing roadway capacity and exacerbating existing traffic congestion with lane closures over the five-to-seven-year construction period. There are approximately 170 businesses that front this section of Hawthorne Blvd, some of which would be impacted permanently due to acquisitions needed to construct and operate the light rail. The Hawthorne Option has the highest construction cost.

Topic Area	Hawthorne Option
Significant & Unavoidable Environmental Impacts	Construction (Short-term): Noise and Vibration Operation (Long-term): Less than significant after mitigation
Other Environmental Concerns	Caltrans encroachment permit needed, not yet approved Relocation of a major storm drain and three sets of high-tension power lines Lengthy lane closures during construction along the corridor with 170+ businesses
Freight Improvements	No freight improvements or quiet zone corridor north of 190 <sup>th</sup> Street
Ridership & Access	Two rail stations: No connection to Redondo Beach Transit Center New Daily Riders: 5,497 / Daily Project Trips: 15,648
Real Estate Needs & Construction Staging	Largest amount of property needed to construct and operate. Several commercial properties needed to construct and operate Project located adjacent to I-405 and Hawthorne Blvd. No residential properties would be acquired. (Potential additional impacts to properties if Caltrans requires lane widening along Hawthorne Blvd). Lane closures during construction
Traffic & Parking	Loss of ~20 parking spaces, changes to median, left turn lanes, signalization, realignment of travel lanes
Construction Cost & Timeframe	\$2.96B (2032\$), Opening Year 2035

Per CEQA, the Draft EIR must also include “Alternatives to the Project” to reduce or eliminate significant impacts generated by the Project. As such, the Draft EIR includes three Alternatives:

- Metro ROW Hybrid (170<sup>th</sup>/182<sup>nd</sup> Grade Separated Light Rail) Alternative
- High-Frequency Bus Alternative
- No Project Alternative

**Metro ROW Hybrid Alternative:** This Alternative would travel along the Metro ROW for the entire 4.5-mile length and connects to both transit centers. The Alternative would include project benefits

associated with the Metro ROW alignments (e.g., new walking paths, quiet zone ready freight improvements). However, the design varies in a few locations to reduce significant and unavoidable noise impacts and address other community concerns related to the Metro ROW. Instead of at-grade crossings at 170<sup>th</sup> and 182<sup>nd</sup> Street, the Metro ROW Hybrid Alternative would locate the light rail below street level in two short trenches to travel under 170<sup>th</sup> and 182<sup>nd</sup> Street, which would:

- avoid long-term noise impacts to residential properties near 170<sup>th</sup> Street,
- avoid potential delays to emergency responders at 182<sup>nd</sup> Street,
- enhance safety along 170<sup>th</sup> and 182<sup>nd</sup> Street which are school routes,
- avoid shifting freight closer to Breakwater Village, a senior living community,
- avoid significant air quality impacts during construction (generated by the Trench Option) with less trenching, and
- improve light rail operations with fully grade separated crossings.

Topic Area	Metro ROW Hybrid (170th/182nd Grade Separated Light Rail) Alternative
Significant & Unavoidable Environmental Impacts	Construction (Short-term): Noise and Vibration Operation (Long-term): Less than significant after mitigation
Freight Improvements	Quiet zone ready improvements at eight freight crossings and upgraded trackwork to reduce noise/vibration along the corridor and enhance safety.
Ridership & Access	Two new rail stations with direct connections to both transit centers New daily riders: 4,694/ Daily project trips: 11,579
Real Estate Needs & Construction Staging	Limited real estate acquisitions north of 190 <sup>th</sup> Street The majority of construction would occur on Metro-owned land No residential properties would be acquired
Traffic & Parking	No changes to travel lanes or parking
Construction Cost & Timeframe	\$2.23B (2031\$), Opening Year 2034

