



Metro

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

Agenda - Final

Thursday, March 27, 2025

10:00 AM

Watch online: <https://boardagendas.metro.net>
Listen by phone: Dial 888-978-8818 and enter Access Code:
5647249# (English) or 7292892# (Español)

To give written or live public comment, please see the top of page 4

Board of Directors - Regular Board Meeting

Janice Hahn, Chair

Fernando Dutra, 1st Vice Chair

Jacquelyn Dupont-Walker, 2nd Vice Chair

Kathryn Barger

Karen Bass

James Butts

Lindsey Horvath

Holly J. Mitchell

Ara J. Najarian

Imelda Padilla

Tim Sandoval

Hilda Solis

Katy Yaroslavsky

Gloria Roberts, non-voting member

Stephanie Wiggins, Chief Executive Officer

METROPOLITAN TRANSPORTATION AUTHORITY BOARD AGENDA RULES
(ALSO APPLIES TO BOARD COMMITTEES)

PUBLIC INPUT

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 general 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 General 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.

CONDUCT IN THE BOARD ROOM - The following rules pertain to conduct at Metropolitan Transportation Authority meetings:

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.

INFORMATION RELATING TO AGENDAS AND ACTIONS OF THE BOARD

Agendas for the Regular MTA Board meetings are prepared by the Board Clerk and are available prior to the meeting in the MTA Records Management Department and on the Internet. Every meeting of the MTA Board of Directors is recorded and is available at <https://www.metro.net> or on CD's and as MP3's for a nominal charge.

DISCLOSURE OF CONTRIBUTIONS

The State Political Reform Act (Government Code Section 84308) requires that a party to a proceeding coming before an agency involving a license, permit, or other entitlement for use including all contracts (other than competitively bid contracts that are required by law, agency policy, or agency rule to be awarded pursuant to a competitive process , labor contracts, personal employment contracts, contracts valued under \$50,000, contracts where no party receives financial compensation, contracts between two or more agencies, the periodic review or renewal of development agreements unless there is a material modification or amendment proposed to the agreement, the periodic review or renewal of competitively bid contracts unless there are material modifications or amendments proposed to the agreement that are valued at more than 10 percent of the value of the contract or fifty thousand dollars (\$50,000), whichever is less, and modifications of or amendments to any of the foregoing contracts, other than competitively bid contracts), shall disclose on the record of the proceeding any contributions in an amount of more than \$500 made within the preceding 12 months by the party, or the party's agent, to any officer of the agency. When a closed corporation is party to, or participant in, such a proceeding, the majority shareholder must make the same disclosure. Failure to comply with this requirement may result in the assessment of civil or criminal penalties.

ADA REQUIREMENTS

Upon request, sign language interpretation, materials in alternative formats and other accommodations are available to the public for MTA-sponsored meetings and events. All requests for reasonable accommodations must be made at least three working days (72 working hours) in advance of the scheduled meeting date. Please telephone (213) 364-2837 or (213) 922-4600 between 8 a.m. and 5 p.m., Monday through Friday. Our TDD line is (800) 252-9040. Requests can also be sent to boardclerk@metro.net.

LIMITED ENGLISH PROFICIENCY

A Spanish language interpreter is available at all Committee and Board Meetings. All other languages must be requested 72 hours in advance of the meeting by calling (213) 364-2837 or (213) 922-4600. Live Public Comment Instructions can also be translated if requested 72 hours in advance.



323.466.3876

x2 *Español (Spanish)*

x3 *中文 (Chinese)*

x4 *한국어 (Korean)*

x5 *Tiếng Việt (Vietnamese)*

x6 *日本語 (Japanese)*

x7 *русский (Russian)*

x8 *Հայերէն (Armenian)*

HELPFUL PHONE NUMBERS AND EMAIL

Copies of Agendas/Record of Board Action/Recordings of Meetings - (213) 922-4880 (Records Management Department) - <https://records.metro.net>

General Information/Rules of the Board - (213) 922-4600

Internet Access to Agendas - <https://www.metro.net>

TDD line (800) 252-9040

Board Clerk Email - boardclerk@metro.net

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

Live Public Comment Instructions:

Live public comment can be given by telephone or in-person.

The Meeting begins at 10:00 AM Pacific Time on March 27, 2025; you may join the call 5 minutes prior to the start of the meeting.

Dial-in: 888-978-8818 and enter
English Access Code: 5647249#
Spanish Access Code: 7292892#

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 10:00 AM, hora del Pacifico, el 27 de Marzo de 2025. Puedes unirse a la llamada 5 minutos antes del comienzo de la junta.

Marque: 888-978-8818 y ingrese el codigo
Codigo de acceso en ingles: 5647249#
Codigo de acceso en espanol: 7292892#

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

1. APPROVE Consent Calendar Items: 2, 5, 6, 8, 9, 10, 11, 12**, 14, 15, 20, 21, 22, 23, 24, and 29.

**Item requires 2/3 vote of the Full Board.

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

All Consent Calendar items are listed at the end of the agenda, beginning on page 8.

NON-CONSENT

3. **SUBJECT: REMARKS BY THE CHAIR** [2025-0222](#)

RECOMMENDATION

RECEIVE remarks by the Chair.

4. **SUBJECT: REPORT BY THE CHIEF EXECUTIVE OFFICER** [2025-0223](#)

RECOMMENDATION

RECEIVE report by the Chief Executive Officer.

CONSTRUCTION COMMITTEE RECEIVED AND FILED THE FOLLOWING:

13. **SUBJECT: FEMALE PARTICIPATION IN PROJECT LABOR AGREEMENT/CONSTRUCTION CAREERS POLICY CONSTRUCTION PROJECTS** [2025-0036](#)

RECOMMENDATION

RECEIVE AND FILE the Construction Workforce Disparity Study report and response to Board Motion 29 (Attachment A).

- Attachments:**
- [Attachment A - Board Motion 29](#)
 - [Attachment B - Construction Workforce Disparity Study](#)
 - [Attachment C - Support Letters](#)
 - [Presentation](#)

**13.1 SUBJECT: MEETING THE MOMENT: A REGIONAL APPROACH TO
REALIZING LA METRO'S WORKFORCE EQUITY GOALS
MOTION**

[2025-0237](#)

RECOMMENDATION

APPROVE Motion by Horvath, Hahn, Dutra, Solis and Yaroslavsky that the Board direct the Chief Executive Officer to:

- A. expand the Cultural Competency Plan requirement to integrate Community Benefits and Workforce Equity components into RFP procurements, and identify mechanisms to embed workforce commitments, such as childcare accessibility, reliable transportation, supportive work environments and an inclusive workplace culture, ensuring alignment with Metro's broader workforce initiatives;
- B. establish a regional roundtable with the Program Management Office (PMO), general contractors' associations, contractors, the Los Angeles Department of Economic Opportunity (DEO), LA/OCBCTC, union trades, and other key stakeholders to develop a strategic action plan. Discussion should include, but not be limited to consistent goal setting for regional public contracting agencies, the provision and/or subsidization of childcare services similar to that of "TradesFutures" childcare pilots in Milwaukee and New York City, and "Care That Works" in Boston, and apprentice/journeyman ratios on construction sites. The roundtable should provide a unique forum for stakeholders to address the systematic barriers that confront the participation of women in the trades;
- C. conduct a Women in the Trades Regional Summit to bring together public agencies, trade unions, workforce development boards, and academic institutions to foster collaboration, share best practices, and drive commitments to increase female participation in the construction workforce;
- D. establish a Construction Female Advisory Group composed of experienced women in the Trades, which will provide mentorship, guidance, and best practices to help dismantle barriers for women in construction; and
- E. launch a targeted social media campaign (Built By Her) focused on women, youth, and mentorship opportunities. The social media campaign should be complemented with outreach to potential partners in the field of women's sports and the creative arts.

WE FURTHER MOVE that the Chief Executive Officer be directed to report back in June 2025 with a series of workforce equity components that could be

embedded in RFP procurements, such as a contractor's previous commitments and attainment of workforce hiring goals, the maintenance of an inclusive and harassment-free workplace, and the provision or subsidization of childcare resources, that would generate more accountability for a contractor meeting proposed hiring goals.

OPERATIONS, SAFETY, AND CUSTOMER EXPERIENCE COMMITTEE RECEIVED AND FILED THE FOLLOWING:

- 28. SUBJECT: COMMUNITY ADVISORY COUNCIL (CAC) QUARTERLY UPDATE** [2024-1145](#)

RECOMMENDATION

RECEIVE AND FILE quarterly status report on the Community Advisory Council (CAC).

Attachments: [Presentation](#)

- 30. SUBJECT: FEDERAL AND STATE REPORT** [2025-0162](#)

RECOMMENDATION

CONSIDER:

- A. RECEIVING AND FILING the March 2025 Federal and State Legislative Report; and
- B. ADOPTING Staff Recommended Position:
- AB 1237 (McKinnor). County of Los Angeles: sporting events: ticket charge: public transit. - SUPPORT-WORK WITH AUTHOR/SPONSOR (Attachment A).

Attachments: [Attachment A - AB 1237 \(McKinnor\) Legislative Analysis](#)
[Presentation](#)

END OF NON-CONSENT

31. SUBJECT: CLOSED SESSION

[2025-0238](#)

A. Conference with Legal Counsel - Existing Litigation - G.C. 54956.9(D)(1)

1. Julissa Adriana Castaneda v. LACMTA, LASC Case No. 22STCV04100
2. Angel Saucedo v. LACMTA, LASC Case No. 23LBCV01790
3. Sara Valtierra v. LACMTA, LASC Case No. 23CHCV00139

B. Public Employment - G.C. 54957

Title: Chief Executive Officer

C. Conference with Labor Negotiator - Government Code 54957.6

Agency Designated Representatives: Cristian Leiva and Dawn Jackson-Perkins
Employee Organizations: AFSCME, SMART and Teamsters

CONSENT CALENDAR - ITEMS 2, 5, 6, 8, 9, 10, 11, 12, 14, 15, 20, 21, 22, 23, 24, and 29.

2. SUBJECT: MINUTES

[2025-0224](#)

RECOMMENDATION

APPROVE Minutes of the Regular Board Meeting held February 27, 2025.

Attachments: [Regular Board Meeting MINUTES - February 27, 2025](#)
[February 2025 RBM Public Comments](#)

PLANNING AND PROGRAMMING COMMITTEE MADE THE FOLLOWING RECOMMENDATION (3-0):

5. SUBJECT: PROGRAM FUNDS FOR CITY OF REDONDO BEACH IMPROVEMENTS AT AVIATION AND ARTESIA BOULEVARD

[2025-0064](#)

RECOMMENDATION

CONSIDER:

- A. APPROVING \$1,500,000 in additional programming within the capacity of Measure R Multimodal Highway Subregional Programs for improvements at the intersection of Aviation Blvd at Artesia Blvd in the City of Redondo Beach within the South Bay Subregion as shown in Attachment A; and
- B. AUTHORIZING the Chief Executive Officer or their designee to negotiate and execute all necessary agreements for the Board-approved projects.

Attachments: [Attachment A - Measure R South Bay I-405, I-110, I-105 & SR-91 Imps. Presentation](#)

PLANNING AND PROGRAMMING COMMITTEE MADE THE FOLLOWING RECOMMENDATION (3-0):

6. SUBJECT: EXPO/CRENSHAW JOINT DEVELOPMENT

[2024-1093](#)

RECOMMENDATION

CONSIDER:

- A. AUTHORIZING the Chief Executive Officer (CEO), or designee, to execute and enter into a joint development agreement (JDA), ground lease, and other related documents with Expo Crenshaw Apartments, LP (Developer), for the construction and operation of a mixed-use affordable housing project (Project) on 1.77 acres of Metro-owned property located at the southeast corner of W. Exposition Blvd. and Crenshaw Blvd. (Metro Site), adjacent to the K Line Expo/Crenshaw Station in the City of Los Angeles (Attachment A - Site Map) in accordance with the Summary of Key Terms and Conditions (Attachment B) and upon receipt of concurrence by the Federal Transit Administration (FTA); and

- B. FINDING the Project complies with the requirements of the California Environmental Quality Act (CEQA) for using a Sustainable Communities Environmental Assessment (SCEA) as authorized pursuant to Public Resources Code Section 21155.2(b), which is consistent with the Environmental Studies and Reports set forth in Attachment C, making the CEQA findings set forth further below (CEQA Findings) and authorizing the CEO or designee to file a Notice of Determination for the Project in accordance with said findings by the Metro Board of Directors (Metro Board).

Attachments: [Attachment A - Site Map](#)
 [Attachment B - Summary of Key Terms and Conditions](#)
 [Attachment C - Environmental Studies and Reports](#)
 [Attachment D - Site Plan and Renderings](#)
 [Presentation](#)

PLANNING AND PROGRAMMING COMMITTEE MADE THE FOLLOWING RECOMMENDATION (3-0):

8. **SUBJECT: ADOPTION OF THE PROJECT PRIORITIZATION FRAMEWORK FOR THE 2025 SCAG CMAQ/STBG CALL FOR PROJECTS**

[2025-0040](#)

RECOMMENDATION

AUTHORIZE the CEO or their designee to submit to SCAG the Project Prioritization Framework Metro will use to evaluate and rank projects for Los Angeles County as part of the 2025 SCAG CMAQ/STBG Call for Projects.

Attachments: [Presentation](#)

PLANNING AND PROGRAMMING COMMITTEE MADE THE FOLLOWING RECOMMENDATION (3-0):

9. **SUBJECT: VERMONT TRANSIT CORRIDOR ENVIRONMENTAL AND PLANNING STUDY**

[2025-0044](#)

RECOMMENDATION

CONSIDER:

- A. RECEIVING AND FILING the Vermont Transit Corridor environmental study findings as per Senate Bill 922 Statutory Exemption requirements;
- B. APPROVING the proposed Vermont Transit Corridor Project, a new 12.4 -mile at-grade, side-running bus rapid transit (BRT) line with 26 stations at 13 intersection locations (Attachment A), as the Locally Preferred Alternative (LPA);
- C. APPROVING the finding that the Project is statutorily exempt from CEQA under Section 21080.25(b); and
- D. AUTHORIZING the Chief Executive Officer to file a CEQA Notice of Exemption (NOE) for the Project with the Los Angeles County Clerk and the Governor's Office of Planning and Research.

-
- Attachments:** [Attachment A - Map of Proposed Project with Station Locations](#)
[Attachment B - Map of Vermont Transit Corridor](#)
[Attachment C - September 2022 Board Motion](#)
[Attachment D - Map of Vermont Corridor EFCs](#)
[Attachment E - Community Engagement Activities](#)
[Attachment F - December 2024 Public Meeting Details](#)
[Presentation](#)

PLANNING AND PROGRAMMING COMMITTEE MADE THE FOLLOWING RECOMMENDATION (3-0):

10. SUBJECT: MAJOR CAPITAL PROJECT GRANTWRITING [2025-0052](#)

RECOMMENDATION

AUTHORIZE the Chief Executive Officer to award a firm fixed unit rate Contract No. PS125381000 to Capitol Government Contract Specialists for Major Capital Project grantwriting services to support Board priorities, in an amount Not-to-Exceed (NTE) \$6,332,734 for a two-year base period, with one, two-year option in the amount of \$6,287,602, for a total NTE amount of \$12,620,336, effective April 7, 2025, subject to resolution of any properly submitted protest(s), if any.

- Attachments:** [Attachment A - Procurement Summary](#)
[Attachment B - DEOD Summary](#)
[Presentation](#)

CONSTRUCTION COMMITTEE MADE THE FOLLOWING RECOMMENDATION (4-0):

11. SUBJECT: METRO CENTER PROJECT CLOSE-OUT [2024-1164](#)

RECOMMENDATION

AUTHORIZE an increase to the Life of Project budget in the amount of \$13,000,000 from \$143,688,310 to \$156,688,310 for the Metro Center Project to fully resolve all claims and complete the close-out of the Project.

- Attachments:** [Attachment A - Projected Breakdown of Cost Allocation](#)
[Attachment B - Funding and Expenditure Plan](#)
[Presentation](#)

CONSTRUCTION COMMITTEE MADE THE FOLLOWING RECOMMENDATION (4-0):

- 12. SUBJECT: ZERO EMISSION BUS (ZEB) CHARGING INFRASTRUCTURE FOR DIVISIONS 18 & 7** [2024-1073](#)

RECOMMENDATION

CONSIDER:

- A. FINDING that authorization of the use of alternative delivery methods, including Progressive Design Build Operate Maintain (PDBOM), pursuant to Public Utilities Code Section 130242 (b), will achieve integration of design, project works, and operations and maintenance of charging equipment in an efficient manner for ZEB Charging Infrastructure Projects at Divisions 18 & 7; and
- B. APPROVING a competitive solicitation of a PDBOM contract to achieve the proposed design approach, specific project features and functions, and other project criteria in addition to price, pursuant to Public Utilities Code 130242 (e).

(REQUIRES TWO-THIRDS VOTE OF THE FULL BOARD)

Attachments: [Attachment A - Zero Emission Buses Board Motion 31.1 Presentation](#)

FINANCE, BUDGET, AND AUDIT COMMITTEE MADE THE FOLLOWING RECOMMENDATION (4-0):

- 14. SUBJECT: INVESTMENT POLICY** [2025-0043](#)

RECOMMENDATION

CONSIDER:

- A. ADOPTING the Investment Policy in Attachment A;
- B. APPROVING the Financial Institutions Resolution authorizing financial institutions to honor signatures of LACMTA's Officials in Attachment B; and
- C. DELEGATING to the Treasurer or their designees, the authority to invest funds for a one-year period, pursuant to California Government Code ("Code") Section 53607.

Attachments: [Attachment A - Investment Policy-Redline](#)
[Attachment B - Financial Institutions Resolution Presentation](#)

FINANCE, BUDGET, AND AUDIT COMMITTEE MADE THE FOLLOWING RECOMMENDATION (4-0):

15. SUBJECT: WEB PLATFORM DEVELOPMENT SERVICES

[2024-1163](#)

RECOMMENDATION

AUTHORIZING the Chief Executive Officer to execute Modification No. 2 to Contract No. PS87947000 with Exemplifi, LLC in the amount of \$400,000 increasing the Not-to-Exceed (NTE) contract value from \$550,000 to \$950,000, and extend the period of performance from August 31, 2025 to June 30, 2026 to continue providing essential digital maintenance and development support for Metro.net and standalone websites (The Source, El Pasajero, and art.metro.net).

Attachments: [Attachment A - Procurement Summary](#)
[Attachment B - Contract Modification/Change Order Log](#)
[Attachment C - DEOD Summary](#)
[Presentation](#)

OPERATIONS, SAFETY, AND CUSTOMER EXPERIENCE COMMITTEE MADE THE FOLLOWING RECOMMENDATION (4-0):

20. SUBJECT: METRO B AND D LINES UNINTERRUPTIBLE POWER SUPPLY BATTERIES

[2024-1128](#)

RECOMMENDATION

AUTHORIZE the Chief Executive Officer to amend Contract No. OP44570-2000B with Skyler Electric Company, Inc., in the amount of \$1,403,491 for Task Order No. 9, to provide Uninterruptible Power Supply (UPS) Batteries for Metro B and D Lines, increasing the cumulative Not-to-Exceed (NTE) contract amount from \$3,468,400 to \$4,871,891.

Attachments: [Attachment A - Procurement Summary](#)
[Attachment B - Task Order Log](#)
[Attachment C - DEOD Summary](#)
[Presentation](#)

OPERATIONS, SAFETY, AND CUSTOMER EXPERIENCE COMMITTEE MADE THE FOLLOWING RECOMMENDATION (4-0):

- 21. SUBJECT: COUNTYWIDE TRANSIT SIGNAL PRIORITY (TSP) CLOUD SOLUTION** [2025-0045](#)

RECOMMENDATION

AUTHORIZE the Chief Executive Officer to award a 30-month, firm-fixed-price Contract No. PS125493000 to JMDiaz, Inc., for the design, development, and implementation of a cloud-based Transit Signal Priority (TSP) system on portions of the NextGen Tier One network in the County of Los Angeles in the amount of \$2,443,389, subject to the resolution of any properly submitted protest(s), if any.

Attachments: [Attachment A - Procurement Summary](#)
[Attachment B - DEOD Summary](#)
[Attachment C - Countywide TSP Program Corridors](#)

OPERATIONS, SAFETY, AND CUSTOMER EXPERIENCE COMMITTEE MADE THE FOLLOWING RECOMMENDATION (3-1):

- 22. SUBJECT: PEST AND BIRD CONTROL SERVICES** [2025-0160](#)

RECOMMENDATION

AUTHORIZE the Chief Executive Officer (CEO) to award a firm fixed unit rate Contract No. OP48505(2)0008370 to CDS Services, Inc. DBA Legion Pest Management, for pest and bird control services throughout Metro's bus and rail facilities, rail cars, and non-revenue vehicles, in the Not-To-Exceed (NTE) amount of \$2,887,332 for the three-year base period and \$1,925,728 for the two-year option, for a combined NTE amount of \$4,813,060, effective May 5, 2025; subject to the resolution of any properly submitted protest(s), if any.

Attachments: [Attachment A - Procurement Summary](#)
[Attachment B - DEOD Summary](#)
[Presentation](#)

OPERATIONS, SAFETY, AND CUSTOMER EXPERIENCE COMMITTEE MADE THE FOLLOWING RECOMMENDATION (4-0):

- 23. SUBJECT: METRO AGENCYWIDE FURNITURE AND MOVING SERVICES** [2025-0071](#)

RECOMMENDATION

AUTHORIZE the Chief Executive Officer to award a five-year, Indefinite Delivery/Indefinite Quantity (IDIQ) Contract No. PS125302000, for furniture, space planning, and installation services, to M3 Office, Inc., for a Not-to-Exceed (NTE) amount of \$3,475,000.00 for the three-year base period and \$1,075,000.00 for each of the two, one-year options, for a combined total of \$5,625,000.00 effective April 1, 2025, subject to the resolution of any properly submitted protest(s), if any.

Attachments: [Attachment A - Procurement Summary](#)
[Attachment B - DEOD Summary](#)
[Presentation](#)

OPERATIONS, SAFETY, AND CUSTOMER EXPERIENCE COMMITTEE MADE THE FOLLOWING RECOMMENDATION (4-0):

- 24. SUBJECT: METRO BIKE SHARE** [2025-0096](#)

RECOMMENDATION

AUTHORIZE the Chief Executive Officer (CEO) to:

- A. EXECUTE Modification No. 18 to Contract No. PS272680011357 with Bicycle Transit Systems, Inc. (BTS) in the amount of \$8,357,384 to continue Metro Bike Share (MBS) program services increasing the total contract value from \$116,292,084 to \$124,649,468 and extend the period of performance by a total of 7 months from April 30, 2025 through November 30, 2025, inclusive of a base period of four months and three, one-month options; and
- B. EXECUTE individual contract modifications within the Board approved contract modification authority.

Attachments: [Attachment A - Board Motion Item No. 41](#)
[Attachment B - Procurement Summary](#)
[Attachment C - Contract Modification/Change Order Log](#)
[Attachment D - DEOD Summary](#)
[Presentation](#)

OPERATIONS, SAFETY, AND CUSTOMER EXPERIENCE COMMITTEE MADE THE FOLLOWING RECOMMENDATION AS AMENDED (4-0):

29. SUBJECT: STATION ACTIVATION MOTION

[2025-0217](#)

RECOMMENDATION

APPROVE Motion by Yaroslavsky, Bass, Dupont-Walker, Sandoval and Mitchell that the Board direct the Chief Executive Officer to:

- A. Create a pilot station activation program to help Metro reimagine and determine how to elevate the experience of our transit riders and the surrounding communities, using tools like farmers markets, cultural programming, vending, and community events and report back in 3 months on the progress. The plan should also identify a rapid deployment that can support Purple Line Extension Section 1 station openings;
- B. Open TAP Card art contest for the new stations, time permitting;
- C. Explore TAP ticket integration art entertainment venues and cultural centers near stations, such as, but not limited to, the El Rey Theater, Pomona Fairplex, LACMA, and the Petersen Museum, building off of the successful Hollywood Bowl pilot; and
- D. Report back on the progress of the actions above on a quarterly basis to the Operations, Safety, and Customer Experience Committee, including progress on the Visionary Seed Fund station activation program at Leimert Park Station, Willowbrook/Rosa Parks Station, and Westlake/MacArthur Park Station.

SUBJECT: GENERAL PUBLIC COMMENT

[2025-0225](#)

RECEIVE General Public Comment

Consideration of items not on the posted agenda, including: items to be presented and (if requested) referred to staff; items to be placed on the agenda for action at a future meeting of the Committee or Board; and/or items requiring immediate action because of an emergency situation or where the need to take immediate action came to the attention of the Committee subsequent to the posting of the agenda.

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

Adjournment



Board Report

File #: 2025-0223, **File Type:** Oral Report / Presentation

Agenda Number: 4.

**REGULAR BOARD MEETING
MARCH 27, 2025**

SUBJECT: REPORT BY THE CHIEF EXECUTIVE OFFICER

RECOMMENDATION

RECEIVE report by the Chief Executive Officer.

Report by the CEO

Item #4



Metro

CHIEF EXECUTIVE OFFICER

March 2025

Update on Elevators & Escalators

FY25 (YTD)

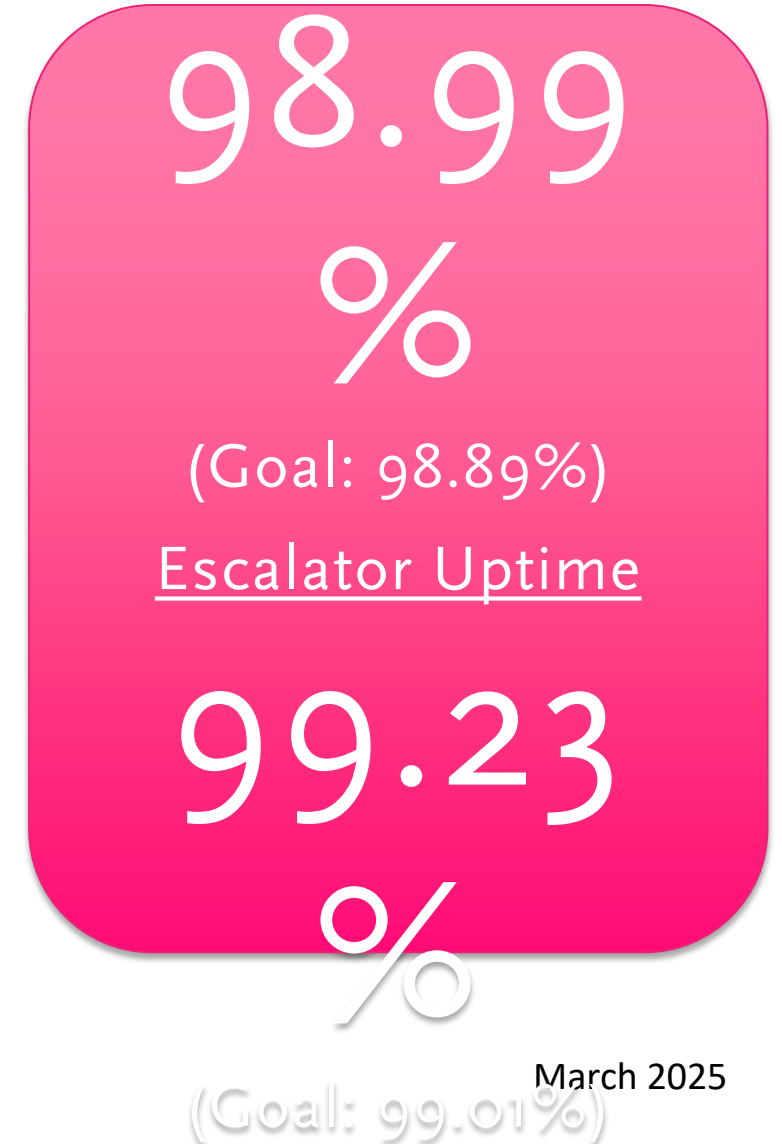
Elevator Uptime

Routine Maintenance Services and Response Time

- 182 elevators and 171 escalators systemwide (will grow 25% by 2027).
- Common causes of downtime include vandalism, aging units (some with obsolete parts), and building design deficiencies leading to water intrusion.
- Metro's vertical transportation maintenance contractor is on the system 365 days a year from 6:00 a.m. to 9:00 p.m. responding within:
 - ✓ 30 minutes between the hours of 6:00 a.m. to 9:00pm.
 - ✓ One (1) hour for emergencies between 9:01 p.m. and 5:59am.

How we Communicate Outages

- Metro Ambassadors (reporting outages & informing customers)
- Train and station audio announcements
- Online notifications (social media, Metro website, & Swiftly API)
- Onsite signs
- Access Services shuttles can be provided to patrons at stations that lack other transit options.



CHIEF EXECUTIVE OFFICER

March 2025

Celebrating Metro Excellence



Gold Tran
Rail MOW Signal Inspector
Employee of the Year



Division 9 (El Monte) Bus Division of the Year



Division 16 (K Line) Rail Division of the Year



Metro

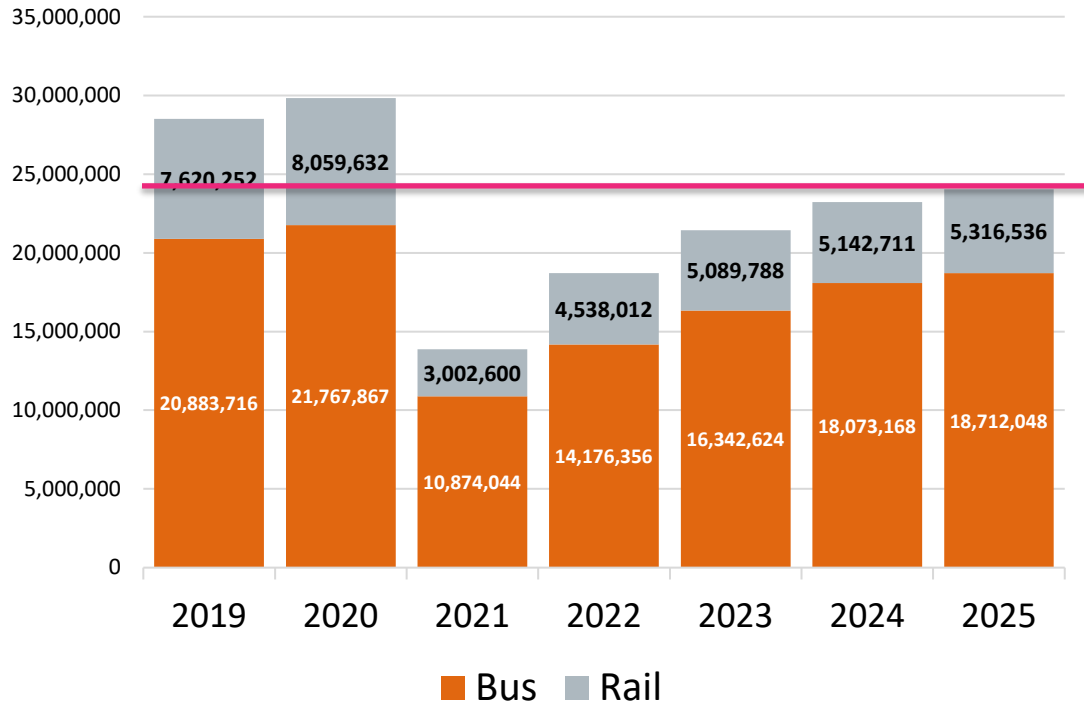
CHIEF EXECUTIVE OFFICER

National Transit Employee Appreciation Day!

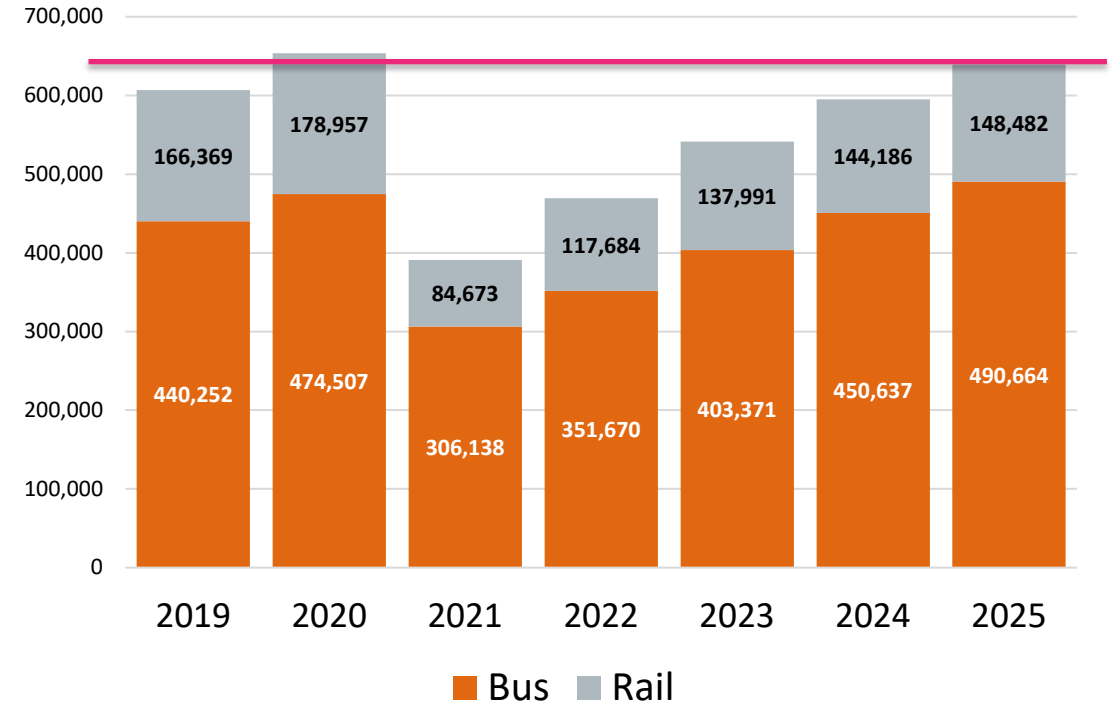


27 Straight Months of Year-over-Year Ridership Growth!

February Monthly Total Ridership



February Average Weekend Ridership



CHIEF EXECUTIVE OFFICER

March 2025

LA County Transit Leadership Summit

2023 Recap: Key Takeaways

Regional Strategies for ZEB and Charging

- Emphasized the importance of regional collaboration to coordinate with utility companies, address charging infrastructure gaps, and support regional transit providers with ZEB-related infrastructure and operations

Advancing Integrated Regional Fare Solutions

- Focused on exploring a regional fare capping concept to improve customer experience, ensure sustainability, and align agency tariff rules. Emphasized simplifying eligibility requirements, coordinating on the Future of TAP, and developing a regional fare mitigation and recovery plan to eliminate barriers for passengers.



Metro

CHIEF EXECUTIVE OFFICER

Thank you, Dr. Geoffrey Martin and Charles Safer!



Dr. Geoffrey Martin
Metro Tunnel Advisory Panel



Charles Safer
Assistant County Counsel
Transportation Division



CHIEF EXECUTIVE OFFICER

March 2025



Board Report

File #: 2025-0036, **File Type:** Informational Report

Agenda Number: 13.

**CONSTRUCTION COMMITTEE
MARCH 19, 2025**

SUBJECT: FEMALE PARTICIPATION IN PROJECT LABOR AGREEMENT/CONSTRUCTION CAREERS POLICY CONSTRUCTION PROJECTS

ACTION: RECEIVE AND FILE

RECOMMENDATION

RECEIVE AND FILE the Construction Workforce Disparity Study report and response to Board Motion 29 (Attachment A).

ISSUE

On February 23, 2023, the Board passed Motion 29 - Attachment A (Directors Horvath, Mitchell, Bass, Solis, Hahn, and Dupont Walker) directing staff to: commission a refresh on the construction workforce disparity study and report back on (1) study findings and recommendations; (2) the potential application of cultural competency requirements in contractor and staff training, as well as similar qualitative metrics that can be used in Metro’s proposal evaluation and contracting processes; and (3) the feasibility of creating bid preference incentives that can be applied to increase the number of women working on Metro funded construction projects, supporting working parents with the availability of dependent care spending account benefits in addition to access to child care; and working with organizations such as Women In Non-Traditional Employment Roles (WINTER) to apply best practices in future contracts. This provides a report back on the aforementioned items.

BACKGROUND

In 2019, Metro undertook a critical study to explore the disparities in the female construction workforce. The study’s findings were reported to the Metro Board in September 2019 . This study assessed female participation levels in various trades and discussed obstacles hindering recruitment and retention of women in construction roles.

Since the initial study, to further advance opportunities for women in construction, Metro has launched several groundbreaking initiatives, including outreach efforts to high schools that promote careers in construction. The Women Breaking Ground website, launched in March 2024, serves as an essential one-stop resource for prospective female workers and has successfully provided information and support to over 900 individuals eager to start a career in construction. Additionally, Metro’s ongoing partnership with Women in Non-Traditional Employment (WINTER), a nonprofit organization dedicated to workforce development for women, reinforces our commitment to this

cause by offering employment assistance to its graduates.

In September 2023, staff provided an update to Metro's Board on the progress of the study. This update included a timeline for engaging a third-party consultant, the procurement process, as well as details regarding contract approval and award. Additionally, during the May 2024 PLA/CCP quarterly update report to the Board, staff shared further progress on the study, including the expected report completion date and plans to present the findings in March 2025.

The 2024 Female Construction Workforce Disparity Study analyzed data from 2019-2023 to assess the availability of females in the construction industry, identify barriers, and provide recommendations to increase females in the construction trades.

DISCUSSION

Metro is unwavering in its commitment to empowering women in the construction industry through robust, results-driven initiatives. Programs such as Women Build Metro LA (WBMLA), the implementation of a report card system to measure female participation among Metro's PLA/CCP contractors, and the Women in the Trades Resource Guide exemplify Metro's leadership in recruiting, employing, and retaining women in this critical field.

Construction Workforce Disparity Update: Key Findings and Strategic Recommendations

In April 2024, Metro commissioned a "Female Construction Workforce Disparity Study" (study) to determine the availability and participation of female workers to meet the demand for future infrastructure projects in support of Metro's projects, including others throughout the Los Angeles Region (Attachment B). The study includes an overview of the current state of the construction workforce, including forecasted workforce supply and demand in the region, with a focused look on the availability of women in the skilled trades. Additionally, the study includes a landscape scan of initiatives from regional agencies and organizations, such as Los Angeles World Airports (LAWA) and Women in Non-Traditional Employment Roles (WINTER), that are being conducted to recruit and retain female workers in the trades.

As outlined in the study, female workers remain significantly underrepresented across regional infrastructure projects throughout Los Angeles County and the Greater Los Angeles Area. As illustrated in Figure ES-1(Female Participation on Construction Projects) between the study period of 2019-2023, the average participation on Metro construction projects was 3.6% compared to 1.9% of the Greater LA Area.

As the only agency in Los Angeles County to establish a 6.9% female participation goal within its Project Labor Agreement/Construction Careers Policy, Metro is setting a precedent for meaningful workforce inclusion. This commitment highlights the importance of diversity in our workforce and paves the way for more significant opportunities for women in construction and related fields.

It is noteworthy to mention that female participation in three trades is above the regional average: surveyors, inspectors, and teamsters. These trades are not as physically demanding in nature, which

leads more women to join.

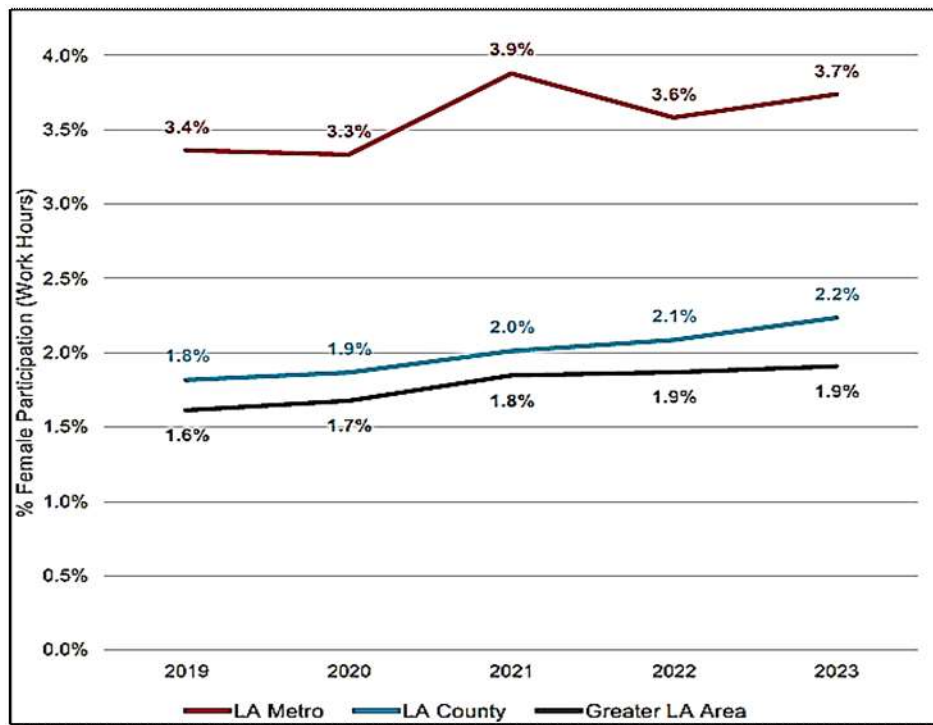
During the study period, due to the increase of construction activities within the LA Region, there were increased options for female workers, which led to a dip in the share of Metro female work hours from 24.6% to 17.5%. Due to staff’s outreach activities, collaboration with the LA/OC Building and Construction Trades Council, and Jobs Coordinators, Metro was able to achieve a much higher female participation compared to the Greater LA Area.

Looking forward, with the advancement of construction on major projects, such as the East San Fernando Valley light rail transit project and the Southeast Gateway Line will increase the demand for construction workers.

Key Findings:

- Between 2019 and 2023, Metro’s female participation averaged 3.6%, exceeding LA County’s 2.2% and the Greater LA Region’s 1.9%, which includes Los Angeles, Orange, Riverside, San Bernardino, and Ventura counties.

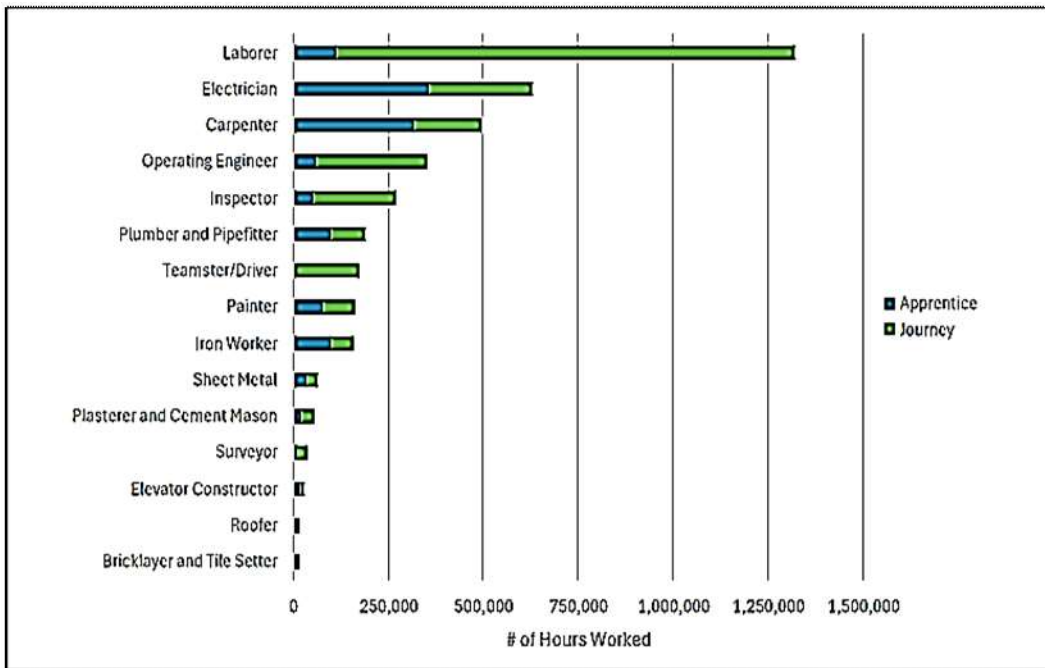
Figure ES-1: Female Participation on Construction Projects (LA Metro, LA County and Greater LA Area)



- The trades with the highest utilization rate of estimated Female Construction Work Hours (Figure ES-2), including both journey workers and apprentices in the Greater LA Area, were Laborers, Electricians, Carpenters, and Operating Engineers.

Figure ES-2: Female Work Hour Utilization on Construction Projects at Metro and in the Greater LA

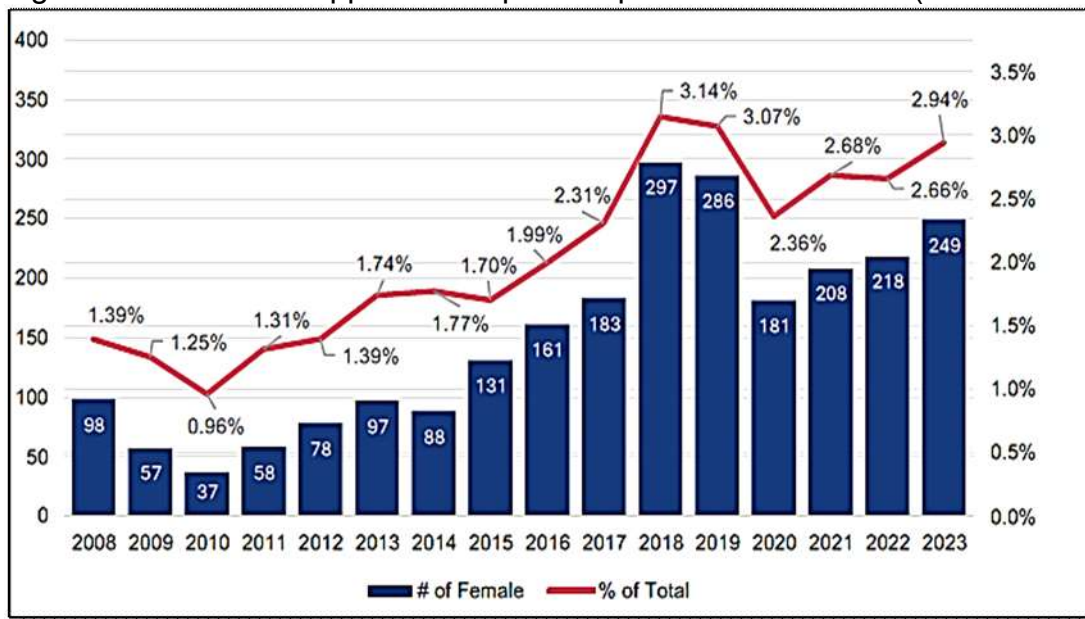
Area by Trade (2019-2023)



- Female participation (Figure ES-8 Female Apprenticeship Participation in Greater LA) in

apprenticeships has been on a positive trend through 2019 but decreased significantly in 2020. From 2020 to 2023, the female apprentices have been trending positively but have not reached pre-pandemic levels.

• Figure ES-8: Female Apprenticeship Participation in Greater LA (Start Year 2008-2024)



- The availability of female construction workers has been impacted by a nearly 10% decrease in younger female workers, while the share of older female workers has increased by over 10%. This underscores the urgent need for targeted outreach and media campaigns to attract young women to construction careers.
- Systemic barriers, including childcare accessibility, reliable transportation, and supportive work environments, continue to hinder women’s retention and career advancement in construction.

The analysis indicated that, under moderate growth, Metro could achieve a 5% female participation rate by 2043, while rapid supply growth could reach a 6.9% rate by 2040. These projections depend on ongoing efforts to increase female participation in the construction industry.

Recommendations:

The study outlines additional recommendations for consideration based on the findings outlined in the report and a review of the best practices in the construction industry. The recommendations were cultivated for Metro to consider creating stronger employer demand for women on construction projects and can be advanced within the near term.

1. Strengthen Accountability on Female Hiring Goals

- a. Require contractors to provide documented evidence of good-faith efforts in meeting female participation goals.
- b. Foster collaboration between contractors, compliance teams, and oversight committees to ensure accountability.
- c. Expand partnerships with community organizations and training providers to support inclusive hiring practices.

2. Invest in Supportive Services, Including Childcare

- a. Address childcare accessibility as a major barrier to long-term employment.
- b. Develop solutions to mitigate the "benefits cliff" that disqualifies low-income apprentices from public assistance once they earn higher wages.
- c. Explore opportunities to expand childcare options and reduce waitlists in the Greater LA Region.

3. Establish a Regional Collaborative for Systemic Change

- a. Facilitate a joint effort among the region's public agencies, trade unions, and workforce development organizations to reduce barriers for women in apprenticeships and create further career opportunities.
- b. Develop a strategic action plan to increase female participation through targeted outreach, additional supportive services, and shared resources.
- c. Introduce a focused social media campaign, *Built By Her*, designed to highlight opportunities for women and girls in construction while promoting mentorship. This initiative aims to inspire and engage a broader audience, encouraging more individuals to explore careers in the field and strengthening the industry's talent pipeline with greater diversity.

Metro will lead the implementation of these recommendations through a regional collaborative approach. In partnership with the Los Angeles County Department of Economic Opportunity (DEO), LA/OC Building and Construction Trades Council, union trades, other public agencies, and industry stakeholders, Metro will convene a roundtable discussion to develop a strategic action plan. To further bolster efforts, Metro will host a Women in the Trades Regional Summit to bring together public agencies, trade unions, workforce boards, and academic institutions to drive innovation and commitment to female workforce participation. Additionally, Metro will establish a Construction Female Advisory Group composed of experienced women in the trades to provide mentorship, share best practices, and dismantle systemic barriers in the field.

Additionally, Metro has already taken significant steps to advance the study's recommendations, demonstrating its commitment to breaking down barriers for women in the construction industry and fostering a more inclusive workforce.

- Metro has engaged in discussions with the Association of General Contractors - Los Angeles Region (AGC-LA) to participate in a regional collaboration focused on developing a strategic action plan to address challenges faced by women in construction.
- Metro has partnered with the Los Angeles County Justice Care and Opportunity Department (JCOD) and Women in Non-Traditional Employment Roles (WINTER) to sponsor an all-female Pre-Apprentice Construction Training pilot program. This program, set to launch in Spring 2025 at the JCOD Calabasas campsite, will benefit from WINTER's Equal Representation in Construction Apprenticeship (ERiCA) grant, which provides critical supportive services for participants.
- Metro is also working closely with the Los Angeles County Department of Economic Opportunity (DEO) to establish a regional cohort of agencies that will lay the groundwork for the Workforce Subcommittee for Infrastructure Los Angeles. This subcommittee will focus on workforce development strategies to support infrastructure projects across the region.
- To further drive awareness and action, Metro has distributed the Female Construction Workforce Disparity Study to public agencies, community-based organizations, and industry stakeholders, ensuring a broader understanding of the urgent need to increase female participation in construction.

Metro has received support letters (Attachment C) from the LA/OCBCTC, DEO, and the Los Angeles Workforce Development Department expressing their support for the regional approach and their commitment to participating in the efforts.

Enhancing Cultural Competency Standards and Implementation

The study recommends refining Metro's Cultural Competency Plan requirements by:

- Establishing clear community benefit and workforce equity components.
- Ensuring workforce development activities align with Metro's broader workforce equity goals.

Metro will strengthen its Cultural Competency Plan requirements to explicitly integrate Community Benefits and Workforce Equity components. These enhancements will include targeted staff training to foster a more inclusive work environment for women and reinforce Metro's commitment to gender equity in construction. Additionally, Metro's Project Labor Agreement/Construction Careers Policy already mandates that prime contractors submit an Employment Hiring Plan outlining their strategy to meet workforce requirements.

Feasibility of Bid Preferences to Boost Women's Participation in Metro Construction

Metro has explored the feasibility of implementing bid preferences to promote female participation. However, Proposition 209 prohibits preferential treatment based on sex, race, or ethnicity in public contracting. Proposition (Prop.) 209, passed by California voters in 1996, states that the state and local public agencies, like Metro, shall not discriminate against, or grant preferential treatment to, any individual or group on the basis of race, sex, color, ethnicity, or national origin in the operation of public employment, public education, or public contracting. California courts have consistently held that state and local public agency policies and procedures that give special advantages to minorities and women violate this constitutional prohibition. While Metro cannot implement direct bid preferences, the agency will continue employing robust outreach strategies to increase participation within the parameters of existing law.

Additionally, Metro is evaluating ways to incorporate commitments that align with workforce initiatives for RFP procurements. This will reinforce the importance of proactive efforts by our contractors in ways that increase the number of women in the field on our projects.

IMPLEMENTATION OF STRATEGIC PLAN GOALS

Metro's Project Labor Agreement/Construction Careers Policy (PLA/CCP) supports strategic plan goal #3 to enhance communities and lives through mobility and access to opportunity.

EQUITY PLATFORM

Metro has continued ongoing efforts undertaken by staff to increase female participation, including outreach to women in construction to obtain insight and best practices for contractors and female workers in the construction industry. In addition, Metro helps the Construction Building Trades unions to increase their female membership by encouraging Metro contractors to hire/sponsor females into the construction trades and working with Women and Girls Governing Council (WGGC) to continuously uplift women into the construction industry.

Conducting the study has given staff additional information on the makeup of female worker representation across the Greater LA Region and has assisted staff in recognizing barriers to recruitment and retention, as noted above. Utilizing the study and considering the recommendations will help build towards Metro's goal of diversifying the construction workforce, increasing the female utilization on Metro's major capital construction projects as Metro prepares for the upcoming Olympics in 2028, and will bring increased awareness to the discrepancy of female worker representation for other public partners in the Greater LA Region.

VEHICLE MILES TRAVELED OUTCOME

VMT and VMT per capita in Los Angeles 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.* Metro's Board-adopted VMT reduction targets align with California's statewide climate goals, including achieving carbon neutrality by 2045. To ensure continued progress, all Board items are assessed for their potential impact on VMT.

While this item does not directly encourage taking transit, sharing a ride, or using active transportation, it is a vital part of Metro operations, conducting the Female Construction Workforce Disparity Study has given staff additional information on the makeup of female worker representation across the Greater LA Region and has assisted staff in recognizing barriers to recruitment and retention. Utilizing the study and considering the recommendations will help build towards Metro's goal of diversifying the construction workforce, increasing the female utilization on Metro's major capital construction projects. Because the Metro Board has adopted an agency-wide VMT Reduction Target, and this item generally supports the overall function of the agency, this item is consistent with the goals of reducing VMT.

*Based on population estimates from the United States Census and VMT estimates from Caltrans' Highway Performance Monitoring System (HPMS) data between 2001-2019.

NEXT STEPS

Staff will take the following actions to expand opportunities for women in the construction industry:

- **Expand the Cultural Competency Plan requirement** to integrate Community Benefits and Workforce Equity components. Staff will identify mechanisms to embed workforce commitments-such as increasing female participation-into RFP procurements, ensuring alignment with Metro's broader workforce initiatives.
- **Establish a regional roundtable** with the Program Management Office (PMO), general contractors' associations, contractors, the Los Angeles Department of Economic Opportunity (DEO), LA/OCBCTC, union trades, and other key stakeholders. This forum will develop a strategic action plan to enact meaningful, lasting change in the construction industry.
- **Conduct a Women in the Trades Regional Summit** to bring together public agencies, trade unions, workforce development boards, and academic institutions. The summit will foster collaboration, share best practices, and drive commitments to increase female participation in the construction workforce.
- **Establish a Construction Female Advisory Group** composed of experienced women in the trades. This group will provide mentorship, guidance, and best practices to help dismantle barriers for women in construction, fostering a more inclusive and diverse workforce.
- **Launch a targeted social media campaign (Built By Her)** focused on women, youth, and

mentorship opportunities. This initiative will inspire and engage more individuals to pursue careers in construction, helping to build a stronger and more diverse pipeline of talent.

Staff will provide an update on the progress and development of key recommendations as indicated in this report in 2nd Quarter FY2026.

ATTACHMENTS

Attachment A - Board Motion #29

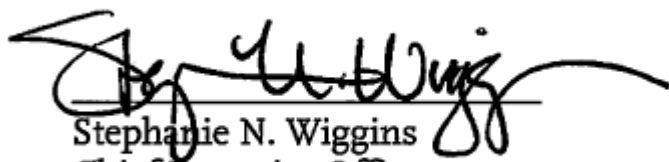
Attachment B - Construction Workforce Disparity Study Report

Attachment C - Support letters

Prepared by: Sidney Urmancheev, Diversity and Economic Opportunity Department Representative (213) 922-5574
Angela Scott, Senior Diversity and Economic Opportunity Department Representative (213) 922-1028
Michael Flores, Manager, Diversity and Economic Opportunity Department (213) 922-6387
Wendy White, Director, Diversity and Economic Opportunity Department (213) 922-2648
Tashai R. Smith, Executive Officer, Diversity and Economic Opportunity Department (213) 922-2128

Reviewed by:

Sharon Gookin, Deputy Chief Executive Officer (213) 418-3101



Stephanie N. Wiggins
Chief Executive Officer

**Board Report**

File #: 2023-0126, **File Type:** Motion / Motion Response**Agenda Number:** 29.

**REGULAR BOARD MEETING
FEBRUARY 23, 2023****Motion by:****DIRECTORS HORVATH, MITCHELL, BASS, SOLIS, HAHN, AND DUPONT-WALKER****Female Participation in Project Labor Agreement/Construction Careers Policy Construction Projects**

Consistent with Metro's Labor Compliance policy and Federal Executive Order 11246 (EO 11246), prime contractors are required to provide worker utilization data by ethnicity and gender. In accordance with EO 11246, Metro's program-wide goal for female participation in Project Labor Agreement / Construction Careers Policy (PLA/CCP) construction projects is 6.9%. As of September 2022, there are thirteen active construction contracts with PLA/CCP requirements, and while all thirteen contractors exceeded the Local Worker/Targeted Goal (40%), a substantial majority are nearing or exceeding the Apprentice Worker (20%) and Disadvantaged Worker (10%) goals, only three of the 13 active projects have met the Agency's Female Utilization Goal (6.9%).

Metro has done tremendous work on the creation of the Female Participation Score Card, releasing notices to prime contractors that are not meeting female participation goals, and with unions and jobs coordinators to refer women that recently completed their work assignments to other active Metro construction projects, amongst other efforts. Staff also continues to focus efforts on strategies to support the outreach, recruitment, and retention of women into the trades focusing on Metro's PLA/CCP construction projects, including working with Laborers Local 300 and the Laborers Training Program to bring the Laborers Tunnel Training Program to Los Angeles County. However, as the COVID-19 pandemic winds down and the need for workers, particularly female workers in the construction trades increases, more can and should be done.

Metro conducts disparity studies to determine if evidence of discrimination exists in the local transportation business marketplace, and to support the use of Disadvantaged Business Enterprise (DBE) and race- and gender-conscious contract goals in its program. The Agency Commissioned BBC Research & Consulting (BBC) to conduct its 2023 Disparity Study, which will focus on construction, professional services, and goods and non-professional services contracts and procurements Metro awarded between January 1, 2016 and December 31, 2021. Metro additionally completed a disparity study assessing the local construction workforce, with a focus on tradeswomen, with data through 2018. A refresh of this report is essential to better understand the current state of the regional construction trades workforce.

SUBJECT: FEMALE PARTICIPATION IN PROJECT LABOR AGREEMENT/CONSTRUCTION CAREERS POLICY CONSTRUCTION PROJECTS MOTION

RECOMMENDATION

APPROVE Motion by Directors Horvath, Mitchell, Bass, Solis, Hahn, and Dupont-Walker that the Board direct the Chief Executive Officer to:

- A. Commission a refresh on the construction workforce disparity study and report back with status updates in each PLA/CCP Quarterly Update to the Board, and report on findings and recommendations of the study in September 2023 (with the understanding that the disparity study may still be in progress).
- B. Report back on the potential application of cultural competency requirements in contractor and staff training related to working with historically underutilized populations in the trades, with a focus on tradeswomen, as well as similar qualitative metrics that can be used in Metro's proposal evaluation and contracting processes; and
- C. Report back on the feasibility of creating bid preference incentives that can be applied to increase the number of women working on Metro funded construction projects, while not compromising the Agency's race conscious contracting goals, including but not limited to: the history of a contractor's compliance with Metro's Female Utilization Goal; supporting working parents with the availability of dependent care spending account benefits in addition to access to child care; and working with organizations such as Women in Non-Traditional Employment Roles (W.I.N.T.E.R) to apply best practices in future contracts etc.

Construction Workforce Disparity Study

**LOS ANGELES COUNTY METROPOLITAN
TRANSPORTATION AUTHORITY (METRO)**

January 17, 2025

TABLE OF CONTENTS

EXECUTIVE SUMMARY	3
1. INTRODUCTION	19
2. STATE OF FEMALE WORKERS IN CONSTRUCTION	26
Public and Private Sector Regional Construction Workforce Availability	29
Public Workforce Hiring Requirements and Goals	34
Public Sector Regional Construction Workforce Availability	37
Projected Female Construction Workforce Availability	48
Projected Female Construction Workforce Demand on Metro Projects.....	51
Projected Female Construction Workforce Gap.....	60
Female Workforce Training Pipeline Assessment.....	73
3. KEY BARRIERS FACING WOMEN IN CONSTRUCTION	92
Barriers to Recruitment.....	93
Barriers to Retention.....	98
4. EMERGING PRACTICES	104
Child Care	104
Changing Culture to Advance Gender Equity	118
Bid Preference and Other Procurement Levers to Advance Gender Diversity in the Construction Industry.....	127
5. RECOMMENDATIONS	137
Strengthen Accountability on Female Hire Goals and Build on What’s Working	137
Invest in Supportive Services with an Effective Child Care Strategy	140
Enhance Procurement Levers to Support Female Hire	143
Establish a Regional Collaborative to Address Systems Change in the Construction Industry	146
Appendix A: Definition of Key Terms.....	151
Appendix B: Construction Workforce Hiring Requirements and Goals across LA County Agencies	153
Appendix C: U.S. Equal Employment Opportunity Commission Guidance on Preventing Harassment in the Construction Industry.....	156
Appendix D: City of Seattle Standard Specifications for Municipal Construction, Acceptable Work Sites	172
Appendix E: Regional Workforce Equity Agreement	174
Appendix F: King County Respectful Worksites Policy	177
Appendix G: Detailed Demand and Gap Analysis Documentation.....	180

EXECUTIVE SUMMARY

This Workforce Disparity Study (*study*) analyzes and aims to expand the availability and utilization of female construction workers on Metro projects and other infrastructure projects in the Greater Los Angeles Area.¹ The study consists of four main sections:

- **State of Female Workers in Construction (Pages 4-14 and 26-91):** This section evaluates female participation in the regional workforce since 2019, estimates female construction worker availability through 2033, and forecasts Metro's progress toward its goal of achieving 6.9% female participation in the workforce. This section also analyzes female participation in construction apprenticeship and pre-apprenticeship programs over the past five years.
- **Key Barriers Facing Women in Construction (Pages 14-15 and 92-103):** This section identifies barriers to female participation in construction, including barriers to recruitment and barriers to retention.
- **Emerging Practices (Pages 104-136):** This section highlights emerging practices for recruiting and retaining female construction workers related to child care, culture change, and procurement levers such as bid preference and cultural competency requirements.
- **Recommendations (Page 15-18 and 137-150):** This section recommends comprehensive strategies for Metro and its public agency partners to enhance female workforce participation.