**High Frequency Bus (HFB) Alternative:** This Alternative would avoid impacts related to rail by providing bus improvements. The HFB Alternative would provide a bus route between the Redondo Beach (Marine) Station and Torrance Transit Center with four new bus stops and 10-minute service during peak periods. The buses would travel on city streets in mixed-flow traffic. Many of the streets along the route are congested with a level of service (LOS) between C and F, which is anticipated to worsen without a rail project. Traffic signal priority would be explored pending approval by local agencies (cities and Caltrans). Due to the layout of the street grid, the bus route would require several turns on various streets to travel southeast to the Torrance Transit Center, resulting in a less direct travel route and lesser travel time savings. The HFB Alternative would not directly connect to

the Redondo Beach Transit Center. Instead, a bus stop would be located along Hawthorne Blvd south of Artesia Blvd near the South Bay Galleria. While the HFB Alternative avoids significant impacts due to rail construction and operations, it does not provide comparable levels of benefits to meet the project objectives. Rail attracts 65% more project trips and results in 88% greater savings of vehicle miles traveled to reduce air pollution and greenhouse gas emissions. The bus improvements would not have the same ability as rail to support anticipated growth in the South Bay, putting additional strain on the transportation network and resulting in increased roadway congestion and travel times.

Topic Area	High Frequency Bus Alternative
Significant & Unavoidable Environmental Impacts	Construction (Short-term): Less than significant after mitigation Operation (Long-term): Less than significant after mitigation
Other Environmental Concerns	Low ridership, low capacity, and slower travel times Fails to significantly reduce air pollution and GHG emissions and address climate change
Freight Improvements	Not applicable
Ridership & Access	4 Stops: Inglewood Ave/Manhattan Beach Blvd, Artesia/Hawthorne Blvd (South Bay Galleria), 190 <sup>th</sup> St/Del Amo Blvd, Torrance Transit Center New Daily riders: 1,248 / Daily project trips: 4,084
Real Estate Needs & Construction Staging	The majority of construction would occur on public streets. Some improvements to bus stops on sidewalks.
Traffic & Parking	Potential loss of street parking. Anticipated delays to traffic.
Construction Cost & Timeframe	\$155M* (2028\$), Opening Year 2030 <i>*A preliminary evaluation of construction costs for the HFB Alternative was performed. More detailed cost estimating work is needed to confirm construction costs and contingencies for HFB Alternative.</i>

**No Project Alternative:** assumes no transportation project is implemented to connect the Redondo Beach (Marine) Station to the Torrance Transit Center. While the No Project Alternative avoids construction impacts, it fails to address the project needs and objectives. The No Project Alternative would be inconsistent with the historical vision of a rail connection to the South Bay as part of the region’s long-term transportation plan, linked to multiple local land use and transportation plans, which seek to provide growing travel demand with rapid transportation infrastructure. No Project would fail to reduce vehicle miles traveled and would fail to link the two new bus transit centers to the regional rail network. Congestion would continue to worsen, as would air pollution and greenhouse emissions, which contribute to climate change. Climate change contributes to increased energy usage and public health issues around extreme heat. For these reasons, the No Project Alternative results in multiple significant and unavoidable long-term impacts related to transportation, land use, air quality, GHG emissions, and energy due to potential inconsistencies with the 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP)/SCS. The No Project Alternative could

result in a loss of the \$231 million TIRCP grant, intended for a transit project.

A No Project Alternative would have the following impacts on the South Bay and greater LA region:

- Loss of ridership: 3.6 million project trips/year,
- Reduced access for 1.49 million new riders/year,
- Increased VMT: 19.5 million/year, and
- Increased GHG emissions: 2,369.4 MTCO<sub>2e</sub>/year.

Topic Area	No Project Alternative
Significant & Unavoidable Environmental Impacts	Construction (Short-term): None Operation (Long-term): Transportation, Land Use and Planning, Air Quality, Greenhouse Gas emissions, Energy
Other Concerns	Fails to increase ridership and attract new riders Fails to reduce vehicle miles traveled Fail to reduce air pollution and GHG emissions, which contribute to climate change, energy use, and heat-related health concerns Fails to connect new transit centers with the regional rail network

**EQUITY PLATFORM**

Metro is committed to serving Equity-Focus Communities, which have been historically underserved in LA County. User benefit analysis reveals that the Project benefits extend to many Equity Focus Communities along the K line corridor as well as to the east/west C line corridor. The Project will connect the South Bay with the rest of the Metro Rail network, increasing access to employment, education, housing, and regional centers. As mentioned above, the South Bay is an important job center in LA County and is projected to grow. Providing fast, reliable access to jobs is critical to meeting travel demand and providing opportunities for economic mobility.

Based on Metro’s 2022 Equity Focus Community data, only a small geographic area in Lawndale is considered an EFC. To better understand demographic data, Metro analyzed income, race, and car-ownership data within a half-mile of the proposed station areas. In the Redondo Beach Transit Center Station area, there are census tracts where 20% to 39.9% of households are low-income, and 6% to 9% of households do not have access to vehicles. The South Bay Galleria station would also serve census tracts where 20% to 39.9% of households are low-income, and 3% to 5.9% do not have access to vehicles. Lastly, the Torrance terminus station would serve census tracts where 10 to 19% of households are low-income households and where 6% to 9% of households do not have vehicle access. Given that a majority of Metro rail riders are low-income, the demographic analysis showed a significant need for transit options in the Project area.

To engage vulnerable populations as part of the environmental study, Metro circulated all community meeting materials and notices in English and Spanish, the predominant languages in the Project area. Metro held pop-up events at local farmers markets and community events to increase awareness of the project and engaged groups who do not typically participate in community

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meetings. Metro performed transit rider intercept interviews at four of the busiest bus stops in the area, meeting with over 100 riders, and performed door-to-door outreach to over 500 businesses who could be affected by the Project. Metro also held project briefings with local community colleges to reach students, another group that relies heavily on transit.

Metro will continue to prepare inclusive outreach and engagement strategies as the project moves forward and partner with Community Based Organization to help disseminate project information, advise on outreach methods, and engage a diverse set of project stakeholders as Metro advances the Project, pending the selection of an LPA.

### **IMPLEMENTATION OF STRATEGIC PLAN GOALS**

The Project supports the following strategic plan goals identified in Vision 2028: Goal 1: Provide high-quality mobility options that enable people to spend less time traveling, Goal 3: Enhance communities and lives through mobility and access to opportunity, and Goal 5: Provide responsive, accountable, and trustworthy governance within the Metro organization.

### **NEXT STEPS**

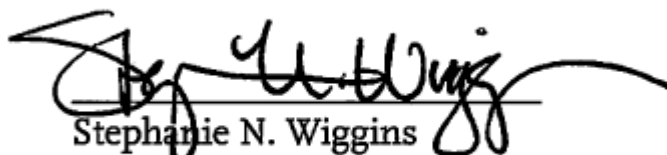
In October, Staff will present a recommendation for the Metro Board to consider in the selection of a Locally Preferred Alternative based on project objectives, findings from environmental and technical studies, community input, and Measure M commitments.

### **ATTACHMENTS**

Attachment A - Project Maps

Prepared by: Chris Corrao, Senior Manager, Mobility Corridors, (213) 922-4716  
Georgia Sheridan, Senior Director, Mobility Corridors, (213) 547-4255  
Dolores Roybal Saltarelli, DEO, Countywide Planning & Development, (213) 922-3024  
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David Mieger, SEO, Countywide Planning & Development, (213) 922-3040  
Ray Sosa, Deputy Chief Planning Officer, (213) 547-4274