Increasing the representation of women in construction would help address the industry's critical labor shortages, while providing women with access to high-paying, sustainable careers and building a more inclusive workforce across the region.

Background

In January 2012, Metro adopted a Project Labor Agreement (PLA) and Construction Careers Policy (CCP) Program (PLA/CCP) for projects with contract values over \$2.5 million to encourage construction employment and training opportunities in economically disadvantaged geographic areas in the Greater Los Angeles Area. Metro construction projects covered by the PLA/CCP must comply with certain targeted hiring requirements based on the total number of work hours performed on the project.

¹ The Greater Los Angeles Area includes Los Angeles, Orange, Riverside, San Bernardino, and Ventura counties.

Metro currently implements programs and activities to support the attainment of the 6.9% female participation goal in partnership with the Los Angeles/Orange Counties Building and Construction Trades Council (LA/OCBCTC). These initiatives include hosting job fairs through Women Build Metro LA, providing career coaching through Workforce Initiative Now – LA, track progress through the Female Participation Score Card and Female Worker Transition Tracking Sheet, and conduct other internal and external outreach and monitoring activities. Other agencies and organizations, including LA County Public Works, Los Angeles World Airports (LAWA), and Women in Non-Traditional Employment Roles (WINTER), also lead a variety of construction workforce recruitment, training, and retention activities throughout the Greater Los Angeles Area.

The PLA/CCP encourages contractors to increase female workforce participation to exceed the nationwide female participation goal of 6.9% set by federal Executive Order (EO) 11246. Although this female and minority participation goal is from an Executive Order, compliance is based on good faith efforts because of California’s Proposition 209, which prohibits public agencies to consider the use of race, sex, color, ethnicity, or national origin as criteria in any public contracting or employment decision. In 2019, Metro released a Workforce Disparity Study which analyzed female participation in the construction workforce across the Greater Los Angeles Area and recommended improvements to female worker recruitment and retention. In February 2023, Metro commissioned an update and expansion of the 2019 study.

State of Female Workers in Construction

Female Construction Workforce Availability

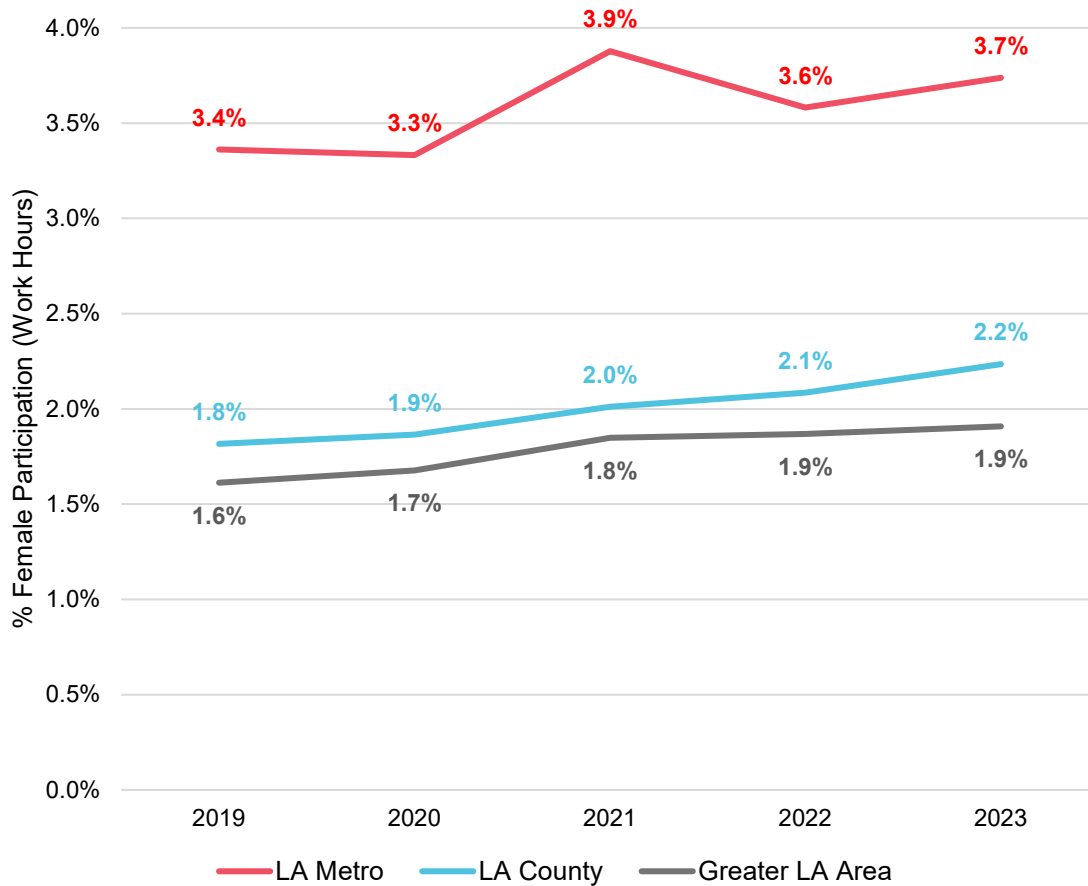
To assess female worker availability, this study analyzes data from LCPtracker, a payroll system used by most public works construction projects in the Greater Los Angeles Area.² LCPtracker provided anonymized data on the number of work hours performed each year between 2019 and 2023 by gender, trade, and apprentice or journey-level status. This study also uses data from the U.S. Census Bureau Quarterly Workforce Indicators (QWI) to analyze age and gender in the construction workforce across both public and private sectors between 2008 and 2023.

- **Metro’s female construction worker utilization rate exceeds the regional average but remains below the 6.9% female participation goal (Figure ES-1).**³ Women performed 3.6% of construction work hours on Metro projects, but only 1.8% of construction work hours on all regional infrastructure projects in the Greater Los Angeles Area from 2019 to 2023. Despite nearly doubling the regional female utilization rate, Metro remains several percentage points below the EO 11246 goal of 6.9% female construction work hours.

² The Greater Los Angeles Area includes Los Angeles, Orange, Riverside, San Bernardino, and Ventura counties.

³ See pages 37-47 for more details on Metro’s female participation rates.

Figure ES-1: Female Participation on Construction Projects (Metro, LA County and Greater LA Area⁴)

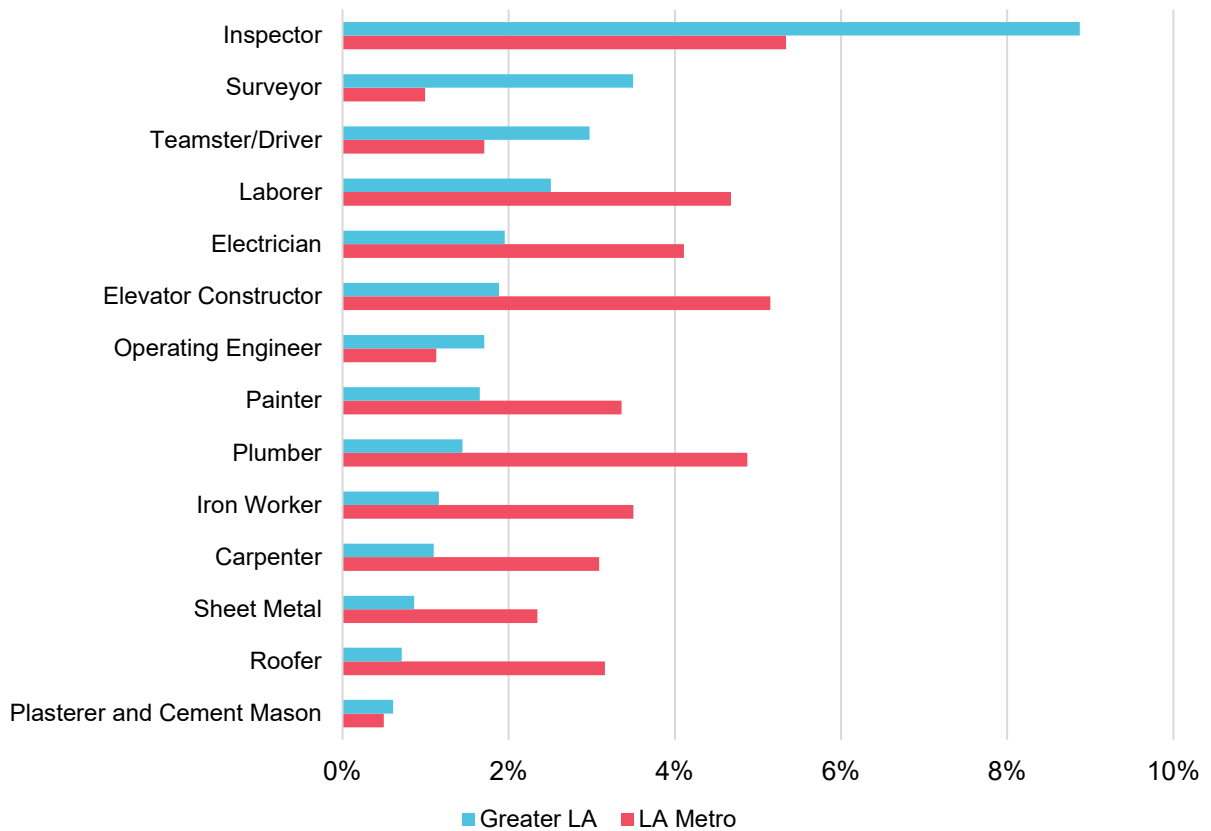


Source: LCPtracker

- **In 9 of Metro’s 14 construction trades, the female utilization rate exceeds the regional average; however, Metro’s female utilization falls short of the 6.9% goal in all 14 trades (Figure ES-2).** Compared to the region overall, Metro projects have higher female participation within the Laborer, Electrician, Elevator Constructor, Painter, Plumber, Iron Worker, Carpenter, Sheet Metal, and Roofer trades. The Inspector, Surveyor, Teamster/Driver, Operating Engineer, and Plasterer and Cement Mason trades have lower female participation on Metro projects than the regional average. The region only meets the 6.9% female utilization goal within the Inspector trade.

⁴ The Greater Los Angeles Area includes Los Angeles, Orange, Riverside, San Bernardino, and Ventura counties.

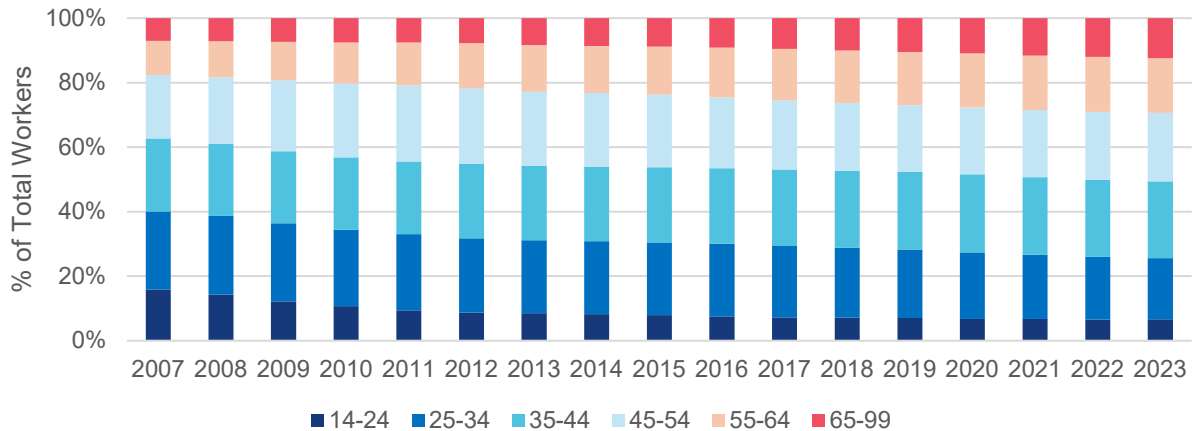
Figure ES-2: Female Work Hour Utilization on Construction Projects at Metro and in the Greater LA Area by Trade (2019-2023)



Source: LCPtracker

- **Over 20% of the region’s female construction workforce, in both private and public sectors combined, is 55 years or older, indicating an overall trend toward an aging workforce (Figure ES-3).** Between 2008 and 2023, the share of younger female construction workers (ages 14 to 24) has declined by nearly 10 percent, while the share of older female construction workers (ages 55 and older) has increased by over 10 percent. To address the challenges of impending retirements, the region must focus efforts on significantly increasing the recruitment and retention of younger female construction workers. This includes expanding on current youth outreach initiatives in schools like Metro and LAWA.

Figure ES-3: Female Construction Workforce in Greater LA Area by Age (2007-2023)



Source: U.S. Census Bureau, Quarterly Workforce Indicators

- **The growth in the region’s construction workforce, in both private and public sectors combined, has fluctuated and slowed in the past five years, particularly among men (Table ES-1).** From 2013 through 2018, the number of women in the overall construction sector increased by 45%, compared to a 33% increase among men. However, from 2019 through 2023 the number of women in the overall construction sector only grew by 8%, while the male construction workforce decreased by 1%.

Table ES-1: Construction Workforce Trend in Greater LA by Gender (2013-2023) ⁵

Year	Total Workers	Female			Male		
		# of Workers	Annual % Growth	% of Total	# of Workers	Annual % Growth	% of Total
2013	281,351	55,267	N/A	20%	226,083	N/A	80%
2014	299,766	60,107	9%	20%	239,656	6%	80%
2015	318,645	65,028	8%	20%	253,616	6%	80%
2016	346,385	71,161	9%	21%	275,227	9%	79%
2017	357,838	74,878	5%	21%	282,957	3%	79%
2018	381,038	80,306	7%	21%	300,730	6%	79%
2019	394,600	83,983	5%	21%	310,618	3%	79%
2020	399,895	85,398	2%	21%	314,499	1%	79%
2021	389,085	85,250	0%	22%	303,837	-3%	78%
2022	395,557	88,236	4%	22%	307,322	1%	78%
2023	396,892	90,556	3%	23%	306,331	0%	77%
10-Yr Growth	41%	64%	N/A	N/A	35%	N/A	N/A

Source: U.S. Census Bureau, Quarterly Workforce Indicators

⁵ This dataset includes all employees of businesses in the Construction Sector as defined by North American Industry Classification Code 23. This definition includes some office workers and others who do not regularly perform construction work as described elsewhere in this study.

- **Despite recent fluctuations in the construction workforce due to external factors, such as the COVID-19 pandemic and associated economic instability, the overall female work hours increased in the public works construction sector over the last five years.**⁶ Although female work hours increased overall from 2019 through 2023, some trades experienced rapid growth while other trades experienced declines in the female workforce (Table ES-2). Based on these trends, the consultant team projected the future female workforce availability using four growth scenarios: Rapid Growth, Moderate Growth, No Growth, and Decline (Figure ES-4).

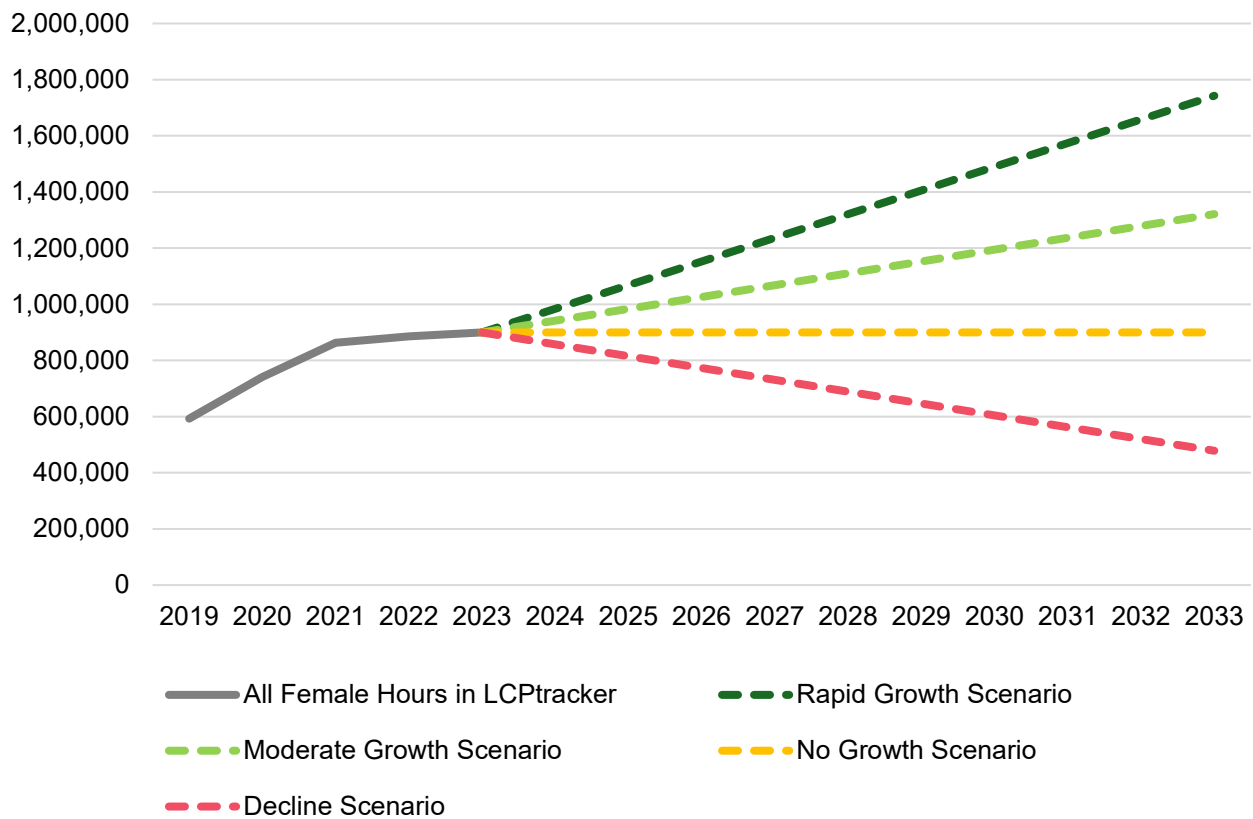
Table ES-2: Female Construction Work Hours by Trade in Greater LA (2019-2023)

Trade	Sum of Total Female Hours Worked					% Change 2019-2023
	2019	2020	2021	2022	2023	
Bricklayer and Tile Setter	3,429	4,177	3,591	3,354	3,088	-9.9%
Carpenter	79,401	104,018	116,537	108,414	87,911	10.7%
Electrician	121,450	110,626	137,719	129,044	131,511	8.3%
Elevator Constructor	3,112	2,160	5,672	9,140	9,344	200.2%
Inspector	15,005	32,645	63,015	81,982	78,680	424.4%
Iron Worker	30,027	45,860	24,907	26,497	31,804	5.9%
Laborer	211,938	289,527	283,627	254,213	281,304	32.7%
Operating Engineer	52,852	50,452	86,169	91,544	72,612	37.4%
Painter	21,600	25,716	34,189	38,632	42,035	94.6%
Plasterer and Cement Mason	7,728	7,666	15,106	15,287	10,369	34.2%
Plumber and Pipefitter	21,432	25,730	27,871	43,595	71,682	234.5%
Roofer	2,185	3,063	3,399	4,060	5,075	132.3%
Sheet Metal	7,560	12,424	13,199	16,377	14,939	97.6%
Surveyor	3,441	9,183	10,519	6,703	6,843	98.9%
Teamster/Driver	11,523	17,446	37,180	56,711	52,587	356.3%
Total	592,684	740,692	862,700	885,554	899,786	51.8%
Annual Percent Change	N/A	25.0%	16.5%	2.6%	1.6%	N/A

Source: LCPtracker

⁶ See Section 2, pages 48-50, for more details on projected female construction workforce availability.

Figure ES-4: Projected Availability of All Female Work Hours (2019-2033)



Source: LCPtracker and Estolano Advisors

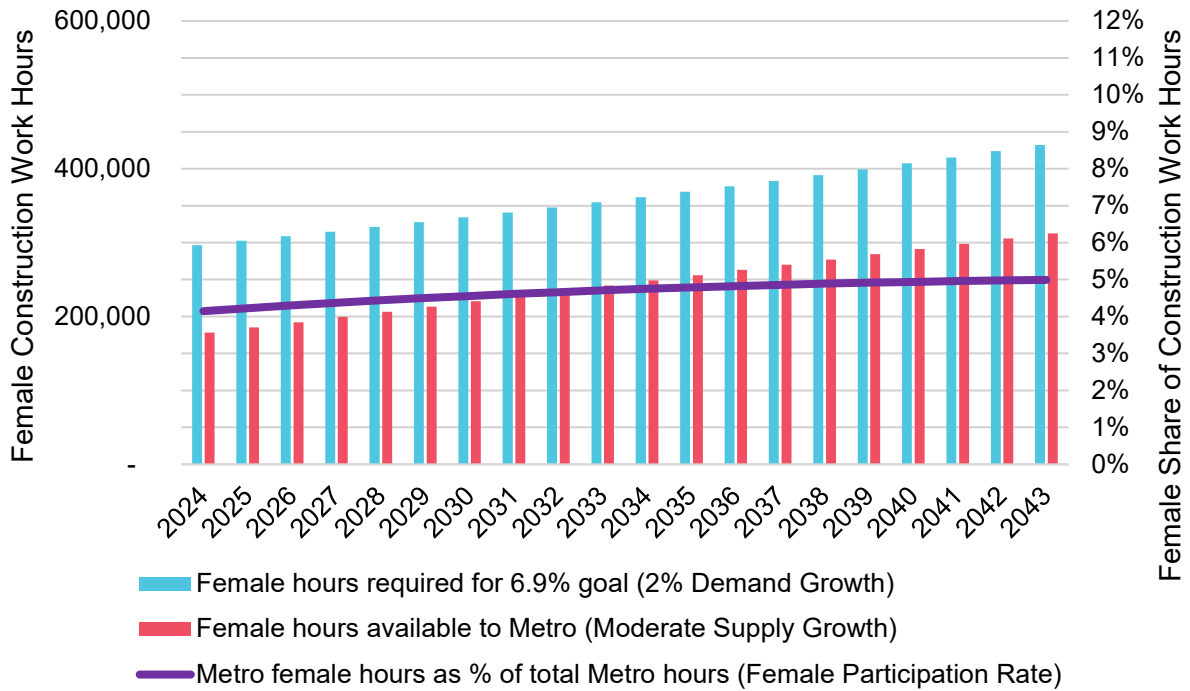
Female Construction Worker Demand and Gap

- **Under a “2% Annual Workforce Demand Growth and Moderate Supply Growth” scenario, Metro’s female construction workforce utilization would remain below 6% of work hours between 2024 and 2043 (Figure ES-5).⁷ Metro can anticipate a 2% annual increase in workforce demand based on historical trends.⁸ Under this demand scenario, female construction worker availability must increase rapidly to meet the 6.9% goal within the next 20 years. Metro’s female construction workforce utilization would reach 6.9% annually by 2040 under a “2% Annual Workforce Demand Growth and Rapid Supply Growth” scenario (Figure ES-6).**

⁷ These utilization scenarios do not include unprecedented events such as pandemics or recessions.

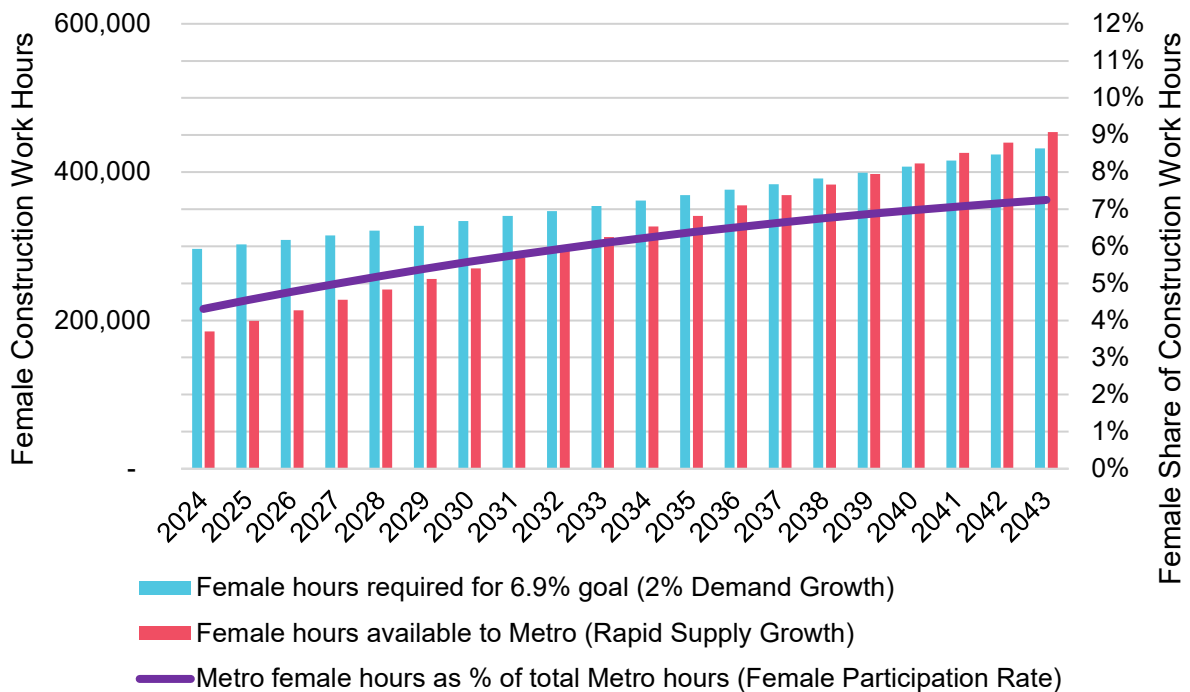
⁸ See Section 2, page 51, for more details on projected construction workforce demand.

Figure ES-5: Projected Female Workforce Utilization on Metro Construction Projects, 2% Demand Growth, Moderate Supply Growth (2024-2043)



Source: LCPtracker, Metro, Estolano Advisors, and ICF

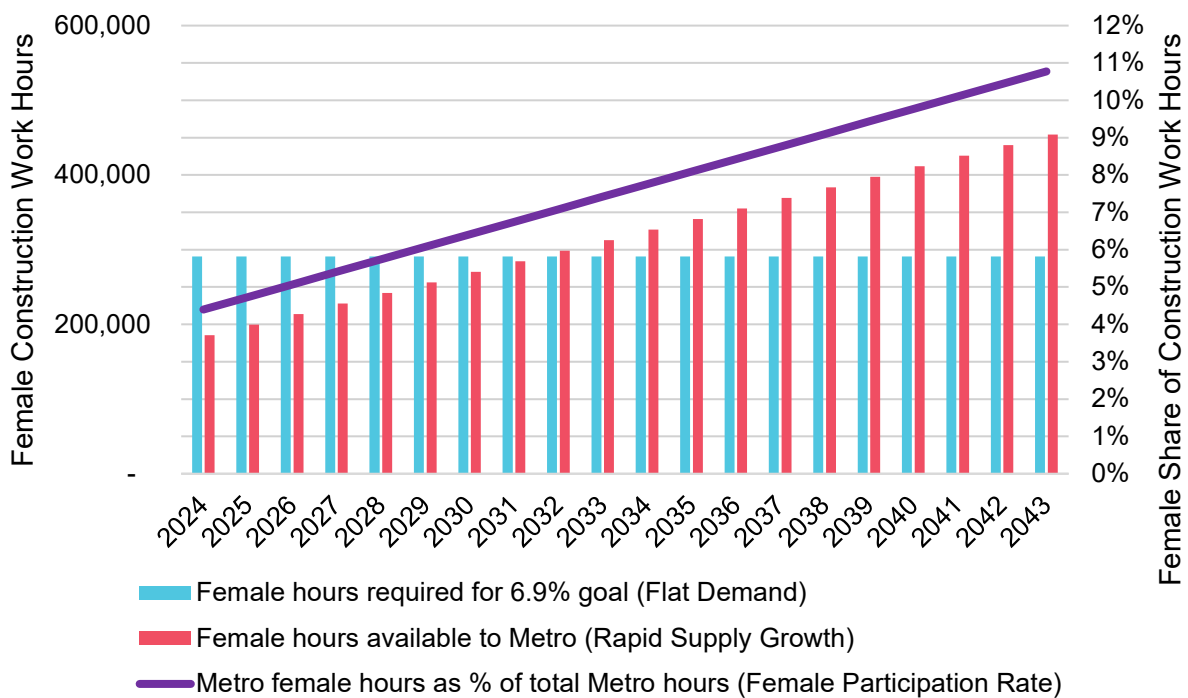
Figure ES-6: Projected Female Workforce Utilization on Metro Construction Projects, 2% Demand Growth, Rapid Supply Growth (2024-2043)



Source: LCPtracker, Metro, Estolano Advisors, and ICF

- **If annual workforce demand is flat (0% growth), Metro could surpass the 6.9% goal for female utilization by 2032 annually under the “Rapid Supply Growth” scenario (Figure ES-7).** However, when including hours from 2012 through 2023, in which female utilization did not exceed 3.6%, the cumulative female utilization would remain below 5% by 2033. Under this “Flat Demand (0% Demand Growth) and Rapid Supply Growth” scenario, the Laborer and Electrician trades would exceed 6.9% female utilization by 2033, but Metro’s other largest trades would fall short without major improvements to female recruitment and retention. Among the next three largest trades, Iron Workers have the highest female utilization projections (3.8% to 6.5%), followed by Carpenters (2.7% to 4.2%) and Operating Engineers (1.5% to 2.5%) across scenarios.

Figure ES-7: Projected Female Workforce Utilization on Metro Construction Projects, 0% Demand Growth, Rapid Supply Growth (2024-2043)

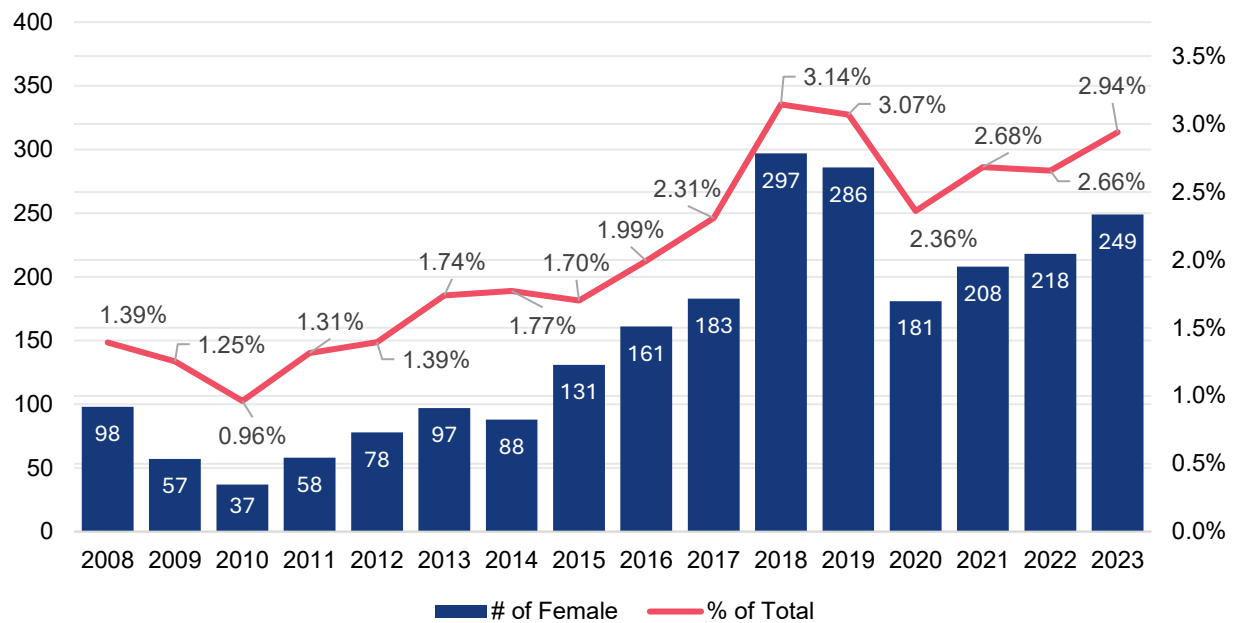


Source: LCPtracker, Metro, Estolano Advisors, and ICF

Female Apprentice Training and Recruitment

- **The number of female apprentices has increased substantially in recent years; however, the region must continue increasing female apprenticeships to meet Metro’s 6.9% female utilization goal.** Annual enrollment of women in building trades apprenticeship programs has more than doubled since 2008 in the Greater Los Angeles Area (Figure ES-8). However, female apprentices still account for less than 3% of all apprenticeships in the Greater Los Angeles Area, and the region’s female apprenticeship participation remains below other regions, such as the San Francisco Bay Area. This trend highlights the need to focus on both female enrollment and retention in apprenticeship programs.

Figure ES-8: Female Apprenticeship Participation in Greater LA (Start Year 2008-2024)

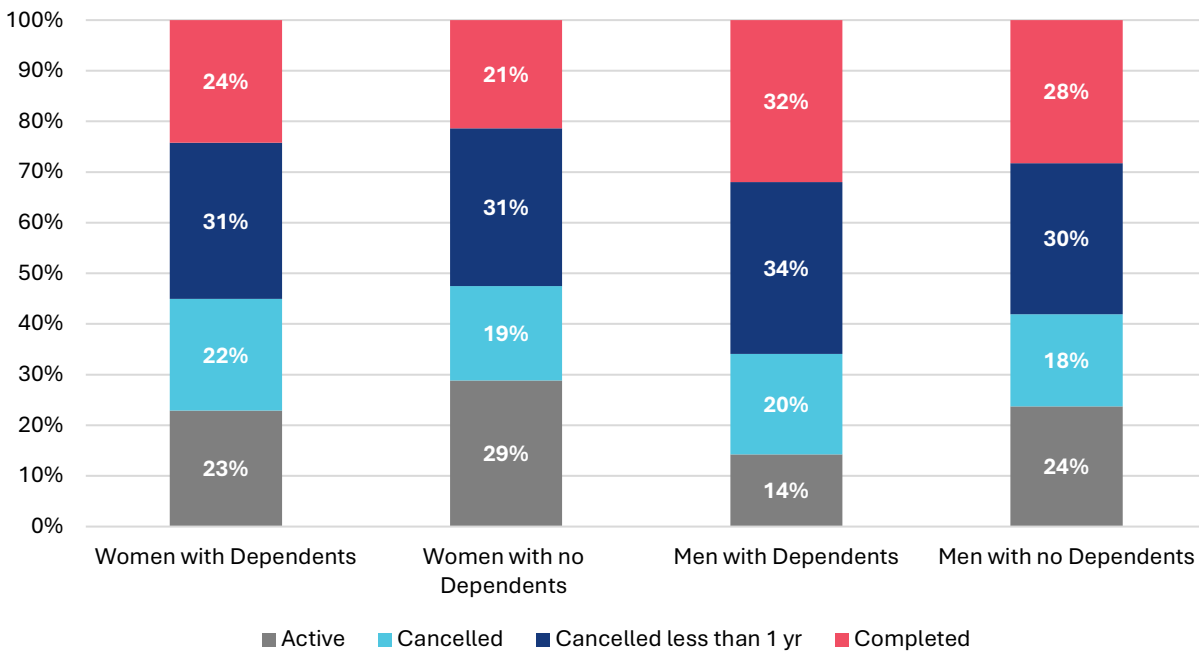


Source: California Department of Industrial Relations Division of Apprenticeship Standards (June 2024)

- **Both male and female⁹ apprentices with dependents are more likely to cancel apprenticeships compared to apprentices without dependents (Figure ES-9).** Male apprentices are 6% more likely to cancel their apprenticeship contracts if they have dependents, and female apprentices are 3% more likely to cancel if they have dependents. The share of active apprentices with dependents is also lower than the share of active apprentices without dependents, implying that apprenticeship programs struggle to retain parents and other caregivers.

⁹ Due to the very small number of workers that selected “Other” or did not respond to the gender identification question (less than 0.1% of all apprentices), the consultant team only analyzed data for “Male” and “Female” in this study.

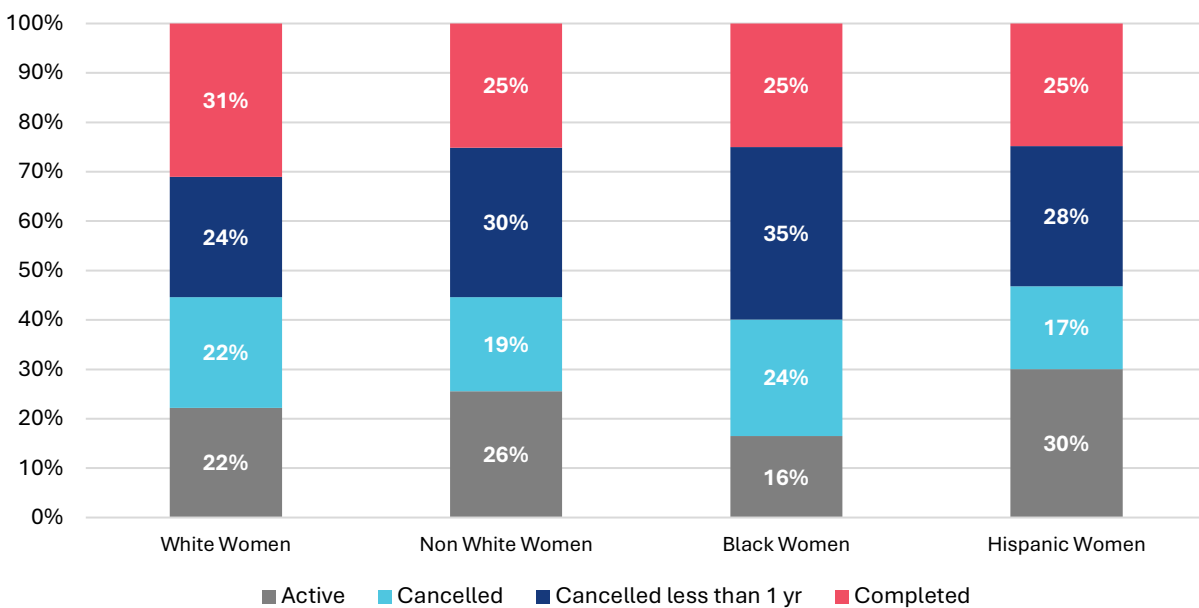
Figure ES-9: Apprentice Status by Gender and Dependent Status (Start Year 2008-2023)



Source: California Department of Industrial Relations Division of Apprenticeship Standards (June 2024)

- **While overall cancellation rates are similar across genders, disparities in apprentice retention rates by race signal inequitable program design and a need for targeted retention efforts.** White women have a 6% higher graduation rate than non-white women in apprenticeship, and Black women are 11% more likely than white women to cancel their apprenticeship within one year (Figure ES-10).

Figure ES-10: Female Apprentice Status by Ethnicity (Start Year 2008-2023)



Source: California Department of Industrial Relations Division of Apprenticeship Standards (June 2024)

- **Gender-specific apprenticeship readiness programs, such as Women in Non-Traditional Employment Roles (WINTER), prepare women to enter union apprenticeship.** Approximately 10% of the 1,622 female apprentices recruited in the Greater Los Angeles Area since 2017 have completed WINTER’s pre-apprenticeship training.

Table ES-3: Female Apprentice Status by Ethnicity (Start Year 2008-2023)

Status	FY 2017-2018	FY 2018-2019	FY 2019-2020	FY 2020-2021	FY2021-2022	FY 2022-2023	FY 2023-2024	Total
# Attended Orientation	130	150	149	270	186	207	323	1,415
Enrolled	70	74	26	30	22	39	55	316
Graduated	65	56	20	26	16	25	43	251
Placed in Union	50	25	11	15	9	20	30	160

Source: WINTER

Barriers for Women in Construction

Barriers to Recruitment

- **Public agencies do not demand enough women workers or female work hours:** Project Labor Agreement projects outline efforts for contractors to address female workforce utilization on Metro projects, but these actions are often not required by other large-scale public sector construction projects in the region. Demand from project owners drives contractors to deploy women workers on jobsites.
- **Lack of social connections limit awareness of construction careers:** Recruitment into construction careers is most commonly done through word of mouth. Women are less likely to receive referrals to careers in the trades.
- **Financial hardship for Pre-Apprentices and Apprentices:** When workers move into apprenticeships, they frequently encounter a “benefits cliff,” where they earn too much to qualify for public assistance but too little to afford child care, housing, and other necessary expenses.

Barriers to Retention: Supportive Services

- **Access to and the availability of child care deter parents from entering and staying in the construction industry:** The limited hours and high costs of child care, and the lack of nearby child care facilities often prevent many parents—both men and women—from completing apprenticeship programs or continuing their careers in construction.

- **Construction workers need access to reliable transportation to travel between various worksites:** Construction workers in the region are required to commute to different worksite locations, and the costs of transportation can be a financial burden. For parents working in construction, the added challenge of commuting to and from child care services before and after work creates an additional barrier to retention.
- **Mental health services are in high demand, especially for women in construction:** The limited availability of mental health services and support groups for female workers may contribute to more burnout and lead to higher dropout rates from apprenticeship programs.

Barriers to Retention: Workplace Culture

- **On-site harassment and a hostile job site culture push women out of construction jobs:** Women in construction continue to face workplace harassment and discrimination, and they frequently experience retaliation after reporting these incidents.
- **Isolation of female workers perpetuates unsafe jobsites:** Women on construction sites are often vastly outnumbered by men, leading many to feel isolated and unsafe due to the lack of other female tradeswomen. This sense of isolation frequently drives women to leave the industry altogether.

Recommendations

Strengthen Accountability on Metro's Female Hire Goals

- **Continue regional leadership in setting goals:** Set clear, measurable goals for female participation on public construction projects and stronger accountability measures for contractors. Encourage other public agencies to set equity standards as a critical element of public contracting. Share best practices regarding growing family-sustaining careers for low-income women workers in the LA region.
- **Strengthen contractor accountability and good faith efforts:** Require contractors to submit records demonstrating their good faith efforts toward meeting female participation goals. Promote effective communication between contractors, agency staff, compliance teams, and oversight committees to support goal attainment. Assist contractors in building partnerships with community organizations and training providers to support inclusive hiring practices.
- **Continue to allocate resources for training and support:** Continue hosting pre-bid orientation sessions and other existing training to support contractors with workforce equity policies and expectations from project initiation and project implementation. Foster a shared understanding among all unions, workforce and community partners.

- **Expand workforce utilization monitoring efforts through existing and new channels:** Expand the existing Labor-Management Committee process to also review project-level female worker utilization rates and engage unions on strategies to address shortfalls and gaps. Enhance the scope and capacity of the existing job site monitoring program to include respectful workplace practices that support the retention of women and other underrepresented workers.
- **Provide financial support for community partners:** Ensure women-serving organizations have a role to play to support contractor and union efforts. Provide necessary funding to those helping place low-income women and people of color on the job sites. Invest in partnerships over the life of projects with prolonged completion periods.

Invest in Supportive Services with an Effective Child Care Strategy

- **Fund child care costs and tuition for early years of apprenticeships:** To address the true cost of child care for apprentices and stabilize support for their families, establish funding for the cost of child care for early year apprentices, especially funding for infants and toddler care. Invest directly in supportive services for apprentices on Metro projects and partner with other regional public project owners to ensure apprentices across the region can access this funding. Building on the successful model of California's Equal Representation in Construction Apprenticeship (ERiCA) grants, this approach would involve joint investments from contractors and unions, providing direct payments to the child care providers of the workers' choice. Also, incentivize local child care providers to expand hours.
- **Establish a child care fund:** Institute a contractual performance requirement to mandate contractors' contributions in a child care fund. This fund will cover child care costs for apprentices in the trades. Co-design fund goals with input from female apprentices and journey-level workers as well tradeswomen-supporting organizations, unions, and child care organizations.
- **Build on existing regional child care systems by partnering with child care organizations, public sector partners and with those engaging providers and workers.** Leverage existing systems and programs to advance its own child care goals. Utilize local initiatives like subsidy programs to grow the supply of child care providers and address the issue of low wages and minimal benefits for child care workers. Collaborate with child care experts, such as the Los Angeles County Child Care Planning Committee, the Policy Roundtable for Child Development, the LA County Office for the Advancement of Early Care and Education, and child care worker union Service Employees International Union (SEIU) Local 99, to co-plan and invest in solutions that expand the regional child care sector.

Enhance Procurement Levers to Support Female Hire

- **Institute new contractor requirements on policies, procedures, and training programs to combat harassment and discrimination in the workplace.** Require contractors to develop a Respectful Workplace Policy posted and made visible at every Metro worksite for the duration of the contract. Require contractors to implement respectful workplace training programs to prepare participants to recognize harassment and discrimination and equip them with tools to intervene when it occurs.
- **Revise Cultural Competency Plan requirement to include distinct Community Benefits and Workforce Equity components:** Should the Cultural Competency Plan requirement become standard practice in Metro's construction procurement process, ensure any workforce development activities funded and implemented through Cultural Competency Plans align with and advance Metro's workforce equity goals and programs. Refine the Cultural Competency Plan framing to establish and clarify distinct community benefit and workforce equity requirements, including a "Community Benefit Component" and a separate "Workforce Equity Component." Responses to the Workforce Equity Component should include a contractor's past experience meeting workforce utilization goals for Metro's and other public projects in the region and describe partnerships, especially with tradeswomen groups, they have built.
- **Make female hire goals an explicit part of Metro's procurement process for Jobs Coordinators:** Before the next Jobs Coordinator solicitation opens, revise the RFIQ to include reference to Metro's female hire goals. In the proposal content and evaluation criteria, incorporate language that speaks to proposer's past experience working with tradeswomen groups and outreach methods used on past projects to promote the recruitment and retention of women.

Establish a Regional Collaborative to Address Systems Change in the Construction Industry

- **Establish a regional collaboration of public agencies and partners interested in increasing the number of women in the construction sector:** Build upon active and proposed multi-jurisdictional initiatives like Infrastructure LA and the City of LA Workforce Infrastructure Network, led by the LA Mayor's Office and the Economic and Workforce Development Department (EWDD), which have established goals to address gender gap in high growth sectors. Use these partnerships to close child care funding gaps and partner with stakeholders to increase outreach efforts. Support the formation a regional woman in trades advisory group to work alongside the regional collaboration.

- **Invest in and grow the regional supply of child care:** Encourage other public agencies to co-invest in child care funding to support apprentices. Engage child care experts and unions to inform them about this fund. Through robust investments, a regional child care fund can help offset start-up costs and facility development expenses for family child care homes and center-based care in child care deserts and help expand hours to serve construction workers.
- **Align demand and supply strategies across jurisdictions and projects to send clear market signals that women belong in the construction sector:** By sharing best practices, aligning recruitment and retention strategies, and co-investing in supportive services, governments across the region will bolster their efforts to diversify the workforce. A coordinated approach will also improve data collection and contractor compliance through better communication and shared tools across jurisdictions.

1. INTRODUCTION

Background

In January 2012, the Los Angeles County Metropolitan Transportation Authority (Metro) adopted a Project Labor Agreement (PLA) and Construction Careers Policy (CCP) Program (PLA/CCP) with the Los Angeles/Orange Counties Building and Construction Trades Council (LA/OCBCTC). Metro's PLA/CCP encourages construction employment and training opportunities for members from economically disadvantaged areas throughout Los Angeles and Orange Counties. The PLA/CCP applies to certain construction projects with a contract value above \$2.5 million. In January 2017, the Metro Board of Directors approved the renewal of the PLA/CCP until 2027.

Under the 2017 PLA/CCP renewal, contractors working on applicable PLA/CCP Metro construction projects must comply with certain targeted hiring requirements based on the total number of work hours performed. To comply with Executive Order 11246, the Metro Board adopted a program-wide goal of a 6.9% female-participation in applicable PLA/CCP covered projects.¹⁰ Executive Order 11246 establishes contractor participation goals for the total hours of minority and female employment and training on federally-funded or federally-assisted construction projects in each construction trade as 6.9%.

Although this female and minority participation goal is from an Executive Order, compliance is based on good faith efforts because of California's Proposition 209, which prohibits public agencies to consider the use of race, sex, color, ethnicity, or national origin as criteria in any public contracting or employment decisions. Therefore, the 2017 PLA/CCP renewal encourages contractors to increase women's workforce participation to meet or exceed the nationwide 6.9% female participation goal. In 2019, Metro staff initiated a workforce disparity study to determine the availability and utilization of female construction workers to meet the demand of future infrastructure projects in the region. This study identified the average female participation rate between 2014 and 2018 on Metro construction projects as 3.5%. Other non-Metro public works construction projects in the region had an average of 1.9% female participation rate during the same period. The top three trades in terms of female participation on Metro projects were: (1) Inspector; (2) Laborer; and (3) Carpenter. The 2019 study suggested Metro's female participation rate is influenced by a shortage of female workers rather than an underutilization of their existing female workforce.¹¹

¹⁰ Metro Project Labor Agreement & Construction Careers Policy Website
<https://www.metro.net/about/placcp/#female-participation>

¹¹ Los Angeles County Metropolitan Transportation Authority. *Metro Workforce Disparity Study*. May 2019, https://media.metro.net/about_us/pla/images/Metro_WDS_Report_2019-0628.pdf.

The 2019 Construction Workforce Disparity Study also identified the following barriers to the recruitment and retention of female workers in the construction industry:

- Lack of Awareness and Exposure to Trades
- Lack of Mentorship and Kinship Networks
- Hiring Practices and Poor-On-The-Job Training
- Hostility and Sexual Harassment
- Scheduling and Child Care

As recommended in the 2019 study, Metro has maintained and expanded women-focused programs such as Women Build Metro LA (WBMLA), the Women in Trades Resource Guide, and Workforce Initiative Now-Los Angeles (WIN-LA) while also developing new workforce programs and services. Upon recognizing that few PLA/CCP projects were meeting the Agency's Female Utilization Goal (6.9%) as of September 2022, Metro Board approved a motion in February 2023 to commission a refresh on the 2019 Workforce Disparity Study.

The purpose of the 2024 Construction Workforce Disparity Study is to provide an overview of the current state of the construction workforce, including forecasting the workforce supply and demand within the Greater Los Angeles Area and identifying the availability of female construction workers to meet demand and participation goals. Additionally, this updated study broadens the research on recruitment and retention barriers by incorporating findings from interviews and emerging practices. It also examines the potential use of cultural competency plan requirements and bid preference incentives as strategies to increase the participation of women in Metro funded construction projects. The 2024 Construction Workforce Disparity Study aims to support Metro's existing race conscious contracting goals with new findings and recommendations.

Current Economic and Workforce Conditions in LA County

While Los Angeles County is steadily recovering from work dislocations and business closures caused by the COVID-19 pandemic, the County now faces other issues such as inflation, population decline, an aging workforce, growing income inequality, limited affordable housing, increased homelessness, increased costs for operating a business, and a struggling commercial real estate market. As such, people of color and vulnerable populations continue to face economic and social disparities. Many residents living in low-income areas in Los Angeles struggle to access high wage jobs in high-growth sectors. Additionally, homelessness continues to disproportionately impact Black, Latino, Indigenous, immigrant, female, and LGBTQ+ communities. Women continue to earn less than their male counterparts in every age group and are more likely to hold jobs paying hourly rates at or below minimum wage.¹² There are current and upcoming opportunities for Los Angeles to support businesses and uplift workers in need.

¹² City of Los Angeles. *Year 25 Annual Plan for Program Year 2024-25 – DRAFT*. Los Angeles Economic & Workforce Development Department, accessed November 12, 2024, https://ewdd.lacity.gov/images/reports/ap25/APy25_draft1PlanOverview.pdf.

For example, there is historic federal funding for infrastructure from the Infrastructure Investment and Jobs Act, Inflation Reduction Act, and CHIPS and Science Act. Additional upcoming federal and state investments are projected to further bolster economic and workforce activity in the region and across industries. Significant federal investments in transportation and infrastructure will directly create construction and manufacturing occupations wherein two out of every three jobs created will be in either occupation. Los Angeles is also uniquely positioned to leverage its extensive sporting infrastructure to support businesses and workers, including the 2026 FIFA World Cup and the LA28 Olympic and Paralympic Games. While Los Angeles leverages upcoming economic opportunities, it is critical for the region to continue to improve its leading economic drivers and generators of jobs, such as Metro, Port of Los Angeles, Los Angeles World Airport, and others.¹³

Metro Programs Focused on Women in Construction

In partnership with the Los Angeles/Orange Counties Building and Construction Trades Council (LA/OCBCTC), Metro currently implements several programs and activities to support the attainment of and track its female utilization goal. These initiatives are summarized below.

Women Build Metro Los Angeles

Women Build Metro Los Angeles (WMBLA), a collaboration between community advocates and agency leadership, has hosted job fairs and “boot camps” to recruit women into construction careers. The collaboration aims to increase female participation in the construction sector and improve career development for female apprentices and journey workers in various trades.¹⁴ WMBLA programs cover career pathways and assistance programs available for women interested in construction.¹⁵ In 2016, in collaboration with Los Angeles Trade Technical College, WMBLA hosted their first all-female “construction boot camp” to introduce women to construction careers.¹⁶ In 2021, WMBLA hosted a virtual apprenticeship readiness program.

¹³ City of Los Angeles. *Year 25 Annual Plan for Program Year 2024-25 – DRAFT*. Los Angeles Economic & Workforce Development Department, accessed November 12, 2024, https://ewdd.lacity.gov/images/reports/ap25/APy25_draft1PlanOverview.pdf.

¹⁴ LACMTA and WIN-LA, “Metro’s Project Labor Agreement and Construction Careers Policy.”

¹⁵ Progressive Railroading, “LA Metro recruiting women for transportation construction careers,” May 2019, <https://www.progressiverailroading.com/labor/news/LA-Metro-recruiting-women-for-transportation-construction-careers--57551>

¹⁶ Jose Ubaldo and LACMTA, “Twenty one women graduate from Metro/L.A. Trade Tech construction boot camp,” The Source, July 15, 2016, <https://thesearchives.metro.net/2016/07/15/twenty-one-women-graduate-from-metro-l-a-trade-tech-construction-boot-camp/>.

Workforce Initiative Now – LA

Launched in 2017, Workforce Initiative Now-LA (WIN-LA) is a regional collaboration between Metro and several workforce, education, and community partners focused on creating career pathways in the transportation industry. These career pathways include construction, operations/maintenance, administration, and professional services. The construction sector program focuses on priority populations, including women, community college students, residents in economically disadvantaged areas, and veterans.¹⁷ WIN-LA connects participants with a career coach and develops a career plan pathway to connect them to training, education, and workforce opportunities.¹⁸

Female Participation Score Card

In November 2017, the Metro Board of Directors approved a female participation score card for Metro construction projects to evaluate progress toward the Executive Order 11246 female construction workforce participation goal of 6.9%.¹⁹ Contractors report female participation rates on the Score Card, which provides a standardized format to compare performance across Metro projects.

Women in the Trades Resource Guide

In Fall 2018, Metro published the Women in the Trades Resource Guide, a toolkit developed for contractors to recruit, employ, and retain women workers and promote a diverse workforce. The document includes guidance on outreach, recruitment, training resources, and worksite best practices. The guide recommends resources and services related to child care, gender sensitivity training, women's healthcare, and family support.

The Guide also encourages contractors to use the Female Worker Transition Tracking Sheet when a project reaches 80% completion to connect female workers to other Metro construction jobs and reduce gaps in employment between project assignments.²⁰ The Female Worker Transition Tracking Sheet helps contractors gather and share female worker contact information with Metro staff and contractors on other projects.²¹

¹⁷ LACMTA, "WIN-LA Program Dashboard."

¹⁸ LACMTA, "WIN-LA Program Dashboard: The Benefits."

¹⁹ LACMTA and WIN-LA, "Metro's Project Labor Agreement and Construction Careers Policy."

²⁰ LACMTA, "Women in the Trades Resource Guide," Fall 2018,
https://media.metro.net/about_us/pla/images/pla_women_trade_guide.pdf

²¹ LACMTA, "Female Worker Transition Tracking Sheet," September 2018,
https://media.metro.net/about_us/pla/images/jc_female_worker_transition_tracking_92018.pdf

Women Breaking Ground

In March 2024, Metro and LA/OCBCTC launched a new recruitment website, Women Breaking Ground, for women in construction.²² Women Breaking Ground showcases success stories of women in construction and highlights their experiences on Metro projects.²³ The website also describes the benefits of construction careers, the unique characteristics of various trades, and the construction career path.²⁴

Youth Outreach

Metro staff perform outreach to schools in the area to encourage infrastructure and construction careers.²⁵ These efforts are in collaboration with LA/OCBCTC, with whom Metro is preparing a pilot pre-apprenticeship program at LAUSD schools. This project is expected to begin in Spring 2025.

Local Workforce Development Initiatives and Policies

There is a need to act regionally to align resources to grow and retain a skilled workforce. Efforts to maximize infrastructure funding should be coupled with efforts to diversify the workforce impacted by investments. This is critical for rectifying the historical exclusion of people of color and women from careers in trades, which typically serve as pathways to high-quality jobs and family-sustaining wages. By increasing efforts to diversify the construction workforce and/or occupations impacted by funding, jurisdictions can promote equitable access to quality jobs particularly for populations in most need. Workforce diversification supports the creation of a robust supply of workers to meet industry demand, and it also addresses social and economic disparities faced by communities of color.²⁶

For example, Metro is currently piloting a Cultural Competency Plan requirement into three Pre-Construction Phase Request for Proposals (RFPs), representing 5% of the maximum overall points a proposal could garner according to RFP evaluation criteria. Expansive in its framing, the requirement was originally intended to ensure that major Metro construction projects meaningfully benefit residents and businesses in the communities surrounding project sites and mitigate the negative impacts that might result from construction activities.

²² LACMTA, "We're launching a website to support women seeking careers in construction. Here's why," March 2024, <https://thesearcharchives.metro.net/2024/03/08/were-launching-a-website-to-support-women-seeking-careers-in-construction-heres-why/>.

²³ LACMTA and LA/OC BCTC, "Women Breaking Ground," 2024, <https://womenbreakground.com/>.

²⁴ LACMTA and LA/OC BCTC, "Women Breaking Ground: Explore careers in construction," 2024, <https://womenbreakground.com/jobs/>.

²⁵ LACMTA Construction Committee, "Project Labor Agreement/Construction Careers Policy," board report, September 18, 2024.

²⁶ The Columbia-Willamette Workforce Collaborative. *Interstate Bridge Replacement Program (IBR)*. Worksystems, March 2024, https://worksystems.org/wp-content/uploads/2024/04/IBR2024_Workforce_Summary-2024-03-22_CWWC.pdf.

The East San Fernando Valley Light Rail (ESFV) is the first Metro project to prepare a Cultural Competency Plan. This plan is currently under collaborative development by the contractor and Metro representatives. It includes eleven distinct sections; one of these is dedicated to workforce development commitments to the East San Fernando Valley community, such as internships, ancillary service provision, career transition support, and partnership with STEM education programs.²⁷ The guiding principle of cultural competency refers to long-term positive community outcomes related to major Metro projects.²⁸ The following section highlights current local workforce development and infrastructure-related initiatives across public agencies in LA County.

LA County's Women and Girls Initiative (WGI)

In 2022, the County Board of Supervisors formalized the Women and Girls Initiative (WGI), which is one of the largest-scale efforts in the U.S. to adopt a gender equity lens in all facets of government administration.²⁹ The WGI aims to comprehensively address gender equity issues across all 38 county departments. The assessments cover internal workforce experiences, representation in leadership, and barriers to county-provided social services.

The WGI workforce assessment focuses on internal county staff, but lessons can extend to the contracted construction workforce. For example, the County Fire Department is focusing on recruiting women into a male-dominated culture through PPE purchasing, hiring of a DEI Officer, and supporting women's recruitment.³⁰ This approach to culture change can guide ongoing collaboration with Women in Trades Advisory Council (WITAC) at LA County Department of Public Works, which facilitates discussions to increase female recruitment, training, placement, and retention in the construction industry.³¹ After the creation of the WITAC, female construction hours on LA County Public Works projects increased.³²

LA County InfrastructureLA Collaborative

Established as part of the County's efforts for regional recovery, InfrastructureLA is a multi-disciplinary, collaborative partnership of local agencies that aim to seek funding opportunities, build support, and effectively create resilient, equitable infrastructure for LA communities across the region. LA County Public Works leads the collaborative, which also includes the following member agencies: Metro, Los Angeles World Airports (LAWA), LA County Sanitation Districts, Los Angeles Department of Water & Power (LADWP), and the City of Los Angeles.

²⁷ San Fernando Transit Constructors, Cultural Competency Plan, interview by Estolano Advisors, September 23, 2024.

²⁸ San Fernando Transit Constructors, interview.

²⁹ County of Los Angeles Women and Girls Initiative, "Gender Impact Assessment Program 2024 Progress Report," June 2024, https://ceo.lacounty.gov/wp-content/uploads/2024/09/REPORT_WGI-Gender-Impact-Assessment-Program_2024-Progress-Report.pdf.

³⁰ Los Angeles County Chief Executive Office, "Final Report."

³¹ Los Angeles County PW, "Community Workforce Agreement."

³² Los Angeles County Chief Executive Office, "Final Report on the Implementation of the County's Women and Girls Initiative," 2024, https://ceo.lacounty.gov/wp-content/uploads/2024/09/BM_Final-Report-on-the-Implementation-of-the-Countys-WGI-1.pdf.