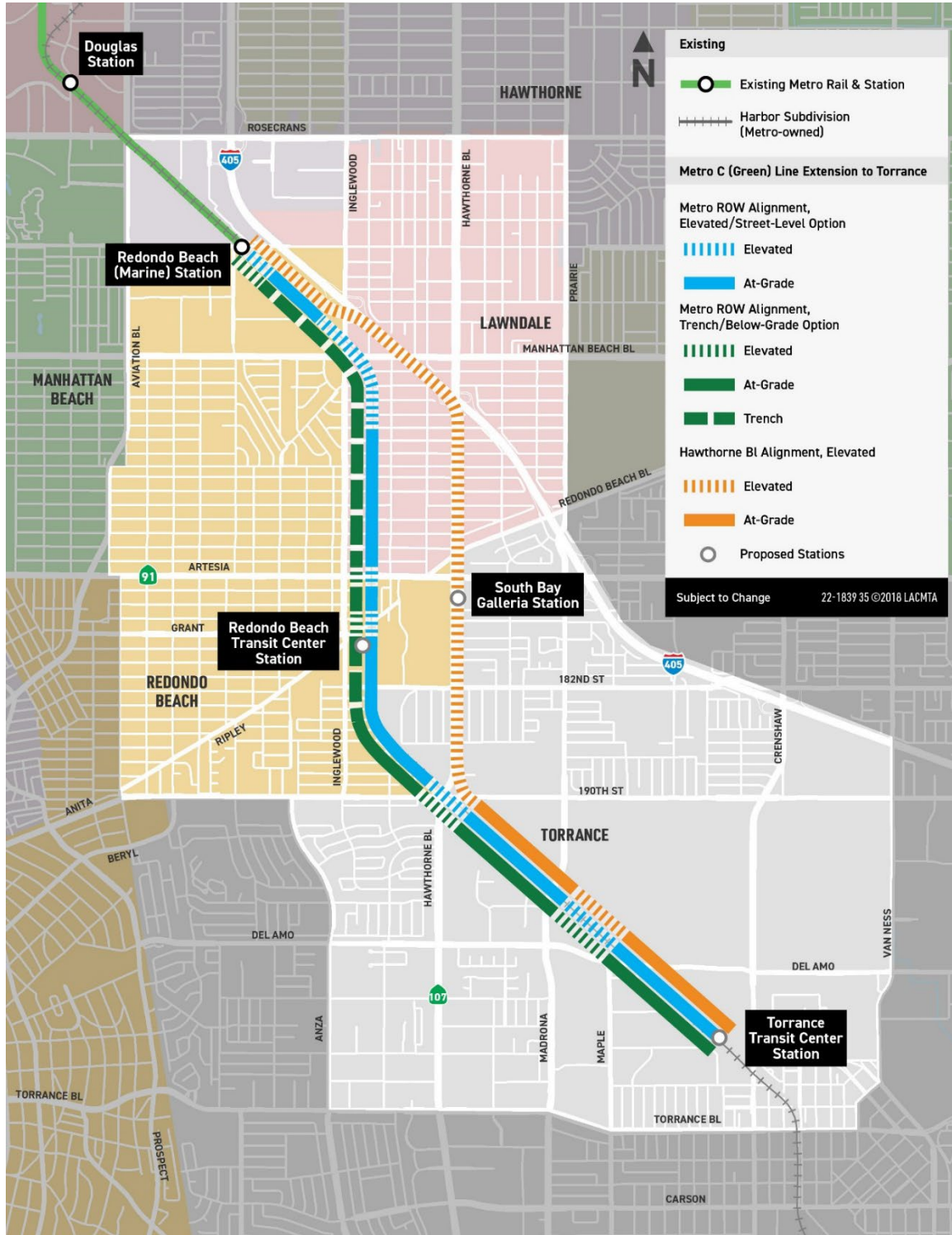
Reviewed by: James de la Loza, Chief Planning Officer, (213) 922-2920



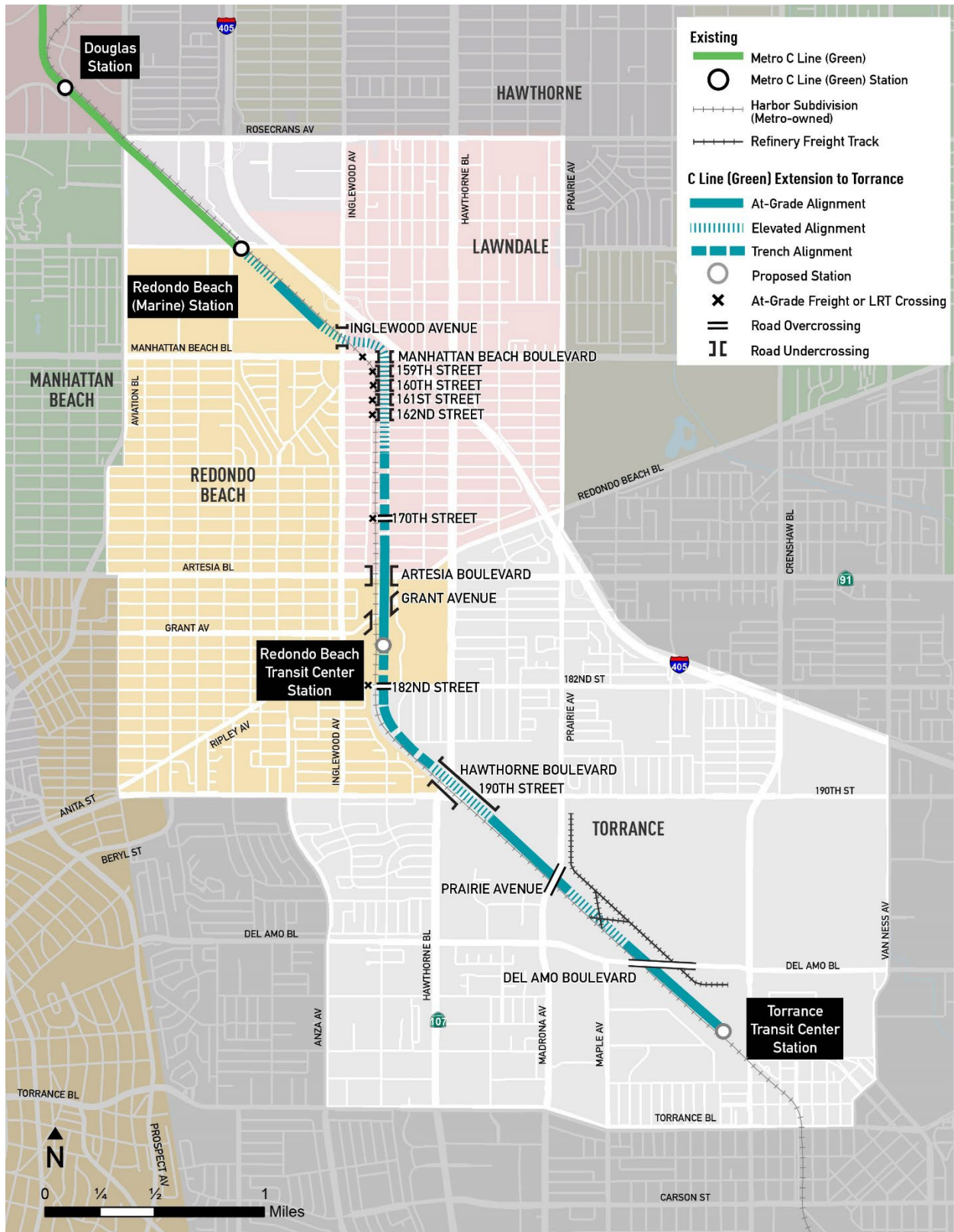
Stephanie N. Wiggins  
Chief Executive Officer