InfrastructureLA currently convenes a Construction Committee to collaborate and coordinate construction activities across the region. The collaborative also established a Workforce Development subcommittee, led by the LA County Department of Economic Opportunity (DEO) to “align with both federal equity and workforce development priorities and the LA County Board of Supervisors priorities of equity, sustainability, climate resilience, workforce development, economic development, and job creation” on Bipartisan Infrastructure Law (BIL) funded project proposals.³³

City of LA Economic and Workforce Development Department’s Proposed LA Workforce Infrastructure Network (LAWIN)

The City of Los Angeles Economic and Workforce Development Department (EWDD)’s strategic plan includes a recommendation to establish the LA Workforce Infrastructure Network (LAWIN), an on-going workforce systems collaborative consisting of cross-sector industries and representatives (e.g., various public, K-12 and higher education institutions, union locals, industry employers, and community partners supporting quality careers). The goal of this collaboration is to provide a platform to discuss how the City could prepare the workforce for the federal Investment Infrastructure and Jobs Act (IIJA) and Inflation Reduction Act (IRA) capital investments. In 2024, EWDD also commissioned a concept paper for this collaborative, which included recommendations to “ensure equity and inclusion in the new opportunities of quality skilled career pathways for all LA residents.”³⁴

The following report is a quantitative and qualitative analysis of gender in the regional construction workforce, resulting in recommendations for Metro to increase female participation in their construction workforce. This report begins with an analysis of female construction worker availability, demand, and training, followed by an assessment of key barriers and emerging practices related to child care, workplace culture, and procurement, including but not limited to bid preference and cultural competency mechanisms. The report concludes with a set of targeted recommendations for Metro to enhance female construction worker recruitment and retention.

³³ County of Los Angeles, “Los Angeles County Selected to Advance in National Initiative to Boost High-Quality Jobs” February 2022 <https://lacounty.gov/2023/02/08/los-angeles-county-selected-to-advance-in-national-initiative-to-boost-high-quality-jobs/>

³⁴ LA City Workforce Development Board, Economic and Workforce Development Department, and Mayor’s Office, “2024 Concept Paper: Los Angeles Workforce Infrastructure Network,” 2024, https://ewddlacity.com/images/reports/ap25/APy25_draft2Appendix9.pdf.

2. STATE OF FEMALE WORKERS IN CONSTRUCTION

To better understand female construction workforce availability in the Greater LA Area,³⁵ the consultant team³⁶ analyzed historical trends for female construction workers in the public and private sectors. The first section provides high level information about construction workers in the public and private sector over time by age and gender. The second section provides detailed information about each trade in the public sector, broken down by gender, year, and apprentice or journey-level status.³⁷ As **Table 2-1** shows, the consultant team developed a “crosswalk” of trades, crafts, and occupations to ensure consistent analysis of different construction roles.

Table 2-1: Crosswalk of Construction Trade, Metro Craft, and Standard Occupation Classification

Construction Trade	Metro Craft	Standard Occupation Classification (SOC)	SOC ID Code
BRICKLAYER AND TILE SETTER	Bricklayer, Stonemason	Brickmasons and Blockmasons	47-2021
	Marble Finisher, Terrazzo Finisher, Terrazzo Worker	Terrazzo Workers and Finishers	47-2053
CARPENTER	Carpenter and Related Trades	Carpenter	47-2031
	Millwright	Millwright	49-9044
	Drywall Installer / Lather (Carpenter)	Drywall Installers, Ceiling Tile Installers, and Tapers	47-2080
	Pile Driver (Carpenter)	Pile-Driver Operators	47-2072
ELECTRICIAN	Electrician	Electricians	47-2111
	Light Fixture Maintenance*	Electricians	47-2111
	Sound/Communication	Electricians	47-2111
	Telecommunications Technician*	Electricians	47-2111
	Telephone Installation*	Electricians	47-2111
	Electrical Utility Lineman	Electrical Power-Line Installers and Repairers	49-9051
ELEVATOR CONSTRUCTOR	Elevator Constructor	Elevator Installers and Repairers	47-4021

³⁵ The Greater LA Area includes five Southern California counties: Los Angeles, Orange, Riverside, Ventura, and San Bernadino.

³⁶ The consultant team includes Estolano Advisors and ICF.

³⁷ For the purposes of this study, the public sector is defined as projects covered by a labor agreement such as a Project Labor Agreement or a Community Workforce Agreement.

Construction Trade	Metro Craft	Standard Occupation Classification (SOC)	SOC ID Code
INSPECTOR	Inspector/Tester	Construction and Building Inspectors	47-4011
IRON WORKER	Boilermaker-Blacksmith	Boilermakers	47-2011
	Iron Worker	Structural Iron and Steel Workers; Reinforcing Iron and Rebar Workers	47-2221; 47-2171
LABORER	Asbestos Worker, Heat and Frost Insulator	Insulation workers	47-2130
	Carpet Layer*	Carpet Installers	47-2041
	Fire Safety and Miscellaneous Sealing*	Insulation workers	47-2130
	Furniture Mover & Related Classifications*	Laborers and Freight, Stock, and Material Movers, Hand	53-7062
	Guniting Worker (Laborer)*	Mixing and Blending Machine Setters, Operators and Tenders	51-9023
	Housemover (Laborer)*	Construction Laborers	47-2061
	Laborer and Related Classifications	Construction Laborers	47-2061
	Landscape Maintenance Laborer*	Landscaping and Groundskeeping Workers	37-3011
	Apprentice Landscape Irrigation Fitter	Landscaping and Groundskeeping Workers	37-3011
	Landscape Irrigation Fitter- LA METRO USE ONLY (New Maintenance of Way/Non Revenue Vehicle Building 61 s Design/Build)	Landscaping and Groundskeeping Workers	37-3011
	Landscape/Irrigation Laborer/Tender	Landscaping and Groundskeeping Workers	37-3011
	Parking and Highway Improvement (Striper-Laborer)*	Construction Laborers	47-2061
	Asbestos and Lead Abatement (Laborer) #	Hazardous Materials Removal Workers	47-4041
	Brick Tender	Helpers- Brickmasons, Blockmasons, Stonemasons, and Tile and Marble Setters	47-3011

Construction Trade	Metro Craft	Standard Occupation Classification (SOC)	SOC ID Code
LABORER	Horizontal Directional Drilling	Drilling and Boring Machine Tool Setters, Operators, and Tenders, Metal and Plastic	51-4032
	Plaster Tender	Helpers- Painters, Paperhangers, Plasterers, and Stucco Masons	47-3014
	Tunnel Worker (Laborer)*	Construction Laborers	47-2061
OPERATING ENGINEER	Cranes, Pile Driver and Hoisting Equipment (Operating Engineer), Operating Engineer, Operating Engineer (Landscape Construction)	Operating Engineers and Other Construction Equipment Operators	47-2073
	Engineer	Operating Engineers and Other Construction Equipment Operators	47-2073
	Building / Construction Inspector and Field Soils and Material Tester	Construction and Building Inspectors	47-4011
	Field Surveyor	Surveyors	17-1022
	Tunnel (Operating Engineer)*	Operating Engineers and Other Construction Equipment Operators; Rail-Track Laying and Maintenance Equipment Operators; Paving, Surfacing, and Tamping Equipment Operators	47-2073; 47-4061; 47-2071
PAINTER	Painter, Painter – Industrial	Painters, Construction and Maintenance	47-2141
	Drywall Finisher	Tapers	47-2082
	Carpet, Linoleum, Resilient*	Floor Layers, Except Carpet, Wood, and Hard Tiles	47-2042
	Glazier	Glaziers	47-2121
PLASTERER AND CEMENT MASON	Cement Mason	Cement Masons and Concrete Finishers	47-2051
	Plasterer	Plasterers and Stucco Masons	47-2161

Construction Trade	Metro Craft	Standard Occupation Classification (SOC)	SOC ID Code
PLUMBER AND PIPEFITTER	Fire Sprinkler Fitter*	Plumbers, Pipefitters, and Steamfitters	47-2152
	Meter Technician*	Plumbers, Pipefitters, and Steamfitters	47-2152
	Plumber	Plumbers, Pipefitters, and Steamfitters	47-2152
	Plumbing HVAC	Plumbers, Pipefitters, and Steamfitters	47-2152
ROOFER	Metal Roofing Systems Installer	Roofers	47-2181
	Roofer	Roofers	47-2181
SHEET METAL	Sheet Metal Worker (HVAC)	Sheet Metal Workers	47-2211
		Sheet Metal Workers	47-2211
SURVEYOR	Surveyor	Chief of Party; Chainman/Rodman; Surveyors	17.3031.01; 17.3031.01; 17-1022
TEAMSTER/DRIVER	Driver (On/Off-Hauling To/From Construction Site)*	Heavy and Tractor-Trailer Truck Drivers	53-3032
	Teamster	Heavy and Tractor-Trailer Truck Drivers	53-3033

*Non-apprentice crafts

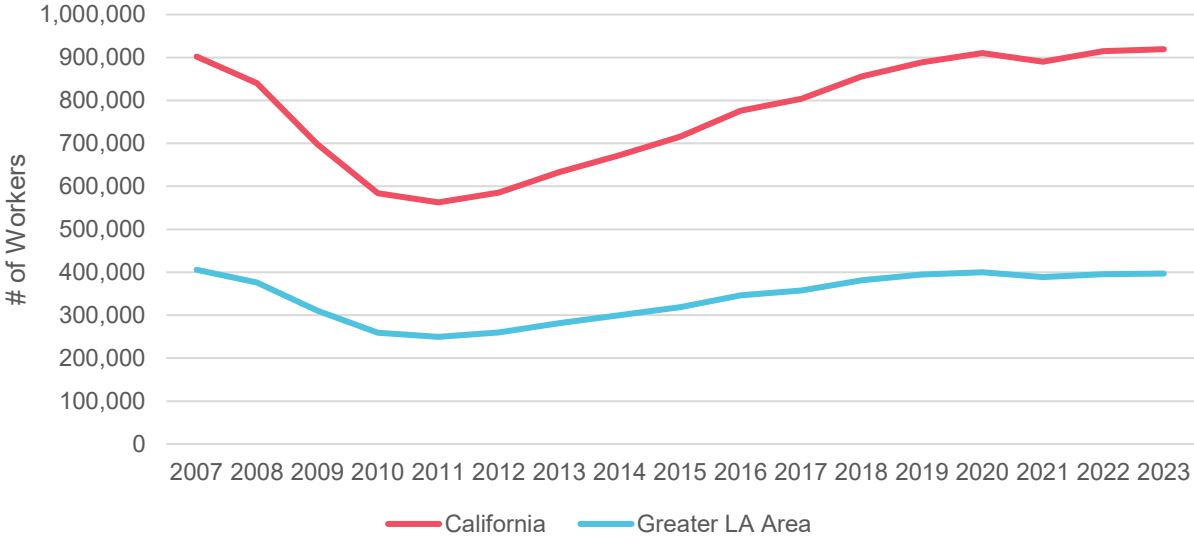
Public and Private Sector Regional Construction Workforce Availability

The U.S Census Bureau Quarterly Workforce Indicators (QWI) provides workforce data for various employment sectors in the United States, including the Construction Sector (NAICS 23), which includes the construction of residential and non-residential buildings, heavy and civil engineering construction, and other specialty trade contractors.³⁸ While not limited to public works construction, the QWI data provides valuable information about age and gender in the construction sector. The following section summarizes construction workforce trends in the public and private sector over the last 17 years using QWI employment data.

³⁸ Based on North American Industry Classification System (NAICS) Code 23: Construction Sector. The Construction Sector comprises establishments primarily engaged in the construction of buildings or engineering projects (e.g., highways and utility systems). Establishments primarily engaged in the preparation of sites for new construction and establishments primarily engaged in subdividing land for sale as building sites also are included in this sector. Construction work done may include new work, additions, alterations, or maintenance and repairs. Activities of these establishments generally are managed at a fixed place of business, but they usually perform construction activities at multiple project sites.

As shown in **Figure 2-1**, the size of the construction workforce in the Greater LA Area has followed similar patterns to the construction workforce statewide. The Greater LA Area accounts for nearly half of the statewide construction workforce. Both geographies experienced significant declines in employment due to the 2007-2009 Great Recession, but employment rates steadily increased following this period, with construction workforce growth trending slightly higher statewide compared to the Greater LA Area. Starting in 2019, growth rates in the Greater LA Area and statewide began to stagnate.

Figure 2-1: Construction Workforce in Greater LA Area and California (2007-2023)

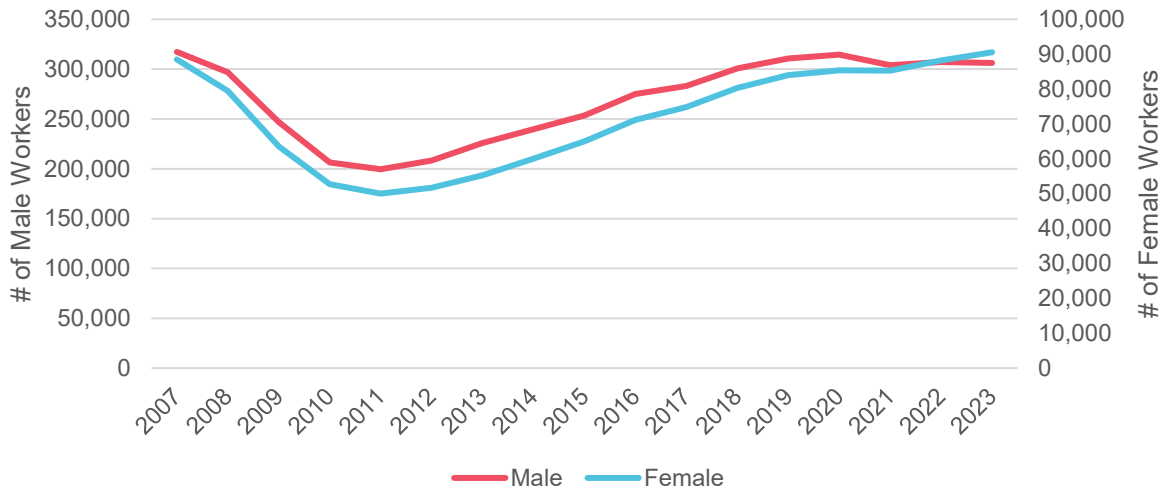


Source: U.S. Census Bureau, Quarterly Workforce Indicators

Although men make up a large majority of the construction workforce in the Greater LA Area, male and female construction workforce trends historically mirror one another. As shown in **Figure 2-2**, male and female construction workforce trends were very similar from 2007 to 2019. Between 2020 and 2023, the female construction workforce grew by a small margin while the male construction workforce declined slightly. While the difference in growth rates is only slight, these trends highlight that the female construction workforce has recently started growing at a faster rate than the male construction workforce.

In a 10-year period, between the years 2013 and 2023, the number of women in the construction sector in the Greater LA Area increased by 64%, as shown in **Table 2-2**. This is far higher than the 10-year growth average for men in the construction sector (35%). As a result, women occupied a slightly larger share of the construction workforce in 2023 compared to 2013, increasing from 20% to 23%. While this growth highlights higher female participation in the construction workforce over the last 10 years, men still account for the vast majority of the construction workforce to date.

Figure 2-2: Construction Workforce in Greater LA Area by Gender (2007-2023)



Source: U.S. Census Bureau, Quarterly Workforce Indicators

Table 2-2: Construction Workforce Trend in Greater LA by Gender (2013-2023)

Year	Total Workers	Female			Male		
		# of Workers	Annual % Growth	% of Total ³⁹	# of Workers	Annual % Growth	% of Total
2013	281,351	55,267	N/A	20%	226,083	N/A	80%
2014	299,766	60,107	9%	20%	239,656	6%	80%
2015	318,645	65,028	8%	20%	253,616	6%	80%
2016	346,385	71,161	9%	21%	275,227	9%	79%
2017	357,838	74,878	5%	21%	282,957	3%	79%
2018	381,038	80,306	7%	21%	300,730	6%	79%
2019	394,600	83,983	5%	21%	310,618	3%	79%
2020	399,895	85,398	2%	21%	314,499	1%	79%
2021	389,085	85,250	0%	22%	303,837	-3%	78%
2022	395,557	88,236	4%	22%	307,322	1%	78%
2023	396,892	90,556	3%	23%	306,331	0%	77%
10-Yr Growth Average	41%	64%	N/A	N/A	35%	N/A	N/A

Source: U.S. Census Bureau, Quarterly Workforce Indicators

³⁹ This dataset includes all employees of businesses in the Construction Sector as defined by North American Industry Classification Code 23. This definition includes some office workers and others who do not regularly perform construction work as described elsewhere in this study.

Construction workforce growth rates have declined significantly since Metro’s last Workforce Disparity Study in 2019. In the previous iteration of this study, the male and female construction workforce grew by 26% and 35%, respectively, over a 5-year period from 2013 to 2017. As shown in **Table 2-3**, new data highlights a sharp drop in these trends. In the 5-year period (2019-2023) following the release of the previous study, the female construction workforce grew by 8%, and the male construction workforce decreased by 1%. While the female construction workforce continues to grow at a faster rate than the male construction workforce, both have experienced significantly lower growth rates in recent years.

Table 2-3: Construction Workforce Trend in Greater LA by Gender (2019-2023)

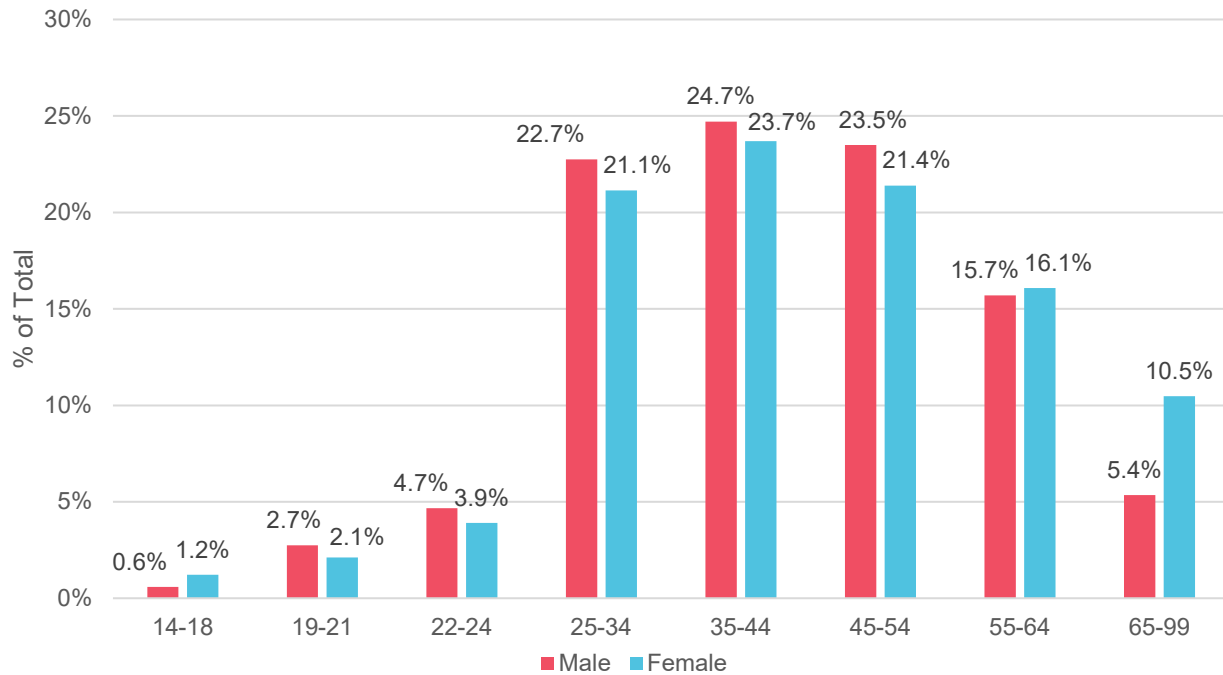
Year	Total Workers	Female			Male		
		# of Workers	Annual % Growth	% of Total ⁴⁰	# of Workers	Annual % Growth	% of Total
2019	394,600	83,983	N/A	21%	310,618	3%	79%
2020	399,895	85,398	2%	21%	314,499	1%	79%
2021	389,085	85,250	0%	22%	303,837	-3%	78%
2022	395,557	88,236	4%	22%	307,322	1%	78%
2023	396,892	90,556	3%	23%	306,331	0%	77%
5-Yr Growth Average	1%	8%	N/A	N/A	-1%	N/A	N/A

Source: U.S. Census Bureau, Quarterly Workforce Indicators

Figure 2-3 highlights the 10-year overall distribution of the construction workforce in the Greater LA Area by age and gender. Between 2013 and 2023, the average age distribution between men and women were roughly the same, with most of the workforce for both men and women being between the ages of 25 and 54. There is a much larger share of women near retirement age in the construction workforce than men, and there is a slightly lower share of younger women (ages 14 to 34) in the construction workforce than younger men. The trends shown below solidify the trends seen in Metro’s 2019 Workforce Disparity Study. Since 2019, the construction workforce in Greater LA has continued to grow older, highlighting the need to recruit new construction workers to replace an aging workforce.

⁴⁰ This dataset includes all employees of businesses in the Construction Sector as defined by North American Industry Classification Code 23. This definition includes some office workers and others who do not regularly perform construction work as described elsewhere in this study.

Figure 2-3: Construction Workforce in Greater LA Area by Age and Gender (2013-2023)

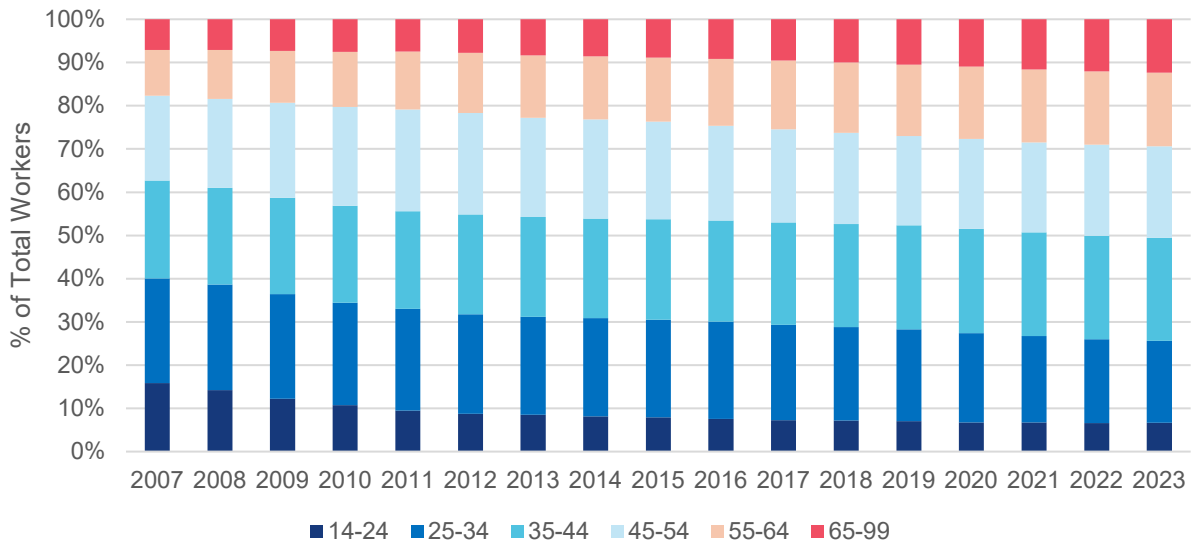


Source: U.S. Census Bureau, Quarterly Workforce Indicators

Figure 2-4 visualizes the change in age distribution for the female construction workforce in the Greater LA Area from 2007 to 2023. The share of younger female construction workers (ages 14 to 24) has shrunk by almost 10 percent while the share of older female construction workers (ages 55 and older) has increased by over 10 percent. This highlights that younger workers are not entering the construction workforce at the same rate as earlier generations, confirming trends first identified in Metro’s 2019 Workforce Disparity Study.

Almost 20% of the female construction workforce is within 10 years of the average retirement age in California. Based on these trends, the region will need to significantly increase the recruitment of younger women into the construction sector to replace the large proportion of women who will likely retire from the industry soon.

Figure 2-4: Female Construction Workforce in Greater LA Area by Age (2007-2023)



Source: U.S. Census Bureau, Quarterly Workforce Indicators

Public Workforce Hiring Requirements and Goals

Public agencies in Los Angeles County have prioritized local populations and disadvantaged workers through minimum hiring requirements in public projects. Project Labor Agreement (PLA) hiring provisions have become the norm in the region, although each agency uses a different system of qualification and prioritization among its target populations.⁴¹ **Table 2-4** shows a high-level summary overview of Metro’s hiring requirements and goals. **Appendix A** shows an overview of hiring requirements and goals from nine other public agencies which, alongside Metro, comprise most of the public sector construction activity in the Los Angeles region. Most agencies have separate requirements that contractors must meet when staffing qualifying projects: one that is geographic (e.g., zip code’s annual household income or relative poverty level) and another that is categorical (e.g., veteran status, former incarceration, homelessness, and former foster youth, etc.).

⁴¹ PLA refers to a Project Labor Agreement between a public agency and the LA/OC Building and Construction Trades Council (LA/OC BCTC a/k/a Building Trades). Eight out of the ten agencies analyzed in this report utilize a PLA; LA Unified School District calls their master labor agreement a Project Stabilization Agreement (PSA) and the LA County Department of Public Works has a Countywide Community Workforce Agreement (CWA). The analysis of Metro’s PLA includes the agency’s Construction Careers Policy (CCP). In this report, the term “PLA” is inclusive of all these contracts and policies.

Table 2-4: Metro Hiring Requirements and Goals

Public Agency Labor Agreement Effective Dates	Hiring Requirement*	Definition
LA County Metro Project Labor Agreement and Construction Careers Policy 2017 - 2027	Metro: Non-Federally Funded (and FTA-funded, 2021-2025)	
	40% Local Targeted	
	First Priority: Community Area Residents	Residence within an ED or EED area within a 5-mile radius of covered project.
	Second Priority: Local Residents from Extremely Economically Disadvantaged (EED) areas	Residence within an EED area in LA County. EED area is median annual household income less than \$32,000 per year.
	Third Priority: Local Residents from Economically Disadvantaged (ED) areas	Residence within an ED area in LA County. ED area is median annual household income less than \$40,000 per year.
	10% Disadvantaged	Residence within LA County, resides within EED or ED area, and meets at least two barriers: homeless, custodial single parent, receiving public assistance, lacking GED or high school diploma, criminal record or involvement with criminal justice system, suffering from chronic unemployment, emancipated from foster care system, veteran of Iraq/Afghanistan war, apprentice with less than 15% of required hours.
	20% Apprentices	
	50% of apprenticeship hours performed by Local Targeted Workers	Participant in California Division of Apprenticeship Standards approved program.
	6.9% Female Utilization Goal*	Exceed Federal Executive Order 11246 goal.
	Metro: Federally Funded	
	40% National Targeted	
	First Priority: National Extremely Economically Disadvantaged areas	Residence within an EED area in the US.
	Second Priority: National Targeted Worker	Residence within an EED or ED area in the US.
	10% Disadvantaged	Resides within EED or ED area, and meets at least two barriers: homeless, custodial single parent, receiving public assistance, lacking GED or high school diploma, criminal record or involvement with criminal justice system, suffering from chronic unemployment, emancipated from foster care system, veteran of Iraq/Afghanistan war, apprentice with less than 15% of required hours.
	20% Apprentices	
50% of apprenticeship hours performed by National Targeted Workers	Participant in US Department of Labor or California Division of Apprenticeship Standards approved program.	
6.9% Female Utilization Goal*	Exceed Federal Executive Order 11246 goal.	
Key:	*Metro's 6.9% female utilization target is a goal, not an explicit requirement	
Geographic		
Categorical		
Apprentice		
Female Utilization		

Apprentice and Female Utilization Requirements

Five agencies have some form of apprentice utilization requirements, which ensure that new tradespeople are exposed to skill-building opportunities. Only two public owners (Metro and the Port of Los Angeles) require a minimum of 20% of work hours completed by apprentices. Other agencies that have apprentice requirements set categorical or geographic minimums for the makeup of the apprentice workforce. For example, the Port of Long Beach requires that a quarter of apprentices are first-year apprentices. The City of Los Angeles requires that half of apprenticeship hours are completed by local residents or transitional workers (based on their set of criteria).

Metro is the only agency to set an aspirational goal for female utilization. Similarly, there is a disparity across agencies in the adoption of apprentice utilization requirements, which pose no preemption conflicts with Prop 209. This is an area of opportunity to build a pipeline into the trades for women and minority workers who will seek work with a variety of agencies as they embark on their careers.

Prop 209 limits California public agencies in their ability to set gender and race-specific hiring requirements for contracts. Instead, Metro utilizes a best-effort female utilization goal to encourage contractors to increase the number of women working on Metro-funded projects. While the region has set strong goals for local and disadvantaged/transitional workers, the requirements can be strengthened through Prop 209-compliant aspirational goals.

Public Sector Regional Construction Workforce Availability

To estimate the public works construction workforce availability, the consultant team utilized payroll data from LCPtracker, a payroll system used by most public works construction projects in the Greater LA Area⁴² to track hours by gender, trade, apprentice or journey-level status, and other parameters. Every worker in LCPtracker's system has worked on a project using a labor agreement such as a project labor agreement (PLA) or community workforce agreement (CWA). Many public construction projects in the Greater LA Area use PLAs, so every worker recorded in LCPtracker could hypothetically work on public construction projects, including those at Metro. As such, the consultant team analyzed this data to estimate the public works construction workforce in the Greater LA region.

Metro's 2019 Workforce Disparity Study also utilized LCPtracker to estimate the public works construction workforce in the Greater LA region; however, the previous study analyzed data from a specific set of public agencies. The consultant team expanded the dataset for this study to include all agencies and companies that use project labor agreements (PLAs). As a result, this study provides a more complete representation of the construction workforce that is eligible to work on public works construction projects.

Table 2-5 highlights the workforce utilization of men and women by trade in Greater LA and Metro projects. Metro's most utilized trades between 2019 and 2023 were 1) Laborers, 2) Electrician, and 3) Operating Engineers. The most utilized trades in Greater LA were 1) Laborers, 2) Carpenters, and 3) Electrician. Although the top trade for both Greater LA and Metro projects was Laborers, Metro utilized a much higher share (37.79%) than Greater LA (23.69%). Conversely, Metro utilized a much lower share of Carpenters (10.75%) compared to the Greater LA region (20.34%).

⁴² The Greater LA Area includes five Southern California counties: Los Angeles, Orange, Riverside, Ventura, and San Bernadino.

Table 2-5: Workforce Utilization by Trade for Men and Women: Greater LA and Metro (2019-2023)

Trade	Greater LA	Metro
Bricklayer and Tile Setter	1.70%	0.24%
Carpenter	20.34%	10.75%
Electrician	14.54%	14.11%
Elevator Constructor	0.70%	2.06%
Inspector	1.38%	3.61%
Iron Worker	6.18%	5.57%
Laborer	23.69%	37.39%
Operating Engineer	9.34%	12.17%
Painter	4.42%	1.70%
Plasterer and Cement Mason	4.16%	3.00%
Plumber and Pipefitter	5.94%	1.56%
Roofer	1.13%	0.38%
Sheet Metal	3.36%	1.32%
Surveyor	0.47%	1.12%
Teamster/Driver	2.66%	5.03%
Total:	100.0%	100.00%

Source: LCPtracker

Similarly, **Table 2-6** highlights the share of construction apprentice work hours for Greater LA and Metro from 2019 to 2023. Apprentices make up a greater share of the construction work performed in Greater LA than on Metro projects across all trades. However, Metro has a much lower share of apprentice utilization in the Elevator Constructor and Painter trades.

Table 2-6: Share of Apprentice Work Hours by Trade between Greater LA and Metro (2019-2023)

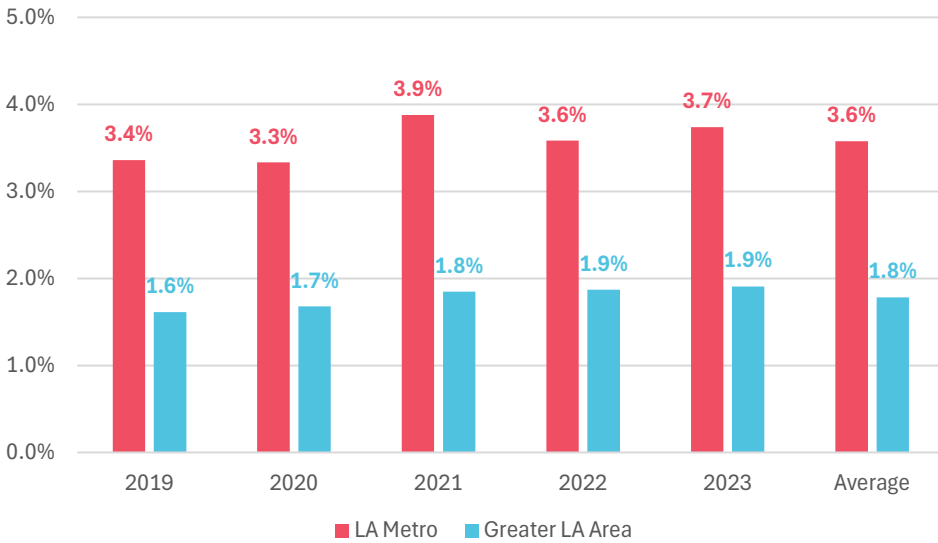
Trade	Greater LA	Metro
Bricklayer and Tile Setter	17.21%	24.08%
Carpenter	23.59%	22.56%
Electrician	28.47%	25.83%
Elevator Constructor	40.14%	25.71%
Inspector	6.23%	6.13%
Iron Worker	26.71%	22.96%
Laborer	10.19%	8.12%
Operating Engineer	7.12%	10.73%
Painter	22.49%	13.00%
Plasterer and Cement Mason	14.10%	14.19%
Plumber and Pipefitter	31.42%	32.95%
Roofer	25.65%	27.14%
Sheet Metal	26.02%	27.61%
Surveyor	24.83%	24.54%
Teamster/Driver	0.45%	1.09%
Total:	19.1%	14.46%

Source: LCPtracker

Figure 2-5 shows the female participation on both Metro construction projects and other public works projects in the Greater LA Area. The average female participation rate between 2019 and 2023 on Metro construction projects was 3.6%, a 0.1% increase from the average female participation rate from 2014-2018 (3.5%). In contrast, the 5-year average female participation rate on non-Metro public works construction projects in the Greater LA Area declined during the same period, from 1.9% (2014-2018) down to 1.8% (2019-2023).

Table 2-7 highlights participation rates on Metro construction projects from 2019 to 2023. Metro's share of construction work hours slowly declined from 2019 to 2023, with Metro accounting for 8.9% of all construction work hours in the Greater LA Area in 2023. Notably, Metro accounts for a much larger share of female construction work hours compared to all work hours in the Greater LA Area. For example, while Metro supplied 8.9% of all construction work hours in 2023, Metro supplied 17.5% of all female construction work hours the same year.

Figure 2-5: Female Participation on Metro Construction Projects (2019-2023)



Source: LCPtracker

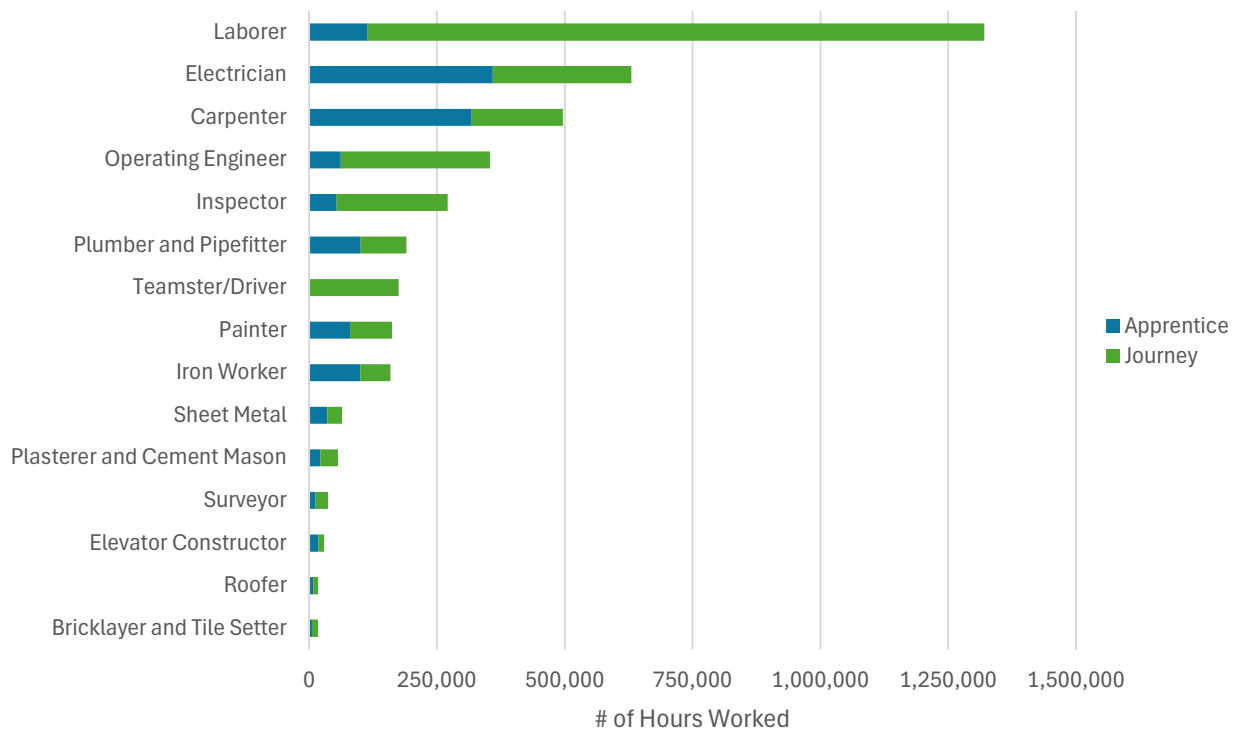
Table 2-7: Female Participation on Metro Construction Projects (2019-2023)

Year	All Work Hours			Female Work Hours		
	Greater LA Area	Metro	Metro's % Share	Greater LA Area	Metro	Metro's % Share
2019	36,751,902	4,332,876	11.8%	592,684	145,647	24.6%
2020	44,156,816	4,377,519	9.9%	740,692	145,874	19.7%
2021	46,687,291	4,422,529	9.5%	862,700	171,503	19.9%
2022	47,393,519	4,178,673	8.8%	885,554	149,688	16.9%
2023	47,149,250	4,214,979	8.9%	899,786	157,554	17.5%

Source: LCPtracker

Figure 2-6 shows the estimated number of female construction work hours by trade and by apprentice or journey-level status in the Greater LA Area. The trades with the highest number of female construction work hours were (1) Laborer; (2) Electrician; (3) Carpenter; (4) Operating Engineer and (5) Inspector. Laborers account for over one-third of female construction work hours. The trade with the lowest percentage of female apprentice hours was Teamster/Driver. Conversely, the trade with the highest percentage of female apprentice hours was Elevator Constructor, with 70% of all elevator constructor hours performed by apprentices.

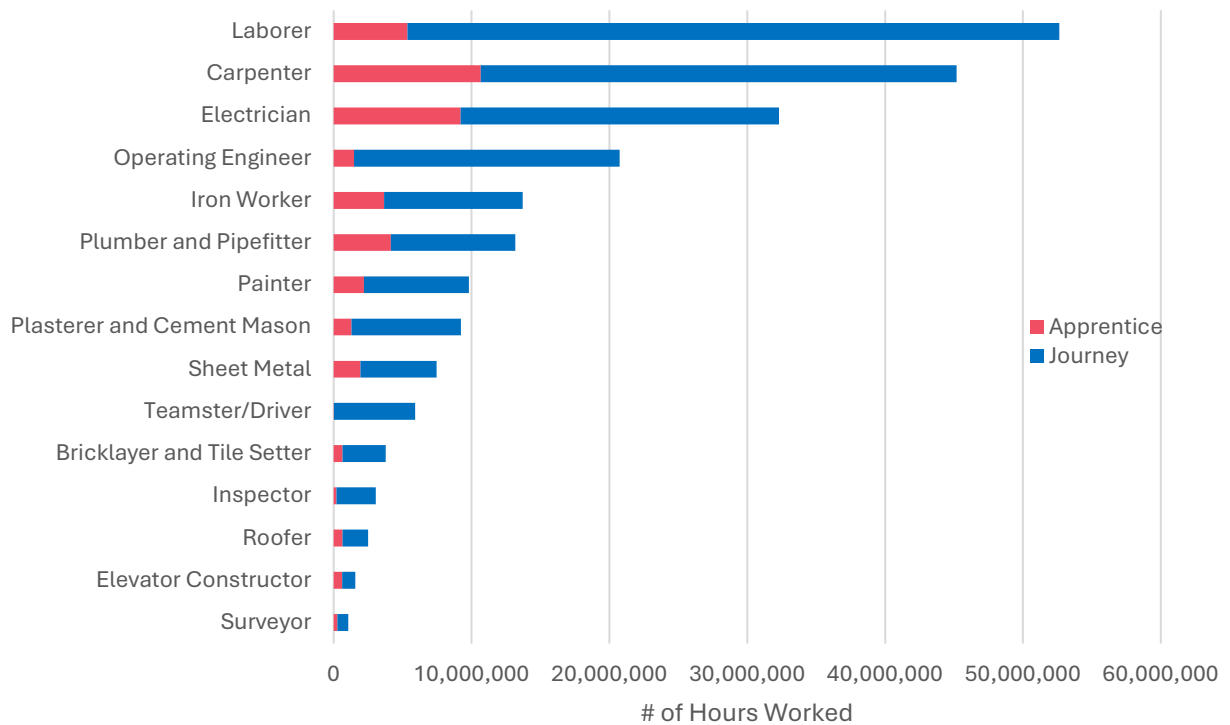
Figure 2-6: Estimated Female Hours Worked on Regional Public Works Construction Projects (2019-2023)



Source: LCPtracker

Figure 2-7 similarly shows the estimated work hours by trade and apprentice or journey-level status for male construction workers in Greater LA. The trades with the highest number of male construction work hours were 1) Laborer; 2) Carpenter; 3) Electrician; 4) Operating Engineer; 5) Iron Worker. Over half of all male construction hours were performed by the top three trades. Laborers account for the most work hours for both male and female construction workers, but the share of total construction work hours is higher for female laborers than male. The trades with the lowest apprenticeship utilization rates for male construction work hours were 1) Teamster/Driver; 2) Inspector; 3) Operating Engineer; 4) Laborer; and 5) Plasterer and Cement Mason. Elevator Constructor was the top trade for apprentice utilization for male construction hours as well.

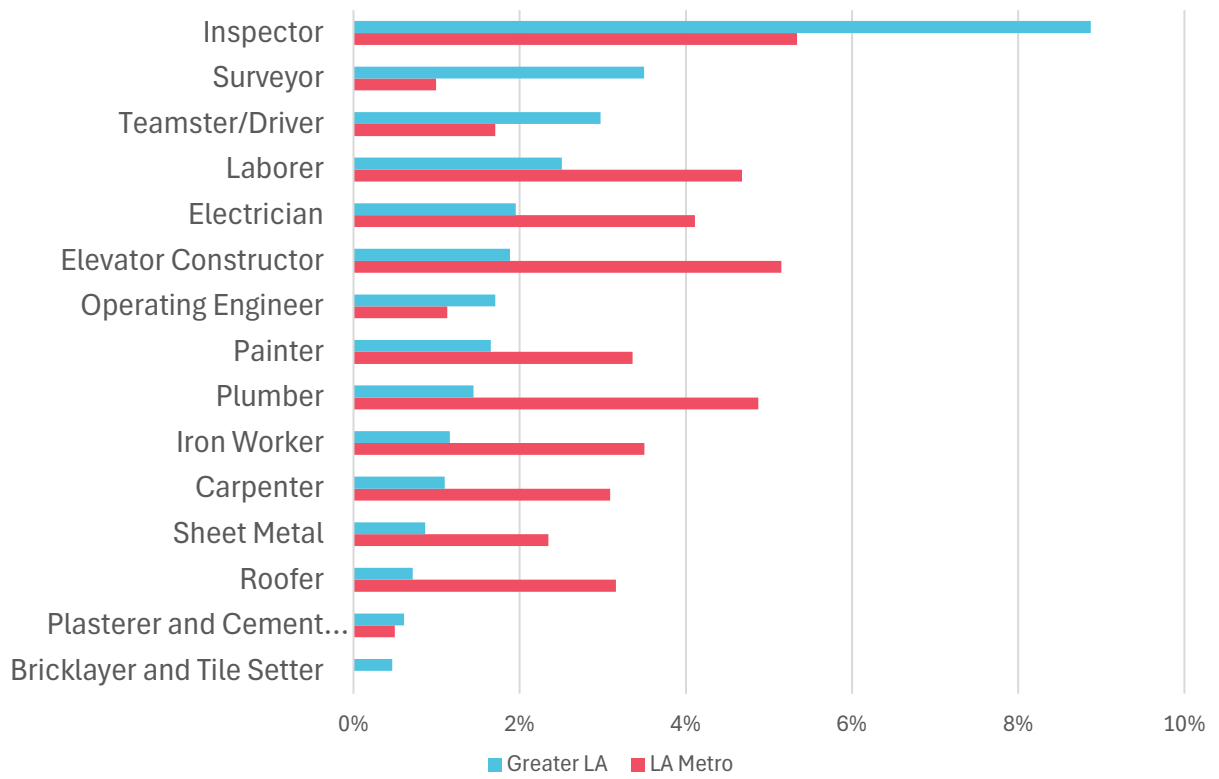
Figure 2-7: Estimated Male Hours Worked on Regional Public Works Construction Projects (2019-2023)



Source: LCPtracker

Figure 2-8 highlights female participation rates by trade on construction projects in Greater LA and at Metro from 2019 to 2023. Overall, female construction workers at Metro have a higher participation rate than Greater LA. The only trades where Metro has a lower participation rate than Greater LA are (1) Inspector; (2) Surveyor; (3) Teamster/Driver; (4) Operating Engineer and (5) Bricklayer and Tile Setter. Notably, Inspectors in Greater LA are exceeding the goal of 6.9% female participation set by the US Department of Labor's Office of Federal Contract Compliance Programs (OFCCP), but all other trades in Greater LA are not meeting the goal of 6.9% female participation.

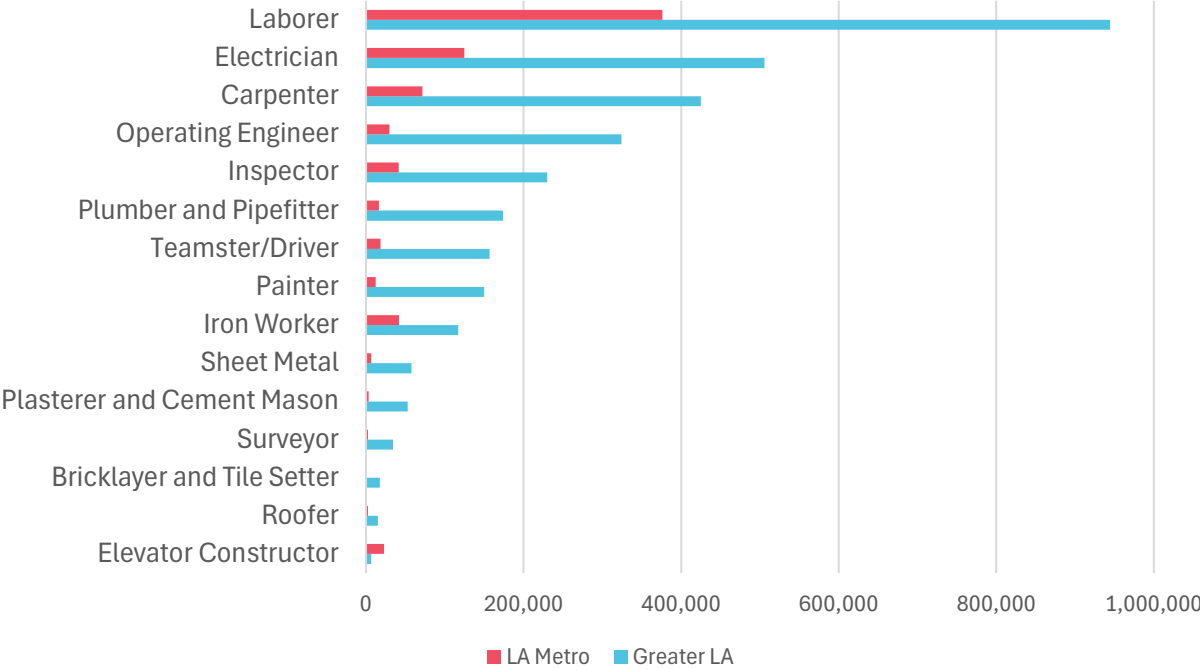
Figure 2-8: Female Work Hour Participation on Construction Projects at Metro and in Greater LA by Trade (2019-2023)



Source: LCPtracker

Figure 2-9 highlights female work hours performed by trade on construction projects in Greater LA and at Metro from 2019 to 2023. The top three trades in terms of female work hours for both were 1) Laborer; 2) Electrician; and 3) Carpenter. However, Metro’s fourth ranking trade for total female work hours was Iron Worker, whereas Greater LA ranks Iron Workers ninth. Elevator Constructors were the only trade in which Metro utilized more female work hours than the region.⁴³

Figure 2-9: Female Work Hours Performed on Construction Projects at Metro and in Greater LA by Trade (2019-2023)

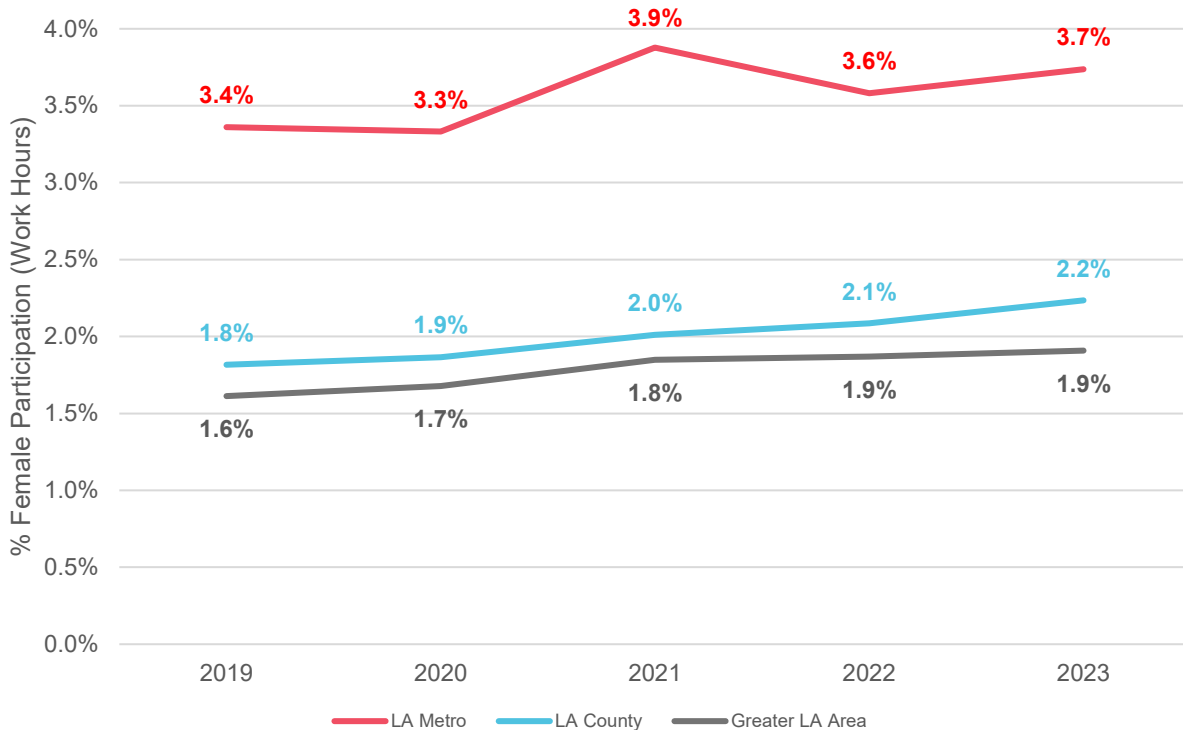


Source: LCPtracker

⁴³ The consultant team subtracted work hours performed for Metro from work hours performed in Greater LA.

Figure 2-10 highlights female participation rates by work hours on construction projects between Metro, LA County⁴⁴, and the Greater LA Area.⁴⁵ Female participation rates slowly rose from 2019 to 2023 for Metro, LA County, and the Greater LA Area. With a peak female participation rate of 3.9% in 2021, Metro maintained a higher female participation than the region between 2019 and 2023. While Metro outperforms the region overall, the agency is still far below the goal of 6.9% female participation set by OFCCP.

Figure 2-10: Female Participation on Construction Projects (Metro, LA County and Greater LA Area)



Source: LCPtracker

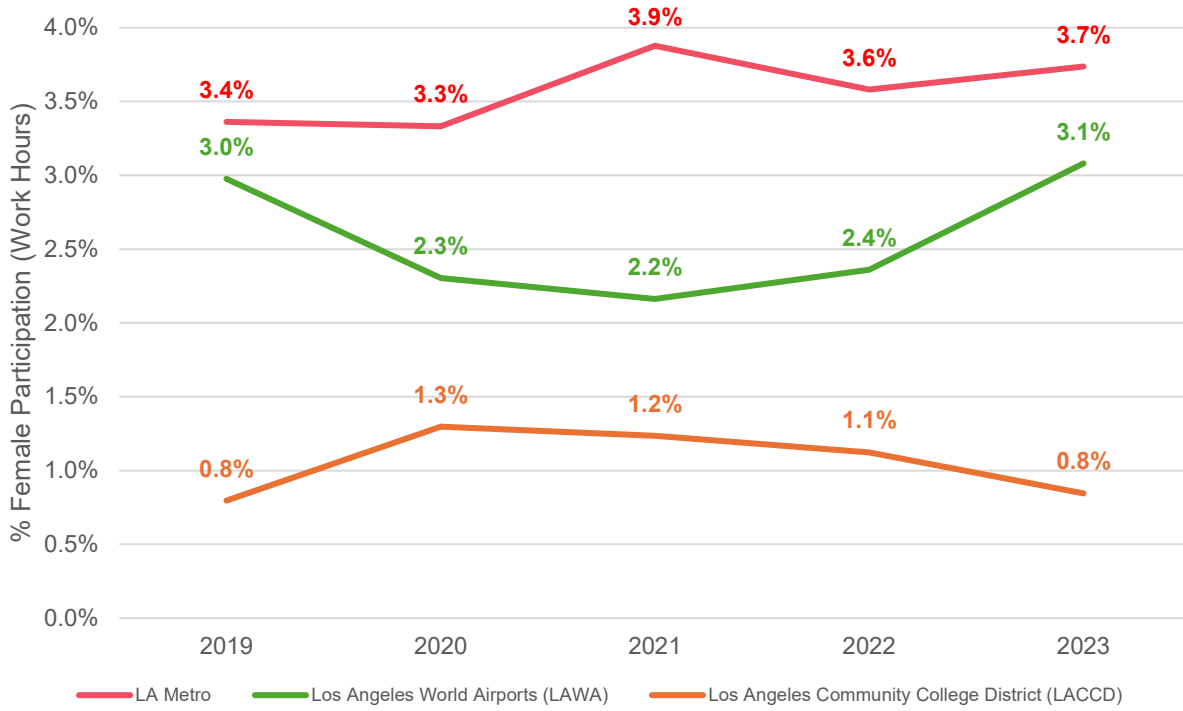
Figure 2-11 highlights female participation rates by work hours on construction projects between Metro and the Los Angeles Community College District (LACCD). With a peak female participation rate of 3.9% in 2021, Metro maintained a higher female participation than LA County, the Greater LA Area, and other agencies like LA County Public Works and LACCD between 2019 and 2023.⁴⁶

⁴⁴ “LA County” includes all public works construction taking place within the county boundary, including all Metro construction and some multi-county projects that intersect LA County.

⁴⁵ The Greater LA Area includes five Southern California counties: Los Angeles, Orange, Riverside, Ventura, and San Bernadino.

⁴⁶ From January 2020 to May 2024, Los Angeles County Public Works had a female participation rate of 1.44%, spanning 804 projects.

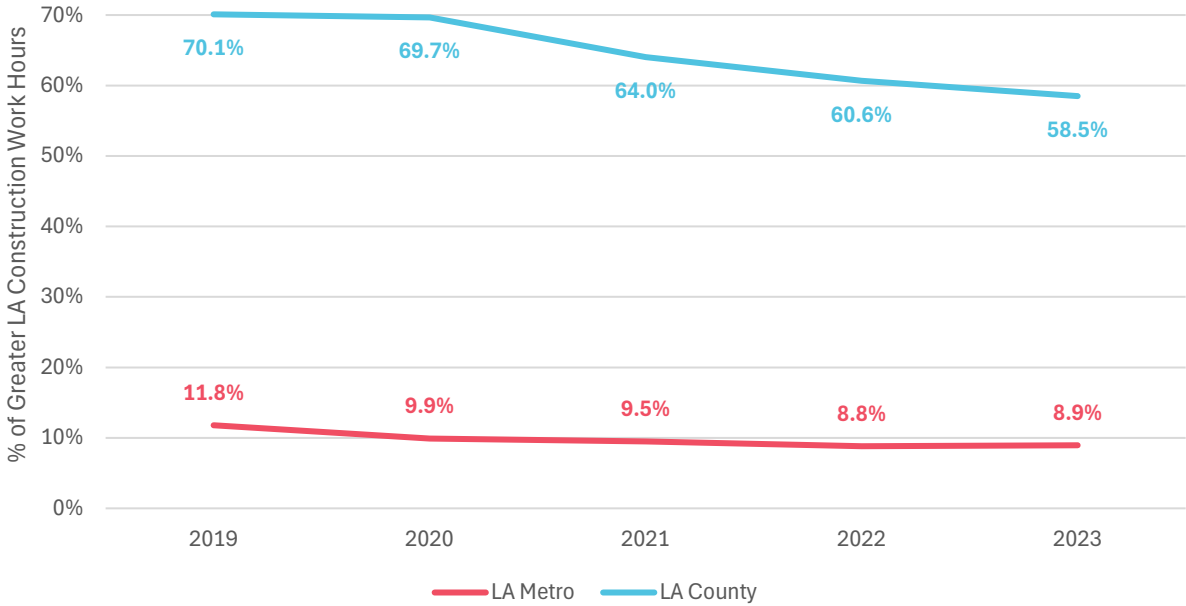
Figure 2-11: Female Participation on Construction Projects (Metro, Los Angeles World Airports, and Los Angeles Community College District)



Source: LCPTracker and Los Angeles Community College District

Figure 2-12 visualizes the share of construction work hours in the Greater LA Area that Metro and LA County capture. As of 2023, Metro accounts for approximately 8.9% of construction work hours in the Greater LA Area, a 2.9% decrease from the approximately 11.8% market share the agency had in 2019. LA County lost approximately 12% of the share of construction work hours between 2019 and 2023, but it still accounts for most of the construction work hours in the Greater LA Area. Notably, the number of construction work hours in LA County *increased* by approximately 7% during this period, suggesting that the demand for construction in Ventura, Orange, Riverside, and San Bernadino Counties is increasing at a higher rate than in LA County.

Figure 2-12: Share of Construction Work Hours by Year in Greater LA (2019-2023)



Source: LCPtracker

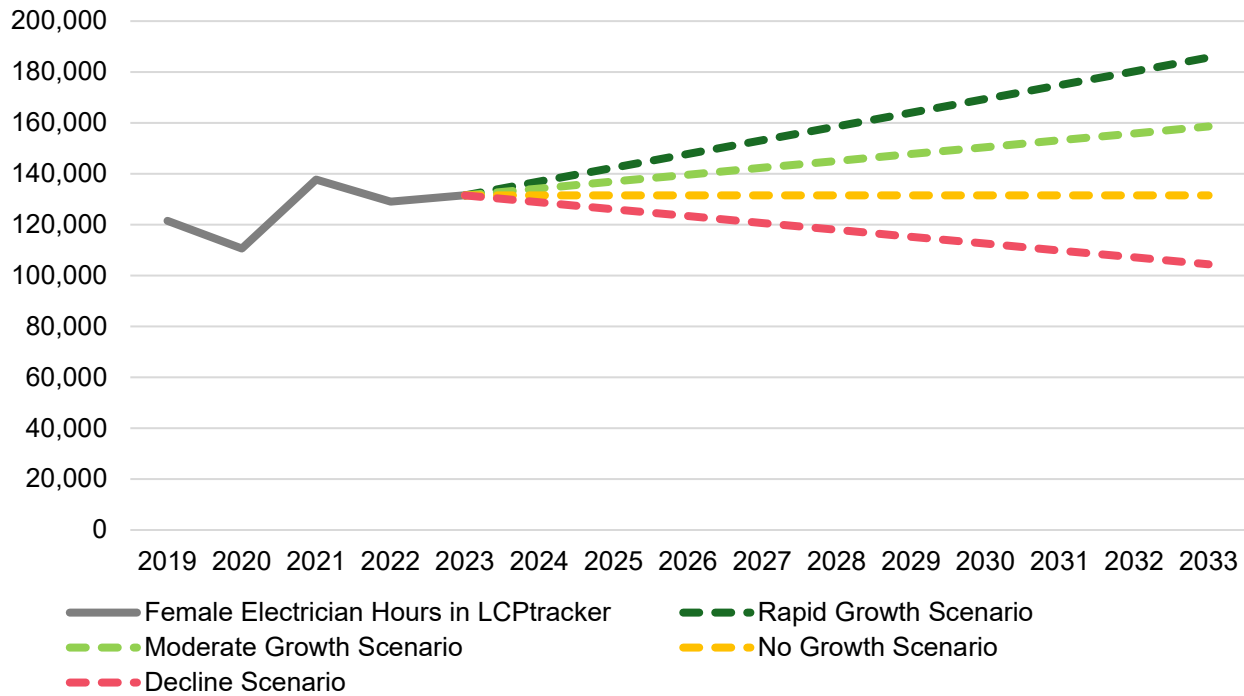
Projected Female Construction Workforce Availability

The consultant team used LCPtracker data to estimate projected female construction work hours through 2033, which includes both apprentices and journey workers combined. Except for Iron Workers and Bricklayers/Tile Setters, the number of female work hours in each trade generally increased from 2019 to 2023. Using LCPtracker data from 2019 to 2023, the consultant team projected future female construction workforce availability in Greater LA under three scenarios: growth, no growth, and decline. Given the unpredictability of construction demand in the region over a decade, these projections are not highly calibrated predictions. Rather, they are a rough estimation of possible of female construction work hours from 2023 to 2033. The definition for each scenario is as follows:

- 1. Rapid Growth Scenario:** This scenario assumes that female work hours would see consistent and rapid growth over the next decade. To calculate this scenario, the consultant team took the difference between the highest and lowest hour totals from 2019 to 2023 and divided the difference by 5 to capture a rapid annual increase from the 2023 total.
- 2. Moderate Growth Scenario:** This scenario assumes that female work hours would see consistent and conservative growth over the next decade. To calculate this scenario, the consultant team took the difference between the highest and lowest hour totals from 2019 to 2023 and divided the difference by 10 to capture a gradual annual increase from the 2023 total.
- 3. No Growth Scenario:** This scenario assumes that the number of female work hours would remain constant at 2023 levels through 2033.
- 4. Decline Scenario:** This scenario assumes that female work hours would see consistent and conservative decline over the next decade. The consultant team calculated this scenario by taking the negative value computed in the Moderate Growth Scenario

As **Figure 2-13** shows, using the work hours of female Electricians as an example, the female work hours under “No Growth Scenario” is the midpoint between the “Decline Scenario” and “Growth Scenario” projections.

Figure 2-13: Availability of Female Electricians - Sustained Growth Scenario (2019 – 2033)



Source: LCPtracker and Estolano Advisors

Table 2-8 shows the results of these projections for each trade, while **Figure 2-14** shows these projections for all 15 trades combined. The following scenarios are intended to visualize the most reasonable range of possible work hour outcomes for each trade over a decade.⁴⁷

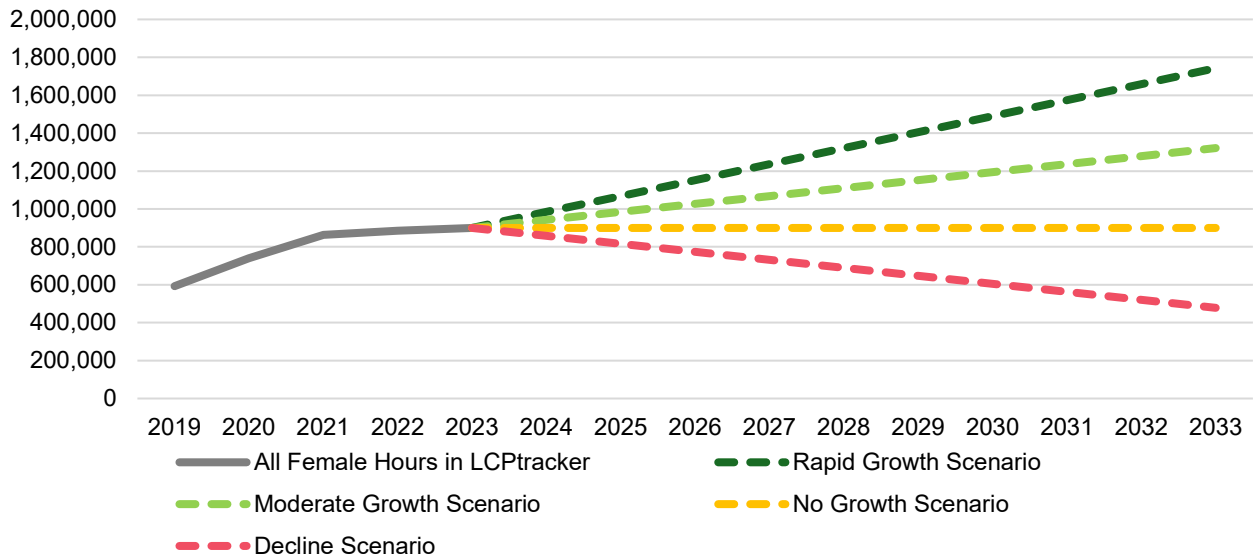
⁴⁷ These projections do not account for unemployment rates in each trade. Additionally, these projections assume that LCPtracker encompasses the entire available workforce for prevailing wage construction.

Table 2-8: Estimated Female Workforce Availability for Greater LA (2023-2033)

Construction Trade	2023	2027			2030			2033		
		Decline	Moderate	Rapid	Decline	Moderate	Rapid	Decline	Moderate	Rapid
Bricklayer and Tile Setter	3,088	2,653	3,524	3,959	2,326	3,851	4,613	1,999	4,177	5,266
Carpenter	87,911	73,057	102,765	117,619	61,916	113,906	139,901	50,775	125,047	162,182
Electrician	131,511	120,674	142,349	153,186	112,546	150,477	169,442	104,418	158,605	185,698
Elevator Constructor	9,344	6,470	12,218	15,092	4,315	14,374	19,403	2,160	16,529	23,714
Inspector	78,680	51,889	105,471	132,262	31,796	125,564	172,448	11,703	145,657	212,634
Iron Worker	31,804	23,422	40,185	48,566	17,136	46,471	61,138	10,851	52,757	73,710
Laborer	281,304	250,268	312,339	343,375	226,992	335,616	389,928	203,715	358,893	436,481
Operating Engineer	72,612	56,175	89,049	105,486	43,848	101,377	130,142	31,520	113,705	154,798
Painter	42,035	33,861	50,209	58,383	27,731	56,340	70,644	21,600	62,470	82,905
Plasterer and Cement Mason	10,369	7,321	13,418	16,466	5,034	15,704	21,039	2,748	17,991	25,612
Plumber and Pipefitter	71,682	51,582	91,782	111,882	36,507	106,857	142,031	21,432	121,932	172,181
Roofer	5,075	3,919	6,232	7,388	3,052	7,099	9,123	2,185	7,966	10,857
Sheet Metal	14,939	11,413	18,466	21,993	8,768	21,111	27,283	6,122	23,756	32,573
Surveyor	6,843	4,012	9,674	12,505	1,889	11,797	16,752	(235)	13,921	20,998
Teamster/Driver	52,587	34,512	70,662	88,737	20,956	84,219	115,850	7,400	97,775	142,962

Source: LCPTracker and Estolano Advisors

Figure 2-14: Projected Availability of All Female Work Hours (2019-2033)



Source: LCPTracker and Estolano Advisors

Projected Female Construction Workforce Demand on Metro Projects

On behalf of the consultant team, ICF estimated current and future demand for female workers on Metro projects. To project hours of employment on Metro projects per craft and trade through 2033 (**Table 2-9 and Table 2-10**), ICF estimated the current (2023 base year) Metro construction costs by applying budgeted construction costs⁴⁸ to projects identified in Metro's project schedule (as of January 2024)⁴⁹ as in an active construction phase in 2023. ICF estimated total Metro construction costs for 2023 at \$2.13B. ICF also estimated the proportion of labor costs at 35%,⁵⁰ resulting in base year labor construction costs of \$747,000,555. ICF applied the construction cost estimated in 2023 to the total hours worked for Metro among unionized workers in 2023 to determine the construction cost per hour at \$177.23.

ICF used upper and lower bound scenarios to project future labor construction costs. In the Flat (0%) Demand Growth scenario, ICF assumed that Metro labor construction costs and demand will remain flat through 2033 with no increase in labor hours. In the second 2% Demand Growth scenario, ICF estimated Metro construction costs and demand will increase at 2% year over year, based on Metro's average growth over the last five years sourced from Metro annual budgets.⁵¹ This methodology produced annual labor construction cost estimates for Metro.

Subsequently, the consultant team applied the percent of total labor hours for each Metro craft in 2023 to each future year to calculate the required labor hours by Metro craft for each year through 2033. For this analysis, ICF assumed that the proportion of labor hours in 2023 for each Metro craft will remain constant relative to the total in each succeeding year. In the flat demand scenario, the hours stay constant at 2023 levels. In the 2% annual growth scenario, the hours needed per craft for Metro projects escalate based on the growing labor costs translated into total annual hours and proportioned based on the 2023 craft mix. Comparing the number of labor hours in 2023 to the number of labor hours estimated for each future year represents the total demand gap in labor hours.

⁴⁸ Metro Adopted Budget FY2024, Appendix V: Transportation Infrastructure Development Project List. Retrieved August 5, 2024 from [Finance and Budget - LA Metro](#).

⁴⁹ Metro Program Management Master Schedule, January 2024. Metro provided internal document.

⁵⁰ Labor costs in construction projects typically range from 20-40% with specialized projects and major urban markets skewing higher in the range. See for example, [Labor vs material cost in construction: Overview - Bridgit](#).

⁵¹ Metro Adopted Budgets FY2020-FY2025, <https://budget.metro.net/budget-documents.html>. Note that this outpaces EDD Construction Market growth projections in Greater LA (1.6% growth) and the annualized employment growth for the 34 SOC occupations estimated using Lightcast data (.8-1.2% growth).

For example, in the Flat Demand Growth scenario the total projected hours for Metro in 2033 are 4,214,979 (equivalent to 2023 hours) and in the 2% Demand Growth scenario (Exhibit 9), in 2033 the total projected hours for all Metro crafts are 5,138,035. As further example, for the Metro craft “Building / Construction Inspector and Field Soils and Material Tester” specifically, 2033 hours are 216,518. By comparing the number of labor hours in 2023 to the number of labor hours estimated for each future year, the number of additional hours required are calculated, which represents the total demand gap in labor hours. For example, for the Metro craft of “Building / Construction Inspector and Field Soils and Material Tester” the demand gap hours (additional hours needed for 2033) comparing 2023 and 2033 is 38,898 and the total demand gap in 2033 is 988,056 hours.

Table 2-9: Projected Metro Hours in 2026 and 2033 under 2% Demand Growth Scenario by Craft

Metro Craft	2023 Hours for Unionized Workers on Metro Projects	Projected 2026 Hours for Unionized Workers on Metro Projects	Additional Labor Hours Required for 2026	Projected 2033 Hours for Unionized Workers on Metro Projects	Additional Labor Hours Required for 2033
Apprentice Landscape Irrigation Fitter (2nd Shift)	48	51	3	59	11
Asbestos and Lead Abatement (Laborer)	2,549	2,705	156	3,107	558
Asbestos Worker, Heat and Frost Insulator	1,196	1,269	73	1,458	262
Brick Tender	11,042	11,718	676	13,460	2,418
Bricklayer	865	918	53	1,054	189
Bricklayer, Stonemason	37,838	40,154	2,316	46,124	8,286
Building / Construction Inspector and Field Soils and Material Tester	177,620	188,492	10,872	216,518	38,898
Carpenter And Related Trades	513,518	544,950	31,431	625,976	112,458
Carpet, Linoleum	272	289	17	332	60
Carpet, Linoleum, Resilient	12	13	1	15	3
Cement Mason	134,682	142,925	8,244	164,176	29,495
Cranes, Pile Driver, and Hoisting Equipment (Operating Engineer)	33,781	35,848	2,068	41,178	7,398
Driver (On/Off-Hauling To/From Construction Site)	74,351	78,902	4,551	90,634	16,282
Drywall Finisher	1,788	1,897	109	2,180	392
Drywall Installer / Lather (Carpenter)	35,125	37,275	2,150	42,817	7,692
Electrical Utility Lineman	6,177	6,555	378	7,530	1,353
Electrician	475,231	504,318	29,088	579,303	104,073
Elevator Constructor	82,236	87,269	5,033	100,245	18,009
Fence Builder (Carpenter)	2	2	0	2	0
Field Surveyor	38,458	40,812	2,354	46,880	8,422
Fire Safety and Miscellaneous Sealing	184	195	11	224	40

Metro Craft	2023 Hours for Unionized Workers on Metro Projects	Projected 2026 Hours for Unionized Workers on Metro Projects	Additional Labor Hours Required for 2026	Projected 2033 Hours for Unionized Workers on Metro Projects	Additional Labor Hours Required for 2033
Glazier	27,316	28,988	1,672	33,298	5,982
Gunite Worker (Laborer)	9,841	10,443	602	11,996	2,155
Horizontal Directional Drilling	7,135	7,572	437	8,698	1,563
Iron Worker	300,399	318,785	18,387	366,184	65,786
Laborer (Construction, Fence Erector, Gunite, Housemover, Tunnel)	235	249	14	286	51
Laborer And Related Classifications	954,083	1,012,480	58,397	1,163,021	208,939
Landscape Irrigation Fitter	203	216	12	248	44
Landscape Maintenance Laborer	58,772	62,369	3,597	71,643	12,871
Landscape Operating Engineer	175	186	11	213	38
Landscape / Irrigation Laborer / Tender	7,084	7,517	434	8,635	1,551
Marble Finisher	1,506	1,598	92	1,836	330
Modular Furniture Installer (Carpenter)	517	548	32	630	113
Operating Engineer	441,485	468,508	27,022	538,168	96,683
Operating Engineer (Landscape Construction)	134	142	8	163	29
Painter	55,080	58,452	3,371	67,143	12,062
Painter - Industrial	2,602	2,762	159	3,172	570
Parking And Highway Improvement (Striper-Laborer)	3,807	4,040	233	4,640	834
Parking And Highway Improvement (Striping, Slurry and Seal Coat Operations-Laborer)	642	681	39	782	140
Pile Driver (Carpenter)	5,237	5,558	321	6,384	1,147
Plaster Tender	9,967	10,577	610	12,149	2,183
Plasterer	13,257	14,068	811	16,160	2,903
Plumber	83,861	88,993	5,133	102,225	18,365
Residential Electrician	8	8	0	10	2
Residential Sheet Metal Worker	341	362	21	416	75
Roofer	41,736	44,291	2,555	50,876	9,140
Sheet Metal Worker	26,026	27,619	1,593	31,726	5,700
Sheet Metal Worker (HVAC)	49,184	52,194	3,010	59,955	10,771
Teamster	36,572	38,811	2,239	44,581	8,009
Telecommunications Technician	341	362	21	416	75
Terrazzo Finisher	187	198	11	228	41
Terrazzo Worker	336	356	21	409	73
Tile Finisher	3,806	4,039	233	4,639	833
Tile Layer	2,466	2,617	151	3,006	540
Tile Setter	176	187	11	215	39

Metro Craft	2023 Hours for Unionized Workers on Metro Projects	Projected 2026 Hours for Unionized Workers on Metro Projects	Additional Labor Hours Required for 2026	Projected 2033 Hours for Unionized Workers on Metro Projects	Additional Labor Hours Required for 2033
Tree Maintenance (Laborer)	4,255	4,515	260	5,187	932
Tunnel (Operating Engineer)	42,997	45,629	2,632	52,413	9,416
Tunnel Worker (Laborer)	396,239	420,492	24,253	483,013	86,774
Total Construction Labor Hours	4,214,979	4,472,969	257,990	5,138,035	923,056
Estimated Labor Construction Cost	\$747,000,555	\$792,722,965	N/A	\$910,589,508	N/A

Source: LCPtracker and ICF.

To calculate the female labor demand gap, ICF analyzed the LCPtracker data to calculate the sum of female hours incurred per Metro craft in 2023 and the percent of total hours completed by female workers in 2023 for each craft. This craft-specific proportion was applied to each respective Metro craft for each future year being analyzed to determine the projected number of female hours per year. The number of female labor hours required to meet the utilization goal of 6.9% per year was calculated and compared to the estimated female labor hours in each year to determine the additional hours required by female labor needed to satisfy Metro’s current and future demand. This metric represents the demand gap in female labor hours which is shown by craft for 2026 and 2033 in Exhibit 10 below.

For example, the Metro craft “Building / Construction Inspector and Field Soils and Material Tester” incurred 11,959 female worker hours in 2023 and is projected to use 14,578 hours in 2033 based on future demand growth projections. To reach the 6.9% utilization goal, this craft needs to incur 14,940 total female hours in conjunction with accretions in hours for other crafts listed in the Exhibit 10. Thus, the additional hours required to meet this utilization goal, or the female labor hours demand gap, for the “Building / Construction Inspector and Field Soils and Material Tester” craft in 2033 is 362 female hours.

Table 2-10: Projected Female Metro Hours in 2026 and 2033 under 2% Demand Growth Scenario by Craft

Metro Craft	2023 Hours for Female Workers on Metro Projects	Projected 2026 Hours for Female Workers on Metro Projects	Number of 2026 Female Hours Required to Meet Utilization Target	Additional 2026 Female Hours Required to Meet Utilization Target	Projected 2033 Hours for Female Workers on Metro Projects	Number of 2033 Female Hours Required to Meet Utilization Target	Additional 2033 Female Hours Required to Meet Utilization Target
Apprentice Landscape Irrigation Fitter (2nd Shift)	-	-	4	4	-	4	4
Asbestos And Lead Abatement (Laborer)	-	-	187	187	-	214	214
Asbestos Worker, Heat and Frost Insulator	40	42	88	45	49	101	52
Brick Tender	-	-	809	809	-	929	929
Bricklayer	-	-	63	63	-	73	73
Bricklayer, Stonemason	-	-	2,771	2,771	-	3,183	3,183
Building / Construction Inspector and Field Soils and Material Tester	11,959	12,691	13,006	315	14,578	14,940	362
Carpenter and Related Trades	12,370	13,127	37,602	24,475	15,079	43,192	28,114
Carpet, Linoleum	-	-	20	20	-	23	23
Carpet, Linoleum, Resilient	-	-	1	1	-	1	1
Cement Mason	298	316	9,862	9,546	363	11,328	10,965
Cranes, Pile Driver, And Hoisting Equipment (Operating Engineer)	779	826	2,474	1,647	949	2,841	1,892
Driver (On/Off-Hauling To/From Construction Site)	836	887	5,444	4,557	1,019	6,254	5,235
Drywall Finisher	-	-	131	131	-	150	150
Drywall Installer / Lather (Carpenter)	218	231	2,572	2,341	266	2,954	2,689
Electrical Utility Lineman	-	-	452	452	-	520	520
Electrician	24,984	26,513	34,798	8,285	30,455	39,972	9,517
Elevator Constructor	7,152	7,590	6,022	(1,568)	8,718	6,917	(1,801)
Fence Builder (Carpenter)	-	-	0	0	-	0	0
Field Surveyor	486	516	2,816	2,300	592	3,235	2,642
Fire Safety and Miscellaneous Sealing	-	-	13	13	-	15	15

Metro Craft	2023 Hours for Female Workers on Metro Projects	Projected 2026 Hours for Female Workers on Metro Projects	Number of 2026 Female Hours Required to Meet Utilization Target	Additional 2026 Female Hours Required to Meet Utilization Target	Projected 2033 Hours for Female Workers on Metro Projects	Number of 2033 Female Hours Required to Meet Utilization Target	Additional 2033 Female Hours Required to Meet Utilization Target
Glazier	293	311	2,000	1,689	357	2,298	1,940
Gunit Worker (Laborer)	-	-	721	721	-	828	828
Horizontal Directional Drilling	-	-	522	522	-	600	600
Iron Worker	9,341	9,913	21,996	12,083	11,387	25,267	13,880
Laborer (Construction, Fence Erector, Gunit, Housemover, Tunnel)	-	-	17	17	-	20	20
Laborer and Related Classifications	54,689	58,037	69,861	11,824	66,666	80,248	13,583
Landscape Irrigation Fitter	-	-	15	15	-	17	17
Landscape Maintenance Laborer	508	539	4,303	3,765	619	4,943	4,325
Landscape Operating Engineer	-	-	13	13	-	15	15
Landscape / Irrigation Laborer / Tender	-	-	519	519	-	596	596
Marble Finisher	-	-	110	110	-	127	127
Modular Furniture Installer (Carpenter)	-	-	38	38	-	43	43
Operating Engineer	4,204	4,461	32,327	27,866	5,124	37,134	32,009
Operating Engineer (Landscape Construction)	-	-	10	10	-	11	11
Painter	2,089	2,217	4,033	1,816	2,546	4,633	2,086
Painter - Industrial	1,216	1,291	191	(1,100)	1,483	219	(1,264)
Parking And Highway Improvement (Striper-Laborer)	47	50	279	229	57	320	263
Parking And Highway Improvement (Striping, Slurry and Seal Coat Operations-Laborer)	-	-	47	47	-	54	54
Pile Driver (Carpenter)	-	-	383	383	-	440	440
Plaster Tender	-	-	730	730	-	838	838
Plasterer	504	535	971	436	614	1,115	501
Plumber	3,088	3,276	6,141	2,864	3,764	7,054	3,290
Residential Electrician	-	-	1	1	-	1	1

Metro Craft	2023 Hours for Female Workers on Metro Projects	Projected 2026 Hours for Female Workers on Metro Projects	Number of 2026 Female Hours Required to Meet Utilization Target	Additional 2026 Female Hours Required to Meet Utilization Target	Projected 2033 Hours for Female Workers on Metro Projects	Number of 2033 Female Hours Required to Meet Utilization Target	Additional 2033 Female Hours Required to Meet Utilization Target
Residential Sheet Metal Worker	-	-	25	25	-	29	29
Roofer	2,072	2,199	3,056	857	2,526	3,510	985
Sheet Metal Worker	1,080	1,146	1,906	760	1,317	2,189	873
Sheet Metal Worker (HVAC)	-	-	3,601	3,601	-	4,137	4,137
Teamster	3,532	3,748	2,678	(1,070)	4,305	3,076	(1,229)
Telecommunications Technician	-	-	25	25	-	29	29
Terrazzo Finisher	-	-	14	14	-	16	16
Terrazzo Worker	-	-	25	25	-	28	28
Tile Finisher	-	-	279	279	-	320	320
Tile Layer	-	-	181	181	-	207	207
Tile Setter	-	-	13	13	-	15	15
Tree Maintenance (Laborer)	-	-	312	312	-	358	358
Tunnel (Operating Engineer)	-	-	3,148	3,148	-	3,617	3,617
Tunnel Worker (Laborer)	15,772	16,737	29,014	12,277	19,225	33,328	14,103
Total Female Labor Hours	157,554	167,198	308,635	141,437	192,058	354,524	162,467

Source: LCPtracker and ICF.

Additionally, to illustrate the female current and future demand by construction trade, ICF mapped each craft to its respective construction trade to show current (**Table 2-11**) and future (**Table 2-12**) demand gaps. For example, in Exhibit 12 the Teamster/Driver trade will need an additional 4,005 hours in 2033 to meet projected demand.

Table 2-11: Current Female Workforce Gap on Metro Projects in 2023 by Trade

Construction Trade	2023 Hours (Actual)	Female Hours Required for 6.9%	2023 Female Hours (Actual)	Current Female Workforce Gap
BRICKLAYER AND TILE SETTER	47,180	3,255	-	3,255
CARPENTER	554,399	38,254	12,588	25,666
ELECTRICIAN	481,757	33,241	24,984	8,258
ELEVATOR CONSTRUCTOR	82,236	5,674	7,152	(1,478)
INSPECTOR	177,620	12,256	11,959	297
IRON WORKER	300,399	20,728	9,341	11,387
LABORER	1,467,077	101,228	71,055	30,173
OPERATING ENGINEER	518,571	35,781	4,204	31,578
PAINTER	87,071	6,008	3,598	2,410
PLASTERER AND CEMENT MASON	147,939	10,208	802	9,406
PLUMBER AND PIPEFITTER	84,064	5,800	3,088	2,713
ROOFER	41,736	2,880	2,072	808
SHEET METAL	75,551	5,213	1,080	4,133
SURVEYOR	38,458	2,654	486	2,168
TEAMSTER/DRIVER	110,923	7,654	5,146	2,507
Total	4,214,979	290,834	157,554	133,279

Source: LCPtracker and ICF.

Table 2-12: Projected Female Metro Hours in 2026 and 2033 under 2% Demand Growth Scenario by Trade

Construction Trade	Actual 2023 Hours for Female Workers on Metro Projects	Projected 2026 Hours for Female Workers on Metro Projects	Number of 2026 Female Hours Required to Meet Utilization Target	Additional 2026 Female Hours Required to Meet Utilization Target	Projected 2033 Hours for Female Workers on Metro Projects	Number of 2033 Female Hours Required to Meet Utilization Target	Additional 2033 Female Hours Required to Meet Utilization Target
BRICKLAYER AND TILE SETTER	0	0	3,455	3,455	0	3,968	3,968
CARPENTER	12,588	13,358	40,595	27,237	15,344	46,631	31,286
ELECTRICIAN	24,984	26,513	35,276	8,763	30,455	40,521	10,066
ELEVATOR CONSTRUCTOR	7,152	7,590	6,022	(1,568)	8,718	6,917	(1,801)
INSPECTOR	11,959	12,691	13,006	315	14,578	14,940	362
IRON WORKER	9,341	9,913	21,996	12,083	11,387	25,267	13,880
LABORER	71,055	75,404	107,424	32,020	86,616	123,397	36,781
OPERATING ENGINEER	4,982	5,287	37,972	32,684	6,073	43,617	37,544
PAINTER	3,598	3,819	6,376	2,557	4,386	7,324	2,937
PLASTERER AND CEMENT MASON	802	851	10,833	9,981	978	12,443	11,466
PLUMBER AND PIPEFITTER	3,088	3,276	6,155	2,879	3,764	7,071	3,307
ROOFER	2,072	2,199	3,056	857	2,526	3,510	985
SHEET METAL	1,080	1,146	5,532	4,386	1,317	6,355	5,038
SURVEYOR	486	516	2,816	2,300	592	3,235	2,642
TEAMSTER/DRIVER	4,368	4,635	8,122	3,487	5,325	9,330	4,005
Total Female Labor Hours	157,554	167,198	308,635	141,437	192,058	354,524	162,467

Source: LCPtracker and ICF.

Projected Female Construction Workforce Gap

The consultant team compared measures of construction labor supply and demand to project the workforce gap both regionally and specifically for Metro projects. These projections consider different growth scenarios for the labor supply and demand from 2024 to 2033.

Overall Projected Metro Labor Gap

The consultant team developed supply side labor projections using historical Greater LA Area⁵² data from LCPtracker as described in Pages 48 through 50. To capture the volatility in many of the trades over the past five years, the consultant team developed Rapid Growth, Moderate Growth, No Growth, and Decline scenarios for each trade. To incorporate supply-side projections into the gap analysis, ICF developed scenarios assuming moderate and rapid growth in supply. The projected supply for each scenario includes the number of projected female hours in the Greater LA Area by trade and by year from through 2033.

Because the supply scenarios represent projections for the Greater LA Area, not all of which would be available to Metro based on competition for these resources, the consultant team estimated supply side availability of female labor for Metro contractors based on the historical average of the percent of the Greater LA female supply Metro captured from 2019-2023 by trade. For example, on average over the last five years, Metro has captured 78% of the “Elevator Constructor” trade and 6.5% of the “Surveyor” trade. The consultant team multiplied female supply projections for Greater LA by the historical percent of female supply that Metro has captured to create hour supply estimates by year and trade

Using the two demand and two supply scenarios, the consultant team compared demand and supply estimates under the four resulting scenarios to project the annual gap in female labor hours and projected female utilization rate by year. **Table 2-13** shows the current or base year (2023) gap between 2023 female hours and the female hours that would be needed to meet an annual 6.9% female participation rate of 133,280 hours. That gap decreases as demand remains flat and supply moderately increases and by 2033 is 48,942 hours. By 2033, the projected annual female participation rate is 4.56% in 2026 and 5.74% by 2033. **Figure 2-15** displays this projection graphically and extrapolates through 2043.

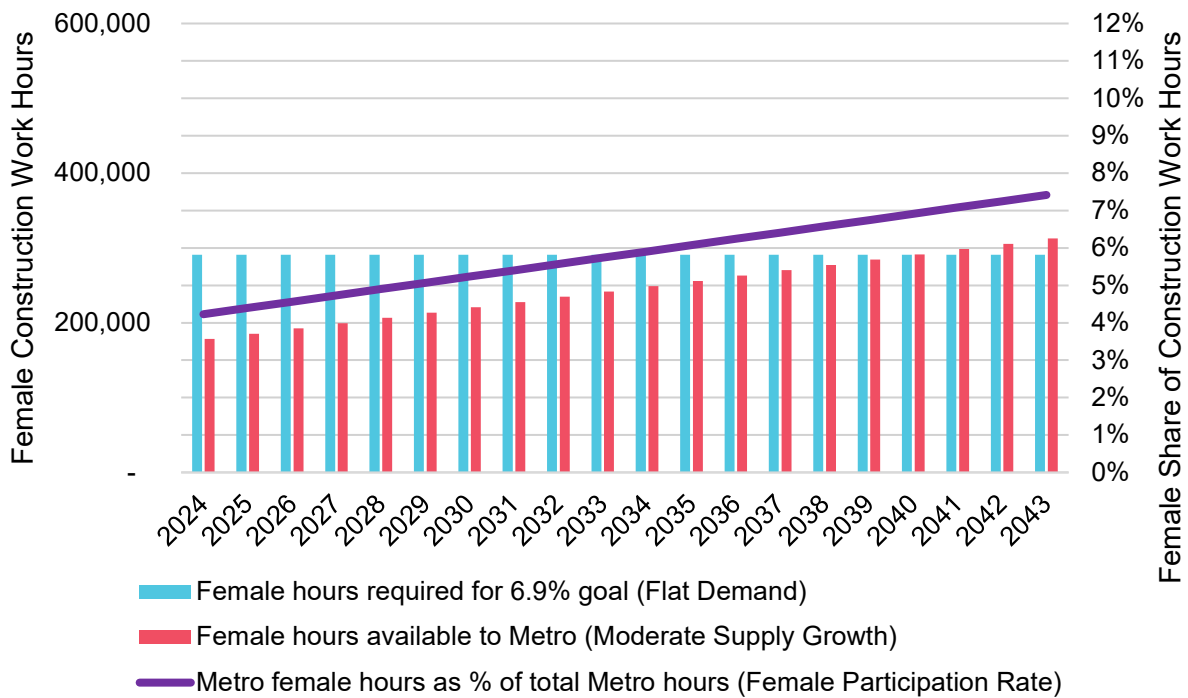
⁵² The Greater LA Area includes five Southern California counties: Los Angeles, Orange, Riverside, Ventura, and San Bernadino.

Table 2-13. Metro Female Annual Gap & Utilization: Flat (0%) Demand Growth and Moderate Supply Growth, Current, 3-Year, and 10-Year Projections

Scenario: Flat (0%) Demand Growth and Moderate Supply Growth	Female Labor Hours 2023 (Current)	Female Labor Hours 2026 (Projected)	Female Labor Hours 2033 (Projected)
Projected Total Hours (all genders)	4,214,979	4,214,979	4,214,979
Projected Female Hours at 2023 Participation Rate	157,554	157,554	157,554
Female hours required to meet target utilization	290,834	290,834	290,834
Additional female hours needed to meet target utilization	133,279	133,279	133,279
Projected female hours available to Metro (supply)	157,554	192,384	241,891
Difference between available female hours and projected demand at 2023 participation rate	--	34,829	84,337
Difference between available female hours and hours needed to meet target utilization rate	(133,280)	(98,450)	(48,942)
Metro Percent Female Hours	3.74%	3.74%	3.74%
Percent Female Hours required to meet target utilization	6.90%	6.90%	6.90%
Metro Female Hours as % of total hours (Female Participation)	3.74%	4.56%	5.74%

Source: LCPtracker, ICF, and Estolano Advisors. Note: Base year female utilization is calculated from LCPtracker data and may vary slightly from other point in time estimates of Metro female utilization.

Figure 2-15: Projected Female Workforce Utilization on Metro Construction Projects, 0% Demand Growth, Moderate Supply Growth (2024-2043)



Source: LCPtracker, Metro, Estolano Advisors, and ICF

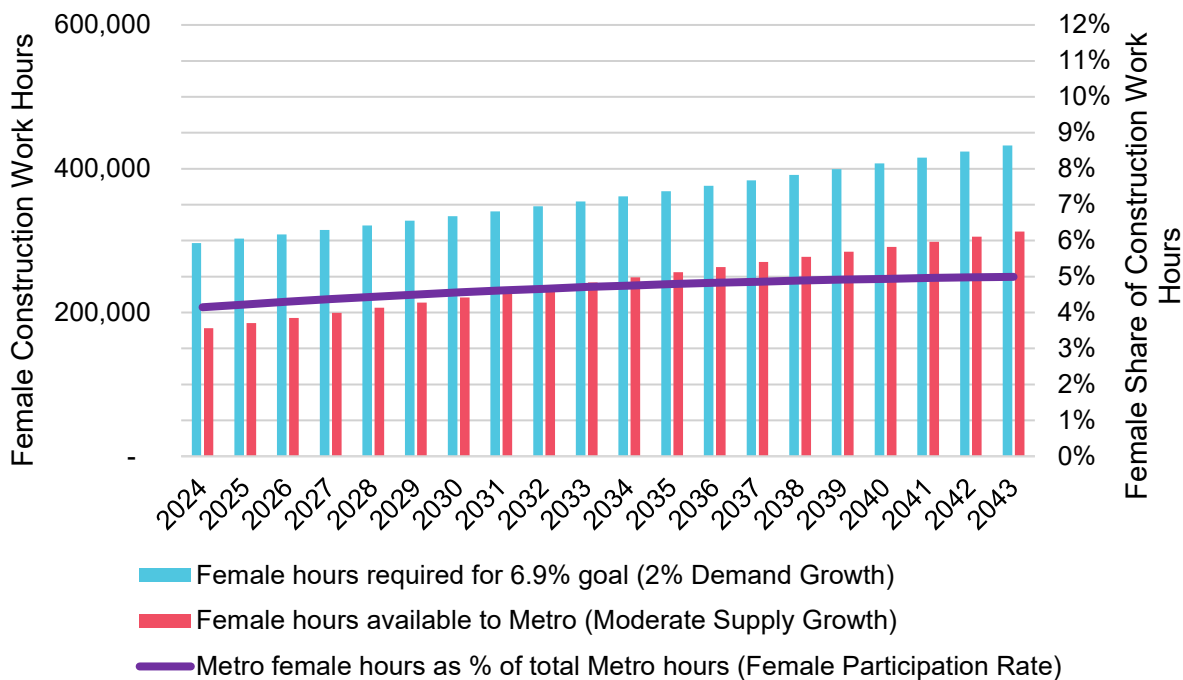
Table 2-14 shows the three- and ten-year projections assuming demand is increasing at 2% a year. As expected, the female workforce gap is larger than under the previous scenario and by 2033 the female utilization rate is at 4.71%. **Figure 2-16** displays this projection graphically and extrapolates through 2043.

Table 2-14. Metro Female Annual Gap & Utilization: 2% Annual Demand Growth and Moderate Supply Growth, Three-Year and Ten-Year Projections

Scenario: 2% Demand Growth and Moderate Supply Growth	Female Labor Hours 2026 (Projected)	Female Labor Hours 2033 (Projected)
Projected Total Hours (all genders)	4,472,969	5,138,035
Projected Female Hours at 2023 Participation Rate	167,198	192,058
Female hours required to meet target utilization	308,635	354,524
Additional female hours needed to meet target utilization	141,437	162,467
Projected female hours available to Metro (supply)	192,384	241,891
Difference between available female hours and projected demand at 2023 participation rate	25,186	49,833
Difference between available female hours and hours needed to meet target utilization rate	(116,251)	(112,633)
Metro Female Hours as % of total hours (Female Participation)	4.30%	4.71%

Source: LCPtracker, ICF, and Estolano Advisors.

Figure 2-16: Projected Female Workforce Utilization on Metro Construction Projects, 2% Demand Growth, Moderate Supply Growth (2024-2043)



Source: LCPtracker, Metro, Estolano Advisors, and ICF

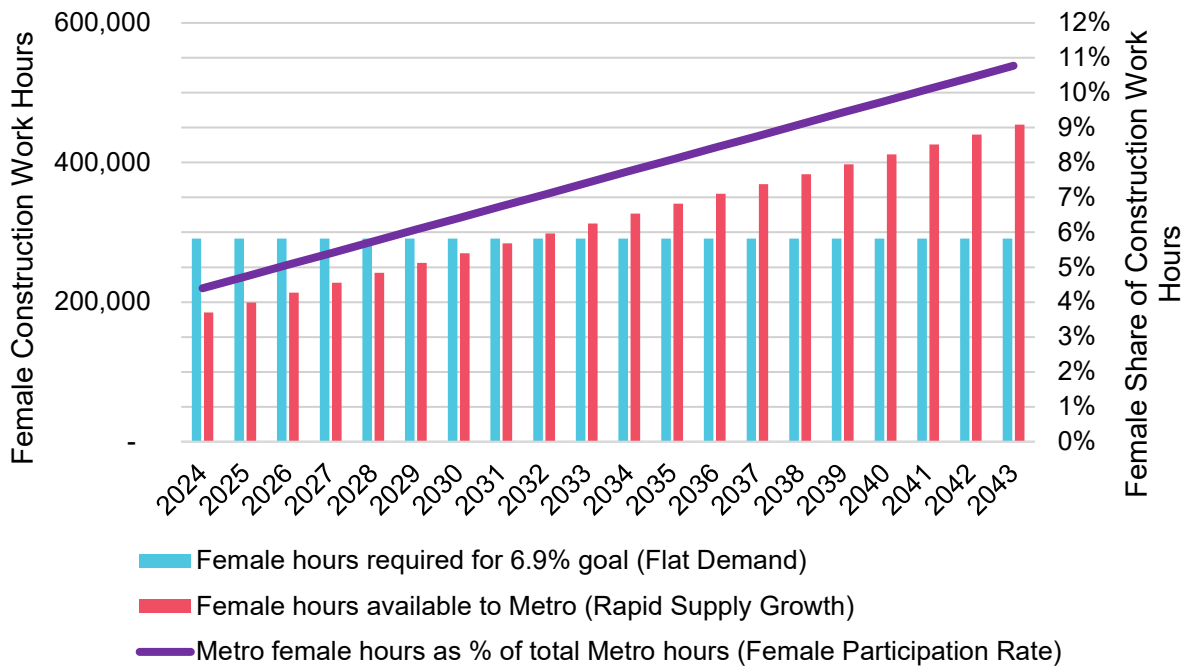
In the most optimistic scenario modeled, Flat (0%) Demand Growth and Rapid Supply Growth, Metro contractors could surpass the 6.9% goal for female utilization by 2032, on an annual basis, reaching 7.08% in 2032 and 7.42% in 2033 (Table 2-15 and Figure 2-17). In the final scenario, Table 2-16, 2% Demand Growth per year and Rapid Supply Growth, female participation surpasses 6% by 2033 but not does surpass 6.9% within the ten-year period. Figure 2-18 displays this projection graphically and extrapolates through 2043.

Table 2-15. Metro Female Annual Gap & Utilization: Flat Demand Growth and Rapid Supply Growth, Three-Year and Years 8-10 Projections

Scenario: Flat (0%) Demand Growth and Rapid Supply Growth	Female Labor Hours 2026 (Projected)	Female Labor Hours 2031 (Projected)	Female Labor Hours 2032 (Projected)	Female Labor Hours 2033 (Projected)
Projected Total Hours (all genders)	4,214,979	4,214,979	4,214,979	4,214,979
Projected Female Hours at 2023 Participation Rate	157,554	157,554	157,554	157,554
Female hours required to meet target utilization	290,834	290,834	290,834	290,834
Additional female hours needed to meet target utilization	133,279	133,279	133,279	133,279
Projected female hours available to Metro (supply)	213,601	284,326	298,471	312,616
Difference between available female hours and projected demand at 2023 participation rate	56,047	126,772	140,917	155,062
Difference between available female hours and hours needed to meet target utilization rate	(77,232)	(6,507)	7,638	21,783
Metro Female Hours as % of total hours (Female Participation)	5.07%	6.75%	7.08%	7.42%

Source: LCPtracker, ICF, and Estolano Advisors.

Figure 2-17: Projected Female Workforce Utilization on Metro Construction Projects, 0% Demand Growth, Rapid Supply Growth (2024-2043)



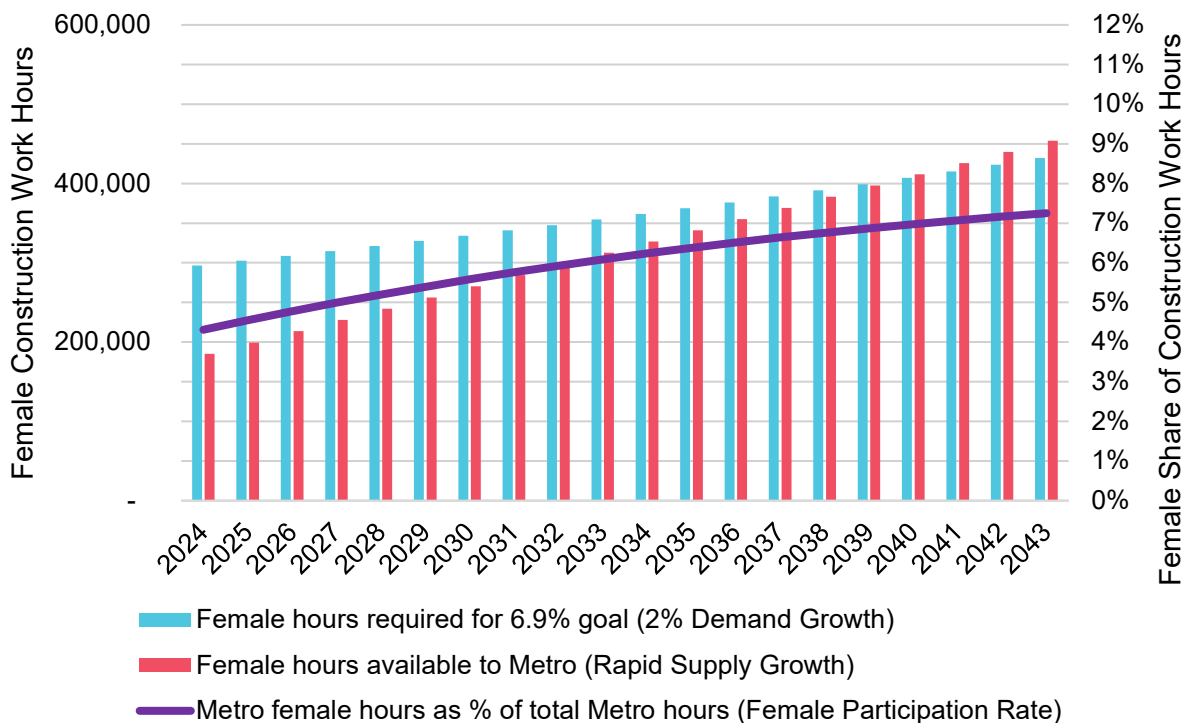
Source: LCPtracker, Metro, Estolano Advisors, and ICF

Table 2-16. Metro Female Annual Gap & Utilization: 2% Annual Demand Growth and Rapid Supply Growth, Three-Year and Ten-Year Projections

	Female Labor Hours 2026 (Projected)	Female Labor Hours 2033 (Projected)
Scenario: 2% Demand Growth and Rapid Supply Growth		
Projected Total Hours (all genders)	4,472,969	5,138,035
Projected Female Hours at 2023 Participation Rate	167,198	192,058
Female hours required to meet target utilization	308,635	354,524
Additional female hours needed to meet target utilization	141,437	162,467
Projected female hours available to Metro (supply)	213,601	312,616
Difference between available female hours and projected demand at 2023 participation rate	46,403	120,559
Difference between available female hours and hours needed to meet target utilization rate	(95,034)	(41,908)
Metro Female Hours as % of total hours (Female Participation)	4.78%	6.08%

Source: LCPtracker, ICF, and Estolano Advisors.

Figure 2-18: Projected Female Workforce Utilization on Metro Construction Projects, 2% Demand Growth, Rapid Supply Growth (2024-2043)



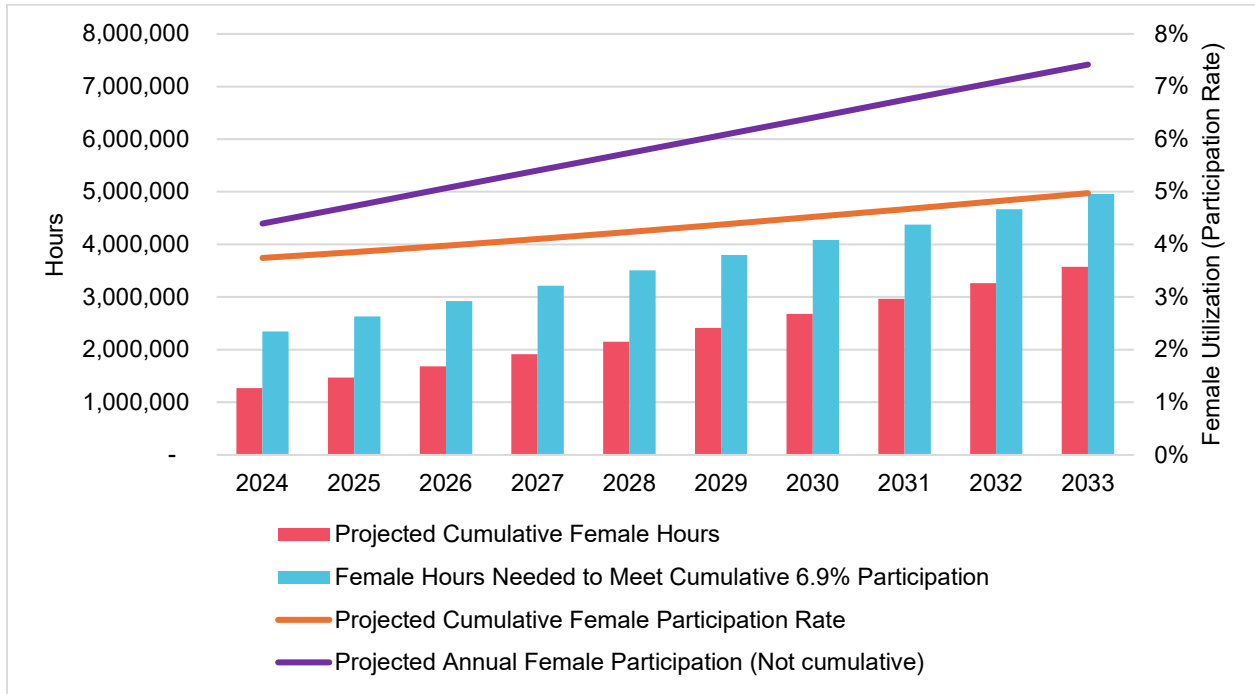
Source: LCPtracker, Metro, Estolano Advisors, and ICF

As noted above, under the most favorable scenario modeled: Flat Demand Growth and Moderate Supply Growth, Metro contractors could achieve a 7.08% female utilization in 2032 and 7.42% in 2033, on an annual basis. However, due to historical hours (29.7M as of November 2023⁵³) included in the PLA utilization calculations and Metro contractors’ historical female utilization rates below 2023 levels dating back to 2012, the cumulative female utilization would still be less than 5% by 2033. **Figure 2-19** shows the difference between the Female Utilization rate annually each year and the lower cumulative rate when accounting for historical hours. Cumulative female utilization increases at a lower rate than annual utilization because it is being weighted by lower historical female utilization rates.

Table 2-17 below shows, for each of the four scenarios, the projected cumulative female utilization rate for 2026 and 2033 accounting for historical hours, PLA hours, and female utilization rates. The cumulative Female Utilization rate in 2033 under the four scenarios ranges from 4.15% (with a shortfall in hours of 2.11M) under a 2% annual demand growth, moderate supply growth scenario to 4.97% (with a shortfall in hours of 1.39M) assuming flat demand growth and rapid supply growth. If demand were to increase more than the 2% annual projected growth, under both the moderate and rapid supply growth scenarios, Female Utilization rates would be lower than those shown here, all other assumptions equal.

⁵³ Sourced from Metro provided PLA documents.

Figure 2-19. Metro Annual and Cumulative Female Utilization: Flat Demand Growth and Rapid Supply Growth, 2024-2033



Source: LCPtracker, Metro, Estolano Advisors, and ICF

Table 2-17. Metro Cumulative Female Workforce Gap & Utilization: All Scenarios, Three-Year and 10-Year Projections

Scenario: Flat (0%) Demand Growth and Moderate Supply Growth	2026	2033
Projected Cumulative Hours	42,379,823	71,884,672
Projected Cumulative Female Hours	1,641,318	3,186,034
Projected Cumulative Female Utilization Rate	3.87%	4.43%
Cumulative Female Hours Needed to Reach 6.9% Utilization	2,924,208	4,960,042
Scenario: 2% Demand Growth and Moderate Supply Growth		
Projected Cumulative Hours	42,892,398	76,810,783
Projected Cumulative Female Hours	1,641,318	3,186,034
Projected Cumulative Female Utilization Rate	3.83%	4.15%
Cumulative Female Hours Needed to Reach 6.9% Utilization	2,959,575	5,299,944
Scenario: Flat (0%) Demand Growth and Rapid Supply Growth		
Projected Cumulative Hours	42,379,823	71,884,672
Projected Cumulative Female Hours	1,683,753	3,575,022
Projected Cumulative Female Utilization Rate	3.97%	4.97%
Cumulative Female Hours Needed to Reach 6.9% Utilization	2,924,208	4,960,042
Scenario: 2% Demand Growth and Rapid Supply Growth		
Projected Cumulative Hours	42,892,398	76,810,783
Projected Cumulative Female Hours	1,683,753	3,575,022
Projected Cumulative Female Utilization Rate	3.93%	4.65%
Cumulative Female Hours Needed to Reach 6.9% Utilization	2,959,575	5,299,944

Source: LCPtracker, Metro, Estolano Advisors, and ICF

Projected Metro Labor Gap by Trade

The consultant team also calculated the annual female utilization and gap for each trade through 2033. As shown in **Table 2-18**, historically over the last five years, the top five trades with the most hours annually on Metro projects are: Laborers, Electricians, Operating Engineers, Carpenters, and Iron Workers. Trades with the highest number of female hours over the 2019-2023 period are: Laborers, Electricians, Carpenters, Iron Workers, and Inspectors. The trades with highest average female utilization from 2019-2023 are Inspector, Elevator Constructor, Plumber and Pipefitter, Laborer, and Electrician, though none meet the target utilization goal when looking at the average over five years.

Table 2-18. Hours and Female Utilization on Metro Construction Projects, 2019-2023

Construction Trade	All Hours (2019-2023)	Female Hours (2019-2023)	Average Female Utilization
BRICKLAYER AND TILE SETTER	51,455	-	0.00%
CARPENTER	2,313,989	71,455	3.09%
ELECTRICIAN	3,036,702	124,789	4.11%
ELEVATOR CONSTRUCTOR	442,879	22,798	5.15%
INSPECTOR	776,406	41,435	5.34%
IRON WORKER	1,199,382	42,009	3.50%
LABORER	8,049,139	376,251	4.67%
OPERATING ENGINEER	2,619,518	29,522	1.13%
PAINTER	367,025	12,331	3.36%
PLASTERER AND CEMENT MASON	645,272	3,197	0.50%
PLUMBER AND PIPEFITTER	336,765	16,408	4.87%
ROOFER	81,677	2,579	3.16%
SHEET METAL	283,736	6,651	2.34%
SURVEYOR	240,671	2,388	0.99%
TEAMSTER/DRIVER	1,081,961	18,456	1.71%
Total	21,526,576	770,268	3.58%

Source: LCPtracker and ICF.

To project the female workforce gap and the projected female utilization for each trade, the consultant team used the Moderate and Rapid Supply Growth scenarios and scaled the projected Greater LA supply estimates to account for competition for the regional labor supply. Supply estimates for each trade were scaled based on the average percent of the female labor supply that Metro has captured out of the Greater LA female labor supply over the last five years.

Under the four scenarios (**Table 2-19 and 2-20**), annual projections for 2033 female utilization by trade for the top five Metro trades range from: Laborer: (5.72%-8.48%); Electrician: (5.35%-7.63%); Iron Workers: (3.8%-6.48%); Carpenters: (2.66%-4.21%) and Operating Engineer: (1.5%-2.49%).

Table 2-19. Projected Female Workforce Gap and Utilization by Trade: Flat (0%) Demand Growth; Rapid Supply Growth, 2033 (Most Optimistic Scenario for achieving 6.9% female utilization)

Trade	Projected Hours 2033	Female Hours Required to Meet 6.9% 2033	Projected Female Hours (Supply) Available to Metro 2033	Female Workforce Gap - Hours 2033	Projected Female Utilization 2033
BRICKLAYER AND TILE SETTER	47,180	3,255	0	(3,255)	0.00%
CARPENTER	554,398.90	38,253.52	23,351	(14,902.28)	4.21%
ELECTRICIAN	481,756.50	33,241.20	36,762	3,521.04	7.63%
ELEVATOR CONSTRUCTOR	82,235.64	5,674.26	18,371	12,697.15	22.34%
INSPECTOR	177,620.27	12,255.80	32,472	20,216.24	18.28%
IRON WORKER	300,398.59	20,727.50	19,463	(1,264.69)	6.48%
LABORER	1,467,076.69	101,228.29	124,357	23,128.34	8.48%
OPERATING ENGINEER	518,571.36	35,781.42	12,923	(22,858.37)	2.49%
PAINTER	87,070.58	6,007.87	6,304	296.07	7.24%
PLASTERER AND CEMENT MASON	147,938.75	10,207.77	2,430	(7,777.60)	1.64%
PLUMBER AND PIPEFITTER	84,063.60	5,800.39	14,845	9,044.15	17.66%
ROOFER	41,736.00	2,879.78	1,575	(1,305.03)	3.77%
SHEET METAL	75,551.00	5,213.02	3,359	(1,854.18)	4.45%
SURVEYOR	38,457.75	2,653.58	1,366	(1,287.11)	3.55%
TEAMSTER/DRIVER	110,923.39	7,653.71	15,038	7,384.58	13.56%
Total	4,214,979	290,834	312,616	21,783	7.42%

Source: LCPtracker and ICF.

Table 2-20. Projected Female Workforce Gap and Utilization by Trade: 2% Demand Growth; Moderate Supply Growth, 2033 (Least Optimistic Scenario for achieving 6.9% female utilization)

Trade	Projected Hours 2033	Female Hours Required to Meet 6.9% 2033	Projected Female Hours (Supply) Available to Metro 2033	Female Workforce Gap - Hours 2033	Projected Female Utilization 2033
BRICKLAYER AND TILE SETTER	57,512	3,968	0	(3,968)	0.00%
CARPENTER	675,809.17	46,630.83	18,004.39	(28,626.44)	2.66%
ELECTRICIAN	587,258.49	40,520.84	31,398.64	(9,122.20)	5.35%
ELEVATOR CONSTRUCTOR	100,244.79	6,916.89	12,805.27	5,888.38	12.77%
INSPECTOR	216,518.12	14,939.75	22,243.73	7,303.98	10.27%
IRON WORKER	366,184.20	25,266.71	13,930.22	(11,336.49)	3.80%
LABORER	1,788,358.30	123,396.72	102,251.05	(21,145.67)	5.72%
OPERATING ENGINEER	632,135.59	43,617.36	9,492.50	(34,124.86)	1.50%
PAINTER	106,138.55	7,323.56	4,750.11	(2,573.45)	4.48%
PLASTERER AND CEMENT MASON	180,336.51	12,443.22	1,707.02	(10,736.20)	0.95%
PLUMBER AND PIPEFITTER	102,473.06	7,070.64	10,512.28	3,441.64	10.26%
ROOFER	50,875.95	3,510.44	1,155.45	(2,354.99)	2.27%
SHEET METAL	92,096.25	6,354.64	2,449.67	(3,904.97)	2.66%
SURVEYOR	46,879.78	3,234.71	905.89	(2,328.81)	1.93%
TEAMSTER/DRIVER	135,214.99	9,329.83	10,284.99	955.16	7.61%
Total	5,138,035	354,524	241,891	(112,633)	4.71%

Source: LCPtracker and ICF.

Table 2-21 and Table 2-22 show the projected progression of female utilization rates for each Trade under the most optimistic and least optimistic scenarios. Under the most optimistic scenario, 7 of the 15 trades would exceed 6.9% female utilization by 2033, some by significant margins. Under the least optimistic scenario, four trades are projected to be able exceed 6.9%.

Table 2-21. Projected Annual Female Utilization by Trade, 3-, 5-, and 10- year projections: Flat (0%) Demand Growth; Rapid Supply Growth (Most Optimistic Scenario for achieving 6.9% female utilization)

Trade	Current Female Utilization (2023)	Projected Female Utilization (2026)	Projected Female Utilization (2029)	Projected Female Utilization (2033)
BRICKLAYER AND TILE SETTER	0.00%	0.00%	0.00%	0.00%
CARPENTER	2.27%	2.86%	3.44%	4.21%
ELECTRICIAN	5.19%	6.07%	6.74%	7.63%
ELEVATOR CONSTRUCTOR	8.70%	12.86%	16.93%	22.34%
INSPECTOR	6.73%	10.22%	13.67%	18.28%
IRON WORKER	3.11%	3.90%	5.01%	6.48%
LABORER	4.84%	6.37%	7.27%	8.48%
OPERATING ENGINEER	0.96%	1.57%	1.96%	2.49%
PAINTER	4.13%	4.74%	5.81%	7.24%
PLASTERER AND CEMENT MASON	0.54%	0.96%	1.25%	1.64%
PLUMBER AND PIPEFITTER	3.67%	10.44%	13.54%	17.66%
ROOFER	4.96%	2.37%	2.97%	3.77%
SHEET METAL	1.43%	2.76%	3.48%	4.45%
SURVEYOR	1.26%	1.88%	2.60%	3.55%
TEAMSTER/DRIVER	3.94%	7.56%	10.13%	13.56%
Total	3.74%	5.07%	6.07%	7.42%

Source: LCPtracker and ICF.

Table 2-22. Projected Annual Utilization by Trade, 3-, 5- and 10-year projections: 2% Demand Growth; Moderate Supply Growth, 2033 (Least Optimistic Scenario for achieving 6.9% female utilization)

Trade	Current Female Utilization (2023)	Projected Female Utilization (2026)	Projected Female Utilization (2029)	Projected Female Utilization (2033)
BRICKLAYER AND TILE SETTER	0.00%	0.00%	0.00%	0.00%
CARPENTER	2.27%	2.42%	2.54%	2.66%
ELECTRICIAN	5.19%	5.41%	5.39%	5.35%
ELEVATOR CONSTRUCTOR	8.70%	10.21%	11.42%	12.77%
INSPECTOR	6.73%	8.00%	9.07%	10.27%
IRON WORKER	3.11%	3.15%	3.46%	3.80%
LABORER	4.84%	5.57%	5.65%	5.72%
OPERATING ENGINEER	0.96%	1.29%	1.39%	1.50%
PAINTER	4.13%	3.96%	4.21%	4.48%
PLASTERER AND CEMENT MASON	0.54%	0.76%	0.85%	0.95%
PLUMBER AND PIPEFITTER	3.67%	8.38%	9.27%	10.26%
ROOFER	4.96%	1.95%	2.10%	2.27%
SHEET METAL	1.43%	2.26%	2.45%	2.66%
SURVEYOR	1.26%	1.43%	1.67%	1.93%
TEAMSTER/DRIVER	3.94%	5.91%	6.71%	7.61%
Total	3.74%	4.30%	4.50%	4.71%

Source: LCPtracker and ICF.

Female Workforce Training Pipeline Assessment

California's robust apprenticeship system represents the recruitment and training pipeline for workers on public construction projects statewide. The California Department of Industrial Relations Division of Apprenticeship Standards (DAS) regulates the state-certified apprenticeship programs that provide apprentices to public works projects in California. DAS collects and manages the data for all registered apprentices in the state. This data includes gender, age, race, program, year enrolled, enrollment status, address, and other information on each apprentice, but it does not include names or other personally identifiable information.⁵⁴ This section analyzes 15 years of statewide apprenticeship data to discern trends in female participation in construction work in the Greater LA Area⁵⁵ in terms of recruitment and retention.

Table 2-23 shows statewide DAS data⁵⁶ by the following status levels within the apprenticeship program:

- **Active-** Individuals who are actively enrolled in a program through an apprenticeship contract agreement
- **Canceled-** Individuals who canceled their apprenticeship contract agreement before reaching journey-level status
- **Graduated-** Individuals who have completed the apprenticeship program and became journey workers

The Greater LA Area represents 42% of the total active apprentices in California, and 38% of the total female graduates in the state. Although the Bay Area includes fewer female active and graduated apprentices in total, they outperform the Greater LA Area in the share of females. Despite falling behind the Bay Area, the Greater LA Area outperforms San Diego County in share of active and graduated female apprentices. The higher share of active female apprentices in the Greater LA area (2.73%) versus the share of graduated female apprentices (1.8%) reflects the increased efforts to recruit female apprentices. However, both rates fall short of Metro's goal of 6.9% female workforce participation.

⁵⁴ Due to the very small number of workers that selected "Other" or did not respond to the gender identification question (less than 0.1% of all apprentices), the consultant team only analyzed data for "Male" and "Female" in this study.

⁵⁵ The Greater LA Area includes Los Angeles, Orange, Riverside, San Bernardino, and Ventura counties.

⁵⁶ Table 2-23 includes all registered apprenticeship programs in California, including union and non-union programs. The remainder of the report focuses on union-only programs in the Greater LA Area.

Table 2-23: Apprenticeship Status by Region and Gender (Start Year 2008-2023)

Status ⁵⁷	California	Greater LA Area	Bay Area ⁵⁸	San Diego County
Active	52,267	21,755	9,309	4,849
# Female	2,344	594	461	120
% Female	4.5%	2.7%	5.0%	2.5%
% of State	100%	41.6%	17.8%	9.3%
Graduated	98,728	37,825	22,137	7,666
# Female	4,093	680	666	107
% Female	4.2%	1.8%	3.0%	1.4%
% of State	100%	38.3%	22.4%	7.8%

Source: California Department of Industrial Relations Division of Apprenticeship Standards (June 2024)

Female Apprentice Recruitment in the Greater LA Area

Union vs. Non-Union Apprenticeships

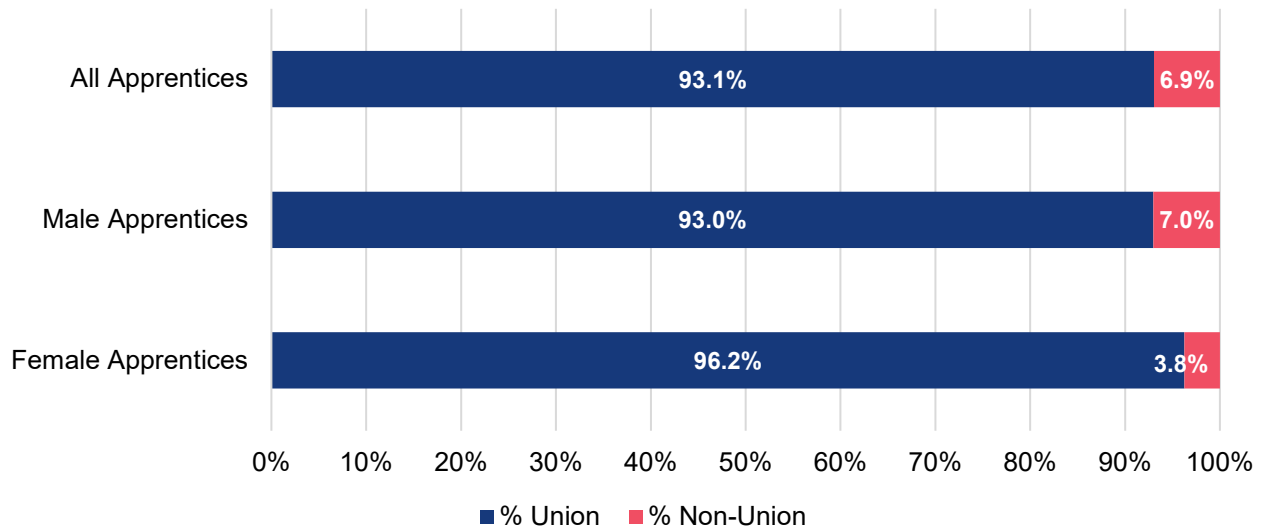
The apprenticeship data in the following subsections reflect only those apprentices enrolled in joint-labor management apprenticeship programs in the Greater LA Area. Public agencies such as Metro use union workers in accordance with their Project Labor Agreements (PLAs), so these union-led programs provide more relevant data on the construction training pipeline.