# Attachment A: Project Maps for C Line Extension to Torrance Project

## Light Rail Alignments Studied in Draft EIR

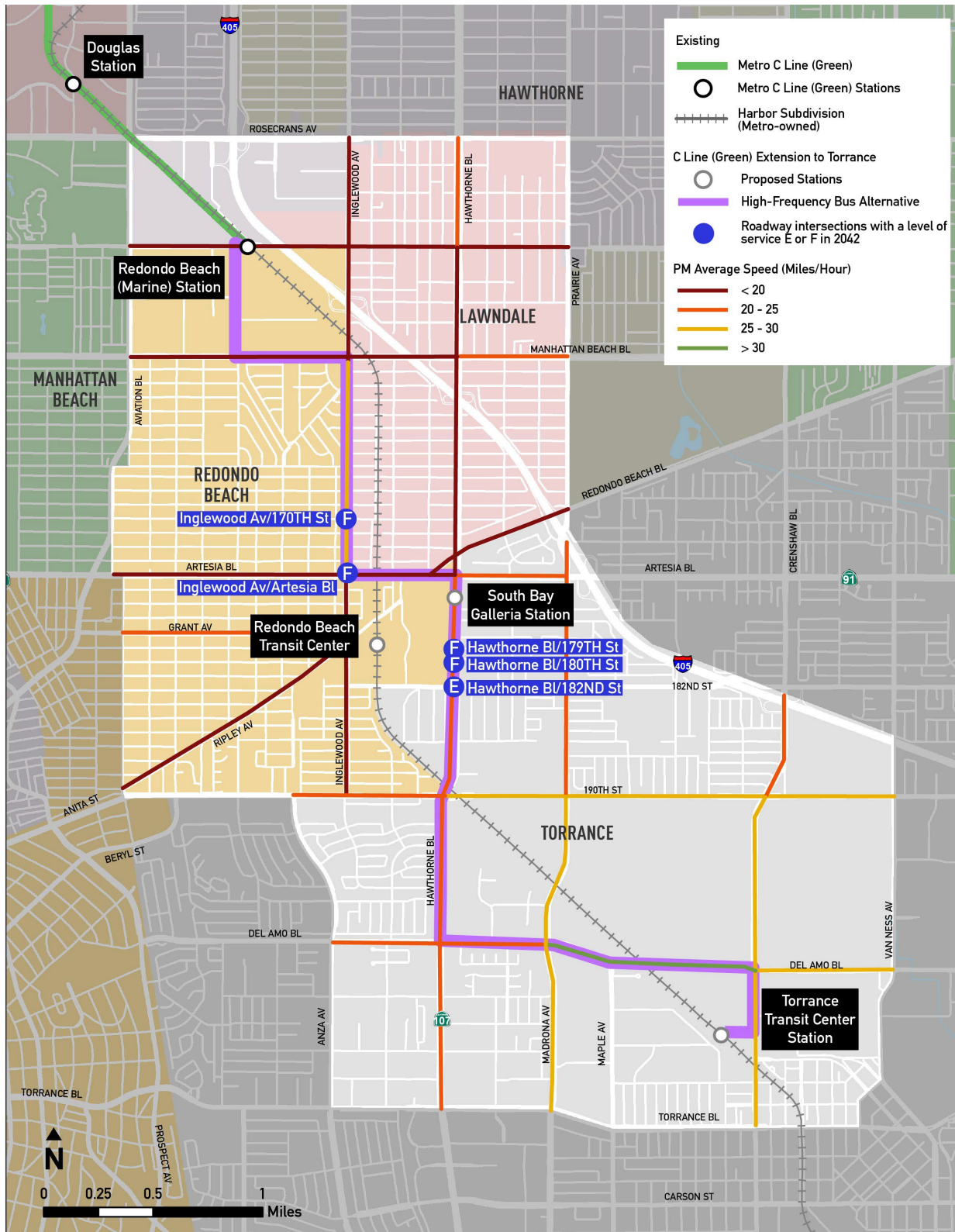


**170<sup>th</sup> & 182<sup>nd</sup> Grade Separated Light Rail Alternative (Metro ROW Hybrid)**





# High Frequency Bus (HFB) Alternative



← To Crens

# Next stop: more rail in the South Bay.

**C LINE (GREEN) EXTENSION TO TORRANCE**

Metro Rail & Busway



**METRO BOARD  
PLANNING & PROGRAMMING COMMITTEE  
EXECUTIVE MANAGEMENT COMMITTEE  
SEPTEMBER 2023**

# Project Purpose & Benefits

- Provides fast and reliable alternative to highly congested I-405 and roadways (congestion to worsen by 30% by 2045 – SCAG)
- Provides one-seat ride to LAX, Inglewood, and E Line (19-minute trip from Torrance to LAX)
- Connects newly opened Redondo Beach and Torrance bus centers to expanding County-wide regional network