Although some construction apprentices are enrolled in state-registered non-union programs led by contractors' associations, they account for a small share of the apprenticeship dataset. As shown in **Figure 2-20**, non-union apprentices represent 6.9% of all construction apprentices in the Greater LA Area. Male apprentices (7.0%) are nearly twice as likely to be in non-union programs than female apprentices (3.8%). The higher rate of female participation in union programs may result from the female utilization goals included in some PLAs. In addition, stronger job security and worker protections may encourage female workers to join unionized apprenticeship programs at a higher rate.

⁵⁷ Data highlights the 15 construction trades identified in **Table 2-1**

⁵⁸ Bay Area includes Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, and Sonoma counties.

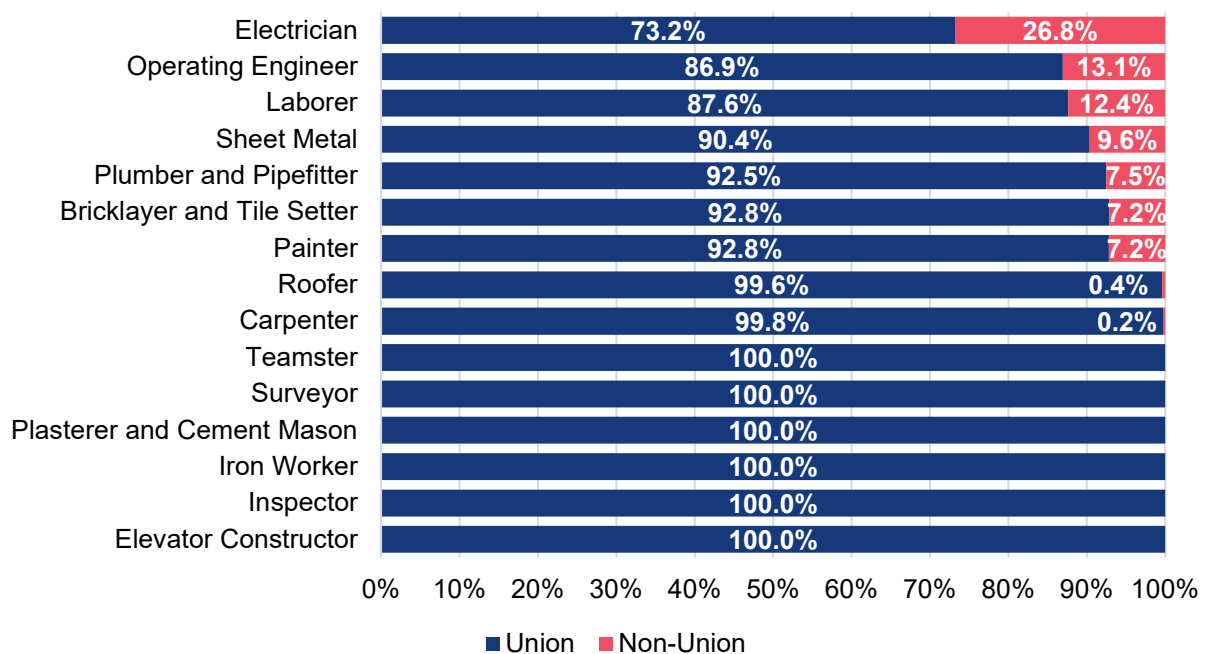
Figure 2-20: Apprenticeships by Union Status and Gender (Start Year 2008-2024)



Source: California Department of Industrial Relations Division of Apprenticeship Standards (June 2024)

Figure 2-21 shows the union status of apprentices by trade among the 15 trade categories used elsewhere in this report. Trades such as Electrician (26.8%), Operating Engineer (13.1%), and Laborer (12.4%) have relatively high shares of non-union apprentices. Conversely, the Teamster, Surveyor, Plasterer and Cement Mason, Iron Worker, Inspector, and Elevator Construction trades are 100% union apprenticeship programs.

Figure 2-21: Union Status by Trade (Start Year 2008-2024)

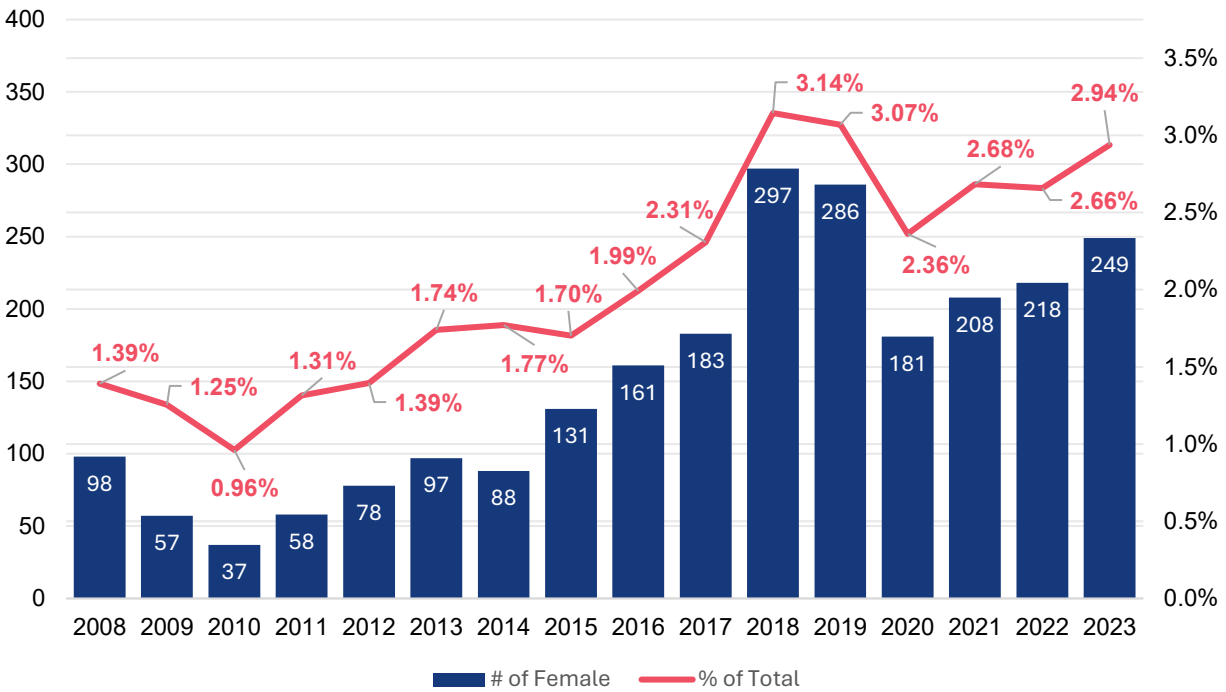


Source: California Department of Industrial Relations Division of Apprenticeship Standards (June 2024)

Male and Female Apprenticeship Participation by Year

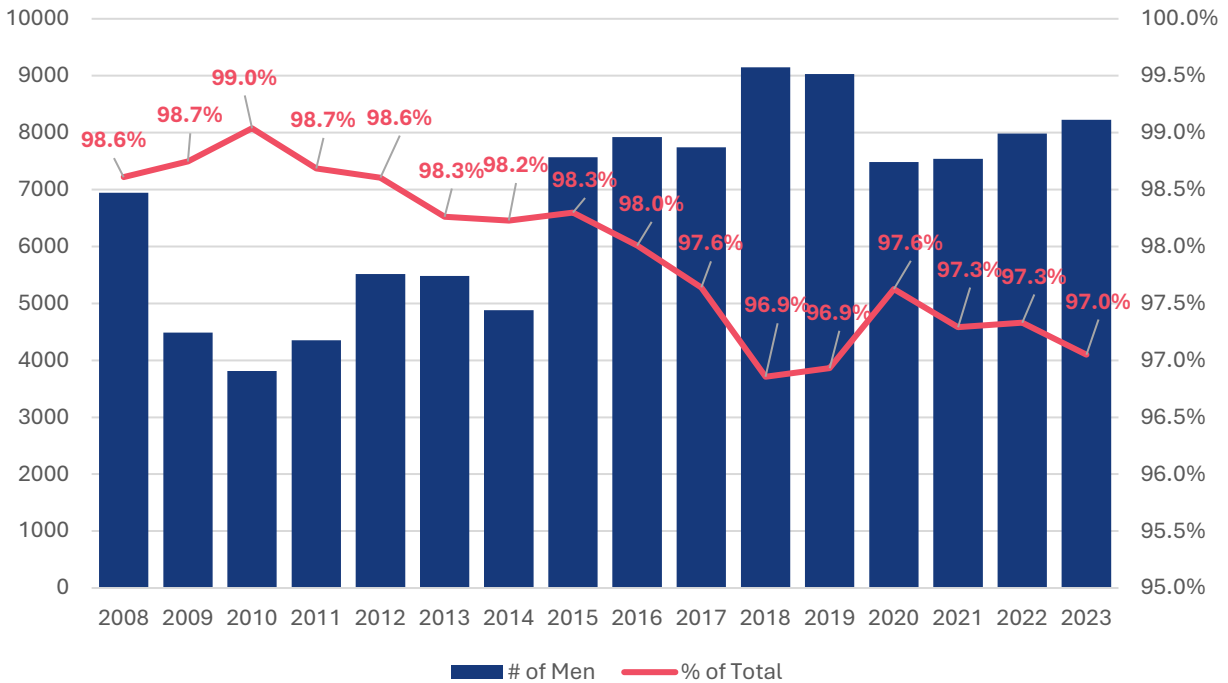
The annual female enrollment in union apprenticeship programs has more than doubled since 2008 in the Greater LA Area. Between 2008 and 2024, registered building trades apprenticeship programs in the Greater LA Area recruited over 2,500 female apprentices, over half of whom registered after 2018. As **Figure 2-22** shows, female participation peaked in 2018 at just over 3% of apprentices. While female participation in apprenticeship programs decreased at the start of the COVID-19 pandemic in 2020, rates of female participation have steadily risen every year since. Conversely, **Figure 2-23** shows that male participation rates in union apprenticeship programs have decreased during the same period. That said, men still account for the vast majority of apprenticeship participation.

Figure 2-22: Female Apprenticeship Participation by Year (Start Year 2008-2024)



Source: California Department of Industrial Relations Division of Apprenticeship Standards (June 2024)

Figure 2-23: Male Apprenticeship Participation by Year (Start Year 2008-2024)

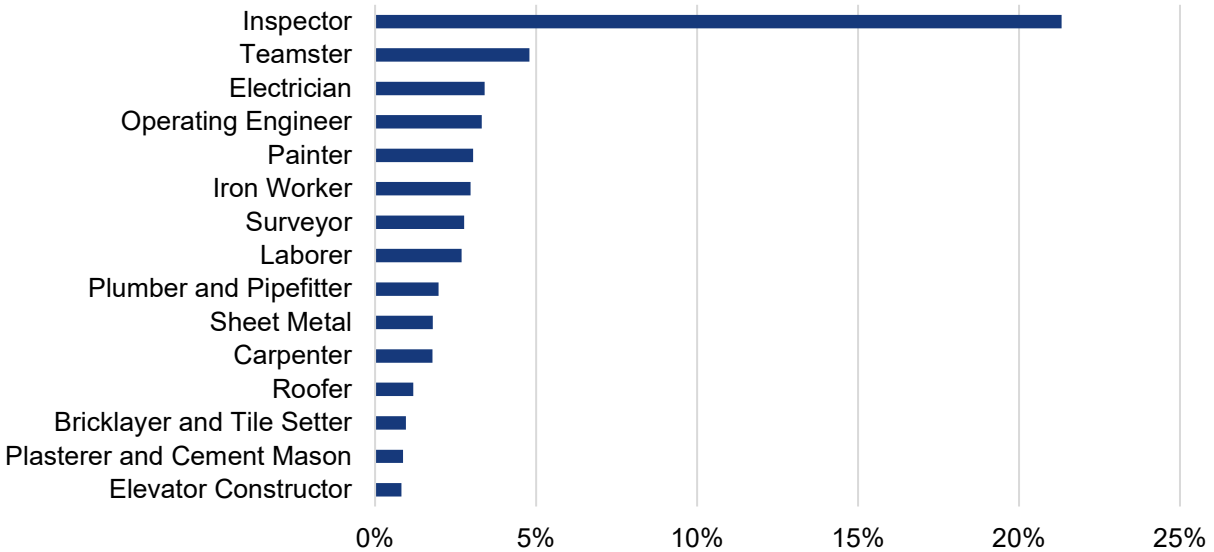


Source: California Department of Industrial Relations Division of Apprenticeship Standards (June 2024)

Female Apprenticeship Participation by Trade

Although the overall share of women in union apprenticeship programs in the Greater LA Area has remained between 1% and 4% since 2008, female participation varies widely across trades as shown in **Figure 2-24**. Since 2008, over 20% of Inspector apprentices have identified as female, whereas no other trade has reached 5% female apprenticeship participation. Union apprenticeship programs with the next highest female participation rates are Teamsters (4.8%), Electricians (3.4%), Operating Engineers (3.3%), Painters (3.0%), and Iron Workers (3.0%).

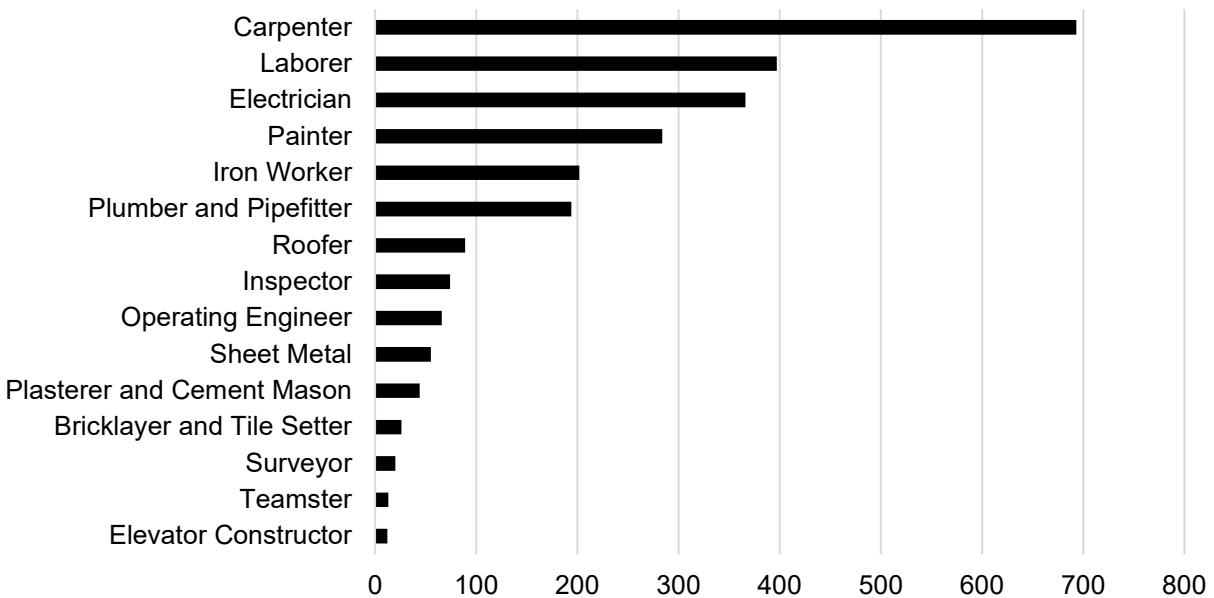
Figure 2-24: Share of Female Apprentices by Trade (Start Year 2008-2024)



Source: California Department of Industrial Relations Division of Apprenticeship Standards (June 2024)

Figure 2-25 categorizes the 2,535 union female apprenticeships started since 2008 by trade. Despite relatively low female participation rates, the overall number of female apprentices has been highest among Carpenters, which have enrolled nearly 700 women in union apprenticeship programs in the Greater LA Area since 2008. Laborers, Electricians, Painters, and Iron Workers have also enrolled over 200 female apprentices each since 2008.

Figure 2-25: Total Female Apprentices by Trade (Start Year 2008-2024)



Source: California Department of Industrial Relations Division of Apprenticeship Standards (June 2024)

Apprenticeship durations vary substantially depending on trade and individual programs. **Table 2-24** shows the range of program durations for each trade. Inspector and Sheet Metal programs are longest on average, with all programs lasting 60 months in total. Laborer programs vary the most, with some programs as short as 18 months and others as lengthy as 60 months. Teamster/Driver and Surveyor programs have the shortest maximum durations at 36 months.

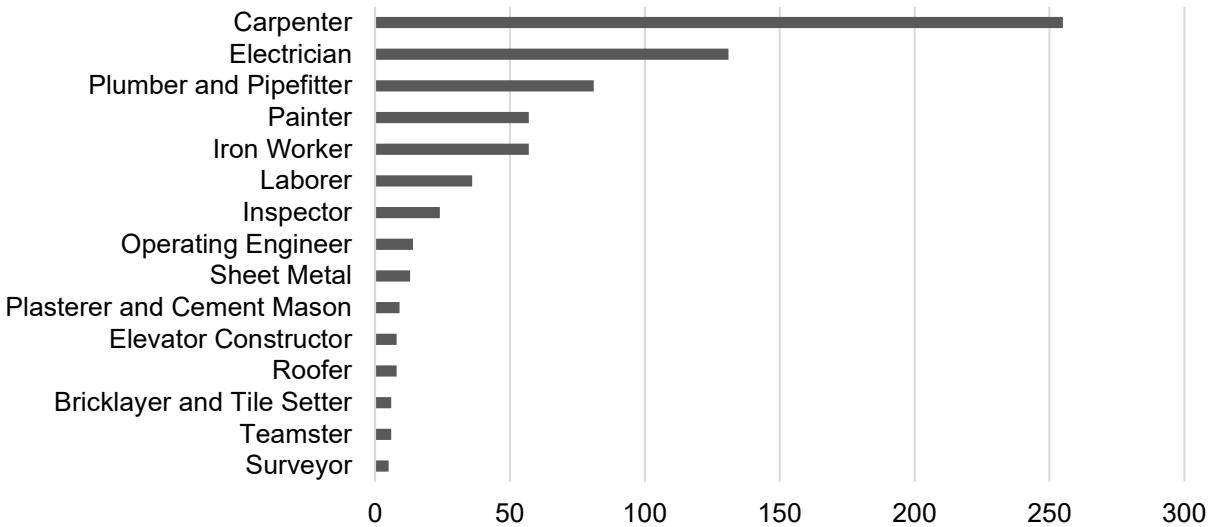
Table 2-24: Range of Apprenticeship Program Durations by Trade

Trade	Training Duration (Months)
Inspector	60
Sheet Metal	60
Plumber and Pipefitter	48 - 60
Electrician	36 - 60
Carpenter	36 - 60
Painter	36 - 60
Laborer	18 - 60
Elevator Constructor	48
Iron Worker	48
Plasterer and Cement Mason	36 - 48
Operating Engineer	24 - 48
Bricklayer and Tile Setter	24 - 48
Roofer	42
Teamster/Driver	36
Surveyor	24 - 36

Source: California Department of Industrial Relations Division of Apprenticeship Standards (June 2024)

As of June 2024, there were 710 women actively enrolled in union apprenticeship programs in the Greater Los Angeles Area. The Carpenter trade has the most females active in apprenticeships with 255 females (or 36% of total active female apprentices). Electricians are next with 19% of the total active female apprentices, followed by Plumbers and Pipefitters with 11%. **Figure 2-26** shows that the trades with the highest number of active female apprentices are (1) Carpenter, (2) Electrician, (3) Plumber and Pipefitter, (4) Painter, and (5) Iron Worker. These top five trades represent 82% of the active female apprentices in the Greater LA Area. More than half of the female apprentices in the Greater LA Area are in the top two trades (Carpenter and Electrician). Although Laborers had the second-most female apprentices recruited from 2008 to 2023, they have the sixth-most active female apprentices as of June 2024.

Figure 2-26: Active Female Apprentices by Trade (Start Year 2008-2024)



Source: California Department of Industrial Relations Division of Apprenticeship Standards (June 2024)

Female Apprenticeship Participation by Program

Table 2-25 below lists the five largest union apprenticeship programs in the Greater LA Area. Although the Plumber/Pipefitter and Painter trades are in the top five of active female apprentices, their largest state-registered union apprenticeship programs are outside the top five, suggesting those trades have relatively decentralized apprenticeship systems.

Table 2-25: Active Female Apprentices by Program (Start Year 2008-2024)

State- Registered Apprenticeship Program	Trade	# of Female Apprentices
Southwest Carpenter and Affiliated Trades J.A.T.C. (Carpenters)	Carpenter	182
Los Angeles Electrical JATC	Electrician	59
Southern California Operating Engineers J.A.C.	Operating Engineer/ Inspector ⁵⁹	38
International Association of Bridge, Structural, Ornamental & Reinforcing Ironworkers L433 J.A & T.C.	Iron Worker	35
Southwest Carpenter and Affiliated Trades J.A.T.C	Laborer	30

Source: California Department of Industrial Relations Division of Apprenticeship Standards (June 2024)

⁵⁹ Southern California Operating Engineers J.A.C. trains apprentices in both the Operating Engineer and Inspector trades which is why this program ranks in the top five programs for active females, but the individual trades are not in the top five trades for active female apprentices.

There are over 145 state-registered apprenticeship programs in the Greater LA Area in the 15 trades identified elsewhere in this report. **Table 2-26** below shows each trade’s largest union apprenticeship program in the Greater LA Area in terms of female recruitment between 2008 and June 2024. Over 100 female apprentices have enrolled in each of the largest Carpenter, Laborer, Electrician, Painter, and Iron Worker programs since 2008.

Table 2-26: Total Female Apprentices Enrolled by Largest Trade Program (Start Year 2008-2024)

Trade	State- Registered Apprenticeship Program	# of Female Apprentices Enrolled
Carpenter	Southwest Carpenter and Affiliated Trades J.A.T.C. (Carpenter)	422
Laborer	Laborers Southern California Joint Apprenticeship Committee	366
Electrician	Los Angeles Electrical JATC	147
Painter	District Council #36 Painter, Paperhanger, and Decorator JATC	147
Iron Worker	International Association of Bridge, Structural, Ornamental & Reinforcing Ironworker L433 J.A.&T.C.	123
Roofer	Southern California Roofers Waterproofers J.A.T.C.	78
Inspector	Southern California Operating Engineers J. A. C.	70
Operating Engineer	Southern California Operating Engineers J. A. C.	66
Plumber and Pipefitter	Los Angeles & Vicinity Steamfitters and Industrial Pipefitters Joint Apprenticeship Training Committee	60
Sheet Metal	Southern California Sheet Metal J.A.&T.C.	51
Plasterer and Cement Mason	Southern California Cement Masons J.A.C.	32
Surveyor	Southern California Surveyors J.A.C.	20
Bricklayer and Tile Setter	Joint Apprenticeship Committee Tile & Terrazzo Industry	19
Elevator Constructor	Southern California Elevator Constructor Joint Apprenticeship and Training Committee	11
Teamster	Construction Teamsters Apprenticeship Fund of So California J A C	11

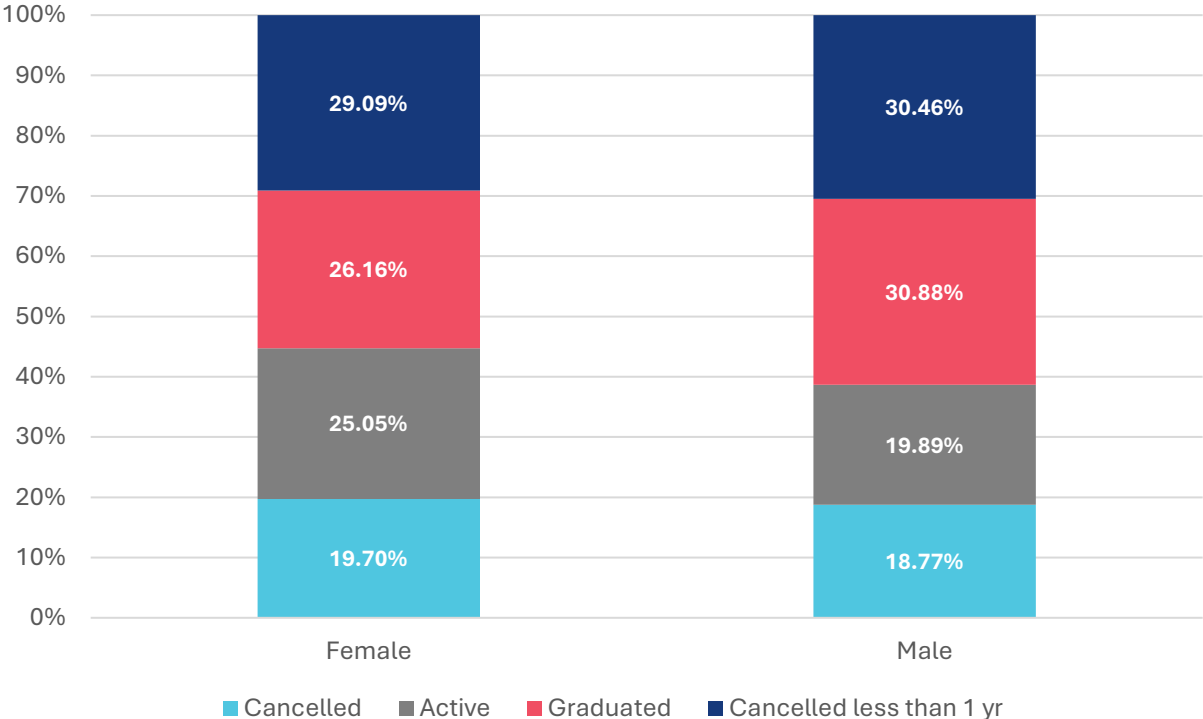
Source: California Department of Industrial Relations Division of Apprenticeship Standards (June 2024)

Female Apprentice Retention and Graduation in the Greater LA Area

Apprenticeship Status by Gender

Overall cancellation rates in the Greater LA Area union apprenticeship programs is similar across genders, but graduation rates have been lower among women compared to men. As **Figure 2-27** shows, approximately 49% of men and 49% of women who started apprenticeships since 2008 have cancelled, whereas 31% of men and 26% of women have graduated.

Figure 2-27: Apprentice Status by Gender (Start Year 2008-2023)

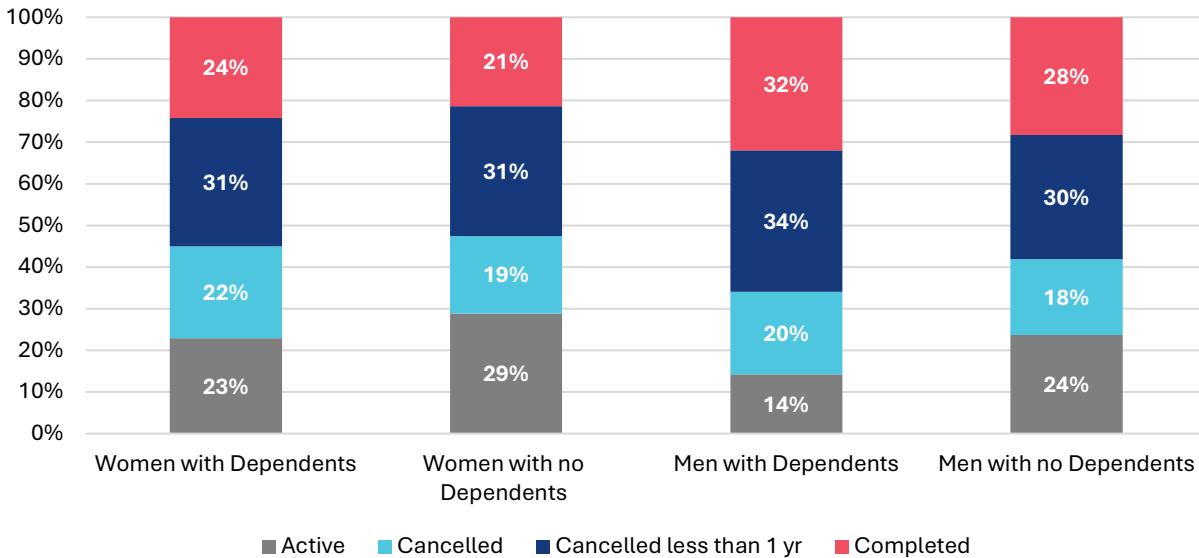


Source: California Department of Industrial Relations Division of Apprenticeship Standards (June 2024)

Apprenticeship Status by Gender and Dependent Status

Unionized construction careers have historically provided family-sustaining wages to working class families. However, the early morning schedules and relatively low wages of apprentices create barriers for parents, especially single parents, to find appropriate child care during their training. **Figure 2-28** supports this notion, showing how both men and women with dependents are more likely to cancel their apprenticeship than those without dependents. Men and women with dependents have similar cancellation rates. Male apprentices are 6% more likely to cancel their apprenticeship contracts if they have dependents, and females are 3% more likely to cancel if they have dependents.

Figure 2-28: Apprentice Status by Gender and Dependent Status (Start Year 2008-2023)

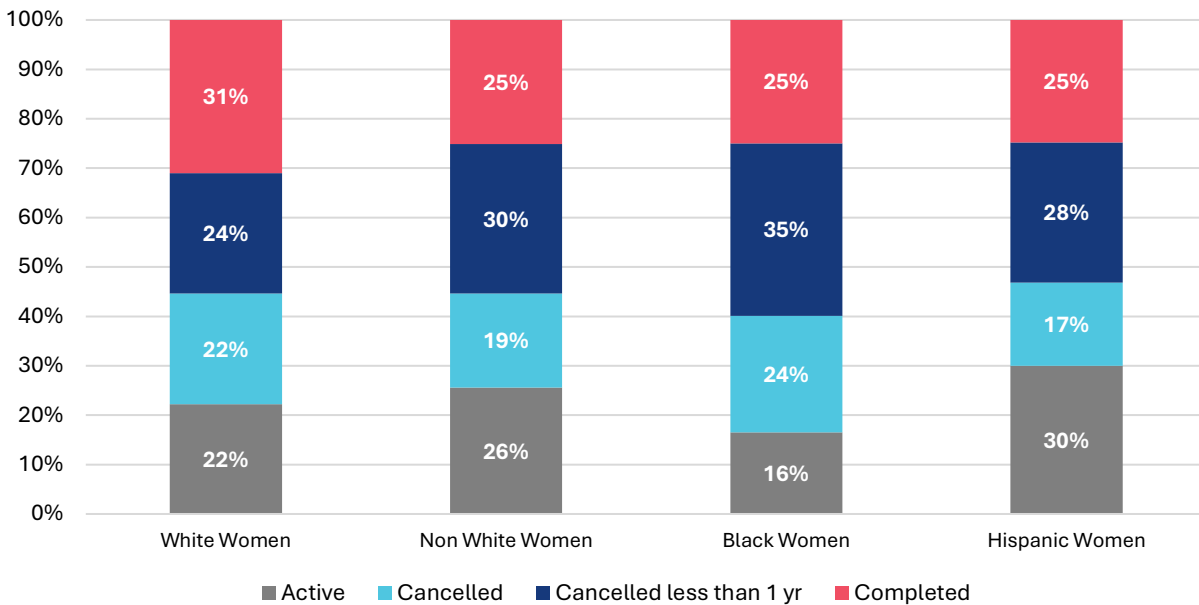


Source: California Department of Industrial Relations Division of Apprenticeship Standards (June 2024)

Apprenticeship Status by Race and Ethnicity

Figure 2-29 shows the status for female apprentices who enrolled from 2008 to 2023 by race. White women graduated at a higher rate than Hispanic, Black, and nonwhite women. Black women are much more likely to cancel within one year compared to Hispanic and white women.

Figure 2-29: Female Apprentice Status by Race/Ethnicity (Start Year 2008-2023)

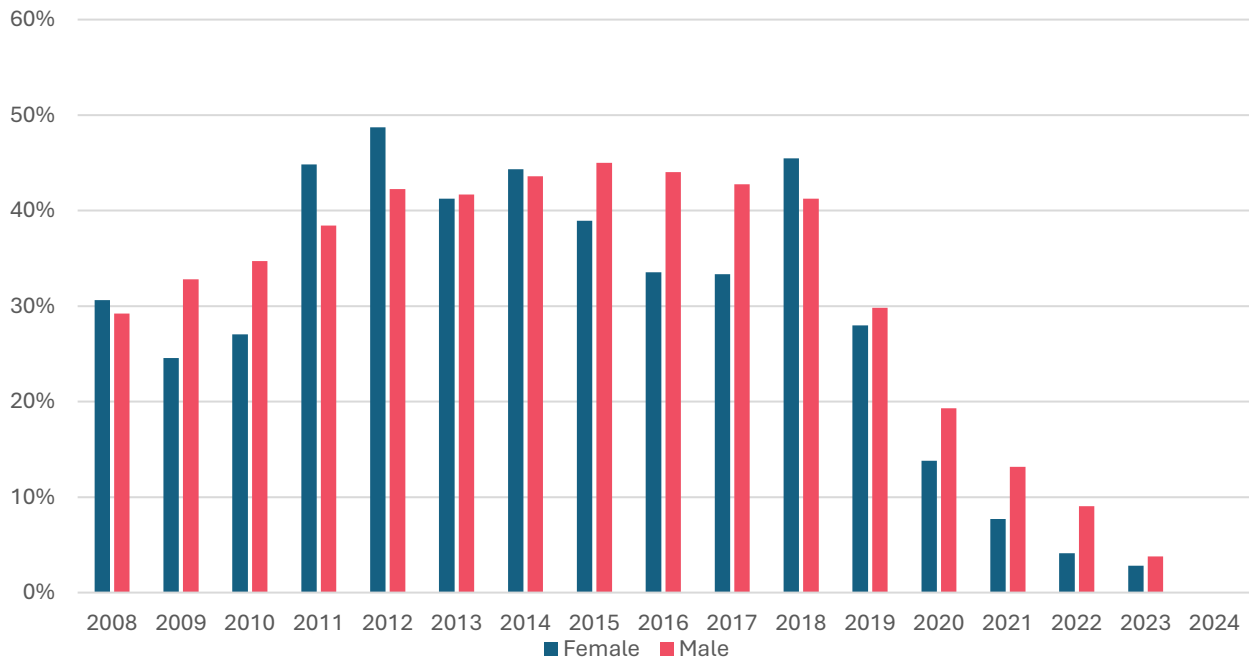


Source: California Department of Industrial Relations Division of Apprenticeship Standards (June 2024)

Apprenticeship Graduations by Gender and Year

Female apprenticeship graduation rates have been lower and less consistent than male graduation rates since 2008. **Figure 2-30** shows that male apprenticeship graduation rates increased somewhat steadily from 29% among 2008 entrants to 45% among 2015 entrants. Conversely, female apprenticeship graduation rate peaked at 49% among 2012 entrants, declined to 33% among 2017 entrants, and increased again to 45% among 2018 entrants. Female apprenticeship graduation rates were also lower than male graduation rates among those starting programs from 2019 through 2023, which may reflect COVID-19 impacts or trade-specific dynamics, as the trade with the highest female apprentice participation rate (Inspector) requires the longest completion time of five years.

Figure 2-30: Male and Female Apprenticeship Graduations by Year (Start Year 2008-2024)

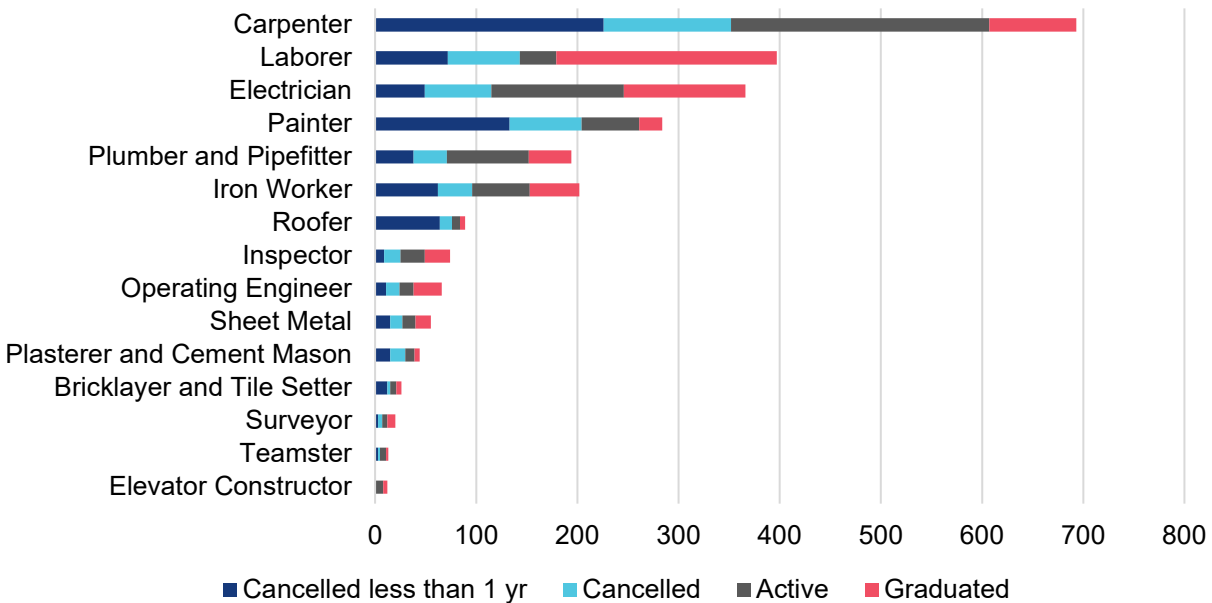


Source: California Department of Industrial Relations Division of Apprenticeship Standards (June 2024)

Female Apprentice Cancellations by Trade

Among the 2,535 female apprenticeship participants since 2008, over 700 have cancelled within one year of starting their program. **Figure 2-31** shows how many apprentices per trade have cancelled in less than one year, cancelled in more than one year, graduated from, or remain enrolled in apprenticeship programs. Over 200 female Carpenter apprentices have cancelled within one year, while over 100 female Painter apprentices have cancelled within one year.

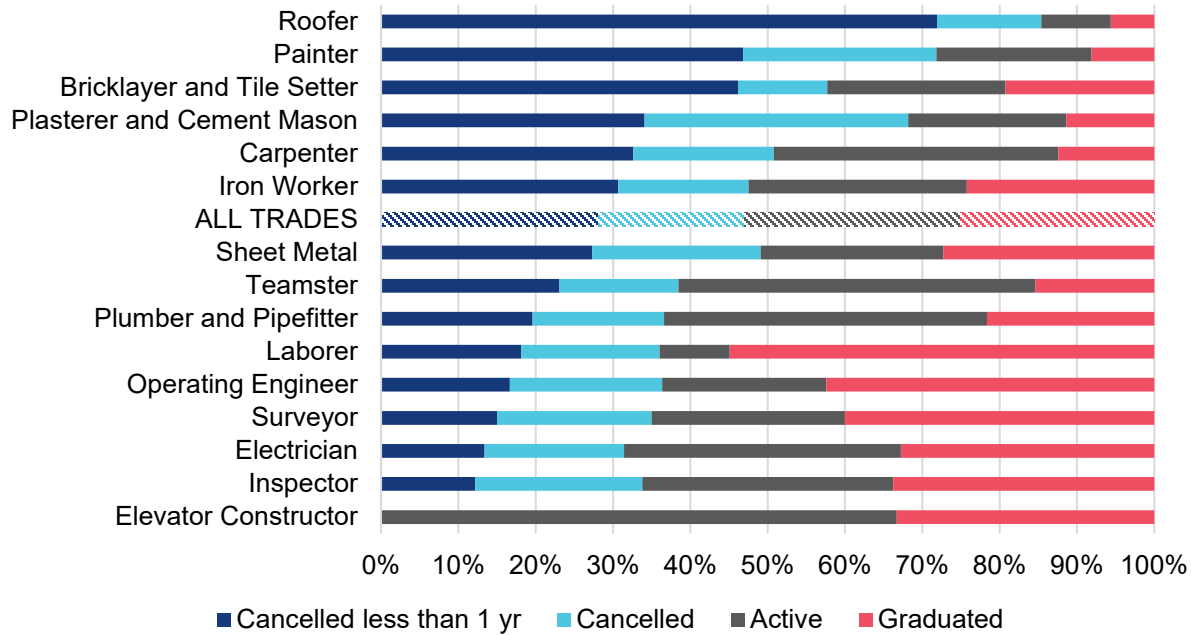
Figure 2-31: Female Apprentices by Trade and Status (Start Year 2008-2024)



Source: California Department of Industrial Relations Division of Apprenticeship Standards (June 2024)

In addition to Carpenters and Painters, female apprentices in Roofer, Bricklayer and Tile Setter, and Plasterer and Cement Mason programs face relatively high cancellation rates exceeding 50%. **Figure 2-32** shows each trade's share of apprenticeship cancellations, active enrollments, and graduations. Over 80% of females enrolled in Roofer apprenticeships since 2008 have cancelled, with over 70% cancelling within one year. Over 40% of female apprentices in Painter and Bricklayer and Tile Setter programs have also cancelled within one year of enrollment. Female apprenticeship cancellation rates are lowest in the Elevator Constructor, Electrician, Inspector, and Surveyor trades.

Figure 2-32: Female Apprenticeship Status by Trade (Start Year 2008-2024)

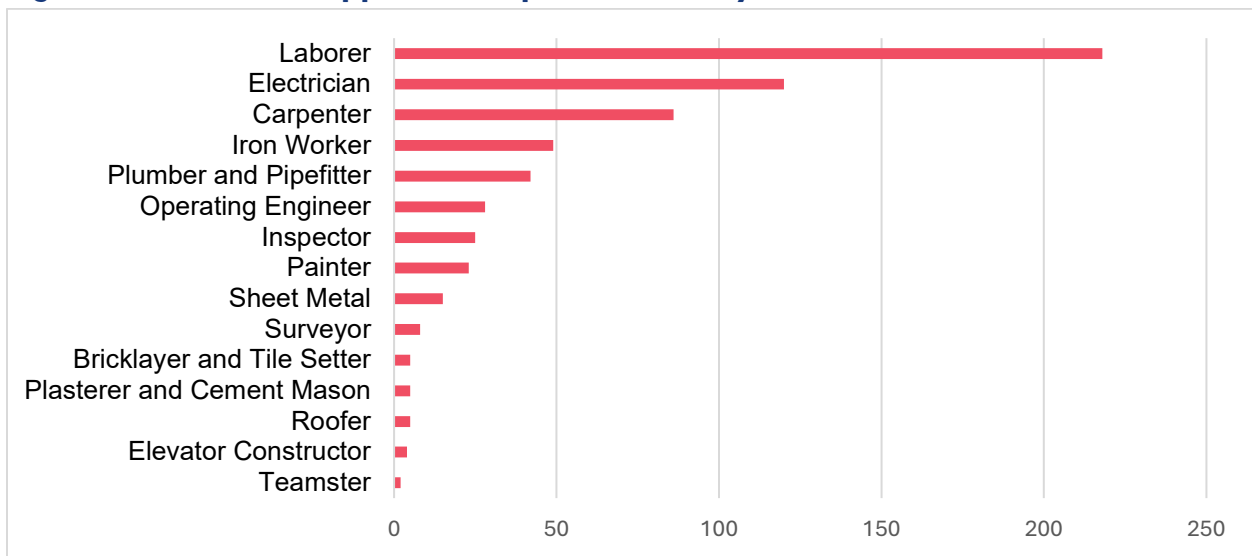


Source: California Department of Industrial Relations Division of Apprenticeship Standards (June 2024)

Female Apprenticeship Graduations by Trade

Between 2008 and 2023, 635 female apprentices graduated from a union apprenticeship program and became journey workers, 272 of which enrolled after 2018. As shown in **Figure 2-33**, the trades with the highest number of female apprentice graduates were (1) Laborer, (2) Electrician, (3) Carpenter, (4) Iron Worker, and (5) Plumber and Pipefitter.

Figure 2-33: Female Apprenticeship Graduates by Trade (Start Year 2008-2023)



Source: California Department of Industrial Relations Division of Apprenticeship Standards (June 2024)

Female Apprenticeship Graduates by Program

The three largest apprenticeship programs in terms of female graduations serve the three largest trades of Laborers, Carpenters, and Electricians. **Table 2-27** shows the five largest programs, which also includes an Iron Worker program and a program serving Operating Engineers and Inspectors.

Table 2-27: Female Apprenticeship Graduates by Program (Start Year 2008-2023)

State-Registered Apprenticeship Program	Trade	# of Female Graduates
Laborers Southern California Joint Apprenticeship Committee	Laborer	210
Southwest Carpenter and Affiliated Trades J.A.T.C. (Carpenters)	Carpenter	60
Los Angeles Electrical JATC	Electrician	54
Southern California Operating Engineers J.A.C.	Operating Engineer/Inspector ⁶⁰	53
International Association of Bridge, Structural, Ornamental & Reinforcing Ironworkers L433 J.A & T.C.	Iron Worker	43

Source: California Department of Industrial Relations Division of Apprenticeship Standards (June 2024)

Construction Workforce Training Ecosystem

The education and service-providing organizations are fundamental to the success of today's Los Angeles-area tradeswomen and will be central to future efforts to advance women in construction. Pre-Apprenticeship, or Apprenticeship Readiness Programs are more general vocational training programs that introduce participants to a range of construction trades. Apprenticeship Readiness Programs develop vocational skills to succeed in apprenticeships, and they also expose participants to various trades so participants can make informed decisions when choosing apprenticeships. These programs are often run by community-based organizations or schools as pre-apprenticeships specialize in targeting specific populations. For example, the Anti-Recidivism Coalition and WINTER (Women in Non-Traditional Employment Roles) operate pre-apprenticeship programs to educate formerly incarcerated individuals and women about the career opportunities in construction.

⁶⁰ Southern California Operating Engineers J.A.C. trains apprentices in both the Operating Engineer and Inspector trades which is why this program ranks in the top five programs for graduated females, but the individual trades are not in the top five trades for graduated female apprentices.

LA/OCBCTC Apprenticeship Readiness Fund

The Los Angeles/Orange Counties Building and Construction Trades Council (LA/OCBCTC) administers the Apprenticeship Readiness Fund (ARF), which funds dozens of Multi-Craft Core Curriculum pre-apprenticeship training programs across Los Angeles and Orange Counties. The Fund is a connective tissue between the unions, supportive service providers, and employer-based jobs coordinators. Many workers embarking on construction careers struggle with transportation, child care, unemployment, and other ancillary needs that directly impact their ability to enter and complete apprenticeships. ARF provides case management for participants to address these needs and helps place program graduates into affiliate unions.⁶¹

Through the ARF, the Building Trades have developed initiatives to address the low numbers of women in the industry. Most recently, the Fund ran a social media recruitment campaign that featured women in a variety of construction professions. They also hosted a focus group on tradeswomen's issues that recommended the development of child care services and women's mentoring groups among affiliate unions.⁶²

One key feature of all of these apprenticeship readiness programs is the use of the Multi-Craft Core Curriculum (MC3). MC3 was developed by the national building trades based on their assessment of the most important skills for workers to be accepted into and succeed in apprenticeship programs. The MC3 does not tailor its training to a particular trade but exposes participants to a range of trades. The LA/OCBCTC approves programs to use the MC3 and aims to coordinate with these programs to create and enhance the links between these entry-level training programs and apprenticeship programs.

⁶¹ LA City Workforce Development Board et al, "2024 Concept Paper: Los Angeles Workforce Infrastructure Network."

⁶² Apprenticeship Readiness Fund interview.

Table 2-28 shows data collected by the LA/OCBCTC Apprenticeship Readiness Fund for MC3 programs in the LA region. Data shows that women account for 19% of total enrolled pre-apprentices and graduates, indicating that completion rates are the same across men and women. Annual enrollment has decreased by half since 2018, but female participation has remained consistent.

Table 2-28: LA/OCBCTC Apprenticeship Readiness Fund Program Participants

Year	Female		Male		Total	
	Enrolled	Passed	Enrolled	Passed	Enrolled	Passed
2016	100	58	252	224	352	282
2017	79	72	300	281	379	353
2018	214	199	856	796	1,070	995
2019	180	159	836	688	1,016	847
2020	97	84	405	302	502	386
2021	87	66	431	321	518	387
2022	103	83	459	405	562	488
2023	110	87	482	382	592	469
Total	970	808	4,021	3,399	4,991	4,207
% of total	19%	19%	81%	81%	100%	100%

Source: LA/OCBCTC Apprenticeship Readiness Fund

Apprenticeship Readiness Programs

Los Angeles has a dense network of skill-based training programs that prepare participants for construction apprenticeships. Among the most prominent organizations that offer a mix of training programs and supportive services for participants are the Flintridge Center, Second Chance, WINTER, Playa Vista Job Opportunities and Business Services, and various YouthBuild programs.

Several Los Angeles apprenticeship readiness programs implement the MC3, a comprehensive curriculum developed by North America’s Building Trades Unions (NABTU).⁶³ MC3 programs train students on the industry, tools and materials, and blueprint reading to ensure that participants get insight on a career in a variety of construction trades.⁶⁴ Los Angeles Unified School District (LAUSD) offers many MC3-affiliated programs that connect students to careers in the trades.

⁶³ LA/OC BCTC, “Apprentice Readiness Fund,” <https://laocmc3.org/>.

⁶⁴ North America’s Building Trades Unions, “The Building Trades’ Multi-Craft Core Curriculum: A Guide for Students and Parents,” <https://nabtu.org/wp-content/uploads/2017/08/MC3-in-Our-Schools-A-Guide-for-Students-and-Parents.pdf>.

HireLAX Apprenticeship Readiness Program

Los Angeles World Airports (LAWA) offers a unique pre-apprenticeship program in collaboration with various other public and nonprofit entities that encourages female participation. The HireLAX Apprenticeship Readiness Program enrolls airport-area residents in an 8-week pre-apprenticeship program that follows the Multi Craft Core Curriculum (MC3). MC3 is a comprehensive trade-developed curriculum that trains the prospective construction workforce. LAWA developed HireLAX to integrate with several community and public agency partners to assist with recruitment and support of its participants. Partners include the City of Los Angeles, Los Angeles Southwest College, Los Angeles County, the Flintridge Center, the AFL-CIO, Second Call, Work Source, and America's Job Center of California (AJCC). Upon completion of the program, HireLAX places graduates on LAWA projects through its contractors and local craft unions.

HireLAX strongly and actively supports women to participate in the program. 20% of program graduates are women, and recruitment of women and girls into HireLAX is individualized across LAWA's workforce programs.⁶⁵ These include internships and STEM programs where LAWA administrators expose potential program participants to construction careers. The Community Relations office ensures that aviation career pathways go beyond pilots and airplane mechanics to incorporate construction careers. LAWA's annual Aviation Career Day has taught more than 1,000 students about aviation-related careers and includes recruitment for HireLAX.⁶⁶ While many programs focus career outreach on high school students, HireLAX intentionally targets girls through early exposure during any elementary-school community programming.⁶⁷

Like the approach of LA County Public Works staff, LAWA's contracting personnel verbally and informally establish the agency's desire for contractors to make best efforts in the recruitment of women into project jobs.⁶⁸

Women in Non-Traditional Employment Roles (WINTER)

Women in Non-Traditional Employment Roles (WINTER) offers the only gender-specific pre-apprenticeship program in the state, providing women with 10 weeks of vocational training and exposure to construction trades through the LA/OC Building Construction Trade Council's MC3 curriculum. The organization has been in operation for 37 years and provides a free ten-week MC3 apprenticeship readiness program to women interested in the building trades. WINTER also provides resource navigation, transitional services, job placement, and retention services to its participants.⁶⁹ The organization partners with individual trades, the Apprentice Readiness Fund, and the county's network of supportive service providers to maximize success among program participants.

⁶⁵ Los Angeles World Airports (LAWA), interview by Estolano Advisors, September 10, 2024.

⁶⁶ Los Angeles World Airports, "Aviation Career Day," <https://www.lawa.org/groups-and-divisions/community-relations/lax/programs/aviation-career-day>.

⁶⁷ LAWA interview.

⁶⁸ LAWA interview.

⁶⁹ WINTER, interviews with Estolano Advisors, July 25 and August 15, 2024.

Table 2-29 shows WINTER’s annual program metrics from FY 2017-2018 until FY 2023-2024. WINTER’s outreach has increased, but enrollments have decreased since FY 2017-2018. Of the 1,415 women who attended a WINTER orientation since 2017, 160 or 11% have successfully completed pre-apprenticeship and entered apprenticeship.

Table 2-29: WINTER Program Participation (FY 2017/18 – FY 2023/24)

	FY 2017-2018	FY 2018-2019	FY 2019-2020	FY 2020-2021	FY2021-2022	FY 2022-2023	FY 2023-2024	Total
# Attended Orientation	130	150	149	270	186	207	323	1,415
Enrolled	70	74	26	30	22	39	55	316
Graduated	65	56	20	26	16	25	43	251
Union Placements	50	25	11	15	9	20	30	160

Source: WINTER

Other Tradeswomen Organizations and Programs

Tradeswomen Ran Association for Diversity and Equity (T.R.A.D.E.) is a new organization focused on building solidarity, community, and mentorship among women in the trades. T.R.A.D.E. hosts periodic happy hours and recruitment career fairs. They also fund delegations of Los Angeles tradeswomen to attend national conferences.⁷⁰

Several building trades offer women’s mentorship programs where apprentices can connect with journeypersons with industry experience.⁷¹ The International Brotherhood of Electrical Workers (IBEW) Local 11 hosts monthly meetings for tradeswomen to meet and build comradery.⁷² The meetings are open to women in all trades as well as WINTER pre-apprenticeship participants.

⁷⁰ T.R.A.D.E., email correspondence with Estolano Advisors, October 23, 2024.

⁷¹ Apprenticeship Readiness Fund, interview by Estolano Advisors, September 10, 2024.

⁷² IBEW Local 11, interview by Estolano Advisors, September 23, 2024.

3. KEY BARRIERS FACING WOMEN IN CONSTRUCTION

To gain insight into the challenges women face in entering and staying in the construction workforce in the Los Angeles region, the consultant team conducted interviews with union representatives, apprenticeship coordinators, public agencies, project owners, and aspiring tradeswomen. The key takeaways on barriers to recruiting and retaining women include:

Barriers to Recruitment

1. Not Enough Demand for Women Workers
2. Awareness of Construction Careers is Limited by Who You Know
3. Lack of Stipends During Pre-Apprenticeship Training and Benefits Cliff

Barriers to Retention

1. Need for Comprehensive Supportive Services
 - a. Child Care
 - b. Transportation
 - c. Mental Health Services
2. Need for Culture Change
 - a. On-site Harassment and Job Site Culture
 - b. Isolation of Women Workers

While construction jobs have low barriers to entry for those with high school diplomas or GEDs, becoming a skilled tradesperson requires years of classroom and on-the-job training, mentorship by journey-level workers and awareness of job opportunities through word-of-mouth and relationships. Women encounter additional challenges, including toxic job site cultures, discrimination, harassment, and limited access to supportive services such as child care.

Understanding these barriers and addressing them through effective policies and workplace practices will help women achieve journey-level status and obtain the necessary certifications to succeed in their construction careers. Reaching this milestone enables women to earn family-sustaining wages and opens doors to further career opportunities, such as roles as foreperson, superintendents, or even starting their own construction businesses. By tackling these barriers today, Metro and its partners can build a more diverse workforce for the future.

Barriers to Recruitment

Not Enough Demand for Women Workers

“With PLAs, contractors will call in and ask for women to meet quotas, so they don’t have to wait as long to find work.” – Recent WINTER graduate⁷³

The construction industry continues to face gender discrimination in hiring and bias. Establishing clear goals and demands from public owners on projects is essential for removing this bias at the outset. In the Los Angeles region, only Metro has established female participation goals on their construction projects.

Without clear demand for women workers from public owners of projects, contractors will often fall back on traditional practices for deploying workers on a project that are steeped in bias.⁷⁴ Contractors often rely on recommendations when hiring and requesting workers from union halls. Therefore, Project Labor Agreements (PLA) and Community Workforce Agreements (CWAs) that include specific targets for female participation help ensure that both unions and contractors recognize the importance of training and placing women on projects. Examples of “subjective hiring tests” include recruitment practices, such as (1) word-of-mouth referrals where workforce is not diverse, (2) reliance on subjective evaluations, such as the “eye ball” test, from predominantly white supervisors, (3) neglecting to post job opportunities, and (4) an overemphasis on promoting from within can perpetuate racial and gender bias in hiring and promotions.⁷⁵

Creating a public owner direct hiring policy to ensure that the female workforce get access to work on projects is crucial for increasing equity. Project owners use PLAs and CWAs to include successful initiatives, such as setting firm apprenticeship diversity requirements in partnership with Joint Apprenticeship Training Committees (JATCs), specifying goals for hours worked on projects by women (including journey-level workers), and establishing these goals for women across multiple projects and jurisdictions to create sustained demand for women workers. Federal partners are also potential key allies in this effort. For example, the Office of Federal Contract Compliance Programs (OFCCP) Megaproject Program promotes equal opportunity in the construction trades workforce of federal contractors and subcontractors on large federal projects by engaging stakeholders early to remove hiring barriers and encourage consideration of a diverse pool of qualified workers.⁷⁶

⁷³ Anonymous. Zoom Interview with Estolano Advisors. 2024. *WINTER Lived Experience: Estolano Advisors (EA) Construction Workforce Disparity Study Interview*. Zoom Interview, October 15, 2024.

⁷⁴ https://www.dol.gov/sites/dolgov/files/WB/media/508_WB_Issuebrief-Equity-Module_10022023.pdf , page 4

⁷⁵ <https://www.dol.gov/agencies/ofccp/compliance-assistance/outreach/resources/construction-best-practices>

⁷⁶ <https://www.dol.gov/sites/dolgov/files/OFCCP/Construction/MegaProgram/Files/OFCCP-Sixteen-Affirmative-Action-Steps.pdf>

Awareness of Construction Careers is Limited by Who You Know

“If more women knew about the support and resources available [in the trades], it would be easier to recruit.” – Recent WINTER graduate¹

As noted in Section 2, **Figure 2-22** shows that female recruitment into the building trades apprenticeship programs has increased since 2008. However, women still represent less than 3 percent of the construction apprentices in the region. Efforts to diversify the construction workforce has resulted in various policies and programs to increase the recruitment of women and people of color into registered construction apprenticeship programs. However, informal networks and word of mouth continue to drive the exposure and recruitment of people into careers in the trades.⁷⁷

Women in Non-Traditional Employment Roles (WINTER) is the state’s only gender-specific pre-apprenticeship program and has graduated 251 women into apprenticeship since 2008. WINTER’s resource navigators can take up to a year of providing resources and support to prepare women to be able to join the program and quit their jobs.⁷⁸ Gender-specific training and targeted recruitment programs expose women to the trades and create institutionalized communities of women in construction.

“By the time you have gotten to high school, you already have an idea of what you can do. Normalize [construction] as an option. The opportunities for growth would be a game changer” – Recent WINTER Graduate⁷⁹

A major obstacle to recruiting women into the construction industry is the negative association many have with the field. Women are less likely to be introduced to or encouraged to explore construction careers. Additionally, those who do show interest often need more support and motivation to enroll in training programs compared to men,⁸⁰ as many women have been socialized to not work with tools and lack the confidence to enter careers in the trades.⁸¹ A 2021 national survey of tradeswomen found that the most effective mechanisms to recruit female construction workers is through word-of-mouth recommendations and training programs that can provide the personalized support and encouragement for women interested in the trades.⁸²

⁷⁷ Hegewisch, Ariane, and Eve Mefferd. n.d. “A FUTURE WORTH BUILDING.” https://iwpr.org/wp-content/uploads/2022/02/A-Future-Worth-Building-What-Tradeswomen-Say_FINAL.pdf. (Page 9)

⁷⁸ Flores, Luz. Zoom Interview with Estolano Advisors. *WINTER: Estolano Advisors (EA) Supportive Services Interview*. Zoom Interview, September 11, 2024.

⁷⁹ Anonymous. Zoom Interview with Estolano Advisors. 2024. *WINTER Lived Experience: Estolano Advisors (EA) Construction Workforce Disparity Study Interview*. Zoom Interview, October 15, 2024.

⁸⁰ Garcia, Ben. Zoom Interview with Estolano Advisors. 2024. *Apprenticeship Readiness Fund (ARF): Estolano Advisors (EA) Construction Workforce Disparity Study Interview*. Zoom Interview, September 10, 2024.

⁸¹ Anthy Hadjimarkos, email message to author, October 24, 2024.

⁸² Hegewisch and Mefferd. “A FUTURE WORTH BUILDING.” (Page 9)

Some recent promising practices in targeted recruitment include:

- **Women in Nontraditional Employment Roles (WINTER): Outreach Strategy** – In 2022, WINTER created two full-time positions for outreach coordinators. Outreach coordinators target non-profits and social service industries that serve women and create partnerships to increase female exposure to the trades. Word of mouth has been a strong outreach tool; more recently there has been a wave of second-generation WINTER participants enrolling.⁸³
- **Apprenticeship Readiness Fund (ARF): Digital Campaign Strategy**: ARF has utilized inclusive images and language in their public-facing materials. They launched a social media campaign to advertise the Multi-Craft Core (MC3) pre-apprenticeship curriculum. The advertising campaign led to outreach to 10,000 women and resulted in approximately 30 female enrollments to pre-apprenticeship.⁸⁴
- **Construction Careers as an Opportunity for Reentry**: A 2021 study found that one third of people released from prison in 2010 did not find reemployment by 2014.⁸⁵ In this study, construction was in the top five sectors to employ formerly incarcerated people, employing 12.2% of people who found employment within 4 years of being released.⁸⁶ Education programs were found to increase post-release employment, especially for individuals who have experienced undereducation.⁸⁷ Employment after release is a significant factor to reduce the chances of recidivism and supports reentry.⁸⁸
- **SB 828: Prison Apprenticeship Pilot Program**: In early 2024, Senator Smallwood-Cuevas introduced a bill that would create an apprenticeship training program in a state women’s prison to create direct pathways for employment to reduce recidivism.⁸⁹ The proposed program would bring similar efforts of the California Department of Corrections and Rehabilitation (CDCR) that connect prison-trained apprentices to local ironworker’s union, to incarcerated women.⁹⁰ However, the bill did not advance in the 2023-24 legislative session and it is unclear whether the bill will be reintroduced or revised in future sessions.

⁸³ Flores, Luz. Zoom Interview with Estolano Advisors. *WINTER: Estolano Advisors (EA) Construction Workforce Disparity Study Interview #1*. Zoom Interview, July 25, 2024.

⁸⁴ Garcia. “Apprenticeship Readiness Fund Interview.” September 10, 2024.

⁸⁵ Carson, E, Danielle Sandler, Renuka Bhaskar, and Leticia Fernandez. 2021. “Special Report Employment of Persons Released from Federal Prison in 2010.” <https://bjs.ojp.gov/content/pub/pdf/eprfp10.pdf>. (Page 14)

⁸⁶ Carson, Renuka and Fernandez. “Special Report Employment.” (Page 21)

⁸⁷ Duwe, Grant, and Makada Henry-Nickie. 2021. “A Better Path Forward for Criminal Justice: Training and Employment for Correctional Populations.” Brookings. April 30, 2021. <https://www.brookings.edu/articles/a-better-path-forward-for-criminal-justice-training-and-employment-for-correctional-populations/>.

⁸⁸ Duwe and Makada. “Better Path Forward.” April 30, 2021.

⁸⁹ “2024 Legislation.” 2024. California Senate District 28. 2024. <https://sd28.senate.ca.gov/2024-legislation>.

⁹⁰ Folsom. 2024. “Folsom Prison Inmates Graduate from Trade Schools.” Goldcountrymedia.com. 2024. <https://goldcountrymedia.com/news/126972/folsom-prison-inmates-graduate-from-trade-schools/>.

- **Destination Crenshaw Partnership with Second Call:** Destination Crenshaw (DC) is a privately owned public benefits project in Leimert Park, LA. There are no direct public funding sources for pre-apprenticeship wages, so Destination Crenshaw connected with private funders to pay wages for its own pre-apprenticeship program. DC recruited and offered supportive services directly through outreach with Second Call, a local organization that focuses on high-risk and formerly incarcerated community members. The hourly wages and supportive services of Destination Crenshaw’s pre-apprenticeship program ensure the targeted populations can succeed in training.⁹¹
- **IBEW Local 11 ETI Mentorship Program Offering Women Extra Resources (EMPOWER):** IBEW 11 partners with local organizations, MC3 pre-apprenticeship programs, schools, and community groups to recruit women. They attend job fairs, career days, and community events and specifically advertise the EMPOWER program to show women the opportunity for careers in the electrical industry. EMPOWER meetings are held monthly and provide food and activities for children to address the obstacles for women to attend. Meeting programs offer a range of hands-on workshops from origami, writing, and power tool safety to develop skills. IBEW 11 also uses the EMPOWER meeting space to create trainings on labor history and political activism and support prospective and existing female electricians. IBEW 11’s targeted recruitment and retention efforts for women has increased female participation in apprenticeship to 5.6% across crafts, with a notable participation rate of 10.17% in Sound and Communication apprenticeship.⁹²

⁹¹ Foster, Jason. Zoom Interview with Estolano Advisors. *Destination Crenshaw: Estolano Advisors Construction Workforce Disparity Study Interview*. Zoom Interview, September 26, 2024.

⁹² Anthy Hadijimarkos, email message to author, October 24, 2024.

Lack of Stipends During Pre-Apprenticeship Training and Benefits Cliff

“I had to quit my last job to start [pre-apprenticeship training] and chose to get a side job at McDonalds to pay my bills. My schedule was to wake up at 4am, get to the program at 5am, get off at 2pm and go work until midnight.” – Lived Experience⁹³

While pre-apprenticeship and apprenticeship programs offer tuition-free training, the loss of wages during participation acts as a barrier to female involvement. Many pre-apprenticeship programs do not provide stipends for the duration of their 40-hour-per-week, 10-week programs, even though participants may be eligible for various public subsidies. Additionally, apprentices in early years of their training typically earn only 60% of a journey-worker's wage (many earning just above \$20/hr.⁹⁴) while no longer qualifying for supportive services from workforce programs (also known as “benefits cliff”).⁹⁵ This situation creates additional challenges for apprentices from vulnerable populations as they attempt to complete their training.⁹⁶ The hardships caused by lack of adequate compensation during training can discourage women and lead many to drop out of the program.

“The cost of housing in Los Angeles County is sky-high and keeps rising... some of our apprentices are working full-time and going to school, but are still experiencing homelessness... Offering some form of food assistance could help keep apprentices focused on their training and success, rather than worrying about how to put food on the table.” – EMPOWER⁹⁷

Pre-apprenticeship programs often require participants to attend the program for up to 40 hours per week, up to 10 weeks. Participants often must give up their current jobs and forfeit their wages during training or work additional hours to manage their financial needs. The Apprenticeship Readiness Fund of the LA/OC Building Trades Council provides stipends to WINTER participants, some up to \$1,000 very two weeks⁹⁸ for the duration of the training period, but these amounts vary based on available funding and do not fully compensate for the lost hourly wages.⁹⁹ In contrast, Destination Crenshaw’s pre-apprenticeship model utilized private funds to pay participants hourly wages, but there have been no direct public funds available to support pre-apprenticeship wages.¹⁰⁰

⁹³ Anonymous. *WINTER Lived Experience Interview*. October 1, 2024.

⁹⁴ Anonymous. *WINTER Lived Experience Interview*. October 1, 2024.

⁹⁵ Office of the Secretary of Transportation. *Investing in America: Best Practices to Expand Access to Jobs and Economic Opportunity through Transportation Infrastructure Investments*. US Department of Transportation. (Page 25)

⁹⁶ Office of the Secretary of Transportation. *Investing in America: Best Practices to Expand Access to Jobs and Economic Opportunity through Transportation Infrastructure Investments*. US Department of Transportation. (Page 25)

⁹⁷ Anthy Hadijimarkos, email message to author, October 24, 2024.

⁹⁸ Flores. *WINTER Supportive Services Interview*. September 11, 2024.

⁹⁹ Flores. *WINTER Supportive Services Interview*. September 11, 2024.

¹⁰⁰ Foster. *Destination Crenshaw Interview*. September 26, 2024.

Barriers to Retention

The Need for Comprehensive Supportive Services

A. Access to Affordable and Inclusive Child Care

Child care is widely recognized as the greatest obstacle for female construction workers, though data indicates that having dependents impacts the completion rates of both male and female apprentices similarly. Nearly 54% of male and female apprentices with dependents drop out before reaching journey-level status. Women, however, continue to have the lowest completion rates for apprenticeships, less than a quarter have completed the full training.¹⁰¹ Key challenges for parents in the trades include affordability, hours of operation, and location of child care services. Refer to **Section 4: Child Care** in this report for a detailed assessment and emerging practices to address child care needs in the construction workforce.

Affordability

Public subsidies and support programs, such as the Equal Representation in Construction Apprenticeship (ERiCA) and Greater Avenues for Independence (GAIN) grants, offer child care funding for female apprentices and pre-apprentices. However, these programs often have long waitlists and insufficient funding to meet the high costs of care. As apprentices' incomes increase during their first and second years, many no longer qualify for several state and county assistance programs, creating a "benefits cliff." Eligibility for state child care subsidies disappears at 85% of the State Median Income (SMI) level, which is greater than \$73,536 for a family size of 1-2 for fiscal year 2023-2024.¹⁰² Although the ERiCA grant aims to mitigate this issue, complex documentation requirements and rigid funding allocations have made it difficult to implement effectively.

A further challenge is the limited availability of child care providers that align with construction schedules. Most providers do not open early enough to accommodate parents who need to be on-site by 5 a.m. As a result, many women in construction depend on friends or family for child care. However, not all have access to such support systems, leaving them to rely on 24-hour or extended-care centers that can offer coverage for long workdays.¹⁰³ The GAIN grant pays for child care facilities and compensates family members who provide child care, but the funds can only be received if the provider is willing and able to receive taxable income from the state.¹⁰⁴

¹⁰¹ See Figure 2-28 in Section 2. Data sourced from California Department of Industrial Relations Division of Apprenticeship Standards (June 2024)

¹⁰² "State Fiscal Year 2023-24 Schedule of Income Ceilings (85 Percent of SMI)." Child Care Resource Center (CCRC), accessed October 9, 2024, https://ccrcca.org/publications/ap/SMI-Chart_%2023-24_Eng.pdf

¹⁰³ Garcia. "Apprenticeship Readiness Fund Interview." September 10, 2024.

¹⁰⁴ Flores. *WINTER Supportive Services Interview*. September 11, 2024.

Limited Non-Traditional Hours Care and Location

There is limited availability of child care providers that operate within the hours to accommodate the work hours of construction. The early schedules of construction jobs have created additional barriers for parents in construction as most providers do not open early enough for a parent to be on-site by 5 a.m. Even the school district's early morning program does not open early enough for construction workers. This is why the most successful women in construction rely on friends or family for their child care needs. However, not all women in construction have a support system to rely on, so they must find 24-hour or extended care centers that are open early enough and can take the children for a long enough time for the parent to complete a workday.

Construction workers change worksites often, so most parents prefer child care to be close to home.¹⁰⁵ Parents of school-aged children face an additional barrier to find a child care provider that is licensed to provide transportation to and from school.¹⁰⁶ The costs of child care, barriers with scheduling, and the availability of local child care contribute to the lower retention rates of construction workers with children, and can deter women from joining or staying the trades.

B. Transportation

Transportation barriers and commuting times are additional challenges for construction workers in the Greater LA Area due to the region's geography. Construction workers shift to new worksites often as phases of construction are completed. The location of the new job site is unpredictable as is the length of the commutes.¹⁰⁷ WINTER provides gas cards for participants to support the costs of daily travel to training and site visits.¹⁰⁸ Interviewed workers appreciated the gas cards provided by WINTER during pre-apprenticeship training but noted the lack of Metro tap cards for those without cars. Many emphasized that using public transportation to and from work locations is impossible due to early work hours and child care responsibilities.¹⁰⁹

For trades workers with children, the "care triangle" of traveling between home, daycare, and the worksite creates a significant burden. Many seek trusted child care near home to reduce travel time, but the scarcity of providers, especially those with hours that align with construction shifts, makes this difficult, if not impossible, for many parents.¹¹⁰

¹⁰⁵ Limon and Sanchez. *IBEW 11 Disparity Study Interview*. September 23, 2024.

¹⁰⁶ Flores. *WINTER Supportive Services Interview*. September 11, 2024.

¹⁰⁷ Anonymous. *WINTER Lived Experience Interview*. October 1, 2024.

¹⁰⁸ Anonymous. *WINTER Lived Experience Interview*. October 1, 2024.

¹⁰⁹ Flores. *WINTER Disparity Study Interview #1*. July 25, 2024.

¹¹⁰ Flores. *WINTER Supportive Services Interview*. September 11, 2024.

C. Mental Health Services

“The environment can be difficult to navigate without addressing underlying issues” – recent graduate of WINTER’s pre-apprenticeship program¹¹¹

The need for supportive services for women entering the trades is significant. Culturally responsive programs that address their experiences with trauma, incarceration, and poverty are vital for promoting retention in the demanding construction industry. Although access to mental health care is a broader public health issue, it is often critical for women in the trades to succeed. For women who are often in the minority on a job site, lack of mental health support can lead to absenteeism, accidents, and other workplace issues and conflict.¹¹² Mental health support has been the most requested service from WINTER’s resource navigators.¹¹³ This often includes connections to navigate health care resources to find medical coverage and an accessible therapist.

Construction jobs do provide opportunities for family sustaining careers and livable wages for people with backgrounds of incarceration and poverty. However, the jobs can be physically and mentally demanding. The strict schedules and time pressures that come with the skilled trades professions requires many workers to manage underlying traumas to navigate the working environment.¹¹⁴ WINTER’s bootcamp and apprenticeship readiness program trains women to be physically capable to enter the trades, but the mental health resources they provide have been noted as providing the mental and emotional skills for their female participants. Access to mental health support has traditionally been limited in many apprenticeship programs. However, more women and workers from diverse backgrounds are identifying it as a crucial factor in stabilizing their construction careers. Providing mental health resources not only supports the retention of female workers but also represents an acknowledgement of the very real pressures and intensive worksite culture all workers face on construction projects.

Addressing Culture Change on Jobsites

A. Harassment, Bullying and Discrimination

“In recent months there were at least two instances of WINTER graduates experiencing harassment; one spoke up and was retaliated against, the other did not out of fear.” – Luz Flores¹¹⁵

¹¹¹ Anonymous. *WINTER Lived Experience Interview*. October 1, 2024.

¹¹² Shockney, Heather. 2023. “The Importance of Mental Health in the Skilled Trades - West Virginia Women Work.” West Virginia Women Work. May 2023. <https://westvirginiawomenwork.org/the-importance-of-mental-health-in-the-skilled-trades>.

¹¹³ Flores, Luz and Torres, Carlos. Zoom Interview with Estolano Advisors. *WINTER: Estolano Advisors (EA) Construction Workforce Disparity Study Interview #2*. Zoom Interview, August 15, 2024.

¹¹⁴ Flores. *WINTER Supportive Services Interview*. September 11, 2024.

¹¹⁵ Flores and Torres. *WINTER Disparity Study Interview #2*. August 15, 2024.

Harassment and retaliation remain major obstacles to retaining female construction workers on job sites. The construction industry continues to accept both gender-based and race-based harassment, creating challenges for building inclusive and supportive work environment for women workers.¹¹⁶

A 2021 nationwide survey of tradeswomen found that 47% of former tradeswomen left the construction industry due to harassment and lack of respect. Furthermore, 39% left due to the lack of accountability in addressing their concerns.¹¹⁷ Harassment on worksites creates toxic environments for tradeswomen, while the absence of accountability and respect perpetuates a culture that enables such behavior. Many incidents go unreported because workers are either unaware of the reporting procedures or fear retaliation due to the lack of anonymous reporting options.¹¹⁸

The reporting process is not anonymous, and as staff from IBEW Local 11 noted, they have heard multiple incidents on Metro projects where contractors were not held accountable including when using retaliatory layoffs.¹¹⁹ Some interviewees noted they felt that there was a pervasive lack of accountability for contractors on public projects and where some contractors and subcontractors do not necessarily share the same goals to diversify the workforce.¹²⁰ And when done inadequately without oversight, contractor efforts to provide on-site anti-harassment trainings end up backfiring and creating more distrust and further targeting of women workers.¹²¹

One union reported that women continue to be targeted for harassment and retaliatory layoffs, especially when reporting health and safety violations on the worksite.

“There was an instance in a tunnel work project where a woman complained there was no restroom for women. That should have been an easy fix. A week later, they got a restroom but the next week [the same woman] was laid off... Employers don’t have to give a reason, but this fear spreads. If you speak up, you’ll lose your job.” – IBEW¹²²

Tradeswomen often work and earn less over time than their male counterparts due to retaliatory layoffs and bias in promotions.¹²³ Female construction workers also cite a lack of opportunity for advancement and promotion as well as the bias and discrimination that influence promotions.¹²⁴

¹¹⁶ “Building for the Future: Advancing Equal Employment Opportunity in the Construction Industry.” 2023. US EEOC. 2023. <https://www.eeoc.gov/building-future-advancing-equal-employment-opportunity-construction-industry>.

¹¹⁷ Hegewisch and Mefferd. “A FUTURE WORTH BUILDING.” (Page 18)

¹¹⁸ “Building for the Future.” 2023.

¹¹⁹ Limon and Sanchez. *IBEW 11 Disparity Study Interview*. September 23, 2024.

¹²⁰ Foster. *Destination Crenshaw Interview*. September 26, 2024.

¹²¹ Limon and Sanchez. *IBEW 11 Disparity Study Interview*. September 23, 2024.

¹²² Limon and Sanchez. *IBEW 11 Disparity Study Interview*. September 23, 2024.

¹²³ Hegewisch and Mefferd. “A FUTURE WORTH BUILDING.” (Page 18)

¹²⁴ Ibid.

The national survey of former tradeswomen found that 40% left the trades due to a lack of prospects for advancement.¹²⁵

“There is no gender pay gap for women in construction, but women are first to get laid off and more likely to be unemployed, so annual wages are lower... so [they] don’t really make the same money.” -IBEW¹²⁶

Harassment, retaliation, and favoritism cultivate unsafe environments with less opportunity for women. Various tools and policies can be implemented by project owners, the trades, and contractors to change the culture of the industry. Refer to **Section 3C – Culture Change** in this report for emerging practices in respectful workplace training and policies used in the construction industry.

B. Isolation of Female Workers

“The most difficult element is the isolation of women in a male-dominated industry.” - IBEW¹²⁷

The cycle of harassment and retaliation is intensified by the isolation women experience in construction. This isolation, driven by low number of women workers on a particular jobsite, also hinders recruitment and retention efforts.

Isolation is a prevalent issue for women in a male-dominated industry like construction. In the 2021 national tradeswomen survey, 20% of women reported never or rarely seeing other women on the job site. Women of color experience higher rates of isolation - 30% of women of color report never or rarely seeing other women of color on the job.¹²⁸ Isolation on the job increases the chances of harassment and assault for women in construction, which then pushes the few women at a jobsite out furthering the isolation and underrepresentation of women in the trades. Isolation was cited by 27% of former tradeswomen as a reason for leaving the trades.¹²⁹

“Events like Tradeswomen Build Nations are powerful for helping women feel seen and heard. We need to support women attending these larger events and also create smaller, more local gatherings.” -EMPOWER¹³⁰

¹²⁵ Ibid.

¹²⁶ Limon and Sanchez. *IBEW 11 Disparity Study Interview*. September 23, 2024.

¹²⁷ Limon and Sanchez. *IBEW 11 Disparity Study Interview*. September 23, 2024.

¹²⁸ Hegewisch and Mefferd. “A FUTURE WORTH BUILDING.” (Page 10)

¹²⁹ Hegewisch and Mefferd. “A FUTURE WORTH BUILDING.” (Page 18)

¹³⁰ Anthy Hadijimarkos, email message to author, October 24, 2024.

Female mentorship programs in the trades help combat isolation and build supportive communities for tradeswomen. A survey of tradeswomen identified women's committees and tradeswomen's groups as two of the most essential programs for fostering success and growth.¹³¹ In the Greater Los Angeles region, half of the registered trades use state funding to offer female mentorship groups, which remain a critical need for women in the region.¹³²

Programs like IBEW Local 11's EMPOWER group have proven highly effective in retaining female construction workers.¹³³ In 2006, IBEW Local 11 launched the ETI Mentorship Program Offering Women Extra Resources (EMPOWER) to support female apprentices by pairing them with journeyman mentors. The group, which meets monthly, has since expanded to include apprenticeship applicants, helping to promote both recruitment and retention of women in the trades. EMPOWER collaborates closely with WINTER and JobCorps to build a strong tradeswomen community and provide personalized support for participants' growth throughout the program.¹³⁴ A USDOT study on women in construction found that the only areas showing progress in female participation—Oregon, the City of Seattle, and Vermont—share a common factor: strong tradeswomen organizations.¹³⁵

Over half of the tradeswomen surveyed in 2021 reported rarely or never working under a female supervisor or foreperson.¹³⁶ Increasing female representation in supervisory roles is another strategy contractors have used to reduce isolation and create a more inclusive work environment on job sites. Contractors and project owners can create representative and diverse leadership teams on jobsites to combat female isolation. Female leadership encourages and motivates less experienced tradeswomen to grow in their careers and can prevent a culture that tolerates harassment and retaliation on the job.¹³⁷ Destination Crenshaw, for example, proactively asked their contractor to create a team of female staff in administration, engineering, and monitoring positions to develop a jobsite culture where people do not feel isolated.¹³⁸

¹³¹ Hegewisch and Mefferd. "A FUTURE WORTH BUILDING." (Page 33)

¹³² Garcia. "Apprenticeship Readiness Fund Interview." September 10, 2024.

¹³³ Limon and Sanchez. *IBEW 11 Disparity Study Interview*. September 23, 2024.

¹³⁴ Limon and Sanchez. *IBEW 11 Disparity Study Interview*. September 23, 2024.

¹³⁵ Office of the Secretary of Transportation. *Best Practices to Expand Job Access*. (Page 32)

¹³⁶ Hegewisch and Mefferd. "A FUTURE WORTH BUILDING." (Page 19)

¹³⁷ Hegewisch and Mefferd. "A FUTURE WORTH BUILDING." (Page 20)

¹³⁸ Foster. *Destination Crenshaw Interview*. September 26, 2024.

4. EMERGING PRACTICES

Child Care

Affordable and reliable child care is essential to building a sustainable workforce for the construction industry. *(See side bar at end of this section for a summary of common types of child care arrangements.)* Child care is the work that makes all other work possible and is an important—albeit usually invisible—part of the nation’s essential infrastructure. In support of Metro’s larger efforts to support gender equity in the workforce, this chapter aims to provide a comprehensive understanding of how child care affects women workers, particularly in the construction sector. This chapter includes:

- An assessment of the gaps in child care provision for construction workers in Los Angeles County.
- Consideration of levers of influence available to Metro to prioritize and address this gap.
- Recommendations for short- and long-term actions Metro can take to tackle regional child care challenges effectively.

Key findings from this analysis include:

- Most families with children live in child care deserts, with inadequate access to child care.
- In discussions with workers, resources navigators at women in trades organizations, unions, apprenticeship providers, and training partners, the absence of affordable, high-quality, and flexible child care emerged as a key factor influencing retention rates, workforce participation, and absenteeism.
- Many workers often join waitlists for child care subsidies during transition into pre-apprenticeship programs. And joining a waitlist doesn’t necessarily mean they will ultimately gain the subsidy.
- Most state reimbursement rates do not incentivize providers to offer additional early care, effectively preventing access to the early-hours care often needed to serve construction workers.
- The care transportation triangle—or long commutes from home to child care and work—limits the child care choices available, and often calls for options provided near where women live.
- Workers transitioning from pre-apprenticeship programs to apprenticeships and corresponding increased incomes often mean workers lose their child care subsidies, though they do not earn enough income to afford the child care they need.

Understanding the Child Care Needs of a Diverse Construction Workforce

The construction workforce requires a variety of high-quality, flexible child care options that can accommodate its diverse and changing needs. To assess potential gaps in child care for the regional labor market, this section defines equitable and effective child care, summarizes the region's existing child care needs, and identifies child care specific to the construction industry.

Defining Equitable and Effective Child Care

Families often choose child care based on factors such as the age and developmental needs of their children, work schedules, budgets, and personal preferences.

Equitable and effective child care options must deliver:

- ✓ **Affordability:** costs are within reach for low- and medium-income workers, such as construction apprentices
- ✓ **Accessibility:** at a convenient location with hours that meet workers' needs
- ✓ **Reliability:** granting workers confidence that they will not need to miss work for unexpected child care issues
- ✓ **Quality:** providing a safe and healthy environment that families can trust and that nurtures the healthy growth and development of children
- ✓ **Responsive:** ensuring child care options that fit the unique needs of the workforce including culturally specific options, allowance for friend and family providers, and proximity to home and school

A comprehensive plan for reliable, accessible, and affordable child care must offer a range of options, or "models," that cater to these varied needs. This includes providing multiple care solutions for a single family to support different needs, such as non-traditional hour care needed to align with the demands of construction work.

Construction workers need mixed delivery models to provide benefits that are tailored to their diverse needs." The four most likely models named are: (1) on-site care, operated by the employer; (2) on-site care, contractor-operated; (3) off-site care, cash assistance; and (4) off-site care, provider sponsorship. A multi-pronged approach that combines these and other strategies is ideal for ensuring families can match with the child care arrangements that work best for them. Employers can invest in child care provisions that offer a variety of choices to workers. As discussed further in the sections below, home-based child care providers are often the best option for parents needing care outside of traditional hours due to the home-based nature of care and smaller number of children cared for by the provider. However, there is a significant shortage of available providers in this group.

Women in Construction Face a Dire Child Care Picture in Los Angeles County

Los Angeles County is experiencing a substantial child care shortage that affects all working parents. Overall, licensed child care spaces do not have seats for 75% of children in the County.¹³⁹ The need is particularly acute for infant and toddler care, with slots available for only 4% of all children aged up to 36 months in Los Angeles, the urban center of the county.¹⁴⁰

For child care to be deemed affordable, it should take up no more than 7% of a household's income, though in 2023, the median yearly infant-based center care cost of \$20,455 represented 24% of the county's median income of \$98,200.^{141, 142, 143} The burden of child care costs is much higher for minimum-wage workers, which spend upwards of 62% of their income on infant care alone.¹⁴⁴ Households under the poverty level are disproportionately burdened as well: about 20% of women-headed households earn below the poverty level in Los Angeles County, with the percentage jumping up to 45% for households caring for children under five years old.¹⁴⁵ At this cost, subsidized care is the only pathway to afford care for most families.

¹³⁹ "Availability of Childcare for Working Families." Kids Data, Accessed September 3, 2024, <https://www.kidsdata.org/topic/99/child-careavailability/table#fmt=262&loc=2,127,1657,331,1761,171,364,356,217,354,1663,339,2169,365,343,367,344,366,368,265,349,361,4,273,59,370,326,341,338,350,2145,359,363,340&tf=141&ch=1247,1248&sortColumnId=0&sortType=asc>

¹⁴⁰ "Caring Cities: Los Angeles." City Hub and Network for Gender Equity (CHANGE), December 6, 2023, <https://www.citieschange.org/resources/caring-cities-los-angeles/>

¹⁴¹ "Working Families are Spending Big Money on Child Care." Center for American Progress, June 20, 2019, <https://www.americanprogress.org/article/working-families-spending-big-money-child-care/#:~:text=According%20to%20the%20U.S.%20Department,the%20HHS%20benchmark%20of%20affordability>

¹⁴² "Childcare Price by Age of Children and Care Setting." U.S. Department of Labor, Accessed September 6, 2024. <https://www.dol.gov/agencies/wb/topics/childcare/price-by-age-care-setting>

¹⁴³ "Los Angeles County Affordable Housing Program Income Limits." Los Angeles County Department of Regional Planning, May 09, 2024, https://planning.lacounty.gov/wp-content/uploads/2024/05/housing_2024-income-limits-costs.pdf

¹⁴⁴ "Childcare Costs in the United States." Economic Policy Institute, October 1, 2020, <https://www.epi.org/child-care-costs-in-the-united-states/#/CA>

¹⁴⁵ "American Community Survey Table S1702." U.S. Census Bureau, 2023 1-Year Estimates, <https://data.census.gov/table/ACSST1Y2023.S1702?q=los%20anegles%20county%20median%20family%20income%20single%20head%20of%20household>

Child Care Deserts

61% of all Los Angeles children live in child care deserts, or areas with insufficient child care supply (defined as three children for every child care slot available).^{146, 147} Low-income families, families living in rural areas, those receiving subsidies, and single parents are more likely to live in child care deserts.¹⁴⁸ Families needing subsidized care are more likely to be placed on waitlists than find access to affordable child care. In Los Angeles County, the need is particularly acute for infants and toddlers (age 0-3), with a waitlist of over 14,000 for this age group as of 2021, and access to licensed care for infants and toddlers under 23 months for only 7% of working parents.¹⁴⁹

Census tracts with the largest concentration of families with an infant or toddler qualifying for child care subsidies are in South Los Angeles, Southeast Los Angeles, Eastside, San Fernando Valley, Long Beach, Antelope Valley and Los Angeles Crest regions.¹⁵⁰

Inability to find necessary child care limits workforce participation. This is particularly true for mothers living in child care deserts as it has been found that they are less likely to participate in the workforce.¹⁵¹ While there is little information on the percentage of single mothers in child care deserts, the association between single parents and child care deserts—along with a higher percentage of single mothers in the county—indicates that single mothers are more likely to reside in areas with scarce child care.¹⁵² It is important to note that 1 in 3 single women headed households with children live in poverty.

¹⁴⁶ Verano, Brenda Fernanda. “Los Angeles Is One of the Many Childcare Deserts throughout the Country, Advocates Say.” CaloNews, May 16, 2024, https://www.calonews.com/communities/los-angeles/losangeles-is-one-of-the-many-childcare-deserts-throughout-the-country-advocates-say/article_813645d0-1356-11ef-b6a8-f7c4bfd65e63.html#:~:text=In%20L.A.%2C%20childcare%20scarcity%20is,in%20certain%20regions%20of%20L.A

¹⁴⁷ “Do You Live in a Childcare Desert?” Center for American Progress, accessed September 6, 2024, <https://childcaredeserts.org/2018/?state=CA>

¹⁴⁸ “81% of People in CCRC’s Service Area Live in a Childcare Desert.” Childcare Resource Center (CCRC), December 1, 2021. <https://www.ccrca.org/about/noteworthy-news/item/81-of-people-in-ccrcs-service-area-live-in-a-child-care-desert/>

¹⁴⁹ County of Los Angeles Department of Public Health, Office for the Advancement of Early Care and Education. Blueprint for Identifying Immediate and Long-Term Effects to Fortify the Infant and Toddler Care System (Item 36, Board Agenda of September 12, 2023). <https://childcare.lacounty.gov/wp-content/uploads/2024/03/Blueprint-Identifying-Immediate-and-Long-Term-Efforts-to-Fortify-the-Infant-and-Toddler-Care-System-Item-36-Board-Agenda-of-September-12-2023.pdf>

¹⁵⁰ “Improving the Infant and Toddler System of Care in Los Angeles Landscape Review.” Conrad N. Hilton Foundation, January 2023, <https://acrobat.adobe.com/id/urn:aaid:sc:VA6C2:7a749c97-4143-440a-93c5-71a88bc132e9>

¹⁵¹ Center for American Progress, “Do You Live in a Child Care Desert?”

¹⁵² “Household Types in Los Angeles, California (City).” The Demographic Statistical Atlas of the United States - Statistical Atlas, accessed October 9, 2024, <https://statisticalatlas.com/place/California/Los-Angeles/Household-Types>

Child Care Providers Struggle to Meet the Need

Early childhood education (ECE) programs throughout California, including Los Angeles County, operate in both centers and homes:¹⁵³

- Child Development Centers are typically located on school campuses or in the community and serve around 100 children. In Los Angeles County, child development centers are multi-room buildings licensed by the state that can be either private businesses, nonprofit organizations or part of public districts.
- Home-based Care is provided by Family Childcare Homes or license-exempt Family, Friend, and Neighbor providers. Family Childcare Homes are licensed by the state and operate in a family home setting, typically serving eight to 14 children.

Without higher reimbursement rates, providers cannot grow their capacity, further exacerbating the child care shortage. The gaps in care resulting from low resources and high needs are most evident among the infant and toddler age group, which require the highest staffing ratios.

The financial model for providing infant and toddler care is unsustainable, as operational costs often exceed what low- to moderate-income families can afford. Additionally, government subsidy reimbursement rates for ECE providers are significantly lower than the actual cost of care,¹⁵⁴ and is not keeping up with cost of living and need for increasing wages.¹⁵⁵ As of 2022, monthly reimbursement rates for child development centers (\$1,000 - \$1,600¹⁵⁶) and family child care home providers (\$700 - \$1,100¹⁵⁷) did not cover the full cost of care, estimated at \$1,678 per child. Low reimbursement rates further disincentivize providers from receiving children with subsidies¹⁵⁸ and require parents to pay more out of pocket to meet the cost of providers. From all angles, the current subsidized care system in Los Angeles County is failing to produce affordable care.

Low Wages and High Turnover of Child Care Workers Affect Costs and Supply

At the height of the pandemic, the child care industry lost 35% of its total workforce, and it has been one of the slowest sectors to recover, further increasing the fragility of a system already in crisis.¹⁵⁹ American Rescue Plan child care stabilization funds have been propping up the sector—allowing providers to pay more than the poverty-level wages that are preventing talented workers from joining or staying in the child care workforce. But those funds were temporary and expired in September 2023, leaving the sector with a tremendous loss.

¹⁵³ CHANGE, “Caring Cities: Los Angeles.”

¹⁵⁴ Ibid

¹⁵⁵ DiMatteo, Gemma. “Nontraditional Hours and Child Care: An Exploratory Study on the Needs of Families and Child Care Providers in California.” California Child Care Resource & Referral Network, October 2019, <https://rrnetwork.org/assets/general-files/FINAL-NTH-Report-10.25-V2.1.pdf>

¹⁵⁶ State of California Health and Human Services Agency, California Department of Social Services, California County Local Child Care Planning Council Needs Assessment - Los Angeles, November 2022, <https://childcare.lacounty.gov/wp-content/uploads/2023/09/Child-Care-Needs-Assessment-Los-Angeles-County-FINAL-11.3.22.pdf>

¹⁵⁷ Ibid

¹⁵⁸ County of Los Angeles Department of Public Health, Blueprint for Identifying Immediate and Long-Term Effects to Fortify the Infant and Toddler Care System

¹⁵⁹ “How is California’s Child Care Sector Faring?” Public Policy Institute of California, July 7, 2022, <https://www.ppic.org/blog/how-is-californias-child-care-sector-faring/>

Women, who predominantly make up the ECE workforce in Los Angeles County (95%), are significantly impacted any changes in the child care system. Over half of the women in the ECE workforce (58%) identify as Latinx and many are Spanish-speaking immigrants.¹⁶⁰ The ECE workforce in both the county and California is aging, with 33% of center-based teachers and 53% of center-based directors aged 50 or older.¹⁶¹

Low wages are the driving force behind child care shortages in Los Angeles County. ECE educators in Los Angeles County face significant financial challenges, with an average hourly wage of \$14.62, driving nearly half (49%) into poverty.¹⁶² Child care workers typically make \$4-\$5 less than fast food workers. Family child care workers earn even less money, averaging \$11.73 per hour. Nearly half of the child care workforce in Los Angeles County qualifies for public assistance programs. Center-based directors earn a median annual salary of less than \$60,000, while teachers earn under \$40,000. Small family child care (FCC) providers earn even less, with a median salary around \$20,000, and large FCC providers slightly over \$40,000. Many educators lack employer-paid health insurance and retirement benefits, leading to rent burden (57%) and limited wealth-building opportunities.¹⁶³

ECE workers are disincentivized from joining and staying in this sector because of the mismatch between wages, qualifications, and cost of living. In 2021, Los Angeles County needed an additional 33,600 workers to meet the needs of 440,000 children ages zero to five. The increase of unmet need is also an effect of the closure of 20% of licensed child care facilities due to COVID-19.¹⁶⁴ Additional ECE workers are especially needed for infants and toddlers, which are experiencing the highest shortages.

The insufficient supply of subsidies means that not all eligible families will receive support. Even when families are eligible for subsidized care, access and availability remain key challenges in finding a provider. About 57% of low-income families did not receive subsidized care in the same year.¹⁶⁵ Subsidies rates that exist now are not enough to cover the cost of providing care.

ECE wages are too low to cover workers' living and operational costs, leading to high turnover and supply shortages. County reimbursement rates have kept wages below market levels,¹⁶⁶ For working families, this means more difficulty to find care due to low reimbursements rates.

¹⁶⁰ Hilton, "Improving the Infant and Toddler System of Care in Los Angeles Landscape Review."

¹⁶¹ Ibid

¹⁶² County of Los Angeles Department of Public Health, Blueprint for Identifying Immediate and Long-Term Effects to Fortify the Infant and Toddler Care System

¹⁶³ Ibid

¹⁶⁴ City of Los Angeles Child Care Equity Initiative Department, Child Care Equity Initiative, Los Angeles City Clerk, March 1, 2024, https://clkrep.lacity.org/online/docs/2023/23-1013_misc_3-1-24.pdf

¹⁶⁵ Bhusal, Samikchhyal, Evelyn Blumenberg, and Madeline Brozen. "Access to Child Care in Los Angeles County: Recent Trends and Covid-19 Implications." UCLA Lewis Center for Regional Policy Studies, June 8, 2021, <https://www.lewis.ucla.edu/research/child-care-access-los-angeles-county-trends/> (p. 12)

¹⁶⁶ County of Los Angeles Child Care Planning Committee, *The State of Early Care and Education in Los Angeles County - Los Angeles County 2017 Needs Assessment Technical Report*, March 2017, <https://childcare.lacounty.gov/wp-content/uploads/2020/07/TechRptState201711July18.pdf> (p.13)

Family, Friend, and Neighbor (FFN) care plays a vital role in the ECE system, especially for infants and toddlers and for those needing flexible child care hours. In California, about 80% of children under two are cared for by FFN providers, often chosen by families working non-standard hours or those with children who have special needs. Despite their vital role, FFN providers in California receiving government subsidies earn just \$8 per hour, which further discourages participation in this essential sector.¹⁶⁷

Child Care Challenges for Women in Construction

A review of labor market data shows that construction workers with young dependents have higher dropout rates compared to those without dependents.¹⁶⁸ In the development of this report, interviews conducted with stakeholders in the construction industry (including pre-apprentices and other workers, training partners, unions, and apprenticeship coordinators) revealed that child care access is a barrier for women in construction. This challenge impacts workers at every level—hindering women's transition into apprenticeship programs, their ability to complete multi-year apprenticeships, and their continued participation in the sector after having children. Both women's trade groups and workers themselves cited the difficulty of finding affordable, high-quality child care aligned with construction job needs, such as care during non-traditional hours.

For one young single-mother, joining an intensive ten-week pre-apprenticeship program was “the best decision I made.” In an interview, this recently graduated young mother, expressed that her decision to join the pre-apprenticeship program of Women in Non-Traditional Employment Roles’ (WINTER) was based on the opportunity to tap into high earning careers that offered benefits. She admitted that before joining the pre-apprenticeship program, no one in her cohort, including herself, knew what it was like to be a worker in the trades. At WINTER, she learned not only about the process of becoming a worker in the trades, but also about tools and how to navigate the work environment. Most importantly, she gained experience juggling parenthood and a career with nontraditional hours.

¹⁶⁷ County of Los Angeles Department of Public Health, Blueprint for Identifying Immediate and Long-Term Effects to Fortify the Infant and Toddler Care System

¹⁶⁸ See Figure 2-28 in Section 2. Data sourced from California Department of Industrial Relations Division of Apprenticeship Standards (June 2024)

When asked about her challenges, she stated, “child care is the biggest problem we women have.” Finding early care hours and care for more than eight hours was a challenge as a pre-apprentice, and this is a challenge she anticipates facing as she enters an apprenticeship. While the financial cost of child care was not a challenge as a pre-apprentice because she received financial support from WINTER and her local school district, she also acknowledged that the cost of care and the commute to child care will become a challenge since she will most likely lose access to supportive services as an apprentice and will have to find a new child care provider that offers early care hours. Although a career in the trades presents many challenges, this young mother expressed excitement about the opportunity to focus on a craft she genuinely enjoys. From her experience, “a lot more women would jump in if we had child care.” Her support system has allowed her to succeed in her pre-apprenticeship, and as a single parent, she recognized how critical it is to continue to have a support system to achieve a career in the trades.¹⁶⁹

Lack of Extended Hours and Weekend Care

For parents in trades, distance, variable schedules, and early work hours lead to a need for non-traditional care hours. In 2021, 12% of all child care requests in Los Angeles County were for nontraditional hours of care,¹⁷⁰ yet only 2% of licensed facilities offered evening, overnight, and/or weekend care.¹⁷¹ In one survey by the California Childcare Resource & Referral Network, sixty-two % of parents reported they had to “give up a job offer or quit a job because you couldn’t find stable care during nontraditional hours.”¹⁷²

Available data reveals that nontraditional care hours are more available through licensed family child care homes.¹⁷³ Nontraditional care providers work long hours, often six to seven days a week, and report feeling burned out and exhausted.¹⁷⁴ Additionally, providers of nontraditional care hours have less time to spend with family and to attend to personal matters, such as doctor appointments.¹⁷⁵ As noted earlier in this report, both Family Childcare homes and Family, Friend, and Neighbor caregivers are disincentivized in offering nontraditional hours due to limits on reimbursement rates and lack of overtime pay.¹⁷⁶

There is an opportunity to boost the participation of women and parents in the workforce by reducing child care deserts and expanding the supply of nontraditional care hours. It is important to also create avenues for family members to support workers with child care responsibilities.

¹⁶⁹ WINTER pre-apprentice graduate, interview by Estolano Advisors, October 1, 2024

¹⁷⁰ “The 2021 Child Care Portfolio - Los Angeles County Family & Child Data.” California Child Care Resources & Referral Network, January 2023, https://rrnetwork.org/assets/general-files/Los-Angeles_2023-01-25-040611_owjl.pdf

¹⁷¹ “Child Care Data Tool,” California Child Care Resource and Referral Network, Accessed October 9, 2024, <https://rrnetwork.org/research/child-care-data-tool#10>

¹⁷² “Nontraditional Hours and Child Care.” California Child Care Resources & Referral Network, October 2019, <https://rrnetwork.org/assets/general-files/FINAL-NTH-Report-10.25-V2.1.pdf>

¹⁷³ California Child Care Resources & Referral Network, “The 2021 Child Care Portfolio”

¹⁷⁴ California Child Care Resources & Referral Network, “Nontraditional Hours and Child Care”

¹⁷⁵ Ibid

¹⁷⁶ Ibid (p. 27)

Family members that can support minimally such as with pick-ups and drop-offs can reduce the distance travelled for women in construction.

The Care Transportation Triangle for Families

A major challenge reported by tradeswomen and advocates is the "child care triangle," or the geographic distance between home, child care, and work. Due to the limited supply of child care, families are traveling longer distances to access it. Additionally, the nature of construction work requires women to travel across the region, further complicating their child care needs by increasing commute times and distances.¹⁷⁷

One resource navigator for women in the trades sector commented that "Parents with a voucher can't have a license exempt provider care for their children in their own home, so parents have to transport their children to the provider's home, often waking them up in the middle of the night and disrupting their sleep (and not allowing the children to sleep in their own beds).

Transportation is difficult for school aged children—getting from school to child care, or child care to school. Parents wish there was an affordable ride-share service their children could use."¹⁷⁸ Both Family child care and FFN child care arrangements are often more flexible in terms of scheduling. Providers may be willing to accommodate irregular or non-traditional work hours, including early mornings, late evenings, or weekends, to support the varying schedules of working parents. Proximity and convenience for families occur when they are located within or near the family's own neighborhood or community, making it convenient for parents to drop off and pick up their children. This proximity reduces commuting time and provides a more seamless transition between home and child care.

Parents in the construction workforce need child care that is not only located near home but also meets their diverse needs. For example, parents with early or late work hours and school aged children may require care that operates outside standard hours, offers transportation, and is located near both the child's school and home. Finding care that meets these multiple needs adds another challenge to an already challenged child care system.

The Benefits Cliff and the Vulnerability of Year 1 and Year 2 Apprentices

Nationally, graduates of apprenticeship programs, or journey-level workers, earn an average salary of \$77,000 upon completion. However, entry-level apprentices typically earn only 40 to 50 percent of that, around \$39,000 annually. While eligibility for child care subsidies generally requires families to earn at or below 85% of the state median income, many states implement stricter criteria, often prioritizing those in greater need with income limits as low as \$26,000. This leads to limited options for families with incomes just above these thresholds and for many apprentices, losing subsidies altogether.¹⁷⁹

¹⁷⁷ Luz Flores, Director of Operations, WINTER, interview by Estolano Advisors, September 11, 2024

¹⁷⁸ California Child Care Resources & Referral Network, "Nontraditional Hours and Child Care" (p. 32)

¹⁷⁹ "3 Ways States Can Expand and Sustain the Infrastructure Workforce by Meeting Child Care Needs." Center for American Progress, March 29, 2023, <https://www.americanprogress.org/article/3-ways-states-can-expand-and-sustain-the-infrastructure-workforce-by-meeting-child-care-needs/>

In Los Angeles, pre-apprentices in WINTER programs earn stipends totaling up to \$2,000 per month and are eligible for other supportive services through CalWORKS. The income earned during pre-apprenticeship will vary depending on the program although not all programs offer stipends or income. Once graduates move to apprenticeships their wages will vary depending on the trade. In year one—Laborers earn \$23.44 per hour and in year two earn \$25.78 per hour. In California, families earning up to 85% of the State Median Income (SMI) level are eligible for child care subsidies. This means that families making over \$73,536 for a family size of 1-2 for fiscal year 2023-2024 is ineligible.¹⁸⁰

Table 4-1: Projected Benefits Cliff for Laborers in Los Angeles County

Level of Tradesperson, Laborer	Est. Monthly Earnings	Est. Monthly Child Care Cost for Center-based Care, Infant	Monthly 85% SMI Ceiling, Family size 1-2 for FY 23-24	Max Monthly Reimbursement Rate for Child Care Center Providers, Infant	Monthly Family Fee at 75-85% SMI
Pre-apprentice	\$2,000	\$1,600	\$6,128	\$1,688.28	\$61.28
Apprentice Year-1	\$3,750.4	\$1,600	\$6,128	\$1,688.28	\$61.28
Apprentice Year-2	\$4,124.8	\$1,600	\$6,128	\$1,688.28	\$61.28
Apprentice Year-3	\$4,500.8	\$1,600	\$6,128	\$1,688.28	\$61.28
Journey, Group 1	\$7,500.8	\$1,600	Ineligible for subsidy	-	-

**Estimate pre-apprentice earnings based on information from WINTER.*

Emerging Opportunities for Women in Construction

Child Care Benefits for Pre-Apprentices and Apprentices¹⁸¹

Navigating the child care system is a significant barrier for working parents.¹⁸² Parents must navigate a mixed-delivery system with varying eligibility criteria depending on family demographics and federal and state programming.¹⁸³ For many, the first step to obtaining subsidized care is finding help. Public government agencies, resource and referral agencies, nonprofit organizations and community groups, and workforce development and training programs are all part of the ecosystem connecting working parents to providers.

¹⁸⁰ “State Fiscal Year 2023-24 Schedule of Income Ceilings (85 Percent of SMI).” Child Care Resource Center (CCRC), accessed October 9, 2024, https://crrcca.org/publications/ap/SMI-Chart_%2023-24_Eng.pdf

¹⁸² County of Los Angeles Child Care Planning Committee, “The State of Early Care and Education in Los Angeles County,” (p. 13)

¹⁸³ Ibid (p.13)

Family fees for subsidized child care in California vary based on income levels, with families earning up to 85% of the state median income (SMI) qualifying for the program. Previously, these fees were often unaffordable for low to moderate-income families, forcing them to choose between child care and other essential needs like food and housing. However, the 2023-24 Budget Act has revised the family fee schedule to enhance affordability, eliminating fees for families below 75% of the SMI and capping fees at 1% for those earning 75% or more of the SMI, effective October 1, 2023.¹⁸⁴

California's subsidized care programs include: California State Preschool Program, General Childcare and Development Program, California Work Opportunities and Responsibility to Kids (CaWORKS), Alternative Payment Program, Early Head Start, and Head Start.¹⁸⁵ Within these programs there are three defined stages of child care. The Los Angeles County agencies administering child care programming include: Los Angeles County Office of Education, Los Angeles County Office for the Advancement of Early Care and Education, Child360, Childcare Alliance of Los Angeles, First 5 LA, and Quality Start Los Angeles.¹⁸⁶ Other resource and referral agencies are: Childcare Resource Center, Connections for Children, African American Provider Network, Pathways LA.¹⁸⁷

New Resources for Women in Construction

Women entering pre-apprenticeships can access child care through two main avenues. The first option is to apply for federal and state-funded programs available through local government agencies, resource and referral organizations, nonprofit groups, and workforce development programs. The second option is to obtain child care support specifically for trades workers by enrolling in pre-apprenticeship programs, which in Los Angeles County primarily receive funding through Equal Representation in Construction Apprenticeship (ERiCA) grants.¹⁸⁸

ERiCA grants provide funding to agencies aimed at promoting the success of women and non-binary participants entering careers in the building and construction sectors. These grants focus on supporting women in trades by funding services in two key areas: child care and outreach. California has allocated \$25 million for the program years 2023-2025. Eligible agencies include those with Department of Administrative Services (DAS)-registered construction pre-apprenticeship programs that foster equal representation in the construction workforce. Recipients of child care ERiCA grants can use the funds to provide direct stipends to pre-apprentices and apprentices for child care expenses, coordinating child care, or in-house child care. However, there are limits on the amount of funding available: pre-apprentices can receive up to \$5,000, while apprentices can receive up to \$10,000 for child care support.¹⁸⁹

¹⁸⁴ Laura Pryor and Erik Saucedo. "Mending Harmful Family Fees." California Budget and Policy Center, July 2023, <https://calbudgetcenter.org/resources/mending-harmful-family-fees-expanding-possibilities-for-california-families/>

¹⁸⁵ County of Los Angeles Child Care Planning Committee, *The State of Early Care and Education in Los Angeles County* (p. 13-14)

¹⁸⁶ "Quality Start Los Angeles." Child Care Alliance of Los Angeles, August 24, 2018, <https://www.ccala.net/connect-to-child-care/quality-start-los-angeles/>

¹⁸⁷ CHANGE, "Caring Cities: Los Angeles"

¹⁸⁸ Luz Flores, Director of Operations, WINTER, interview by Estolano Advisors, September 11, 2024

¹⁸⁹ State of California Department of Industrial Relations, *Equal Representation In Construction Apprenticeship (ERiCA) Grant*, accessed October 9, 2024, <https://www.dir.ca.gov/DAS/Grants/ERiCA.html>

In Los Angeles, LA/OC BTC-The Apprenticeship Readiness Fund (ARF) was awarded \$1.5 million to distribute supportive child care resources to the region's women apprentices.¹⁹⁰ Los Angeles area ERiCA grantmaking by the ARF primarily supports women in the first two years of their apprenticeships, a critical period when they often experience a significant benefits cliff during their income level transition from pre-apprentice to apprentice wages.¹⁹¹

Despite the financial support provided by ERiCA grants, women in trades and their advocates report that these funds are insufficient to meet their needs. The overall supply of child care, particularly nontraditional care hours, remains limited, highlighting the need for more comprehensive solutions that address child care gaps rather than merely circumventing them.

Case Studies of Child Care Support for Women in Construction

TradesFutures Childcare Pilots, Milwaukee and New York City

Hoping to address the challenge of affordable and accessible child care for women in trades, TradesFutures, a national nonprofit promoting construction apprenticeship readiness for women and people of color, launched two pilot child care programs in 2022 on projects in Milwaukee, Wisconsin and New York City, New York.¹⁹² The goal was to alleviate the burden of child care costs for trades workers by testing two different approaches. In Milwaukee, the program initially offered onsite child care near a construction site, while in New York City, vouchers were provided directly to child care providers. These pilots hoped to address the complex challenges of child care faced by women and working families in the trades, including the need for early hours of care, the limited availability of licensed facilities, and high cost of care, particularly for apprentices who earn lower wages.¹⁹³

The New York City pilot partnered with the New York City Building and Construction Trades Council and served graduates of the Non-Traditional Employment for Women (NEW) program, including both apprentices and journey workers. The program aimed to assist at least 10 families, providing up to \$1,000 a month in vouchers directly to graduates' child care providers for a year. For families using family, friend or neighbor care, the program offered a one-time payment of \$500 to the caregiver, with the option to file a 1099 for tax purposes. Through this program, NEW has also hired a case manager to help families access transportation, nanny care, and other services necessary to manage their nontraditional work schedules.¹⁹⁴ The New York City program has since secured additional state funding to expand its services to other apprenticeship-readiness programs in the city.¹⁹⁵

¹⁹⁰ Ibid

¹⁹¹ Ben Garcia, Executive Director, Apprenticeship Readiness Fund, interview by Estolano Advisors, September 10, 2024

¹⁹² "TradesFutures Childcare Pilot Program: Working to Make Childcare Accessible for North America's Skilled Tradespeople." TradesFutures, August 8, 2022. <https://tradesfutures.org/initiatives/child-care-pilot/>

¹⁹³ Nicole Schwartz. "Effective & Inclusive Childcare Solutions: Toolkit for Implementing CHIPS & Science Act Investments Webinar," June 20, 2023, <https://vimeo.com/839835344/f111426cbd?share=coppy>

¹⁹⁴ Ibid

¹⁹⁵ Newberger, Robin. "Childcare for Women in the Trades: The Milwaukee Pilot Program." Federal Reserve Bank of Chicago, February 2024, <https://www.chicagofed.org/publications/chicago-fed-insights/2024/childcare-women-trades-milwaukee>

The Milwaukee pilot's original plan in 2022, with EmpowHer and Milwaukee Building and Construction Trades Council, was to reserve child care slot in a child care facility near the worksite.¹⁹⁶ This pilot faced challenges in recruiting participants. Interviews with potential participants revealed that many preferred child care near their homes and were unwilling to switch providers based on worksite location, particularly in a field like construction, where job sites frequently change. As a result, the pilot shifted to a voucher system, offering to pay half of the child care costs for up to a year to child care providers, along with providing a navigator to help families access care that fit their unique needs.¹⁹⁷ The pilot received \$139,000 from trade union contributions, allowing the pilot to extend into a second year after an initial shift from offering onsite care to a voucher system that better suited participants' needs.

A key lesson learned from the Milwaukee pilot was the importance of conducting a thorough needs assessment before launching child care programs. This experience highlighted that there is no one size fits all model and that there is a need for flexible, adaptable programs tailored to workers' unique needs.¹⁹⁸ Through these pilots, TradesFutures seeks to underscore the importance of ongoing assessments directly with workers to ensure that such programs remain effective and responsive to evolving needs.

Care That Works, Boston, Massachusetts

Care That Works is a Boston-based pilot program aimed at providing child care for families with nonstandard work schedules, particularly those in construction. The program is assembling a network of licensed family child care providers who are willing to start their day early, offering care as early as 5:00 a.m. to accommodate parents with early-morning shifts. Unlike large group child care facilities, family child care providers are licensed to care for up to 10 children in their homes. The pilot will initially launch with five to ten providers and is expected to expand to meet the growing demand. Families will pay standard rates, while Care That Works will provide additional stipends to compensate providers for the schedule adjustments. The program connects to women in construction with union-represented state-licensed family child care providers. Funding for the program involves a mix of funds from unions, contractors, and the city of Boston.

In addition to connecting families with early-morning child care, the program emphasizes fair compensation for child care workers. By offering a rate differential, Care That Works acknowledges the challenges faced by providers in adjusting their schedules. The program is supported by various partners, including project labor agreements with building trades unions, and aims to address both the child care needs of working families and the financial well-being of child care providers. As the pilot expands, it will continue to recruit more providers and adapt to the evolving needs of families with non-traditional work hours.

¹⁹⁶ Shwartz, "Effective & Inclusive Childcare Solutions"

¹⁹⁷ Newberger, Robin. "Childcare for Women in the Trades: The Milwaukee Pilot Program." Federal Reserve Bank of Chicago, February 2024, <https://www.chicagofed.org/publications/chicago-fed-insights/2024/childcare-women-trades-milwaukee>

¹⁹⁸ Shwartz, "Effective & Inclusive Childcare Solutions"

Common Types of Child Care Arrangements:

The following are the most common types of child care arrangements for families:

- **Family Childcare Homes:** Family child care homes are operated by individuals in their own residences. They offer care for a small group of children, usually a mix of different ages. Family child care providers follow licensing regulations and provide a home-like environment with more individualized attention. They provide some of the most flexible care options in the child care system, including providing care during non-traditional hours.
- **Family, Friend, and Neighbor care (FFN):** Private arrangements with family and friends as child care providers refer to Family, Friend, and Neighbor care (FFN) where trusted family members or close friends take care of children. In these arrangements, child care is provided within the home environment of the caregiver, such as a grandparent's house or a friend's residence. Care arrangements with family and friends offer several potential benefits. They often provide a familiar and comfortable setting for the child, promoting a sense of security and continuity. Because the provider can come to the family's home, informal in-home care removes the burden of transporting children to and from care. Additionally, this form of care can offer flexibility in scheduling, especially if parents work nontraditional hours, such as second and third shifts, when most other types of care settings are closed. Often, this form of care also allows for more flexibility of care for households with multiple children and with varying ages.
- **Center-based care:** These are licensed facilities that provide care and early education for children in a structured setting. Child care centers typically have multiple classrooms and age-specific programs, accommodating infants, toddlers, and preschool-aged children. They often employ qualified staff and follow specific curriculum guidelines. Facilities can be on-site at workplaces or off-site. Most centers offer care during standard business hours and sometimes extended after school hours.
- **Preschool Programs:** Preschool programs focus on early education and school readiness for children typically between the ages of three and five. These programs offer structured learning experiences and may operate within schools, child care centers, or standalone preschools.
- **Before and After School Programs:** These programs cater to school-aged children and provide care during the hours before and after the regular school day. They offer a safe and supervised environment for children, often including recreational activities, homework assistance, and opportunities for social interaction.
- **In-Home Child Care:** In-home child care involves hiring a caregiver who provides care for children within the family's own residence. This can include nannies, au pairs, or other types of in-home caregivers. In-home child care offers the convenience of personalized care within the familiar home environment.
- **Head Start and Early Head Start:** Head Start and Early Head Start programs are comprehensive early childhood development programs primarily targeting low-income families. They provide educational, health, nutritional, and social services to promote school readiness and support children's overall well-being.

Changing Culture to Advance Gender Equity

With the increasing prevalence of targeted hire policies in public sector construction, tradeswomen's groups are calling attention to the need for parallel public investment into efforts that support the retention and advancement of women workers once they are recruited into the field. In a national survey of thousands of tradeswomen by the Institute for Women's Policy Research in 2021, respondents cited harassment and a lack of respect as the number one reason they left or have considered leaving the industry.¹⁹⁹ A Portland State University study found that 60% of white women and 64% of Black women apprentices experienced harassment or discrimination in the field, compared to just 19% of white men apprentices.²⁰⁰ These dynamics likely influence differences in cancellation and graduation rates between male and female apprentices (see **Figure 2-27** on Page 82) and between female apprentices of color and white female apprentices (see **Figure 2-29** on Page 83).

While construction is hardly alone among U.S. industries in reckoning with the legacies of entrenched racism and sexism, it lags noticeably behind many industries that have made progress in promoting respectful workplace culture. The persistence of harassment, bullying, and hazing on construction worksites remains a leading factor that drives women, people of color, and LGBTQ workers out of careers in the building trades. For agencies like Metro committed to increasing the participation of women on their projects, failure to address workplace culture will continue to limit the effectiveness of even the most well-designed policies, programs, and investments.

In conjunction with the historic opportunity made possible by recent federal infrastructure investments, multiple federal agencies have released guidance for states and local governments on how to ensure these funds expand access to careers in construction for workers who have been historically excluded, especially women and people of color. The U.S. Departments of Transportation, Commerce, and Labor have all been explicit in naming culture change as essential to fully realizing this opportunity. Metro and others in the region can draw on this growing library of federal guidance outlining the responsibilities of public agencies in upholding respectful workplace culture on their project sites.

¹⁹⁹ Ariane Hegewisch and Eve Mefferd, "A Future Worth Building: What Tradeswomen Say about the Change They Need in the Construction Industry" (Washington, DC: Institute for Women's Policy Research, November 2021), https://iwpr.org/wp-content/uploads/2022/02/A-Future-Worth-Building-What-Tradeswomen-Say_FINAL.pdf.

²⁰⁰ Kelly Haines et al., "Tools to Address Jobsite Culture in Construction" (Regional Respectful Workplace Model Review Committee, Oregon Tradeswomen, Oregon Metro, Portland Metro Workforce Development Board, October 2020), <https://worksystems.org/wp-content/uploads/2023/06/Respectful-Workplace-Review-Committee-Recommendations-Report.pdf>.

Fostering Respectful Workplace Culture in the Construction Industry

The consultant team interviewed labor representatives, tradeswomen advocates, public owners, and apprenticeship coordinators to learn about the need for culture change in the construction industry. Conversations with several participants revealed a shared perception of a positive generational shift in gender-based violence and harassment (GBVH) on jobsites. Younger generations of construction workers have more accepting attitudes towards gender-diverse worksites.²⁰¹ However, the prevalence of toxic workplace culture demands a proactive approach to ensure culture change occurs faster than a passive strategy that waits for generational turnover.

Hostile workplaces lead to significant work stress, which makes the workplace unsafe and increases the risk of injury.²⁰² Harassment, isolation, and bullying erode the trust that is an essential component of safety on the job. Excluding workers from a workplace culture leads to psychological stress and increases the risk of workplace accidents.²⁰³ Advocates consider the psychological effect of isolation to be the greatest obstacle to the retention of tradeswomen.²⁰⁴

The construction industry and construction worksites need comprehensive culture change. While work stress is a particular barrier to the retention of women, it is not a gender-exclusive issue. All construction workers will benefit from a culture change away from worksite harassment, discrimination, and bullying.

In calling for a shift to respectful workplaces, tradeswomen's groups and their allies point to precedent in the successful transformation of the construction industry's culture around occupational health and safety. Because of industry-wide efforts, consensus grew among contractors, unions, and government regulators that construction needed to adopt a culture of workplace safety, such as normalizing personal protective equipment and lockout/tagout procedures. A similar shift is underway to incorporate GBVH into occupational safety regulations. Cal/OSHA is developing workplace violence prevention standards with adoption expected by the end of 2026.²⁰⁵

²⁰¹ Diana Limon and Antonio Sanchez, IBEW Local 11, interview by Estolano Advisors, September 23, 2024.

²⁰² Haines, "Tools to Address Jobsite Culture in Construction."

²⁰³ Elyse Shaw, "Tools for Building an Equitable Infrastructure Workforce: Gender Equity Strategies as a Model" (U.S. Department of Labor Women's Bureau, September 2023), https://www.dol.gov/sites/dolgov/files/WB/media/508_WB_Issuebrief-Equity-Module_10022023.pdf.

²⁰⁴ IBEW Local 11 interview by Estolano Advisors.

²⁰⁵ "Cal/OSHA Workplace Violence Prevention Guidance and Resources," State of California Department of Industrial Relations, March 27, 2024, <https://www.dir.ca.gov/dosh/Workplace-Violence.html>.

Effective culture change initiatives empower workers to change their own workplaces. Metro and other public agencies can lead comprehensive initiatives by requiring contractors to implement **policies**, **programs**, and **physical jobsite standards** that tackle abusive culture head-on. As with any initiative whose success relies on the enthusiastic embrace of the workforce, the construction trade unions must be central to program design and the adoption of culture change initiatives.²⁰⁶

Recent federal guidance from the U.S. DOL Women’s Bureau and the Equal Employment Opportunity Commission outlines three essential components of comprehensive culture-change initiatives:

1. **Policies:** Strong and comprehensive harassment policies, complaint procedures, and protections from retaliation.²⁰⁷
2. **Programs:** Regular, interactive harassment prevention and bystander intervention programs that go beyond ineffective, one-time "check the box" compliance trainings.
3. **Physical Jobsite Standards:** Basic requirements to equip jobsites with materials and facilities that keep all bodies healthy and safe.