# Project History & Timeline

1980 Proposition A – Regional Rail Plan

1993 Metro purchased Harbor Subdivision corridor

2002 South Bay Cities Rail Study

**2008 Measure R (\$272M)**

2009 Harbor Subdivision AA Study

2010 Draft EIS/EIR initiated, paused in 2012

**2016 Measure M (\$619M)**

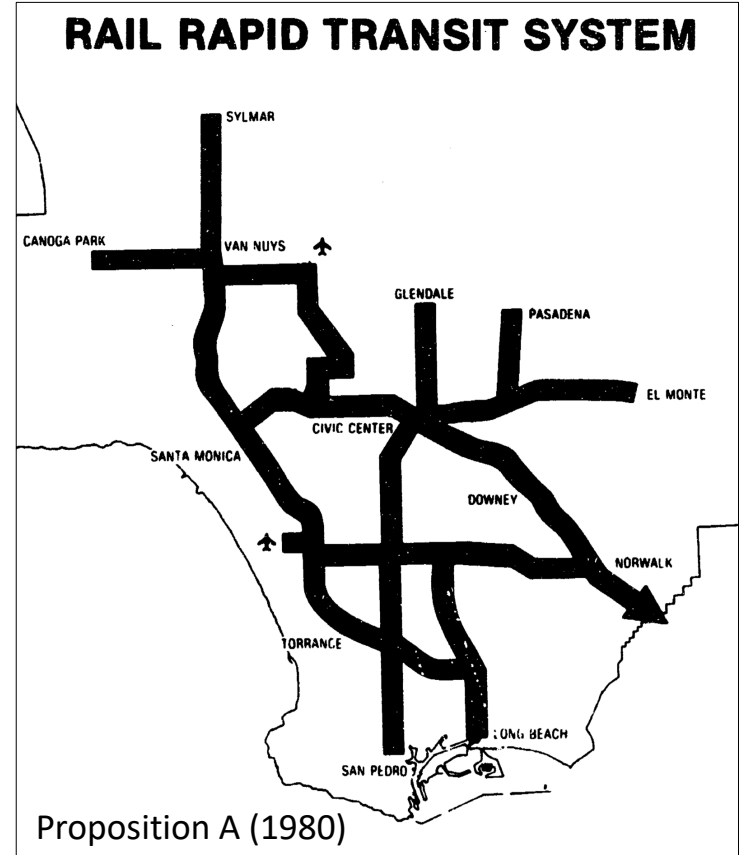
Opening: 2030-2033

**2018 TIRCP Grant (\$231M)**

2018 Board approval to prepare environmental study following SAA Study

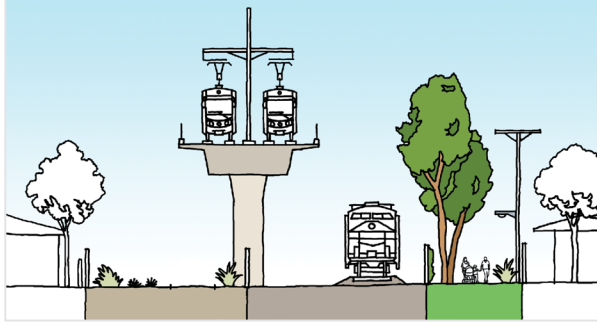
2021 Public scoping for environmental study

**2023 Draft EIR Released with 61-day public comment period and five public hearings**



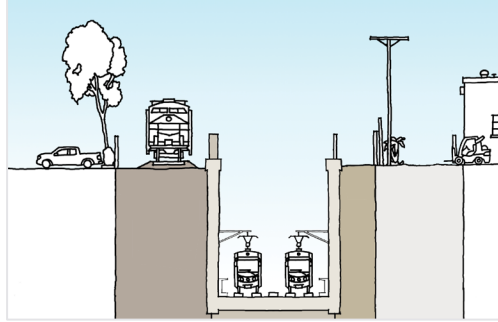
# Draft EIR: Alignments & Alternatives to Project Studied