²⁰⁶ Shaw, “Tools for Building an Equitable Infrastructure Workforce.”

²⁰⁷ U.S. Equal Employment Opportunity Commission (EEOC), “Promising Practices for Preventing Harassment in the Construction Industry,” accessed October 23, 2024, https://www.eeoc.gov/sites/default/files/2024-06/Construction%20Harassment%20Promising%20Practices_508.pdf.

Anti-Harassment Policies

Strong anti-harassment policies must be widely communicated and easily and equally accessible to all workers.²⁰⁸ An Institute for Women's Policy Research study found that 72% of surveyed tradeswomen considered workplace policies an important element of their success in the trades.²⁰⁹ The strongest policies are found and reinforced in municipal statutes, contract bid requirements, and project labor agreements.²¹⁰

Comprehensive anti-harassment policies are:

- Zero tolerance, with clear consequences for bullying, harassment, and discrimination.
- Affirmative in prevention of gender-based violence and harassment.
- Clear in describing prohibited conduct (with examples), the complaint and reporting process, the investigation process, who is covered, and the employer's commitment to take immediate, reasonable, and proportionate corrective action.²¹¹
- Designed with independent, trauma-informed, gender responsive, consistent, and transparent processes for reporting concerns and remedying complaints. This must include support for affected parties.²¹²
- Actively reviewed and updated with consideration of changing workplace structures.
- Unequivocal in prohibition of and protection against retaliation, with construction-specific examples such as transfers, blackballing, and cutting hours. Monitoring should include proactive cross-referencing of retaliation complaints and employee work history for correlation.²¹³

These components draw from recommendations of the U.S. Equal Employment Opportunity Commission (EEOC) and U.S. Department of Labor (USDOL) Women's Bureau. The EEOC recommendations go beyond those listed above and are included in **Appendix C** to this report.

²⁰⁸ Shaw, "Tools for Building an Equitable Infrastructure Workforce."

²⁰⁹ Hegewisch and Mefferd, "A Future Worth Building."

²¹⁰ EEOC, "Promising Practices."

²¹¹ EEOC, "Promising Practices."

²¹² Shaw, "Tools for Building an Equitable Infrastructure Workforce."

²¹³ EEOC, "Promising Practices."

Harassment Prevention and Bystander Intervention Programs

Comprehensive programs of harassment prevention and bystander intervention are an elemental part of employer and workforce-driven culture change initiatives. Well organized training programs cover the rules, expectations, and consequences of harassment.²¹⁴ The USDOL has determined best practices for effective respectful workplace trainings that employers should consider when developing programs.²¹⁵ A comprehensive program goes beyond individual training and is modeled to permeate the culture of a worksite. A summary of the most important components follows.

- Programs must be developed and led by groups that are underrepresented in the trades, such as tradeswomen and workers of color.
- Curricula must help participants identify and respond to bullying, discrimination, and gender-based violence and harassment.
- All trainings are held on the jobsite and include all project personnel, including temps and apprentices. Leadership must also show active participation, including project owners, general contractor leadership, forepersons, and union representatives. However, separation of managers and non-supervisory employees for certain training portions can facilitate more open communication and frank conversations.
- Trainings should be reinforced frequently, on at least a monthly basis, through shorter meetings and toolbox talks.²¹⁶ Longer trainings must be repeated throughout a project's timeline to account for workforce turnover in phased construction.
- Programs should utilize a train-the-trainer model that develops worker leadership in localized culture change efforts and expands the program's reach. Local pre-apprenticeship programs are well poised to adopt and implement these programs.

Labor representatives suggested that while mandatory trainings are an important driver of culture change, such trainings can backfire culturally for the very groups that they seek to benefit. Instead of focusing on instances of discrimination towards women or people of color, trainings should holistically address disrespectful workplace dynamics with a variety of examples, including race- and gender-based violence and harassment.

The EEOC's Promising Practices for Preventing Harassment in the Construction Industry (**Appendix C**) provides additional recommendations and best practices for effective trainings, including curricular elements.

²¹⁴ EEOC, "Promising Practices."

²¹⁵ Shaw, "Tools for Building an Equitable Infrastructure Workforce" and EEOC, "Promising Practices."

²¹⁶ Maura Kelly, "Impacts of Implementing Respectful Workplace Models on Construction Job Sites: Findings and Recommendations from Evaluation Research" (Portland State University, June 2022), <https://static1.squarespace.com/static/56c3899b4d088e9a22122e13/t/62bde2a38140c14992d250c8/1656611492173/2022+Respectful+workplaces+fact+sheet+pdf.pdf>.

Examples of Training Programs

Traditional anti-harassment trainings focus on minimizing employer risk and lack effective tools for creating a culture of intervention.²¹⁷ In response, several tradeswomen-developed training programs are emerging across the U.S. that center workers' agency in stopping cultures of harassment. These programs shift how workers interact with one another on their jobsites.²¹⁸ An evaluation by the Regional Respectful Workplaces Committee in Portland, Oregon analyzed several intervention-oriented training programs for public owners to standardize curricula across the region.²¹⁹

RISE Up 4 Equity

This program was designed by ANEW, a Washington-based pre-apprenticeship organization that promotes construction trades to underrepresented populations and supports these groups to complete apprenticeships.²²⁰ ANEW develops RISE Up Respect, Inclusion, Safety and Equity in the Construction Trades) trainings in partnership with individual organizations, employers, and agencies, catering each program to the specific needs of the job site.²²¹

ANEW designed RISE Up with the direct input of women and minorities in the trades and modeled it around bystander intervention strategies to prevent bullying and harassment.²²² The training scaled successfully among public owners throughout the Seattle area and is structured to expand to other metropolitan areas by training local providers as affiliates.

Green Dot for the Trades

Green Dot for the Trades is a program developed by Alteristic that aims to decrease hazing, harassment, and bullying through bystander intervention and a climate of dignity and respect.²²³ The Virginia-based nationwide program developed in schools and communities before expanding into construction in 2015.²²⁴ The curriculum design drew upon the expertise of actual construction workers.

²¹⁷ Estolano Advisors, "Improving the Effectiveness of Project Labor Agreements" (The San Francisco Foundation, December 2020), 46.

²¹⁸ Haines, "Tools to Address Jobsite Culture in Construction," 6.

²¹⁹ This committee is a Portland, Oregon based review committee comprised of public agencies, the Oregon Building Trades Council, and community-based organizations. Haines, "Tools to Address Jobsite Culture in Construction."

²²⁰ ANEW is Apprenticeship and Non-Traditional Education for Women.

²²¹ "RISE up 4 Equity: About Us," 2024, <https://riseup4equity.org/about-us/>.

²²² Haines, "Tools to Address Jobsite Culture in Construction."

²²³ "Green Dot for the Trades," Alteristic, accessed 2024, <https://alteristic.org/trades>.

²²⁴ Haines, "Tools to Address Jobsite Culture in Construction."

Portland State University evaluated the program in jobsite studies at Multnomah County and TriMet, which are both public owners in Oregon. Researchers found that Green Dot exposure was effective in increasing the likelihood of worker intervention during harassment incidents.²²⁵ At TriMet, 78% of workers agreed that Green Dot had reduced harassment on the jobsite.²²⁶

Physical Worksite Standards for Inclusion and Belonging

A culture of inclusion and respect comprises basic considerations of health and safety on the physical jobsite. While most occupational safety requirements impact all workers equally, tradeswomen's groups have identified specific jobsite elements that perpetuate exclusion, exacerbate feelings of isolation, and create unsafe conditions.

- Secure and sanitary bathrooms must be available for women and non-binary workers on the job site.²²⁷
- The Fair Labor Standards Act requires a private place for parents to pump milk at work. This should be a lockable, private space that is not a bathroom.²²⁸
- Personal Protective Equipment must be available in a diverse array of sizes. Many construction projects utilize a one-size-fits-all approach, which can lead to increased injuries and illnesses. The unavailability of proper PPE has exposed 77% of tradeswomen to unnecessary hazards.²²⁹

The consultant team's interviews with tradeswomen's representatives revealed concerning and regular incidents of bathroom unavailability and PPE shortages on Metro project sites. Fear of inaction and patterns of retaliatory layoffs by their employers prevent tradeswomen from reporting incidents.²³⁰

²²⁵ Kelly, "Impacts of Implementing Respectful Workplace Models."

²²⁶ Maura Kelly and Daniel Mackin Freeman, "Evaluation of Green Dot for the Trades for TriMet" (Portland State University, April 2022), <https://static1.squarespace.com/static/56c3899b4d088e9a22122e13/t/628c0f7cc0c6d764726142d4/1653346173627/Green+Dot+for+TriMet+FULL+REPORT.pdf>.

²²⁷ The Portland, Oregon-area Regional Workforce Equity Agreement (RWEA) 2022 project labor agreement has strong language on toilet facilities: "Prime Contractors shall provide adequate toilet facilities for women on the job site, by maintaining a clean, accessible and locked toilet for female craft employees, and by removing graffiti immediately to help create a respectful environment." <https://www.portland.gov/sites/default/files/2022/rwea-executed-final.2022.06.08.pdf>, 25.

²²⁸ U.S. Department of Labor Women's Bureau, "Nursing Employees Workplace Protections," accessed 2024, https://www.dol.gov/sites/dolgov/files/WB/media/508_Workplace_protections_pump.pdf.

²²⁹ Doug Parker, "Making PPE the Right Fit for All," U.S. Department of Labor Blog, July 21, 2023, <https://blog.dol.gov/2023/07/21/making-ppe-the-right-fit-for-all>.

²³⁰ IBEW Local 11 interview by Estolano Advisors.

Emerging Practices in Public Sector Action on Culture Change in the Construction Industry

Public owners in Oregon and Washington have benefitted from the local development of the Green Dot for the Trades and RISE Up harassment prevention programs. In addition, multiple agencies in those regions have incorporated extensive anti-harassment and respectful workplace language into their contracts, procurement processes, and project labor agreements.

City of Seattle Acceptable Work Site Policy

The City of Seattle's project site requirements utilize strong policy language with clear requirements for anti-harassment trainings for all workers. In 2017, the City of Seattle adopted an Acceptable Work Site (AWS) Contract Provision in its Standard Specifications for Municipal Construction to define and require respectful work site standards on city-funded construction projects.²³¹ This provision also outlines a monitoring and remedy process for violations and disparities on worksites. To support the policy, the City engaged ANEW (the same pre-apprenticeship organization that developed RISE Up) to develop trainings. A 2022 Portland State University evaluation of the AWS trainings found that workers who received training were more likely to respond to harassing behaviors than those without training.²³² Seattle's Acceptable Work Site contract language is included in **Appendix D** at the end of this report.

The Seattle contract language requires contractors to maintain respectful jobsites throughout the life of a project. Enforcement mechanisms are strong enough that the City has the power to order the removal of individuals from jobsites. Currently, Seattle administers an in-house training program for prime contractor leadership and mandatory orientation videos for employees that are reinforced through monthly jobbox talks.²³³ The City also has staff available for technical assistance to support contractors in maintaining a respectful workplace.

Portland, Oregon Regional Workforce Equity Agreement

The Regional Workforce Equity Agreement (RWEA) is an inter-agency project labor agreement between public owners (Multnomah County, the City of Portland, and Oregon Metro) and local building trades unions. The RWEA models several innovative provisions to support harassment-free workplaces.

²³¹ "2017 City of Seattle Standard Specifications for Municipal Construction: Acceptable Work Site Contract Provisions," <https://www.seattle.gov/documents/Departments/FAS/PurchasingAndContracting/WMBE/AWS-contract-provisions.pdf>.

²³² Maura Kelly, "Assessing the Effectiveness of Acceptable Work Sites Trainings: Evaluation Conducted for the City of Seattle" (Portland State University, April 2022), <https://static1.squarespace.com/static/56c3899b4d088e9a22122e13/t/628c1980544d6d0dbff56270/1653348737839/City+of+Seattle+FULL+REPORT.pdf>.

²³³ Allison Calvert, City of Seattle, interview by Estolano Advisors, October 24, 2024.

All bidders for RWEA-covered projects must submit a plan outlining how they will provide quality anti-harassment training and maintain a welcoming environment for women and people of color.²³⁴ In addition, RWEA Article 10 dictates the expectations and requirements for contractors to uphold harassment-free workplaces, hold comprehensive trainings, and inform underrepresented workers of available support systems.²³⁵ The agreement specifically names isolation as a barrier to retention for women and racial and ethnic minorities. It goes further to guarantee adequate toilet facilities and encourage mentorship opportunities for apprentices. The RWEA provisions on recruitment and retention, including many focused on respectful workplace practices, are included in **Appendix E**.

This type of language in a multi-agency labor agreement represents a comprehensive regional initiative to address harassment that combines strong policies, training programs, and worksite standards.

King County Contractor Requirements

King County, Washington, has received national distinction for its successful Priority Hire program, which targets disadvantaged worker recruitment in targeted zip codes and boasts a 13% women participation rate.²³⁶ As part of its suite of labor equity and diversification efforts, the County has a respectful worksite policy that requires contractors to prevent, report, and promptly handle all instances of discrimination on public worksites. Importantly, the County issues financial penalties for non-compliance.²³⁷ The policy language is in **Appendix F** at the end of this report.

The County's policy clearly defines respectful worksite expectations and commits the owner to thorough investigations and corrective action (including termination of individuals or entire contracts). Additionally, employees who report harassment, discrimination, and retaliation are protected from any form of retaliation, as stated in the policy. The rules concur with the King County Master Community Workforce Agreement between the County and local building trades unions.

²³⁴ Oregon Metro. "Construction Career Pathways Regional Workforce Equity Agreement: Plan for Bids." <https://www.oregonmetro.gov/sites/default/files/2022/10/11/Construction-Career-Pathways-regional-workforce-equity%20-agreement-plan-for-bids-20221011.pdf>.

²³⁵ "Regional Workforce Equity Agreement," February 7, 2022, <https://www.portland.gov/sites/default/files/council-documents/2022/rwea-february-7-2022-final-rev.pdf>.

²³⁶ "White House Evidence Team Highlights King County's Priority Hire Program," King County Employee News, July 5, 2022, <https://kcemployees.com/2022/07/05/white-house-evidence-team-highlights-king-countys-priority-hire-program/>.

²³⁷ "Respectful Worksite Language," King County, Washington, 2024, <https://kingcounty.gov/en/legacy/depts/finance-business-operations/business-development-contract-compliance/programs/PriorityHire/RespectfulWorksiteLanguage.aspx>.

Bid Preference and Other Procurement Levers to Advance Gender Diversity in the Construction Industry

Public agencies play a leading role in driving the demand for a diverse, skilled workforce in the construction industry. In addition to setting policy, public agencies can leverage their considerable purchasing power to ensure those who have historically been denied access to opportunity are positioned to benefit from current and future public investments. Through thoughtfully crafted procurement strategies, the deployment of public resources can incentivize equitable outcomes and advance public purposes.

Public agencies across the United States are increasingly using procurement to address workforce disparities on public construction projects. In the realm of public contracting, awarding incentives to contractor teams that include small businesses owned by people of color and women has become common practice, especially in California jurisdictions. Once a novel idea touted by equity advocates, there is now broad consensus on the shared benefits that accrue to communities, cities, and regions when governments prioritize Minority-Owned, Women-Owned and Disadvantaged Business Enterprises (MWDBE) in the purchasing of goods and services. While a newer application of this procurement lever, bid preferences and other incentives can also be used to increase the participation of women and other historically underrepresented groups in a field long dominated by men. Local, regional, and state governments have adopted measures that incentivize contractors to hire women and people of color by incorporating bid scoring methods and other incentives into public contracting on construction projects.

This section provides an overview of procurement approaches from the Pacific Northwest, Midwest, and San Francisco Bay Area that are reshaping how public projects are awarded, ensuring that contractors who commit to equity practices have a competitive edge. These approaches include models applied both to evaluative procurements like Requests for Proposals (RFPs) and to standard Invitations to Bid (ITB), in which agencies are typically bound to award to the lowest bidders. They represent promising new tools to connect women, people of color, and others who face barriers to employment with meaningful, well-paying jobs and family-sustaining careers.

Emerging Practices in Bid Preference

Examples from the Pacific Northwest

Over the last decade, public agencies in two Pacific Northwest metropolitan areas have been at the forefront of efforts to diversify the construction industry through public sector action. In Portland and Seattle, agencies have built strong regional collaboratives dedicated to fostering more diverse, sustainable pipelines of skilled construction workers in partnership with local building trades affiliates, tradeswomen groups, equity advocates, and community-based workforce providers. Seattle's Priority Hire Program, established in 2015, has been heralded the Biden Administration and U.S. Department of Transportation as a national model for its success in bringing people of color and women into the region's skilled trades workforce²³⁸. Portland's Construction Career Pathways Program, developed jointly and adopted by nine public agencies in the region to date, led, in 2022, to the groundbreaking Regional Workforce Equity Agreement, a multi-agency Project Labor Agreement (PLA) whose signatories include three public agencies, 18 trades unions, and community-based pre-apprenticeship training programs. Agencies in both regions have redesigned their procurement processes on construction projects to ensure that awarded contractors both understand and are equipped to meet the workforce equity requirements of public projects.

Oregon Metro: Bid Scoring on Construction Career Pathways and Regional Workforce Equity Agreement Projects

Oregon Metro, Portland's metropolitan planning agency, served as lead convener of the regional public agency collaborative that came together in 2018 to develop the [Construction Career Pathways \(CCP\) Framework](#), which established shared targeted hire requirements for people of color and women on public projects. Along with Multnomah County and the City of Portland, the agency is also a signatory to the Regional Workforce Equity Agreement (RWEA), which incorporated CCP's workforce diversity hiring requirements as binding terms of the agreement. Today, the CCP applies to Oregon Metro construction projects between \$200,000 and \$5 million, while the RWEA governs projects above \$5 million.

²³⁸ U.S. Department of Transportation. "Investing in America: Best Practices to Expand Access to Jobs and Economic Opportunity Through Transportation Infrastructure Investments." Page 44.

One of Oregon Metro’s key strategies to enhance workforce participation from underrepresented groups is the incorporation of public benefit programs into the bidding process. The CCP/RWEA workforce diversity and equity goals represent one of the agency’s three public benefits programs that require contractors’ participation, in addition to small business equity, environmental justice, and sustainable sourcing programs. Bids for construction contracts are scored not only on qualifications and cost but also on contractors’ planned approaches to fulfilling the requirements of the public benefits programs. As part of their responses to both RFPs and Invitations to Bid (ITB), contractors are required to submit CCP/RWEA Plans that include a narrative outlining how they will meet the targeted hire goals associated with the project. For evaluative procurements, a contractor’s response to the public benefit program requirements represents 20% of their overall score on a proposal.²³⁹

For low-bid procurements, the public benefit requirement response is evaluated by procurement staff and, if found to be insufficient, may render their bid “nonresponsive” and disqualified from the bidding opportunity. Upon award, a contractor’s CCP/RWEA Plan becomes a binding term of the prime contract for the duration of the project.

1. Evaluative Criteria on CCP Bids²⁴⁰

For Construction Career Pathways projects, a contractor’s CCP Plan must include the following:

- “A narrative of recruitment good faith efforts”, outlining how the contractor will work with unions and apprenticeship programs to maximize the utilization of people of color and women on the project, across trades and across subcontractors at both the apprentice and journey level;
- “A narrative of retention good faith efforts,” outlining how the contractor will work with unions and apprenticeship programs to support the successful completion of apprenticeship training among women and people of color, including supports such as mentorship and coaching;
- “A narrative of community engagement good faith efforts,” outlining how the contractor will work with pre-apprenticeship programs and other community-based organizations to promote opportunities for underrepresented workers on the project and establish pathways into training programs and registered apprenticeship throughout the duration of the project.

2. Evaluative Criteria on RWEA Bids²⁴¹

For RWEA projects, a contractor’s CCP-RWEA Plan must include the narrative elements described above, as well as the following:

²³⁹ Interview with Nancy Strening, Oregon Metro, October 7, 2024.

²⁴⁰ Oregon Metro. “Construction Career Pathways Program: Information for Bids.” <https://www.oregonmetro.gov/sites/default/files/2022/01/19/Construction-Careers-Pathways-Program-information-for-bids-20220118.pdf>

²⁴¹ Oregon Metro. “Construction Career Pathways Regional Workforce Equity Agreement: Plan for Bids.” <https://www.oregonmetro.gov/sites/default/files/2022/10/11/Construction-Career-Pathways-regional-workforce-equity%20-agreement-plan-for-bids-20221011.pdf>

- “Outline a plan to identify and provide quality anti-harassment or respectful workplaces training programs that maintain a welcoming and open environment toward women, people of color and all protected classes.”

To support bidders in understanding and responding to the CCP/RWEA Plan requirements, Oregon Metro’s procurement team conducts a virtual pre-bid meeting for each contracting opportunity that is exclusively focused on the project requirements associated with Oregon Metro’s workforce equity and diverse hire program, separate from an on-site construction walk-through pre-bid conference²⁴². They also host standing monthly information sessions that orient bidders to the agency’s public benefit programs. Additionally, each RFP and ITB includes attached guidance documents that list ideas and examples of strong recruitment and retention practices contractors should consider as part their efforts to meet the agency’s workforce diverse hire goals. Many of these practices, and others, are listed in the Regional Workforce Equity Agreement itself.

As binding contract terms, the CCP and CCP-RWEA Plans represent the good faith efforts for which contractors will be held accountable in pursuit of the project’s targeted hire goals. If apprenticeship utilization and workforce diversity targets are not met, contractors must provide documented evidence of the actions taken in alignment with their CCP and CCP-RWEA Plans or risk facing financial penalties.

City of Seattle: Bid Scoring on Priority Hire Projects

In 2015, the City of Seattle established a Community Workforce Agreement (CWA) with the Seattle King County Building and Construction Trades Council, and Northwest National Construction Alliance II to meet the intent and obligations of the Priority Hire program, set by Seattle Municipal Code Chapter 20.37.²⁴³ The Priority Hire program aims to promote the hiring of residents from economically distressed neighborhoods in both Seattle and King County, and sets to increase the participation of women and people of color on City construction projects over \$5 million. Seattle’s Priority Hire (PH) Program, codified in the city’s Community Workforce Agreement (CWA), is notable both for its demonstrated success in diversifying the region’s building trades and for its geographic boundaries that extend beyond city limits, recognizing the regional nature of the construction workforce.

Supplemental Bidder Responsibility Criteria (SBRC)

To increase contractor accountability on Priority Hire/CWA projects, the City of Seattle has adopted Supplemental Bidder Responsibility Criteria (SBRC) that must be met in addition to the state of Washington’s standard responsible bidder criteria. For low-bid contracts, once a low-bidder has been established, the city evaluates whether a bidder is responsible according to the state and city criteria. Part of the Supplemental Criteria is whether a contractor has ever been out of compliance with the Priority Hire program requirements.

²⁴² Interview with Nancy Strening, Oregon Metro, October 7, 2024.

²⁴³ City of Seattle. *Community Workforce Agreement*. Purchasing and Contracting, September 30, 2021, <https://seattle.gov/documents/Departments/FAS/PurchasingAndContracting/Labor/fully-executed-2021-city-of-seattle-CWA.pdf>.

As part of their bid, contractors must disclose previous non-compliance or instances of violation. If violations occur, contractors must provide an accurate account of why the violation occurred and what they will do differently to ensure it does not happen again. The city also independently verifies these claims by reviewing contractors' performance records to ensure accuracy and transparency.

Mandatory Social Equity Meetings

In addition to requiring workforce projections prior to contract execution, Seattle holds 2-hour social equity meetings with contractors on every project prior to issuing Notices to Proceed. These meetings provide an opportunity to review all PH and CWA requirements, as well as discuss prevailing wage and WMBE goals in detail with the Contract Compliance Team. City staff consider these meetings an important opportunity to clarify expectations early on and reinforce the city's commitment to both supporting contractors and holding them accountable in meeting workforce equity goals.

Examples from the Midwest

In recent years, state and local governments in Illinois have implemented a variety of innovative bid incentive programs designed to expand and diversify the region's supply of skilled trades workers. While the three models described below take different approaches, all enable contractors to earn and bank "credits" that have concrete economic value and can be applied to lower the calculation of their overall bid on future projects.

State of Illinois Bid Credit Program

In March 2024, Illinois Governor JB Pritzker announced the opening of applications for the Illinois Works (ILW) Bid Credit Program.²⁴⁴ The program is part of a three-pronged strategy laid out in the Illinois Works Jobs Program Act of 2019 that makes sweeping new investments into the state's pre-apprenticeship and apprenticeship training infrastructure.²⁴⁵ Modeled on similar bid incentive programs being used successfully by local jurisdictions and the Illinois Tollway Agency, the ILW Bid Credit Program allows contractors on state-funded public works projects to earn credits for apprentices hired and retained on their projects. Contractors can then apply earned credits on any state public works program to lower the calculation of their bid, increasing their competitiveness for state projects.²⁴⁶

²⁴⁴ Illinois Department of Commerce and Economic Opportunity. "Governor Pritzker Announces Open Applications for the Illinois Works Bid Credit Program." March 27, 2024. <https://dceo.illinois.gov/news/press-release.29808.html>

²⁴⁵ Illinois Department of Commerce and Economic Opportunity. "Illinois Works Jobs Program Act. Illinois Works: An Innovative Model to Reinvigorate our Workforce for the Future" <https://dceo.illinois.gov/illinoisworks.html>

²⁴⁶ Illinois Department of Commerce and Economic Opportunity. "Illinois Works Bid Credit Program." <https://dceo.illinois.gov/content/dam/soi/en/web/dceo/illinoisworks/documents/bid-credit-program-one-sheeter.pdf>

In order generate bid credits for an employer, an apprentice must be a graduate of an Illinois state-funded pre-apprenticeship program. While the Bid Credit Program itself is race- and gender-neutral, its reliance on the ILW Pre-Apprenticeship Program provider network means that contractors must source workers from programs that disproportionately serve those who are currently underrepresented in the industry. By elevating a diverse talent pool and emphasizing retention, ILW’s Bid Credit Program represents a powerful use of procurement levers to drive long-term change in the construction industry.

1. Calculating Bid Credits

According to the IL Department of Commerce and Economic Opportunity (DCEO), the final value calculation for the program’s bid credits is currently in draft form and has not been officially released, pending the publishing of the program’s full administrative rules. Current program materials and publicly released guidelines tie the value of bid credits to two factors: 1) the wage rate of the trade in which an apprentice is employed, and 2) retention-based milestones that increase as apprentices advance in their training.

The program’s draft guidelines currently list \$334,000 as the maximum bid credit value a contractor can earn on a hired and retained apprentice. A contractor can earn bid credits for a single working apprentice for up to six years, or until the apprentice has reached journey level. The following table, shared on a recent webinar introducing the Bid Credit Program, is an *example based on the program’s draft guidelines* of how bid credits accrue:

Figure 4-1: State of Illinois Bid Credit Program Accrual Example

Summary:	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Apprentice	\$33,696	\$37,908	\$46,332	\$54,756	\$63,180	\$75,816
Hiring Incentive (after 90 days)	\$3,000					
Promotion Incentive (Annually)	\$2,000	\$2,500	\$3,000	\$3,500	\$4,000	\$4,500
Total for Apprentice (Year 1 to Year 6)	\$38,696	\$40,408	\$49,332	\$58,256	\$67,180	\$80,316
Accumulative Total		\$79,104	\$128,436	\$186,692	\$253,872	\$334,188

*both based on 40-hour week for 52 weeks (2,080 total hours)

Although bid credits are reflected in dollar amounts, the program refers to credits as “virtual dollars”, not actual dollars. When applied, earned credits can lower a contractor’s bid for a specific project. However, the application of bid credits is restricted to the procurement process. It has no bearing on a project’s assessed budget or the final contracted budget for an awarded project.

The program also allows contractors to pool their credits on teamed bids, further strengthening the competitiveness of contractors’ teams with successful track records in hiring and retaining diverse workers on their projects.

2. Administering the Program

The State of Illinois DCEO administers a Bid Credit Registry and Bank that tracks earned credits for registered contractors. DCEO has also launched the Illinois Works Applicant Tracking System (ATS) to match ILW Pre-Apprenticeship Program graduates with opportunities on state-funded projects. Through the ATS, contractors can access information about a candidate's certifications, trade interests, and availability. This streamlined process enables contractors to connect directly with pre-apprenticeship graduates, offering immediate opportunities for employment and sponsorship into DOL-registered apprenticeships, further helping to close the gap between training and employment for women, people of color, and other underrepresented groups.

Illinois State Toll Highway Authority Bid Credit Program

The Illinois State Toll Highway Authority, or IL Tollway, maintains two bid credit programs that are similar in concept and application to the Illinois Works Bid Credit Program described above. Similar to the ILW program, IL Tollway's Earned Credit Program and ConstructionWorks Bid Credit Program allow contractors to earn credits for the hiring and utilization of diverse and underrepresented workers on IL Tollway construction projects. Contractors can then apply these credits, also referred to as "virtual dollars", to reduce the calculation of their bid amounts on low-bid procurements. The agency is in the process of transitioning all workforce-related bid credits for new contractors to the ConstructionWorks Bid Credits Program, while contractors previously registered through the Earned Credits Program will continue to have access to the through that program.²⁴⁷

The ConstructionWorks Program is a workforce development program funded by IL Tollway and administered by the Chicago Cook Workforce Partnership, the workforce board for the Chicago metropolitan region. The program recruits people of color, women, residents of economically distressed areas, and veterans into pre-apprenticeship and union apprenticeship programs that connect them with employment on Tollways construction projects.²⁴⁸ IL Tollway created the ConstructionWorks Bid Credit Program to build contractors own investment in the success of the workforce development program. ConstructionWorks provides participants with wrap-around services and supports, including funds for equipment, union dues, and child care.

²⁴⁷ Illinois State Toll Highway Authority. "Earned Credit Program." <https://www.illinoistollway.com/doing-business/diversity-development/programs/ecp>

²⁴⁸ Chicago Cook Workforce Partnership. "ILLINOIS TOLLWAY PROMOTES CONSTRUCTIONWORKS EVENTS TO INTRODUCE COMMUNITY LEADERS TO INNOVATIVE WORKFORCE PROGRAM." September 18, 2024. <https://chicookworks.org/illinois-tollway-promotes-constructionworks-events-to-introduce-community-leaders-to-innovative-workforce-program/>

1. Bid Credit Accrual²⁴⁹

According to the ConstructionWorks Bid Credit Program guidelines, bid credits accrue at different rates depending on the skilled trade in which a worker is employed. Contractors can earn bid credits according to the following calculations:

- Operating Engineers and Structural Steel Ironworkers: \$0.75 per wage dollar paid per work hour
- Other Skilled Trades and Fabricators: \$0.65 per wage dollar paid per work hour
- Laborers: \$0.55 per wage dollar paid per work hour
- A one-time new hire bonus of \$5,000 in bid credits after an employee reaches 160 work hours

In addition to these earned bid credits, IL Tollway has recently introduced an additional incentive for contractors who hire ConstructionWorks program participants. IL Tollways will pay contractors \$15 for each hour worked by a new hire employed on an IL Tollways project, with a maximum of \$100,000.²⁵⁰

City of Chicago: Bid Incentives for Diverse Hire

The City of Chicago offers contractors a variety of bid incentives to increase the participation of historically underrepresented groups in the construction workforce, including women, people of color, and formerly incarcerated individuals. The incentives promote workforce diversity and social equity by awarding credits for firms that commit to hiring underrepresented workers into apprenticeships and journey-level roles. Some of the city's bid incentives are earned through commitments contractors make at the time of bid submission, or "Future Incentives", while others are earned when commitments have been successfully fulfilled, or "Earned Credits".²⁵¹

On construction contracts valued at \$100,000 or more, the city offers the following incentives for commitments made to diverse hire on awarded projects.

1. Equal Employment Opportunity Bid Incentive

The Equal Employment Opportunity (EEO) Bid Incentive is a Future Incentive that allows bidders to reduce the overall amount of their calculated bid if they make commitments hire to journey workers, apprentices, and laborers for a minimum percentage of project hours.

- **Cap on Utilization:** The city limits contractors to earning incentives on up to 70% of total worker hours for people of color and 15% for women across journey worker, apprentice, and laborer categories. Although contractors can hire more than these percentages, the city only considers the capped figures when determining bid credits.

²⁴⁹ Illinois State Toll Highway Authority. "Bid Credit Overview." <https://www.illinoistollway.com/doing-business/diversity-development/programs/ecp>

²⁵⁰ Illinois State Toll Highway Authority. "ConstructionWorks Program." <https://www.illinoistollway.com/doing-business/diversity-development/programs/constructionworks#CWCompetitiveEdge>

²⁵¹ City of Chicago Department of Procurement Services. "Resource Guide: Incentives and Programs."

- **150% Credit:** The city awards a 150% credit for every work hour performed by minority or female workers from socio-economically disadvantaged areas (SEDAs), creating additional incentives for engaging these underrepresented communities.

2. Returning Resident Apprentice Utilization Incentive

The Returning Resident Apprentice (RRA) Utilization Incentive is both a Future Incentive and an Earned Credit Incentive intended to create employment opportunities for formerly incarcerated individuals on city construction projects. This incentive encourages contractors to hire apprentices who have been convicted of imprisonable offenses and are returning residents of Chicago. Upon contract closeout, if a contractor has met its RRA utilization goals, the city issues an Earned Credit Certificate that can be applied to future bids.

- **Eligibility:** Returning residents must live in Chicago and have been convicted of a state or federal offense. The apprentices must enroll in a union-based training program that the U.S. Department of Labor or the State of Illinois approves.
- **Incentive Values:** If contractors commit to employing returning residents for 5–10% of the total labor hours, they receive a credit of 0.5% of the contract’s base bid. By committing to hiring 11–15% returning residents, contractors earn a 1% credit.
- **Earned Credit for Future Contracts:** Contractors who meet these utilization goals earn a credit certificate, which they can apply to future bids. These credits remain valid for three years and apply to contracts of equal or greater value.

3. Enforcement

To ensure compliance, the city enforces bid incentive guidelines in a number of ways. Contractors receiving the EEO Bid Incentive who failed to meet their committed utilization percentages for women and people of color are subject to liquidated damages. The city calculates these penalties based on the level of deficiency in meeting the targets. Those who failed to meet proposed RRA apprentice utilization goals may be found by the city to be a “non-responsible bidder”, negatively affecting a contractor’s ability to bid competitively on future projects.

Example from the San Francisco Bay Area

City/County of San Francisco Public Utilities Commission Social Impact Partnership Program

San Francisco’s Social Impact Partnership (SIP) Program, launched by the San Francisco Public Utilities Commission (SFPUC), aims to engage contractors working on public infrastructure projects in contributing to local communities, particularly in fostering workforce participation among women and underrepresented communities. By incentivizing contractors to make commitments through financial, in-kind, or volunteer contributions, the program seeks to enhance social equity in communities affected by SFPUC’s projects.

1. Workforce Participation and Social Impact Goals

SFPUC's SIP Program is designed to leverage the power of public contracts to benefit marginalized communities. The program allows contractors to voluntarily pledge resources toward specific community needs, which include job awareness, workforce training, internships, small business support, and education. Contractors are expected to make these commitments as part of their bids for public contracts exceeding \$5 million. This focus ensures that large-scale projects not only provide infrastructure but also enhance the socio-economic fabric of the communities, particularly through workforce opportunities for women and people of color.

2. Scoring Criteria and Contractor Selection

The SIP Program directly influences contractor selection by assigning points to contractors based on their proposed social impact commitments. Contractors can earn up to 5% additional points available in a bid evaluation, providing an incentive for contractors to propose robust commitments. For instance, in a solicitation with a maximum score of 100 points, contractors participating in the SIP Program could receive up to 5 points for their social impact pledges. This mechanism encourages contractors to include diversity-focused initiatives in their bids to remain competitive. A contractor declining to participate in SIP would forgo those points, making it more difficult to win a contract.

In practical terms, this scoring system creates strong incentives for contractors to align their projects with workforce diversity goals, such as hiring women and people of color or providing training and apprenticeship programs aimed at these groups. By linking points to these commitments, SFPUC ensures that social equity is a key component of the bidding process, thus promoting a diverse workforce on its construction projects.

3. A Focus on Key Metrics

In 2023, SFPUC instituted new program guidelines to increase transparency on SIP projects and ensure commitments by contractors are delivering tangible community benefits. They include new requirements that SIP plans include key metrics by which contractor's success will be measured. These success metrics are incorporated into SIP plans, which become binding terms of prime contracts. SFPUC now tracks the implementation of the SIP Program on a public dashboard on the agency's website.

Public agencies in cities and regions across the county are using procurement levers to create lasting change in the construction industry by increasing diversity and advancing equity on public projects. By integrating innovative bid preferences and evaluation criteria, public agencies, in partnership with labor and community partners, are reshaping the labor market to ensure that women and people of color have access to meaningful employment and family-sustaining careers. While these programs have had significant success, they also highlight the importance of strong enforcement mechanisms to ensure contractors fulfill commitments. These efforts not only enhance workforce supply but also contribute to broader economic and social equity goals.

5. RECOMMENDATIONS

Strengthen Accountability on Female Hire Goals and Build on What's Working

Creating strong employer demand for women workers on construction projects is a powerful strategy for addressing gender disparities. In the absence of clear expectations from public project owners, contractors often revert to traditional business practices that perpetuate bias. Metro is the only public agency in LA region establishing specific goals for female participation on public funded projects assisted by the guidance from federal Department of Transportation (DOT) guidance. Under Executive Order 11246, contractors and subcontractors with federal or federally assisted construction contracts exceeding \$10,000 must make good faith efforts—guided by 16 affirmative action steps to ensure that 6.9% of project hours are performed by women and meet region-specific targets for hours worked by people of color.

Although Prop. 209 limits the ability of establishing hard goals, federally funded projects continue to require contractors to pursue workforce goals as part of their contractual obligations. As the largest project owner and builder in Southern California, Metro can leverage its experience to help contractors and partner agencies increase the participation of women in construction on these critical projects. By continuing to set goals for women, holding contractors accountable, fostering collaboration, and ensuring sustainable community involvement, Metro can further strengthen its position as a regional leader in workforce equity and enhance the inclusion of women in public construction projects.

The following recommendations outline key strategies to build on the agency's current efforts:

Recommendation 1: Continue Regional Leadership in Setting Goals

- I. **Maintain leadership in the region:** Set clear, measurable goals for female participation on public construction projects and showing stronger accountability measures for contractors and targeted investments can help achieve these goals.
- II. **Promote consistent messaging:** Encourage others to set equity standards as a critical element of public contracting. Share success stories and best practices in both finding the necessary labor pool needed to complete projects while growing family sustaining careers for low-income women workers in the LA region.

Recommendation 2: Strengthen Contractor Accountability and Good Faith Efforts

To ensure contractors meet female hire goals, Metro should set clear expectations, ensure accountability on good faith efforts, provide consistent communication, and offer targeted support.

- I. **Require Documentation:** Contractors must submit records demonstrating their good faith efforts toward meeting female participation goals.
- II. **Enhance Communication:** Promote effective communication between contractors, agency staff, compliance teams, and oversight committees to support goal attainment.
- III. **Facilitate Community Connections:** Assist contractors in building partnerships with community organizations and training providers to support inclusive hiring practices.

Recommendation 3: Continue to Allocate Resources for Training and Support

- I. **Metro continues efforts to help contractors achieve success:**
 - a. **Hosting Metro Pre-Bid Orientation Sessions:** Sessions to acquaint prospective contractors with workforce equity policies and expectations.
 - b. **Metro Project Briefings:** Holding workshops at the beginning of projects to emphasize equity goals, fostering a shared understanding among all unions, workforce and community partners.
 - c. **Investing in workforce equity training** tailored to Metro construction project managers to enhance their capacity to implement inclusion efforts in construction projects.
- II. **Consider leveraging the Department of [Labor's Mega Construction Project Program](#) as a model.** This program emphasizes early engagement intensive “front-end” approach from the earliest stages of a designated project that regularly engages a wide range of stakeholders, including contractors, through Equal Employment Opportunity (EEO) Committees.

Recommendation 4: Expand Workforce Utilization Monitoring Efforts through Existing and New Channels.

Metro can build on the agency’s current monitoring capacity and structures to increase accountability across its construction ecosystem. Key opportunities include expanding the existing Labor-Management Committee process to also review project-level female worker utilization rates and engage unions on strategies to address shortfalls and gaps. Metro can also expand the scope and capacity of its current job site monitoring program to include respectful workplace practices that support the retention of women and other underrepresented workers.

- I. **Leverage Project Labor Agreement Labor-Management Committees (LMCOCs) to monitor and address workforce equity issues:** Use LMC's, as outlined in Project Labor Agreements (PLAs), to provide structured oversight and accountability on targeted hire goals. This structure can assist Metro in tracking progress and addressing challenges related to meeting workforce goals. Consider adding workforce partners and women in trades representatives to committee to foster transparency, facilitate problem-solving on major projects.
- II. **Invest in Project Administration:** Invest resources to support Metro Project Managers and Job Coordinators to manage robust labor and community efforts on projects. Allocate financial resources to support ongoing collaboration between community partners, labor organizations, and contractors.
- III. **Promote Joint Problem-Solving and Monitoring:** Invite unions and contractors to participate in Jobs Coordinator meetings. Create an *Access and Opportunity Committee* of tradeswomen and tradeswomen-serving organizations to help socialize Metro's strategy and build buy-in with contractors, unions and the industry more broadly.
- IV. **Monitor Job Sites for Anti-Harassment and Respectful Workplace Practices:** Implement job site monitoring to ensure respectful workplace practices are upheld consistently on Metro projects. Currently, Metro's labor compliance team conducts job site monitoring to ensure prevailing wage and health and safety rules are being followed on Metro's job sites. Metro should expand the scope of job site monitoring to include respectful worksite practices. Job site monitoring should focus on ensuring the following:
 - Women, apprentices, and all underrepresented workers are receiving equal access to meaningful work and training in their trade, overtime hours, and other job site opportunities.
 - Anti-harassment policies and procedures are posted in a visible location at the worksite.
 - Bathrooms are clean, safe, and accessible.
 - All workers have well-fitting PPE.
 Jobsite monitoring efforts should include anonymous surveys with workers to gauge the prevalence of harassment and discrimination at Metro's work sites and identify where corrective action is needed.

Recommendation 5: Provide Financial Support for Community Partners

1. **Ensure women-serving organizations have a role to play to support contractor and union efforts:** Provide necessary funding to those helping place low-income women and communities of color on the job sites.
2. **Invest in partnerships over the life of projects with prolonged completion periods:** Since public projects can span several years, it is essential to adequately compensate community-based, workforce partners with their time and expertise to ensure ongoing engagement.

Invest in Supportive Services with an Effective Child Care Strategy

Registered apprenticeships provide a pathway to good, family-sustaining wages; however, first-year apprentices often earn only a fraction of what journey-level workers make. While completing these earn-as-you-learn programs will lead to family sustaining construction careers, many low-income women entering such apprenticeships encounter a significant “benefits cliff”—earning enough to disqualify them from subsidies or public assistance but not enough to cover essential expenses like child care, transportation, and housing. Many women workers face financial difficulties and struggle to afford necessary items such as tools, clothing, and child care.

To address these challenges, it is crucial to fund and expand comprehensive support service programs. Allocating resources to remove barriers to entry and retention for diverse workers through wrap-around services and mentorship opportunities offer a direct way to address disparities in the sector. Supportive services help pre-apprentices and apprentices address financial challenges transitioning into the demanding yet rewarding construction industry. A critical component of this support is the provision of affordable and reliable child care, which is vital for building a sustainable workforce in construction. The sector requires a variety of high-quality, flexible child care options to meet its diverse and evolving needs. Child care is often an invisible yet essential part of the workforce infrastructure, enabling all other work to occur. By implementing the following strategies, agencies can create a supportive ecosystem that encourages contractor investments in a joint child care fund, benefiting workers and the broader community.

Recommendation 1: Fund child care costs/tuition for early years of apprenticeships: To address the true cost of child care for apprentices and stabilize support for their families, Metro can take key steps to establish funding for the cost of child care for early year apprentices, especially funding for infant and toddler care. This recommendation would be best implemented in a two-pronged process; 1) through direct investment by Metro into supportive services fund for apprentices on Metro projects and 2) through regional partnerships with other public owners of projects to ensure apprentices across the region can access this funding.

Why a child care fund?

- **Address the “Benefits Cliff”:** Women pre-apprentices need to complete 4–5-year apprenticeships to fully benefit from a career in construction. While an apprentice may work on a Metro project intermittently during various phases, it is in the agency’s interest to invest in the regional supply of women workers in different trades.
- **Building on successful models: of California’s ERiCA grants:** this approach would involve joint investments from contractors and unions, providing direct payments to the child care providers of the workers’ choice. This investment would cover the costs when subsidized programs are no longer available to the worker. There is more demand than supply of child care funding through ERiCA grants.

Metro's funding would build upon an innovative model with buy-in from local building trades unions and women supporting workforce partners.

- **Incentives for local child care providers to expand hours:** This child care funding can incentivize local providers to care for children to offer early morning and late-day hours, further supporting working families when offered guaranteed tuition over two years.
- The Seattle area's transit agency, **Sound Transit** contributes five cents (\$0.05) per hour worked by employees covered under a Project Labor Agreement (PLA) to the Regional Apprenticeship Preparation Integrated Delivery System (RAPID) fund. This funding supports outreach, training, and retention efforts including funding for supportive services. The agency collaborates with organizations like Apprenticeship & Nontraditional Employment for Women (ANEW), Helmets to Hardhats, and others to help veterans, women, and people from disadvantaged backgrounds enter construction careers.

Recommendation 2: Create a regional Joint Child Care Fund: Co-invest in child care fund for apprentices with contractors and potentially other public agencies as well, to establish a joint child care fund to cover child care costs for apprentices and workers in the trades. This fund should be co-designed with worker input and in collaboration with child care experts and unions.

- I. **Institute a contractual performance requirement to mandate contractors' contributions:** Require contribution contributions and ensure contribution formula is adjusted periodically.
 - The **Social Justice Labor Management Cooperation Trust Fund** is established under the Port of Oakland's Maritime and Aviation Project Labor Agreement (MAPLA) to support the MAPLA Social Justice Program. Contractors performing work under MAPLA are required to contribute thirty cents (\$0.30) for each hour worked by their employees into this fund, in addition to established employee benefits. This payment must be included in the contractors' bids and is deducted monthly from the progress payments requested by the prime contractor for their workforce and subcontractors. The deductions are based on the total hours reported in the MAPLA Program Summary by Project Goals Report, ensuring that contributions are aligned with the hours worked.

Recommendation 3: Build robust long-term partnerships to address child care challenges with worker input.

- I. **Engage those directly impacted in crafting solutions:** Work together with female apprentices and journey-level workers as well women supporting trades organizations and unions in in co-designing child care programs.
- II. **Survey workers and be prepared to adjust long the way:** Metro and contractors work together with unions and women workers to assess effectiveness of child care support programs and funding targets through worker surveys and workforce data analysis. Monitor contractor participation in the child care fund, assess the impact on child care access for workers, and adjust strategies as needed to ensure goals are being met.
 - Hold informational sessions or workshops to engage contractors, trade unions, and local businesses. Discuss the importance of child care in workforce retention and productivity and present the joint child care fund as a community investment.
- III. **Communicate Success Stories:** Share success stories and data demonstrating the positive impact of the joint child care fund on workforce stability and productivity. This can encourage more contractors to participate and highlight the value of investing in child care.

Recommendation 4: Build on Existing regional child care systems by partnering with child care organizations, public sector partners and with those engaging providers and workers.

Metro can leverage existing systems and programs to advance its own child care goals. Contractors and public project owners can benefit from improving these systems but need to help expand capacity and create more inclusive child care options for their employees. Utilizing local initiatives like subsidization programs can help grow the supply of child care providers and address the issue of low wages and minimal benefits for child care workers while also supporting local businesses in achieving their child care goals.

- I. **Formalize Partnerships with Child Care Experts and Workers:** Los Angeles Metro has numerous opportunities to collaborate with child care experts, such as the Los Angeles County Childcare Planning Committee, the Policy Roundtable for Child Development, the LA County Office for the Advancement of Early Care and Education, and child care worker union SEIU Local 99, to co-plan and invest in solutions that expand the regional child care sector.

Enhance Procurement Levers to Support Female Hire

Addressing complex system challenges to expand access for women on Metro projects requires an integrated approach that aligns Metro's policies, investments, and procurement practices. In calling for a refresh of the 2019 workforce disparity study, the Metro Board directed staff to explore procurement approaches to increasing the participation of tradeswomen on Metro construction projects, including the use of bid preferences and a revision to the Cultural Competency Plan requirement recently piloted on three of the agency's design-build RFPs. A national scan conducted for this study revealed that local, regional, and state governments across the U.S. have adopted measures that incentivize contractors to hire women and people of color through bid preferences on public construction projects. Although California's Proposition 209 restricts Metro's ability to implement such a model for female hire directly, other avenues exist for Metro to promote the recruitment, retention, and advancement of tradeswomen through procurement.

Recommendation 1: Institute new contractor requirements on policies, procedures, and training programs to combat harassment and discrimination in the workplace.

Strengthening career pathways for women on Metro construction projects requires proactive efforts to ensure respect and safety for women and other underrepresented workers on Metro job sites. The persistence of harassment, bullying, and hazing on construction worksites remains a leading factor that drives women, people of color, and LGBTQ workers out of careers in the building trades. Interviews conducted for this study revealed multiple instances of retaliation against women who complained about a lack of safe and accessible bathrooms at the worksite. These experiences underscore the importance of comprehensive culture change approaches that include strong anti-harassment policies and procedures, regular training programs, and physical job site standards that support safety and belonging in the workplace. The recommendations below draw on recently released guidance from the EEOC on preventing harassment and discrimination in the construction industry²⁵². While these recommendations are aimed at increasing the retention and advancement of tradeswomen specifically, incorporating respectful worksite practices will benefit not only underrepresented workers but all workers on Metro's job sites.

²⁵² U.S. Equal Employment Opportunity Commission. *Promising Practices for Preventing Harassment in the Construction Industry*. June 2024. <https://www.eeoc.gov/promising-practices-preventing-harassment-construction-industry>

- I. **Clear Anti-Harassment Policies and Procedures:** As part of all construction contracts, Metro should require contractors to develop a Respectful Workplace Policy that:
 - a. Defines harassment, discrimination, hazing, and bullying, with specific examples relevant to the construction industry.
 - b. Clearly outlines the process for reporting prohibited conduct that provides multiple reporting channels.
 - c. Clearly outlines the contractor's process and timeline for investigating complaints.
 - d. Includes a disciplinary process that is consistent and proportionate to the severity of the misconduct.
 - e. Affirms the contractor's commitment to prompt action to respond to and remedy complaints.
 - f. Upholds the protection of individuals who report instances of harassment and discrimination and the prohibition of retaliation in response to complaints.
 - g. Includes the name and contact information of the appropriate individual designated to receive and respond to complaints.

As a contract requirement, this policy should be posted and made visible at every Metro worksite for the duration of the contract. To support contractors in developing or improving existing anti-harassment policies, Metro can draw on the EEOC guidance released in June 2024.²⁵³

- II. **Comprehensive Training Programs:** As part of all construction contracts, Metro should require contractors to implement respectful workplace training programs. These training programs should go beyond one-off, compliance-driven models to prepare participants to recognize harassment and discrimination and equip them with tools to intervene when it occurs. Several high-quality harassment-prevention training programs have been implemented with success in the construction industry, including RISE Up, developed by a national tradeswomen's group. To comply with the requirement, training programs should meet the following criteria:
 - a. Train participants in the contractor's anti-harassment policy, complaint procedures, and investigation and discipline process;
 - b. Incorporate a bystander invention model that trains participants in identifying and responding to harassment, discrimination, and bullying;
 - c. Include all project personnel on a worksite, including journey-level workers, apprentices, and temporary workers;
 - d. Held at least annually throughout a project lifecycle to account for workforce turnover and be reinforced more frequently, such as monthly, through shorter meetings and "job box" talks;
 - e. Incorporate a train-the-trainer model to build and expand capacity to advance culture change within the unionized workforce.

²⁵³ Ibid.

Given the regional nature of the construction workforce, Metro should convene stakeholders regionally to identify a shared training program. This recommendation is outlined further in Section 4.III.3 below.

Recommendation 2: Revise Cultural Competency Plan requirement to include distinct Community Benefits and Workforce Equity components.

While it is too early to assess Metro’s Cultural Competency Plan pilot as a whole, the approach holds promise for facilitating accountability to communities surrounding Metro construction sites and connecting local residents and businesses with economic opportunities created by Metro projects. Should the Cultural Competency Plan requirement become standard practice in Metro’s construction procurement process, Metro should make sure any workforce development activities funded and implemented through Cultural Competency Plans align with and advance Metro’s workforce equity goals and programs, including the PLA/CCP targeted hire requirements and female hire goals. In RFPs, the Cultural Competency Plan requirement can be an opportunity for Metro to evaluate contractors on the strategies they will use to meet targeted and female hire goals and their track record recruiting and retaining a diverse workforce on past projects. Currently, contractors are not asked to outline these strategies until the creation of the Employment Hiring Plan once a Notice to Award has been issued. Incorporating this evaluation through the Cultural Competency Plan requirement can also help ensure that workforce development activities initiated and funded by Metro are creating a pipeline for project area residents into quality jobs in the trades, such as through certified MC3 pre-apprenticeship programs, partnerships with local tradeswomen groups, and supportive services proven to support the success of women, disadvantaged workers, and others who face barriers to employment.

In future applications of the Cultural Competency Plan requirement on evaluative procurements like Design-Build, Metro should refine the Plan framing to establish and clarify distinct community benefit and workforce equity requirements:

- Outline “A. Community Benefit Component” and “B. Workforce Equity Component.”
- For “B. Workforce Equity” component, require that contractors outline in narrative form how they plan to meet Metro’s targeted hire and female hire goals. The narrative should describe the strategies they will use to do the following:
 1. Recruit targeted, disadvantaged, and female apprentices and journey workers.
 2. Retain targeted, disadvantaged, and female apprentices and journey workers.
 3. Ensure a respectful worksite that is free from harassment, discrimination, hazing, and bullying.

Responses to the Workforce Equity Component should include a contractor’s past experience meeting workforce utilization goals for Metro’s and other public projects in the LA region and describe partnerships, especially with tradeswomen groups, they have built.

- To aid contractors in understanding and responding to this requirement, Metro can direct them to the Women in the Trades Resource Guide for suggested recruitment, retention, and respectful worksite strategies. In conjunction with the release of the 2024 workforce disparity refresh and report, Metro should revise its Women in Trades Resource Guide to ensure the inclusion of emerging best practices and up-to-date information on the local landscape supporting women in construction.

Recommendation 3: Make female hire goals an explicit part of Metro’s procurement process for Jobs Coordinators.

Metro maintains a pool of qualified Jobs Coordinators who are hired by prime contractors to lead outreach and recruitment efforts on their construction projects. Jobs Coordinators play a critical role in recruiting diverse workers into Metro’s construction workforce. Their effectiveness is essential to Metro’s ability to succeed in meeting its targeted hire requirements outlined in the PLA/CCP and female hire goals. Currently, the Request for Interest and Qualifications for Jobs Coordinators outlines Metro’s targeted worker, disadvantaged worker, and apprenticeship utilization goals on both federally funded and non-federally funded projects in detail and describes the responsibilities of Jobs Coordinators in helping the agency attain them. However, Metro’s female hire goals are not mentioned anywhere in RFQI language.

Before the next Jobs Coordinator solicitation opens, revise the RFIQ to include reference to Metro’s female hire goals. In the proposal content and evaluation criteria, incorporate language that speaks to proposer’s past experience working with tradeswomen groups and outreach methods used on past projects to promote the recruitment and retention of women.

Establish a Regional Collaborative to Address Systems Change in the Construction Industry

As the Greater LA Area diversifies, public project owners have an opportunity to address systemic disparities faced by women in the construction sector by embracing a regional approach to workforce diversification. Pervasive challenges—such as limited child care options, job site culture, and bias in recruitment and hiring—cannot be resolved by a single project or agency, no matter how strong their policies. Women in construction operate within a regional labor market and often encounter similar obstacles across projects and employers. A coordinated effort to reduce these barriers will lead to more women successfully completing apprenticeships, advancing in their careers, and establishing lasting success in the industry.

Imagine a construction sector where, regardless of the project, women apprentices are guaranteed a set of fundamental rights and support systems, from on-site anti-harassment training to child care funding. Regional collaboration makes this vision achievable by facilitating a unified response to the industry's demand for a skilled workforce, allowing partners to set shared diversity and recruitment goals, pool resources for retention efforts, and tackle common issues like affordable child care. Such a collaborative approach not only builds a stronger, more inclusive talent pipeline but also promotes economic mobility for communities of color and working families. By partnering on established regional initiatives, public project owners can reduce barriers and open pathways to high-quality construction careers for women, people of color, and justice-involved individuals across the sector.

I. Recommendation 1: Formalize a regional collaborate to advance women in construction.

Establish a regional collaboration of public agencies and partners interested in increasing the number of women in the construction sector: Currently, there are no regional collaborations specifically focused on increasing the number of women on construction projects in the LA area. However, potential partnerships are highlighted in the *Local Efforts* section of this report, which includes active and proposed multi-jurisdictional initiatives like Infrastructure LA and the City of LA Workforce Infrastructure Network, led by the Mayor's Office and the Economic and Workforce Development Department (EWDD), has established goals to address gender gap in high growth sectors. The efforts aim to close child care funding gaps and partner with stakeholders to increase outreach efforts.

- In the Portland metro area, nine public agencies have formed a formal collaboration to implement a shared approach to diversifying their construction workforce. This approach, known as the **Construction Career Pathways Framework (CCPF)**, provides high-level guidance for public owners dedicated to meeting the region's growing construction needs through a diverse workforce. CCPF emphasizes cross-sector collaboration by engaging public agencies, labor organizations, community-based groups, contractors, and educational institutions to achieve a broad regional impact. Each agency, based on its specific size and capacity, establishes individual thresholds for meeting diversity goals. The Framework focuses on seven key actions for public owners: setting clear diversity goals, defining project thresholds, tracking progress, creating workforce agreements, implementing on-site anti-harassment and culture-change strategies, investing collectively in supportive services, and fostering regional collaboration to build a robust, diverse workforce. Recent accomplishments include:

- Establishment of a **Regional Funding Collaborative** to strategically invest in training, outreach, wrap around services and other retention strategies for diverse workers in the region.
- Coordination on developing and delivering a respectful workplace and anti-harassment training curriculum across projects and jurisdictions.
- Coordination of public tracking and data sharing on achieving workforce goals on projects including alignment on software to monitor labor demographics and other data components on projects.
- Establishment of first of its kind multi-jurisdictional workforce equity agreements (PLA) between public agencies and the construction trades that embeds workforce equity goals for women and people of color.

- II. **Support the formation a regional woman in trades advisory group to work alongside the regional collaboration.** Similar to LA County Public Works Women in Trades Advisory Council (WITAC), a regional Council can help facilitate discussions and strategies to increase female recruitment, training, placement, and retention in the construction industry.

Recommendation 2: Invest in and grow the regional supply of child care.

Without a plan to expand the number of providers or improve wages for child care workers, incentives may unintentionally worsen local supply issues by failing to balance increased demand with an already limited supply, leading to higher prices and reduced availability for families in the community. Additionally, efforts to enhance child care within the construction industry should not displace other low-wage workers in the region who also require care.

- I. **Create a regional Joint Child Care Fund:** Co-invest in child care fund for apprentices with other public agencies as well, to establish a joint child care fund to cover child care costs for apprentices and workers in the trades. This fund should be co-designed with worker input and in collaboration with child care experts and unions.
- II. **Grant programs to address child care deserts:** Examples of collaboration to grow to supply of child care could include establishing grant programs to support start-up costs and facility development expenses for family child care homes and center-based care in child care deserts, for those that serve infants and toddlers; supporting efforts to create Apprenticeships for becoming child care providers (City of Los Angeles has efforts currently); and direct facility renovations grants to child care facilities so they can expand their operations.

- III. Partner with other public jurisdictions to have a unified regional approach to increase child care capacity:** The consultant team's interviews revealed that several governments in LA County area are already extending grant programs and policies to grow the child care supply and address child care deserts. This underscores the need for a shared, regional approach that fosters collaboration, increases investments, and reduces duplication of efforts. For example, the cities of Los Angeles and Long Beach are actively engaging in efforts to expand the supply of child care providers, particularly by investing in small, minority- and women-owned businesses, and nonprofits in underserved communities. A unified regional effort, driven by a community-focused planning process with child care advocates, unions, policy experts and governmental partners, can bolster efforts to further expand child care access and create a sustainable ecosystem across the region.

Recommendation 3: Align demand and supply strategies across jurisdictions and projects to send clear market signals that women belong in the construction sector:

- I. Share Best Practices and Align Supportive Services for Recruitment and Retention Strategies:** A regional approach can create opportunities for agencies to share best practices and strategies for diversifying the workforce on projects. It also provides a platform for governments to better understand the systemic barriers women workers face across projects, such as child care, job site culture, and capacity building for workforce partners. Additionally, many agencies have established funding mechanisms to support workers in gaining career pathways, such as the High Road Workforce Grants and child care funding in the City of LA. Aligning investment strategies across the region for supportive services that impact retention rates for women will strengthen the efforts of workforce and union partners to recruit and train women in the construction sector.
- II. Align data collection and tracking compliance mechanisms for contractors:**
- a. Develop and implement data systems to track pre-apprentices and apprentices throughout their training, from entry to graduation, to help monitor their career progress towards journey-level status and identify areas for intervention. Data-driven strategies are essential for tracking measurable outcomes and ensuring effective workforce development across projects and jurisdictions. By collecting data on individual workers as they move from one project to another across various public agencies, Metro and its partners can better understand the challenges they face and develop targeted strategies to support their career pathways.

- b.** Establishing and regularly maintaining a countywide database of construction workers and work hours by public agency, year, trade, and gender by project and contractor. While some public agencies currently use workforce tracking tools, LCPtracker is the most common among LA County agencies, and a standardized database could enhance its clarity and transparency, allowing agencies to collaborate to evaluate contractor success across the region. This database can build upon the California Department of Industrial Relations Division of Apprenticeship Standards (DAS) database, by crafting a more precise regional picture for publicly funded projects that are utilizing supportive services and other mechanism to advance diversity on their projects.