## ROW Elevated/At-Grade



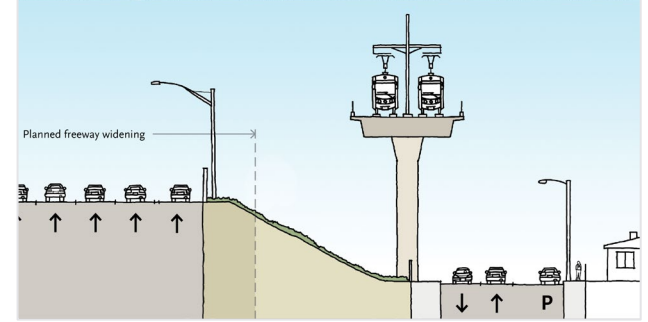
\$1.9B, Opens 2033

## Trench Option



\$2.84B, Opens 2036

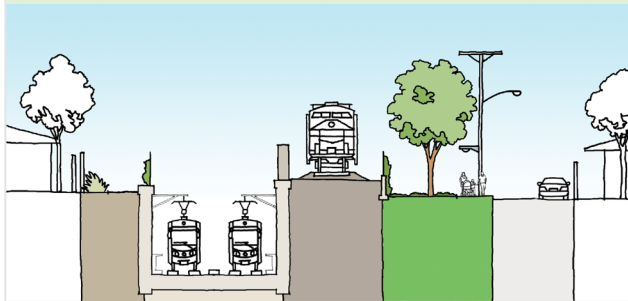
## Hawthorne Option



\$2.96B, Opens 2035

## ROW "Hybrid" Alternative

Includes under-crossings at 170<sup>th</sup> & 182<sup>nd</sup> St

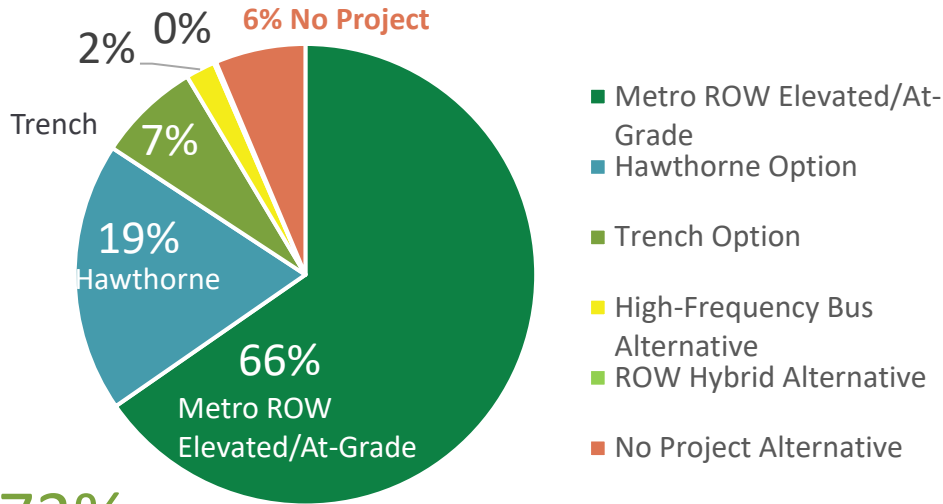


\$2.23B, Opens 2034

Draft EIR also considers:  
High Frequency Bus Alternative  
No Project Alternative



# Draft EIR Comments & Community Poll

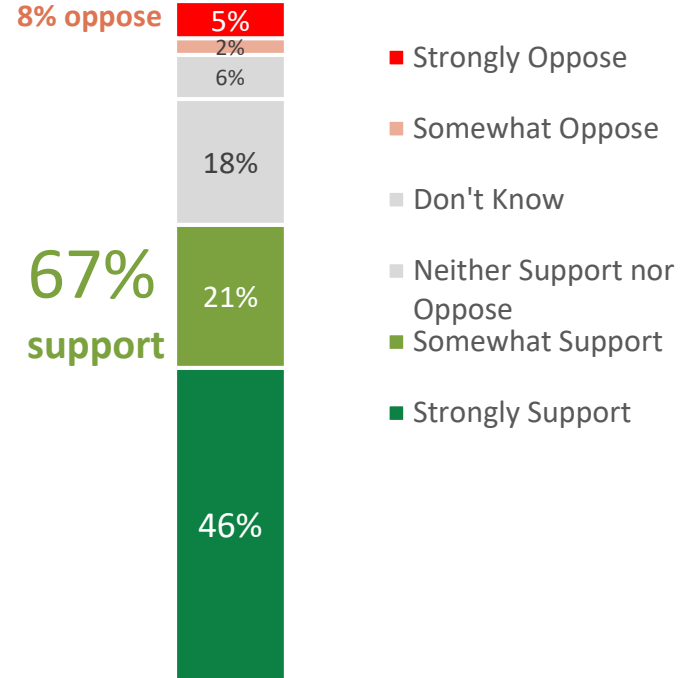


73%

Support use of Metro ROW in some form

## 2023 Draft EIR

1,850 comments on alignments  
2,200 comments total over 61-day  
comment period with 5 public hearings



67% support

8% oppose

## Spring 2023 Poll

670 Residents surveyed in Lawndale,  
Redondo Beach and Torrance

# Community Concerns & Metro Commitments to Address

## Concerns

- Noise and vibration
- Freight noise and derailment
- Safety and security
- Delays to emergency responder
- Property values
- Utility relocations
- Loss of trees and greenspace
- Property impacts/displacement
- Changes to traffic and parking



**Commitments:** “quiet zone ready” corridor, sound walls, special trackwork, neighborhood paths, security plan tailored to local communities, mitigation measures



# Far Reaching Project Benefits

**Travel time savings extend beyond Project area to South Bay, Palos Verdes Peninsula, Gateway Cities, South LA and Central LA**

## **Next Steps: October Metro Board Meeting:**

Staff to provide recommendation for Locally Preferred Alternative (LPA) to:

- Meet project need and objectives
- Mitigate significant and adverse impacts during operations
- Address community concerns through mitigations and commitments

### ***2042 Project Work Trips From South Bay***

Green illustrates areas with travel time benefits  
Dashed purple indicates Equity Focus Communities