- III. Adopt a regional approach to culture change on job sites:** Given the regional nature of the construction workforce, implementing standardized culture change policies and training across job sites can help shift the sector’s overall culture. Public agencies can enforce these requirements through their procurement processes on construction projects. By collaborating regionally, agencies can jointly evaluate effective training programs and support partners in scaling up offerings. To ensure a unified approach with consistent language, Metro should convene a committee to assess training programs with proven success in the construction industry and recommend one for use across the LA region.

Appendix A: Definition of Key Terms

Apprentice – Apprentice workers that are registered and participating in Joint Labor/Management Apprenticeship Programs approved by the State of California, Department of Industrial Relations, Division of Apprenticeship Standards (DAS), or in the case of projects with federal funding, approved by the US Department of Labor (DOL) and California DAS.

Construction Workforce Availability - The supply of construction laborers, which is defined in either the total work hours or number of workers that are available to work on a construction project.

Construction Workforce Demand - The demand for construction laborers, which is defined in either the total work hours or number of workers needed to work on a construction project.

Executive Order (EO) 11246 - Executive Order (EO) 11246 requires all government contractors and subcontractors to take affirmative action to expand job opportunities for minorities. In 1978, the Carter Administration amended the EO to set a nationwide goal for hiring women on federally funded construction projects in excess of \$10,000 in each trade. The current nationwide female participation goal is 6.9%.

Proposition 209 – A California ballot initiative, approved by voters in 1996, which prohibits any state, regional, or local public agency from considering “race, sex, color, ethnicity, or national origin” in any decisions involving public contracting, employment, or education.²⁵⁴

Female Participation - The percentage is calculated as the number of work hours performed by female workers out of the total work hours on a construction project. The female participation goal is defined as 6.9% of the total hours of training and employment performed by female construction workers as set forth by Executive Order 11246. The consultant team also uses the term Female Utilization to refer to Female Participation.

Greater Los Angeles (LA) Area - The study analyzes construction workforce availability in the entire region since it is common for construction workers to travel into Los Angeles for work. The consultant team define the region as the Greater Los Angeles (LA) Area, which encompasses the following five (5) counties of Southern California (Los Angeles, Orange, Riverside, San Bernardino, and Ventura).

²⁵⁴ “Prohibition Against Discrimination or Preferential Treatment by State and Other Public Entities. Initiative Constitutional Amendment,” California Secretary of State, 1996, <https://web.archive.org/web/20060213080538/http://vote96.ss.ca.gov/Vote96/html/BP/209.htm>.

Los Angeles/Orange Counties Building and Construction Trades Council (LA/OCBCTC) -

The Council negotiates Project Labor Agreements (PLA) with developers and owners to bring collective bargaining to projects in the private and public sectors. The Council currently has PLAs with the Los Angeles Unified School District, Los Angeles World Airports, Port of Long Beach, Port of Los Angeles, Metro, NBCUniversal, Paramount Pictures, BNSF, Occidental Petroleum and many others. The Council consists of 48 local unions and district councils in 14 trades.

Journey Worker - A person who has completed an apprenticeship program and is considered an experienced worker, not a trainee. Journey workers are fully qualified and can perform a specific trade without supervision.

Project Labor Agreement (PLA) – This is an agreement to help facilitate careers in the construction industry and to promote employment opportunities during the construction of public Capital Improvement Projects. In 2012, Metro entered an agreement between the Los Angeles/Orange Counties Building and Construction Trades Council.

Trade - The analyses in this study are based on a compilation of data from various sources that classify construction trades differently (e.g., trade, craft, construction occupation, etc.). In this study, the consultant team refers to the “construction trades” based on a categorization crosswalk between the Metro crafts, the associated trades, and the Standard Occupational Classification (SOC) codes, as shown in **Table 2-1**. The crosswalk focuses on 15 major trades associated with Metro construction projects.

Union – Refers to Los Angeles/Orange Counties Building and Construction Trades Council affiliated with the Building & Construction Trades Department (AFL/CIO), Craft International Unions and any other labor organization signatory to Metro’s PLA.

Appendix B: Construction Workforce Hiring Requirements and Goals across LA County Agencies

Public Agency Labor Agreement Effective Dates	Hiring Requirement*	Definition
LA County Metro Project Labor Agreement and Construction Careers Policy 2017 - 2027	Metro: Non-Federally Funded (and FTA-funded, 2021-2025)	
	40% Local Targeted	
	First Priority: Community Area Residents	Residence within an ED or EED area within a 5-mile radius of covered project.
	Second Priority: Local Residents from Extremely Economically Disadvantaged (EED) areas	Residence within an EED area in LA County. EED area is median annual household income less than \$32,000 per year.
	Third Priority: Local Residents from Economically Disadvantaged (ED) areas	Residence within an ED area in LA County. ED area is median annual household income less than \$40,000 per year.
	10% Disadvantaged	Residence within LA County, resides within EED or ED area, and meets at least two barriers: homeless, custodial single parent, receiving public assistance, lacking GED or high school diploma, criminal record or involvement with criminal justice system, suffering from chronic unemployment, emancipated from foster care system, veteran of Iraq/Afghanistan war, apprentice with less than 15% of required hours.
	20% Apprentices	
	50% of apprenticeship hours performed by Local Targeted Workers	Participant in California Division of Apprenticeship Standards approved program.
	6.9% Female Utilization Goal*	Exceed Federal Executive Order 11246 goal.
	Metro: Federally Funded	
	40% National Targeted	
	First Priority: National Extremely Economically Disadvantaged areas	Residence within an EED area in the US.
	Second Priority: National Targeted Worker	Residence within an EED or ED area in the US.
	10% Disadvantaged	Resides within EED or ED area, and meets at least two barriers: homeless, custodial single parent, receiving public assistance, lacking GED or high school diploma, criminal record or involvement with criminal justice system, suffering from chronic unemployment, emancipated from foster care system, veteran of Iraq/Afghanistan war, apprentice with less than 15% of required hours.
20% Apprentices		
50% of apprenticeship hours performed by National Targeted Workers	Participant in US Department of Labor or California Division of Apprenticeship Standards approved program.	
6.9% Female Utilization Goal*	Exceed Federal Executive Order 11246 goal.	
City of LA Dept. of Public Works Project Labor Agreement 2021 - 2031	30% Local Resident	
	First Priority: Tier 1 zip codes	Zip codes specified in PLA where median household income is less than 50% LA County, or where unemployment rate exceeds 200% of LA County.
	Second Priority: Tier 2 zip codes	Zip codes specified in PLA where median household income is less than that of LA County, or where unemployment rate exceeds that of LA County.
	10% Transitional	
	First Priority: Group 1	(1) Tier 1 or 2 zip codes or anywhere in City of Los Angeles and (2) a veteran, involvement with justice system, or homeless.
	Second Priority: Group 2	(1) Tier 1 or 2 zip codes or anywhere in City of Los Angeles, and (2) MC3 graduate or two of the following: household income less than 50% county median income, emancipated from foster care system, receiving public assistance, lacking GED or high school diploma, apprentice with less than 15% of required hours, custodial single parent, suffering long-term unemployment.
50% of apprenticeship hours performed by Local Residents or Transitional Workers		

City of Long Beach Project Labor Agreement 2021-2031	40% Local Resident	
	First Priority: Tier 1	City of Long Beach residents.
	Second Priority: Tier 2	Gateway Cities residents.
	Third Priority: Tier 3 areas	Los Angeles and Orange County residents.
	10% Transitional or Veteran	Veteran or one of the following: homeless, custodial single parent, receiving public assistance, lacking GED or high school diploma, involvement with criminal justice system, suffering from chronic unemployment, emancipated from foster care system, veteran of Iraq/Afghanistan war.
LA Community College District Project Labor Agreement 2020-2030	35% Local Resident	
	First Priority: Campus Community Zip Codes	Resides in each campus's specified zip codes.
	Second priority: Other zip codes	Resides within designated zip codes.
	Third priority: Los Angeles or Orange County	Resides within Los Angeles or Orange County.
	10% Disadvantaged or Veteran	Veteran or resides in a District-wide zip code and one of the following: no GED or high school diploma, criminal justice record, 90 days or more unemployed, recipient of public benefits, custodial single parent, homeless, household income in poverty guideline or less than 50% of AMI.
50% of apprentice workforce are first year apprentices		
LA County Dept. of Public Works Countywide Community Workforce Agreement 2023 - 2028	30% Local Resident	
	First Priority: Tier 1 Qualified Local Resident	Residency in LA County within 5 miles of project site in zip code where percentage of households below 200% federal poverty level is greater than county average.
	Second Priority: Tier 2 Qualified Local Resident	Residency in LA County within 5 miles of project site in zip code where at least 30% of population is living in poverty and unemployment rate is at least 150% of national average.
	10% Targeted	Resident of LA County and one of the following: income at or below poverty level, no GED or high school diploma, at least 6 months unemployed, recipient of public benefits, homeless or recently homeless, custodial single parent, former foster youth, veteran or eligible spouse, migrant and seasonal farmworker, English language learner, 55+ in age, disabled, or low level of literacy.
Los Angeles World Airports Project Labor Agreement 2021 - 2030	30% Impact Area or Local Resident	Impact Area is designated zip codes near Los Angeles International Airport. Local Resident is remaining zip codes in Culver City, Hawthorne, and City of Los Angeles.
LA Unified School District Project Stabilization Agreement 2024 - 2033	50% Local Resident	(1) Resident of zip codes overlapping LAUSD or (2) graduate of LAUSD, veteran, or MC3 graduate.
Port of Long Beach Project Labor Agreement 2023 - 2033	40% Local Resident	
	10% Transitional or Veteran	One of the following: homeless, custodial single parent, receiving public benefits, no GED or high school diploma, unemployed, former foster care, income is below 70% of Lower Living Standard Income Level for living area, less than 15% apprentice hours, MC3 graduate.
	25% of apprentice workforce are first year apprentices	

Port of Los Angeles Project Labor Agreement 2017 - 2027	30% Local Resident	
	First Priority: Tier 1 Zip Codes	Zip codes in the Port's impact zone.
	Second Priority: Tier 2 Zip Codes	Additional zip codes in the Port's impact zone.
	Third Priority: Remaining zip codes in City of LA	
	10% Transitional	
First Priority: Tier 1 Zip Codes	Reside in zip codes, and one of the following (veteran, involvement with justice system, homeless) or two of the following (household income below 50% LA County median annual household income, former foster care, receiving public benefits, no GED or high school diploma, apprentice with less than 15% hours, custodial single parent, long-term unemployed).	
Second Priority: Tier 2 Zip Codes		
Third Priority: Remaining zip codes in City of LA		
20% Apprentices		
50% of apprentice hours Local Resident		
Burbank Airport Project Labor Agreement 2016 - 2026	30% Area Resident or Veteran	
	First Priority: Tier 1 Area Resident	Veteran or resident of Burbank, Glendale, and Pasadena.
	Second Priority: Tier 2 Area Resident	Resident of zip codes in City of Los Angeles in vicinity of Airport.

Key:
Geographic
Categorical
Apprentice
Female Utilization

*Metro's 6.9% female utilization target is a goal, not an explicit requirement

APPENDIX C

PROMISING PRACTICES FOR PREVENTING HARASSMENT IN THE CONSTRUCTION INDUSTRY

U.S. Equal Employment Opportunity Commission



www.EEOC.gov

PROMISING PRACTICES FOR PREVENTING HARASSMENT IN THE CONSTRUCTION INDUSTRY

The U.S. Equal Employment Opportunity Commission (EEOC) is the primary federal agency charged by Congress with enforcing the nation’s workplace civil rights laws. The EEOC is responsible for enforcing federal laws that make it illegal to discriminate against a job applicant or an employee because of race, color, religion, sex (including gender identity, sexual orientation, and pregnancy, childbirth, or related medical conditions), national origin, age (40 or older), disability or genetic information. The EEOC’s mission is to prevent and remedy unlawful employment discrimination—including harassment and retaliation—and advance equal employment opportunity for all through education and outreach, technical assistance, and enforcement.

Harassment remains a serious problem in our nation’s workplaces. Over a third of the charges the EEOC received between fiscal year (FY) 2019 and FY 2023 included an allegation of harassment based on one or more of the characteristics protected under federal employment law.¹ While workplace harassment is an issue in all sectors and industries, it is prevalent on many construction jobsites,² and some of the most egregious incidents of harassment investigated by the EEOC have arisen in the construction industry.³ The nature of the construction industry includes a number of risk factors that may increase the likelihood of harassment, including workforces that are primarily male, workplaces where there is pressure to conform to traditional stereotypes, and decentralized workplaces.⁴ These factors may be exacerbated by the presence of multiple employers on a worksite,⁵ and the cyclical, project-based nature of construction.

Harassment imposes immediate costs on those who are subject to it, and harassment based on race, sex, and national origin is also a significant barrier to recruiting and retaining women and people of color in construction.⁶ It is also a workplace safety issue. Because construction work is

¹ [Enforcement and Litigation Statistics](#), U.S. Equal Employment Opportunity Commission.

² See Ariane Hegewisch and Eve Mefferd, [A Future Worth Building: What Tradeswomen Say about the Change They Need in the Construction Industry](#), Institute for Women’s Policy Research, (November 2021) (in a [2021 survey of over 2,600 tradeswomen](#), nearly 1 in 4 women reported experiencing near constant sexual harassment, and 1 in 5 women of color reported “always” or “frequently” experiencing racial harassment on the job); see generally [Building for the Future: Advancing Equal Employment Opportunity in the Construction Industry](#), Report of Chair Charlotte A. Burrows, U.S. Equal Employment Opportunity Commission (May 2023).

³ See *id.*

⁴ See [EEOC Select Task Force on the Study of Harassment in the Workplace](#), Report of Co-Chairs Chai R. Feldblum and Victoria A. Lipnic (June 2016); see *infra*, Appendix A for further discussion of risk factors.

⁵ The presence of multiple employers on the worksite also impacts which entities may be considered the employer of any particular worker for purposes of establishing legal liability. This document’s reference to a worker’s “employer” typically refers to their employer of record and should not be considered instructive on questions of whether an additional employer may also have liability.

⁶ [Knocking Down Walls: Discrimination and Harassment in Construction](#), U.S. Equal Employment Opportunity Commission Hearing (May 17, 2022), [Written Testimony of Ariane Hegewisch](#), Senior Research Fellow, Institute for Women’s Policy Research (IWPR) (“Not surprisingly, almost one in two tradeswomen respondents to the 2021 IWPR Tradeswomen Survey (47.7 percent) have seriously considered leaving their careers altogether.”).

potentially hazardous and often performed in teams, harassment on construction sites can endanger workers' physical safety and increase the chance of injury.⁷

The EEOC's [Strategic Enforcement Plan \(SEP\) for Fiscal Years 2024-2028](#) prioritizes combatting systemic harassment in all forms and on all prohibited bases. The SEP also includes a focus on industries where women and workers of color are underrepresented, especially industries that benefit from substantial federal investment, like construction. The EEOC intends to address systemic harassment in construction using a variety of tools, such as encouraging commitment and coordination from every entity with a presence on a construction worksite, including all employers (contractors and subcontractors), unions, apprenticeship programs, and staffing agencies.

This document identifies promising practices for industry leaders to help prevent and address harassment in the construction industry. It recommends that general contractors take on a coordination and leadership role on the construction worksite. This document draws from and builds upon the EEOC's [existing resources on workplace harassment](#), including the 2024 [Enforcement Guidance on Harassment in the Workplace](#), the 2016 [Report of the Co-Chairs of the Select Task Force on the Study of Harassment in the Workplace](#) ("the Co-Chair Task Force Report"), and subsequent companion documents on promising practices.⁸ The practices discussed in this document may assist covered entities in meeting their legal obligations to maintain harassment-free workplaces and remedy harassment if it arises, which will in turn promote safety on the job.⁹

The contents of this document do not have the force and effect of law, do not create any new obligations or duties under federal law, and are not meant to bind the public in any way. This document is intended only to provide promising practices that employers may wish to consider in working to prevent and address harassment in the construction industry.

Core Principles and Promising Practices for Combatting Harassment

The Co-Chair Task Force Report identified five core principles that have generally proven effective in preventing and addressing harassment:

- Committed and engaged leadership;
- Consistent and demonstrated accountability;
- Strong and comprehensive harassment policies;

⁷ See Hannah M Curtis et al., "[Gendered Safety and Health Risks in the Construction Trades](#)," *Annals of Work Exposures and Health*, Volume 62, Issue 4, 405-06, 410 (May 2018); see also [Knocking Down Walls: Discrimination and Harassment in Construction](#), U.S. Equal Employment Opportunity Commission Hearing (May 17, 2022); [Written Testimony of Kenneth D. Simonson](#), Chief Economist, Associated General Contractors of America ("[S]uccess in construction requires constant teamwork that is impossible without mutual respect and support.").

⁸ See, e.g., [Promising Practices for Preventing Harassment in the Federal Sector](#), U.S. Equal Employment Opportunity Commission (April 2023).

⁹ Some entities may have additional legal obligations arising under laws or regulations enforced by the U.S. Department of Labor's Office of Federal Contract Compliance Programs, Occupational Safety and Health Administration, the Office of Apprenticeship, or other local, state, or federal agencies.

- Trusted and accessible complaint procedures; and
- Regular, interactive training tailored to the audience and the organization.

This document applies these core principles to the specific challenges and opportunities in the construction industry. Although this document focuses on construction, many of the promising practices identified may also be helpful in other industries and workplaces.

A. Leadership and Accountability

The cornerstone of a successful harassment prevention strategy is leadership’s consistent and demonstrated commitment to create and maintain a culture in which harassment is not acceptable. Worksite leaders—from the project owner to crew leads to union stewards—should clearly, frequently, and unequivocally message and demonstrate that harassment is prohibited. Approaches include:

Treating Harassment Prevention Holistically

Project owners and general contractors should consider prioritizing and emphasizing worksite-wide collaboration to prevent and correct harassment. While every onsite entity has its own legal obligations and potential liabilities, the project owners and general contractor can play an important oversight and coordination function by maintaining an overarching focus on the shared responsibility of fostering a harassment-free workplace. The EEOC recommends that:

- Project leaders strive to prevent and address harassment against ALL workers on a site, whether or not those workers are covered by anti-discrimination laws.
- General contractors refer smaller subcontractors or staffing agencies¹⁰ that may need assistance with their legal responsibilities under federal anti-discrimination laws to the EEOC’s [resources for employers and small businesses](#), including employer checklists, harassment risk factors and responsive strategies, harassment policy tips, and contact information for the EEOC’s small business liaisons.

¹⁰ [Enforcement Guidance: Application of EEO Laws to Contingent Workers Placed by Temporary Employment Agencies and Other Staffing Firms](#), U.S. Equal Employment Opportunity Commission (1997).

Unions can help prevent and address harassment in construction workplaces by:

- Including and consistently abiding by a commitment to preventing and remedying harassment in their governing documents and in negotiated workplace agreements.
- Serving as a critical resource for members who may need assistance in identifying the appropriate reporting channels to utilize, such as in situations when it is unclear which entities are responsible for remedying harassment.
- Continuing to support and promote efforts to help ensure apprenticeship and pre-apprenticeship programs are fully inclusive and do not have unnecessary barriers to entry for workers from underrepresented groups.
- Supporting efforts to help ensure that apprenticeship and pre-apprenticeship programs are fostering and maintaining harassment-free worksite training environments.¹¹
- Developing guidance and promising practices for representing members subject to harassment, including offering advice for addressing allegations of harassment against a fellow union member.¹²

Including Anti-Harassment Measures in Contract Bids

Any project owner or sponsor—including a state or local government—should consider requiring that contract bids include a plan to prevent and address workplace harassment. Similarly, general contractors can include corresponding provisions in any agreements with subcontractors and staffing agencies to ensure ongoing compliance. These bid requirements (verified at the time of award) and corresponding contract provisions could include that the bidder maintain:

- An effective and comprehensive harassment policy that accounts for anticipated potential accessibility barriers, such as limited literacy skills or language access needs;
- An accessible complaint system with multiple reporting channels that are clearly identified and provide contact information;
- Regular and effective training for all workers about the harassment policy and complaint system, including training that retaliation for reporting or reasonably opposing harassment is against the law, as well as training for designated individuals about how to prevent, recognize, and respond to objectionable conduct without retaliation; and/or
- A discipline policy that is prompt, consistent, and proportionate to the severity of the harassment or related misconduct, such as retaliation.

¹¹ Registered apprenticeships are governed by the U.S. Department of Labor’s Equal Employment Opportunity (EEO) regulation for Registered Apprenticeship Programs. See U.S Department of Labor, Office of Apprenticeship, [Prevent Harassment | Apprenticeship.gov](#).

¹² See AFL-CIO, [Addressing Sexual Harassment in the Workplace: There Is Power in my Union](#) (Feb. 2019).

General Contractors Serving in a Coordinating Role

In addition to ensuring compliance with its own internal policies, the general contractor is typically well positioned to coordinate harassment prevention across a worksite and serve as a backstop for resolving difficult issues. For example, the EEOC recommends that general contractors:

- Consider providing or coordinating sitewide preventive measures, such as training.
 - General contractors may be well positioned to determine the scope and substance of training, including whether bystander training¹³ may be appropriate.
- Consider monitoring the actions of subcontractors and staffing agencies to ensure adherence to such measures and providing supportive resources as needed.
- Convene, in coordination with a union if applicable, a sitewide leadership committee that meets regularly to coordinate on preventing discrimination and harassment and to identify emerging issues and collaborate to develop solutions. Such a committee could seek to include input from civic groups that are representative of the broader community, such as tradeswomen organizations and pre-apprenticeship and apprenticeship programs, to benefit from their expertise. The committee should be led by an individual with knowledge of EEO policies and authority to implement change.
 - If a workplace safety committee already exists, consider whether it is appropriate to expand its scope to issues that may give rise to safety incidents such as workplace harassment, mental health, and substance use disorders.
- Periodically verify that their subcontractors are following through with their harassment-prevention commitments by:
 - Ensuring that subcontractors are complying with obligations set out in their contracts;
 - Monitoring the effectiveness of subcontractors' efforts to prevent and correct harassment, which could include conducting tests or spot checks of their harassment complaint procedures;
 - Reviewing training materials to determine whether they include accurate and sufficient information about harassment policies, complaint procedures, and related topics, such as retaliation; and
 - Ensuring that concerns or complaints regarding harassment policies, complaint systems, or trainings are addressed appropriately and that any necessary changes are implemented and communicated to workers.
- When subcontractors lack the experience or resources to resolve an issue, take inadequate steps to address or prevent harassment, or fail to take reasonable corrective action in response to harassment, consider facilitating and assisting subcontractors in finding

¹³ Bystander intervention training typically enables bystanders to recognize problematic behaviors, motivates them to step in, conducts skills-building exercises to provide bystanders with the tools and confidence to intervene, and provides bystanders with resources they can call upon and support their intervention. Training could include interventions such as rallying others, including those in positions of authority, to intervene and checking in with the person being harassed.

solutions, especially when harassment is occurring between workers from different employers.

- When circumstances warrant, work with the subcontractor's management team to remove or bar harassers from the worksite.
- As appropriate, acknowledge and thank individuals on the worksite who take action to prevent or address workplace harassment.

Evaluating Policies and Seeking Feedback

When building in workforce accountability, general contractors are encouraged to seek feedback from workers about the worksite's collective anti-harassment efforts. For example, the general contractor or relevant committee should consider:

- Conducting anonymous worker surveys on a regular basis to assess whether harassment may be occurring. Worksite leaders may wish to explore ways to seek quick, simple feedback, including through mobile phones, to serve as an early indicator of any emerging concerns, rather than relying on lengthy surveys designed to be taken on a computer. This provides an opportunity to intervene and correct any problems at an early stage. Repeating the survey regularly could get the views of new workers at later stages of the project and evaluate progress.
- Partnering with researchers to evaluate the worksite's harassment prevention strategies.

B. Comprehensive and Clear Harassment Policies

A comprehensive, clear policy against harassment sets forth the behaviors that are unacceptable in the workplace, the procedures workers are encouraged to follow when reporting harassment, and the steps that the employer will follow when responding to complaints or reports of harassment. The policies should be developed with input from supervisors and managers who have a role in implementing them. Employers should solicit input of workers to ensure the policies are understandable to individuals at all levels, positions, and locations. Policies should be communicated regularly in an accessible format to all workers on a worksite, including employees, independent contractors, and workers placed by a staffing agency. When communicating these policies, employers should take into account the language access needs of workers, including those with limited literacy skills or limited proficiency in English, or workers with a disability. The policies should be communicated whenever workers cycle onto a project—distributing or posting the policy once at the outset of a project is likely insufficient to inform workers who join the project after it begins. In some cases, a general contractor may wish to make available its own policies or suggested model policies for subcontractors to adopt.

The EEOC recommends including the following elements in a comprehensive anti-harassment policy:

- **A clear description of who is covered by the policy**, such that people covered by the policy can understand that it prohibits certain conduct by and toward coworkers, apprentices, applicants, independent contractors, temporary workers, worksite inspectors, onsite vendors, or any other people likely to be on the worksite.

- **A clear description of prohibited conduct, with examples tailored to the work environment**, such as taunting tradeswomen when they are performing a difficult or dangerous task or vandalizing the toolboxes or personal protective equipment of Black workers. Certain conduct may be more likely to constitute unlawful harassment when it occurs in high-risk environments like construction.
- **An unequivocal statement that harassment is prohibited**. Anti-harassment policies do not have to be limited to characteristics explicitly covered by law, and employers should consider extending their policies to cover additional factors that may make a worker more vulnerable to harassment in a construction environment (e.g., apprenticeship status, undocumented status).
- **A description of complaint and reporting processes** and where to find more information about them.
- **A statement that workers are encouraged to report harassment, bullying, or other inappropriate conduct** even if they are not sure if the conduct violates the policy. Early notification enables the employer to promptly address problematic conduct before it may result in a legal violation, and limits potential harm to workers.
- **A commitment that the employer will provide a prompt, impartial, and thorough investigation**, and that the employer will keep the identity of individuals who report harassment, alleged targets, witnesses, and alleged harassers confidential to the extent possible and permitted by law, to allow the employer to conduct an effective investigation.
- **A statement that workers are encouraged to respond** to questions or to otherwise participate in investigations regarding alleged harassment.
- **An assurance that the employer will take immediate, reasonable, and proportionate corrective action** if it determines that harassment has occurred. The policy should outline the range of possible consequences for engaging in prohibited conduct and not rely on the term “zero-tolerance,” which may have the unintended consequence of deterring reporting.¹⁴
- **An unequivocal statement that retaliation is prohibited**, and that individuals who report harassing conduct, participate in investigations, or take any other actions protected under federal employment discrimination laws will not be penalized or retaliated against for doing so.
 - In construction, such retaliation may include blackballing, transferring to a different worksite, or cutting hours worked of the target of harassment (and/or anyone who supported the target and their allegations). Retaliatory transfers and hours reductions may significantly impact workers’ ability to build long-term trusted relationships with coworkers and impair career advancement.
 - For example, one way to identify and address possible retaliation would be for any entity with access to hours worked information to cross-reference retaliation complaints and hours worked and scrutinize any correlation.

¹⁴ See [EEOC Select Task Force on the Study of Harassment in the Workplace](#), *Report of Co-Chairs Chai R. Feldblum and Victoria A. Lipnic* (June 2016) for a description of “Zero Tolerance Policies.”

The EEOC recommends that employers ensure that anti-harassment policies are accessible to all workers in the following ways:

- **Written and communicated in a clear, easy to understand style and format in all languages commonly used by workers at the site.** Because of the decentralized nature of many construction worksites, consider creative ways to make policies readily available on an ongoing basis, including through a company app, messaging app, or web portal that workers can access on their mobile phones.
- **Posted in consistent and easy-to-find places** like the location of the morning meeting, or near restrooms, breakrooms, or timeclocks. A general contractor could consider:
 - Posting its own anti-harassment policy;
 - Providing a space for other relevant entities (such as subcontractors and staffing agencies) to post their anti-harassment policies;
 - Making the anti-harassment policy continuously available on the employer’s website and/or digital platforms used by applicants and employees;
 - Notifying all workers that they should have received an anti-harassment policy at the time of hire, and describing where such policies are located;
 - Offering to help workers locate any policy upon request; and
 - Identifying individuals who can answer questions about harassment policies and complaint procedures.
- **Kept up to date.** Ensure that the latest version of each entity’s policy is reviewed regularly, updated as needed, and posted and distributed to all workers.

If multiple entities on site have their own policies, it may be advantageous for all policies to be reviewed for consistency by a single designated person (or relevant committee) at the worksite. Absent a workplace committee, the general contractor may be well positioned to review each policy for content and overall alignment and share feedback with the subcontractor, staffing agency, or other entity that created the policy.

C. Effective and Accessible Harassment Complaint System

In the construction context, the complexity of the multiple employer/entity environment introduces challenges to traditional reporting structures, but also presents opportunities to turn multiple channels into a “no wrong door” environment.¹⁵ While each onsite employer should have its own complaint system, the general contractor may also wish to coordinate supplemental channels that are available to workers regardless of their employer of record. Additionally, registered apprentices should be able to report harassment to their program sponsor.

An effective harassment complaint system welcomes questions, concerns, and complaints; encourages employees to report potentially problematic conduct early; treats alleged targets of harassment, complainants, witnesses, alleged harassers, and others with respect; operates

¹⁵ Specifically, a worksite may choose to have a policy requiring that any entity that receives a complaint about a worker for which they are not the employer of record endeavor to properly re-route the complaint appropriately.

promptly, thoroughly, and impartially; and imposes appropriate consequences for harassment or related misconduct, such as retaliation.

The EEOC recommends that a harassment complaint system:

- **Be fully resourced and accessible in languages commonly used by workers**, enabling the employer to respond promptly, thoroughly, and effectively to complaints.
- **Include multiple ways to complain, both formally and informally.** Reporting channels should be clearly identified, and the policy should include contact information for those who can receive complaints. Workers may be reluctant to file a formal complaint reporting harassment. While a formal complaint leading to an investigation may often be the best route, there may be circumstances in which a target of harassment primarily wants the harassment to stop and prefers an alternative option.
 - In addition to existing legal posting requirements, a strong harassment policy educates workers on available avenues to contact local, state, and federal enforcement agencies to learn more about their rights or to file a complaint.
- **Have more than one channel.** Providing multiple channels for workers to complain about harassment helps to ensure that a complainant who is harassed by their immediate supervisor can lodge a complaint with a different employer representative, which reduces the risk of retaliation.
- **Describe the information the entity may request** from complainants, including: the identity of the alleged harasser(s), alleged target(s), and any witnesses; the date(s) of the alleged harassment; the location(s) of the alleged harassment; and a description of the alleged harassment.
 - Given the multiple employer/entity nature of many construction worksites, a complainant may not be able to provide all requested information, such as the identity or employer of an alleged harasser. In those cases, the EEOC recommends that employers encourage complainants to provide as much information as possible, while also assuring them that the employer(s) responding to the complaint will assist the complainant with identifying an alleged harasser, if in question, and their employer, to the extent feasible.
- **Include processes to determine whether alleged targets of harassment, individuals who report harassment, witnesses, or other relevant individuals are subjected to retaliation, and impose sanctions on those responsible.**
 - The cyclical, project-based nature of construction may facilitate or mask retaliation. The EEOC recommends that a complaint system actively account for those risks, such as monitoring whether any site transfers involve individuals participating in a harassment investigation, and whether the individual consents to the transfer.
- **Ensure that the individuals who are responsible for receiving complaints are well-trained** and are granted the requisite authority to meaningfully investigate complaints.
- **Clarify that once a complaint is made and an investigation underway, relevant supervisors should remain vigilant** and use the tools at their disposal to mitigate ongoing harassment and retaliation in a way that doesn't penalize the person who filed a

complaint. A complaint filing should not suggest to supervisors that they take no action of any kind.

- **Upon completing its investigation, the employer should inform the complainant and alleged harasser of its determination** and any corrective action that it will be taking, subject to applicable privacy laws.

The general contractor can play an oversight and coordinating role with regard to complaint systems across a worksite by:

- Seeking to ensure that all workers have multiple reporting channels to complain.
 - For example, confirming that every subcontractor has implemented a complaint channel, and then also providing an anonymous hotline for all workers.
- Considering use of shared, site-wide alternate complaint channels such as an ombudsperson or a hotline that accepts anonymous complaints.
- Training all workers on existing complaint channels, such as through an apprentice's registered program.
- Requiring each onsite employer to notify the general contractor of complaints it receives so that the general contractor can ensure that complaints are resolved promptly and effectively, without retaliation. The general contractor may also wish to periodically review complaints holistically and take action to address any patterns.
- Requiring each onsite employer to notify the general contractor of any complaint it may receive about the conduct of any worker, even if that worker is employed by a different entity. This enables the general contractor to facilitate re-routing the complaint to the most appropriate employer. It also provides visibility so that the general contractor can look out for and prevent any cross-entity retaliation.
- Periodically testing the complaint systems in place throughout the worksite to ensure they are working as intended and identifying and addressing any breakdowns. For example, an HR representative could call the hotline and ensure that the required next steps are followed.

D. Effective Harassment Training

Regular, interactive, and comprehensive training of all workers on a construction site can help ensure that the workforce understands applicable rules, policies, procedures, and expectations, as well as the consequences of misconduct. As with all aspects of harassment prevention, the training should be provided in a clear, easy to understand style in all languages commonly used by onsite workers.

Harassment Trainings may be most effective when they are:

- Tailored to the workforce and work environment.
- Developed and presented with input from worksite leaders and a cross-section of workers, including those in different trades, positions, and at different seniority levels. This will help ensure that the content, format, and delivery is inclusive, effectively tailored, and better received by the audience.

- Championed by senior leaders, including project owners/sponsors, general contractor leadership, crew leads/forepersons, and union representatives.
- Repeated and reinforced regularly, and, if appropriate, presented in brief segments, such as at the worksite morning meeting or through a toolbox talk. Such training can be repeated throughout a project's lifecycle to reach workers newly arrived onsite.
- Interactive. In most situations, live, interactive trainings are recommended. Given the dynamic nature of construction workforces, providing training through an interactive module accessible via mobile phone, or watching a series of shorter video clips and having a follow-up guided discussion about the clips, may be more feasible than live trainers.
 - Workers should be provided adequate time during the workday to complete training, whether online or in-person, including any follow up discussions or supplemental training.
- Structured to facilitate open communication. This may be best accomplished by holding separate sessions for supervisors/managers and non-supervisory employees to better tailor the sessions to their responsibilities and to encourage more frank conversations.
- Provided to workers, temps, apprentices, and supervisors (this applies regardless of whether they are employees or independent contractors or other types of workers), at all levels, supported by union representatives, and reinforced by apprenticeship programs, which should have their own policies and procedures.
- Routinely evaluated by participants and revised as necessary.
- Multifaceted to include expectations of civil and respectful treatment of others in the workplace. Such training should be structured so as not to discourage workers from reporting or opposing harassing conduct or otherwise interfering with their statutory rights.

The EEOC recommends comprehensive harassment trainings that include:

- Descriptions of prohibited harassment, including offensive or unsafe conduct that may constitute harassment in the particular context of construction.
- Descriptions and tailored examples of conduct that could constitute retaliation, along with an explanation of the types of activities that are protected from retaliation under federal employment discrimination laws.
- Information about what workers should do if they experience, observe, or become aware of conduct that they believe may be prohibited, and encouraging people to report it.
- A clear, simple, and specific explanation of the complaint process and all available complaint options, what happens after a complaint is made (typically investigation), and previewing that the range of disciplinary consequences will be proportionate to the conduct.
- Opportunities to ask questions about the training, harassment policy, complaint system, and related rules and expectations.

Additionally, worksites may benefit from training on how colleagues or others may choose to intervene when they witness harassment (bystander training) or are asked for help.

Additional training may be necessary for those with legal responsibilities.

Worksite leaders are encouraged to identify those with managerial or supervisory responsibility for preventing, stopping, and correcting harassment and ensure they have specific training on these legal obligations. Senior worksite leaders may also find it helpful to include additional employees who exercise authority, such as team leaders, or members of any committees focused on worker well-being.

Anti-harassment training for workers with managerial or supervisory responsibility or other worksite leadership roles might include, for example:

- Information about how to prevent, identify, stop, report, and correct harassment, such as:
 - Identification of potential risk factors for harassment and specific actions that may minimize or eliminate the risk of harassment;
 - Easy to understand, realistic methods for addressing harassment that they observe, that is reported to them, or that they otherwise learn of;
 - Clear instructions about their obligation to report harassment observed or reported to appropriate personnel; and
 - Explanations of confidentiality associated with harassment complaints.
- An unequivocal statement that retaliation is prohibited, a description and examples of conduct that could constitute retaliation and an explanation of the types of activities that are protected from retaliation under federal employment discrimination laws, such as:
 - Complaining or expressing an intent to complain about harassing conduct;
 - Resisting sexual advances or intervening to protect others from such conduct; and
 - Participating in an investigation about harassing conduct or other alleged discrimination.
- Explanations of the consequences (for example, discipline) of failing to fulfill their responsibilities related to harassment, retaliation, and other prohibited conduct.

APPENDIX A: Construction Industry Risk Factors for Harassment

The Co-Chair Task Force Report identified a number of “risk factors” in a workplace that increase the risk of harassment.¹⁶ The existence of one or more risk factors in a workplace does not necessarily mean that harassment will occur but may indicate an environment in which harassment may be more likely to arise. As such, it is particularly important for employers to remain vigilant and to take steps proactively to prevent harassment in industries where risk factors are present. Of the twelve risk factors identified in the Co-Chair Task Force Report, several are particularly applicable in the construction industry:

- 1. A homogenous workforce.** The risk of harassment may increase where there is a lack of diversity in the workplace. Women and certain people of color are historically and currently underrepresented in the construction industry, especially in the higher-paid, higher-skilled trades. Women make up just 11% of all workers in the construction industry—a figure that includes office and clerical positions—and only about 4% of workers in the trades, even though they make up 47% of the labor force.¹⁷ Black workers were nearly 13% of the U.S. labor force in 2023 but less than 7% of the construction workforce.¹⁸ Asian workers also make up a very small percentage of the construction workforce (1.7%) compared to their share of the overall labor force (6.9%).¹⁹ In addition, Black and Hispanic or Latino workers and women are disproportionately concentrated in lower-paying construction jobs.²⁰
- 2. Workplaces where there is pressure to conform to traditional stereotypes.** Harassment may be more likely to occur where a subset of workers do not conform to stereotypes. Such workers might include, for example, a woman who challenges gender norms by presenting as “tough enough” to do a job in a traditionally male-dominated environment like construction.
- 3. Decentralized workplaces.** Decentralized workplaces—those enterprises where corporate offices are far removed physically and/or organizationally from front-line

¹⁶ [EEOC Select Task Force on the Study of Harassment in the Workplace](#), Report of Co-Chairs Chai R. Feldblum and Victoria A. Lipnic (June 2016).

¹⁷ See [Household Data Annual Averages, Table 18, Employed persons by detailed industry, sex, race, and Hispanic or Latino ethnicity, 2022](#), *Labor Force Statistics from the Current Population Survey*, Bureau of Labor Statistics (last modified Jan. 26, 2024); Ariane Hegewisch and Eve Mefferd, [A Future Worth Building: What Tradeswomen Say about the Change They Need in the Construction Industry](#), Institute for Women’s Policy Research (November 2021). See also [Building an Equitable Construction Workforce: Understanding and Increasing the Proportion of Women and People of Color in Construction](#), Insight Policy Research (March 2024).

¹⁸ See [Household Data Annual Averages, Table 18, Employed persons by detailed industry, sex, race, and Hispanic or Latino ethnicity, 2022](#), *Labor Force Statistics from the Current Population Survey*, Bureau of Labor Statistics (last modified Jan. 26, 2024).

¹⁹ See [Household Data Annual Averages, Table 18, Employed persons by detailed industry, sex, race, and Hispanic or Latino ethnicity, 2022](#), *Labor Force Statistics from the Current Population Survey*, Bureau of Labor Statistics (last modified Jan. 26, 2024); [Household Data Annual Averages, Table 11, Employed persons by detailed occupation, sex, race, and Hispanic or Latino ethnicity](#), *Labor Force Statistics from the Current Population Survey*, Bureau of Labor Statistics (last modified Jan. 26, 2024).

²⁰ [Household Data Annual Averages, Table 11, Employed persons by detailed occupation, sex, race, and Hispanic or Latino ethnicity](#), *Labor Force Statistics from the Current Population Survey*, Bureau of Labor Statistics (last modified Jan. 26, 2024). See [Construction and Extraction Occupations](#), *Occupational Outlook Handbook*, Bureau of Labor Statistics (last modified Sept. 8, 2022).

employees or first-line supervisors—may foster a climate in which harassment may go unchecked. For workers on construction sites, being unable to “go down the hall” to HR or lacking the ability to seek out a more senior person besides a direct supervisor, may make seeking advice or reporting harassment more challenging. The lack of proximity to a central headquarters may also embolden potential harassers, who feel less direct accountability.

There are two additional features of construction worksites that can exacerbate the risk factors discussed above:

- 4. Worksites with Multiple Employers Present.** Typical workers on a construction worksite might be employed by the project owner (the entity initiating the project and hiring the general contractor), a general contractor, or various subcontractors, or could be a self-employed specialist or a temporary worker through a staffing agency. Though technically employed by different entities, these workers may work alongside each other on a daily basis. This structure also introduces the additional challenge of a dynamic workforce in which project supervisors and coworkers may shift throughout a project’s duration. It also introduces additional complexity in identifying retaliation, since a complaining worker may experience retaliation from their own employer and potentially other employers. It differs dramatically from many U.S. workplaces, in which a single employer is responsible for, and oversees compliance with, nondiscrimination requirements.
- 5. Cyclical, project-based work.** Work in the construction industry can be highly cyclical with seasonal downturns and variable demand, and only a small fraction of workers are employed as permanent core staff for one company. Most construction workers move from contract to contract and from jobsite to jobsite and are laid off after a project ends. The temporary nature of the work may make construction employees particularly vulnerable to retaliation, due to fears about the impact to livelihood that can result if a worker is blacklisted in the industry following a complaint of discrimination. The transitory nature of construction work may also present challenges when seeking culture change because worksite leaders may need to set expectations and implement new reporting processes at every new project. Finally, underrepresented workers may be discouraged from reporting harassment due to the cyclical nature of the work —after finding it necessary to “prove themselves” to coworkers and earn their trust and escape harassing treatment, the project ends, and the process starts all over again.

APPENDIX B

Additional Resources

EEOC Resources

[*Enforcement Guidance on Harassment in the Workplace*](#), U.S. Equal Employment Opportunity Commission (April 2024).

[*Building for the Future: Advancing Equal Employment Opportunity In the Construction Industry*](#), Report of Chair Charlotte A. Burrows, U.S. Equal Employment Opportunity Commission (May 2023).

[*Promising Practices for Preventing Harassment in the Federal Sector*](#), U.S. Equal Employment Opportunity Commission (April 2023).

[*Promising Practices for Preventing Harassment*](#), U.S. Equal Employment Opportunity Commission (November 2017).

[*Enforcement Guidance on Retaliation and Related Issues*](#), U.S. Equal Employment Opportunity Commission (August 2016).

[*EEOC Select Task Force on the Study of Harassment in the Workplace, Report of Co-Chairs Chai R. Feldblum and Victoria A. Lipnic*](#), U.S. Equal Employment Opportunity Commission (June 2016).

Other Resources

[*Best Practices to Expand Access to Jobs and Economic Opportunity Through Transportation Infrastructure Investments*](#), U.S. Department of Transportation (February 2024).

[*Tools For Building An Equitable Infrastructure Workforce*](#), U.S. Department of Labor Women's Bureau (September 2023).

[*The Good Jobs Initiative*](#), U.S Department of Labor.

Appendix D: City of Seattle Standard Specifications for Municipal Construction, Acceptable Work Sites

Acceptable Work Site

Acceptable Work Site is defined as a work site that is appropriate, productive, safe, free from bullying, hazing or harassment. An Acceptable Work Site is free from behaviors that may impair production, and/or undermine the integrity of the work conditions including but not limited to job performance, safety, productivity, or efficiency of workers.

Work Site

The Project Site and any field or company offices used for the Project, or other locations used in conjunction with the Project where Work is performed.

Non-Discrimination Requirements (1-07.11 (3))

The Owner will not enter into contracts with Contractors that do not agree to use Affirmative Efforts to employ or contract with women and minority group members as required under SMC 20.42, who do not agree to ensure an Acceptable Work Site, or who violate any provisions of that chapter, or those requirements set forth below.

Acceptable Work Site (New Section (1-07.11(4)A)

The Contractor must ensure an Acceptable Work Site and must include this Section in all subcontracts.

The intent of the person that appears to violate the Acceptable Work Site is not a measure of whether such behaviors are appropriate; rather the standard is whether a reasonable person should have known that such behavior would cause a worker to be humiliated, intimidated, or otherwise treated in an inappropriate, discriminatory, or differential manner.

Behaviors that violate an Acceptable Work Site include but are not limited to:

1. Persistent conduct that to the reasonable person would be perceived as offensive and unwelcome;
2. Conduct that a reasonable person would perceive to be harassing or bullying in nature;
3. Conduct that a reasonable person would perceive to be hazing;
4. Verbal references that a reasonable person would perceive to be offensive stereotypes or racial/gender slurs;
5. Jokes about race, gender, or sexuality that a reasonable person would perceive to be offensive;
6. Task assignments that stratify, or give a perception of stratification, based on race, gender, or other defining characteristics;

7. Language that a reasonable person would perceive to be offensive based on race, gender, or oriented towards sexuality;
8. Name-calling, cursing, or unnecessary yelling, including from a supervisor, foreman, or other more senior person, that a reasonable person would perceive as offensive;
9. Repeating rumors about individuals in the Work Site that a reasonable person would perceive as harassing or harmful to the individual's reputation;
10. Refusal to hire someone based on race, gender, sexuality, or any other protected class; and
11. References to or requests for immigration status other than those required by law, religious affiliation, gender affiliation, criminal background, or other related aspects of a worker unless mandated by federal law.

To maintain an Acceptable Work Site, all Work must be assigned in a manner that respects training objectives for apprentices and ensures an equitable distribution of meaningful work, training, and assignments among all workers.

While maintaining and managing an Acceptable Work Site is the Contractor's responsibility, each Subcontractor must also have accountability for performance in sustaining and managing their Work Sites. CPCS will monitor Work Sites to ascertain whether a risk or circumstance exists that may merit a remedy. Monitoring may include proactive observations of the Work Site, interviews of individuals familiar with the Work Site, collection of data that may evidence disparities, investigation of complaints by an individual familiar with the Work Site, or collection of other evidence. If risks or circumstances that may merit a remedy are discovered, CPCS will notify and collaborate with the prime Contractor to discuss appropriate remedies, and may likewise notify Subcontractors and appropriate unions when necessary for the resolution of the situation, except when unusual circumstances require confidentiality. CPCS may also require other remedies such as those found in Section 1-08.1(3), if CPCS regards the situation as urgent, of potential harm, or without timely resolution.

This Section is for the benefit of the Owner and its interest in the Project. It does not create any third-party beneficiaries or form the basis of any action against the Owner by a third party.

"2017 City of Seattle Standard Specifications for Municipal Construction: Acceptable Work Site Contract Provisions,"

<https://www.seattle.gov/documents/Departments/FAS/PurchasingAndContracting/WMBE/AWS-contract-provisions.pdf>.

Appendix E: Regional Workforce Equity Agreement

10.4 Recruitment and Retention Strategies. Prime Contractors, Subcontractors and Unions shall take the following steps to recruit and retain a diverse workforce: A. Prior to the start of construction, the Prime Contractor shall meet with the Unions and the Owner for the purpose of reviewing this Agreement and the projection of the workforce needs over the course of construction of each Covered Project.

B. Prime Contractors, Subcontractors and Unions shall work aggressively to recruit women and people of color for Covered Projects.

C. On at least an annual basis, Unions and Public Owners shall conduct or designate one or more events with women and people of color to enlist their assistance as recruiters and solicit their ideas on how to increase employment of underutilized groups. Such events shall be conducted or designated to function as recruiting sites for underutilized groups of workers, and shall be developed and operated in connection with local pre-apprenticeship programs. Prime Contractors, Unions, and each Subcontractor, in each case working on a Covered Project at the time of the events, shall attend and participate in such events.

D. Each Prime Contractor and Subcontractor shall provide all apprentices referred to such Prime Contractor or Subcontractor a fair chance to perform successfully, allowing for possible lack of previous experience, and shall recognize that such Prime Contractor or Subcontractor is responsible for providing on-the-job training and that all apprentices should not be expected to have previous experience.

E. Prime Contractors, Subcontractors and Unions shall participate in job fairs, school to-work, and community events to recruit women and people of color into the construction trades. The Prime Contractors, Subcontractors and Unions shall participate at least semi-annually for the duration of a Covered Project.

F. The Prime Contractor shall allow scheduled job site visits by participants in community programs, in conformance with the Prime Contractor's Project safety plan and requirements, to increase awareness of job and training opportunities in the construction trades.

G. Prime Contractors and Subcontractors shall ensure that their employees performing Covered Work are knowledgeable about the Prime Contractor's or Subcontractor's policies if they need to report a harassment problem. Prime Contractors will provide a complete orientation to the job site to all workers performing Covered Work, including procedures for reporting problems, and expected crew behaviors.

H. Prime Contractors and Subcontractors shall be BOLI-recognized Training Agents and abide by the apprenticeship standards of the BOLI-registered or BOLI-recognized program for the appropriate craft(s) from which they employ apprentices. Prime Contractors and Subcontractors shall make reasonable attempts to keep apprentices working and train them in all work processes described in the apprenticeship standards. Public Owners shall have the right to review training plans, apprentice work progress reports and hiring/worker retention to ensure compliance with this Agreement.

I. Each Prime Contractor and Subcontractor will review and disseminate, at least annually, their EEO policy and affirmative action obligations under this Agreement with all employees having any responsibility for hiring, assignment, layoff, termination or other employment decisions.

J. Prime Contractors and Unions shall regularly provide cultural competency training to all managers, supervisors and principals, and conduct a review, at least annually, of their adherence to and performance under EEO policies and any affirmative action obligations.

K. Prime Contractors and Unions shall take steps to reduce feelings of isolation among racial and ethnic minorities and women by making every attempt to have several racial and ethnic minorities and women at the job site and by informing such workers about available support systems.

L. Prime Contractors shall provide adequate toilet facilities for women on the job site, by maintaining a clean, accessible and locked toilet for female craft employees, and by removing graffiti immediately to help create a respectful environment.

M. Prime Contractors, Subcontractors, and Unions shall team minority, female, or disadvantaged apprentices who may need support to complete their apprenticeship programs with a late-term or journey-level mentor.

N. Prime Contractors, Subcontractors, and Unions shall maintain documentation of their compliance with the recruitment and retention strategies set forth above and shall submit such documentation to the Public Owners and the Regional Oversight Committee when requested, but not more frequently than semi-annually.

10.5 Anti-Harassment Protections. Prime Contractors, Subcontractors, Unions and Public Owners shall maintain Covered Project sites as harassment-free workplaces, and shall maintain a welcoming and open environment toward women, people of color, and all protected classes. The Parties shall work collaboratively to develop strengthened anti-harassment systems, and shall identify quality training programs regarding respectful workplaces and avoidance of harassment and discrimination on job sites. Unions, Prime Contractors and Subcontractors shall participate in such systems and programs as required by a Public Owner for that Public Owner's Covered Projects.

10.6. No Discrimination. The parties recognize and agree that the discrimination against and the harassment of an individual because of the individual's sex, gender identity/expression, race, religion, age, national origin or disability, and other state or federally protected class is adverse to the interest of workers, Unions, Prime Contractors, Subcontractors, and Public Owners. Such discrimination and harassment is prohibited by this Agreement, and constitutes grounds for discipline against employees, and contractual remedies against parties that initiate, permit, or facilitate it. It is the duty of the employer to provide a work environment free from unlawful discrimination, workplace harassment, and sexual harassment. It is the duty of employees to conduct themselves in a professional and respectful manner. It is the duty of Unions and Public Owners to prohibit and avoid discrimination and harassment in all operations related to Covered Projects. Those in leadership, supervisory, or management roles shall be held to a higher standard and must be proactive in creating and maintaining operations free of harassment and discrimination.

“Regional Workforce Equity Agreement,” February 7, 2022,
<https://www.portland.gov/sites/default/files/council-documents/2022/rwea-february-7-2022-final-rev.pdf>.

Appendix F: King County Respectful Worksites Policy

WHAT IS A RESPECTFUL WORKSITE?

Respectful Worksite means a worksite that is respectful and free of all forms of harassment, including sexual harassment and bullying. A Respectful Worksite is void of behaviors that would reasonably offend, intimidate, embarrass, or humiliate others, whether deliberately or unintentionally that may harm production, and or work conditions including but not limited to job performance, safety or the productivity of workers.

THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING A RESPECTFUL WORKSITE AND FOR:

The Contractor is responsible for maintaining a Respectful Worksite and for:

- a. Acting promptly and appropriately to prevent discrimination, harassment, retaliation, or inappropriate conduct in the workplace.
- b. Reporting any incident of discrimination, harassment, retaliation, or inappropriate conduct that they witness or is otherwise brought to the attention of the Contractor; and,
- c. Receiving and handling allegations of discrimination, harassment, retaliation, or inappropriate conduct promptly and appropriately.

CONSEQUENCES OF NON-COMPLIANCE

The Contractor and all parties subcontracting under the authority of this Contract shall comply fully with all applicable federal, state, and local laws, ordinances, executive orders, and regulations that prohibit discrimination. These laws include, but are not limited to, RCW Chapter 49.60, Titles VI and VII of the Civil Rights Act of 1964, the American with Disabilities Act, and the Restoration Act of 1987. In addition, KCC 12.16, 12.17 and 12.18 are incorporated herein by reference and the requirements in these code sections shall specifically apply to this contract. Any violation of the requirements of the provisions of this Section 00120 shall be a material breach of contract, which may result in termination of this Contract or such other remedy as the County deems appropriate, including but not limited to damages or withholding payment, cancellation or suspension, in whole or in part, of the Contract by the County, or invoking the enforcement provisions of KCC 12.16 that provide for penalties, liquidated damages or other remedies, and may result in ineligibility for County contracts.

RESPONSIBILITIES AND COMMITMENTS

- King County is committed to maintaining a respectful, productive, inclusive, and equitable worksite.
- King County expects that all Contractors and their officers, employees, agents, or subcontractors of all tiers will act with fairness, civility, integrity, and treat all employees equitably.
- Discrimination, harassment, retaliation, and other inappropriate conduct that undermines the integrity of the employment relationship are prohibited.

- King County will investigate all complaints of conduct inconsistent with these expectations, regardless of whether the conduct rises to the level of unlawful discrimination, harassment, or retaliation.
- Substantiated complaints will result in prompt, corrective action, up to and including termination of the employee from the Worksite and or cancellation of the contract or subcontract for default at no cost to King County, and any other remedy allowed by law.
- King County prohibits discrimination or harassment related to a person's race, color, sex, age, creed, disability, marital status, national origin, religion, pregnancy, gender, gender identity or expression, genetic information, sexual orientation, veteran or military status, use of a service animal, and any other status protected by federal, state, and local law.
- King County prohibits retaliation of any kind against employees, who in good faith, report harassment, discrimination, or retaliation, or assist in the investigation of such complaints.

DEFINITIONS

Respectful Worksite

Respectful Worksite means as a Worksite that is appropriate, safe, productive, and free of bullying, hazing, or harassment. An Acceptable Worksite is free from behaviors that may impair production, and/or undermine the integrity of the work conditions including but not limited to job performance, safety, productivity, or efficiency of workers.

Worksite

Worksite refers to the location at which construction, equipment or services furnished by the Contractor under the Contract will be performed, completed and or delivered.

Discrimination

Discrimination occurs when an employer takes a discrete adverse employment action against an employee and the employee's protected status was a substantial factor in the employer's decision.

Discrete Adverse Employment Action

Discrete Adverse Employment Action is an action that substantially affects the terms, conditions, or privileges of employment. It includes, but is not limited to, discipline, discharge, layoff and a failure to hire or promote.

- In the case of retaliation, an action would discourage a reasonable employee from making a complaint or participating in a discrimination, harassment, or retaliation investigation or proceeding.

Protected Status

Protected Status includes an employee's sex, age, creed, disability, marital status, national origin, race, color, religion, pregnancy, gender, gender identity or expression, genetic information, sexual orientation, veteran or military status, use of a service animal, and any other status protected by federal, state, and local law.

Harassment

Harassment is unwelcome conduct that can take many forms, including but not limited to, innuendoes, unwelcome compliments, suggestive or insulting noises, facial expressions, vulgar language, nicknames, slurs, derogatory comments, cartoons, jokes, pranks, written materials, and offensive gestures or touching. It is illegal when:

- Enduring the conduct becomes a condition of continued employment; or
- The conduct is severe or pervasive enough to create an environment that a reasonable person would consider intimidating, hostile, or abusive.

Sexual Harassment

Sexual Harassment occurs when unsolicited and unwelcome sexual advances, requests for sexual favors, displays of sexually oriented material, or other verbal or physical conduct of a sexual nature:

- Is explicitly or implicitly made a term or condition of employment.
- Is used as a basis for an employment decision; or
- Unreasonably interferes with an employee's work performance, or creates an intimidating, hostile, or otherwise offensive environment.
- Both the victim and the harasser can be the same gender or gender identity.

Retaliation

Retaliation occurs when a supervisor or manager takes a discrete adverse employment action against an employee because the employee reported discrimination, harassment or retaliation or assisted in the investigation or proceeding of such complaints.

Inappropriate Conduct

Inappropriate Conduct is conduct that, while not rising to the level of unlawful discrimination or harassment, communicates a hostile, derogatory, or negative message about persons based on protected status. Inappropriate conduct can be either verbal or nonverbal and includes slights, insults, and other conduct that a reasonable person would find offensive.

"Respectful Worksite Language," King County, Washington, 2024,

<https://kingcounty.gov/en/legacy/depts/finance-business-operations/business-development-contract-compliance/programs/PriorityHire/RespectfulWorksiteLanguage.aspx>.



Task 3: Workforce Demand and Gap Analysis Report

November 2024

Submitted to:
Riley O'Brien, Estolano Advisors
Michael Flores, Los Angeles County
Metropolitan Transportation Authority
(Metro)
Sidney Urmancheev, Metro

Submitted by:
Renee Rainey, ICF
Dominic Modicamore, ICF
Hannah Shepard-Moore, ICF

Table of Contents

Introduction	3
A & B: Current and Future Workforce Demand	3
1. Historical and Current Workforce Demand	8
1.1 Historical Occupational Trends	8
1.2 Historical and Current Hiring Trends	13
1.3 Occupational Landscape and Current Female Employment.....	14
2. Future Workforce Demand.....	18
2.1 Projected Employment Demand in 2026 and 2033.....	18
2.2 Projected Demand on Metro Projects in Annual Hours by Craft and Trade, 2026 and 2033.....	21
C& D Current and Future Workforce Gap Analyses	29
3. Current and Future Workforce Gap Analyses.....	29
3.1 Projected Female Metro Workforce Gap.....	29
3.2 Projected Female Metro Workforce Gap by Trade.....	33
3.3 Projections for Achieving 6.9% Female Utilization	37
Appendices	38
Appendix A: Occupation Mapping.....	38
Appendix B: Historical and Current Monthly Average Hires by Occupation in Greater LA Area.....	40
Appendix C: STATA Correlation Table	42
Appendix D: Projected Labor Demand and Female Labor Demand Gap from 2024 – 2033.....	43
Appendix E: Projected Female Labor Demand Gap from 2024 – 2033, by Trade.....	66
Appendix F: Percent Female Labor Supply Available for Metro Projects (Average 2019-2023)	74
Appendix G: Calculated Annual Female Utilization Rates by Trade, 2024-2045.....	75



Introduction

The ICF Team was contracted by Estolano Advisors as a subcontractor for Los Angeles County Metropolitan Transportation Authority (Metro) to identify current and projected future workforce demand amongst selected construction-related occupations and the current and projected future gap of female workers in the Greater Los Angeles (LA) Area. This data analysis is part of the larger analysis conducted by Estolano Advisors to determine availability of unionized female workers in construction to support Metro's motion to meet a female labor utilization goal of 6.9% for hours worked on federally funded construction projects and identify strategies and recommendations for mitigating the underrepresentation of women in construction. The 2024 study is an update of the Metro Disparity Workforce Study¹ conducted in 2019. At the end of 2023, Metro was averaging 3.78% female participation on active projects and 3.65% on all active and closed projects.² By April 2024, female participation on active projects increased to 3.88% and 3.68% on active and closed projects combined.³

A & B: Current and Future Workforce Demand

The Greater LA Area remains in a period of robust construction activity shaped by Federal and local investments including:

- **Federal Infrastructure Investment and Job Act (IIJA)** – also known as the Bipartisan Infrastructure Law – under which California has received over \$30B in investments to upgrade roads, bridges, rail, public transit, airports and ports and other infrastructure.⁴
- **Federal Inflation Reduction Act (IRA)** – which requires prevailing wage standards in Clean Energy construction projects⁵ and provided a \$412M grant to the Port of Los Angeles to electrify operations.⁶
- **Measure M** – a LA County sales tax for transportation investment passed in 2016 that includes a 40-year investment and expenditure plan to improve equity and transportation infrastructure.⁷
- **Metro's Twenty-Eight by '28 Initiative** – an accelerated set of transit, highway, and bike projects planned to be completed by the 2028 Olympic and Paralympic Games.⁸
- **California Senate Bill 1 (Road Repair and Accountability Act of 2017)** – a statewide gas-tax that increased transportation infrastructure investments in roads, freeways, bridges, and transit by \$5.4 billion annually.⁹

Metro has recently concluded or will conclude shortly several large capital construction projects including:

- **Regional Connector Transit Corridor** – a two-mile light rail connector in downtown Los Angeles, which cumulatively over its lifetime will represent over 5M in construction hours.¹⁰

¹ Estolano LeSar Advisors with ICF and Inclusive Economics (2019). *Metro Disparity Workforce Study*.

² PLA Reports provided by Metro.

³ [Female Participation Score Card](#), sourced from the Project Labor Agreement (PLA)/ Construction Careers Policy (CCP) Report Construction Committee Update on May 16, 2024 and Metro shared data from June 2024 internal PLA report.

⁴ About IIJA, [IIJA: Bolstering California's transportation investments](#).

⁵ Center for American Progress, September 14, 2022, [The Inflation Reduction Act Provides Pathways to High-Quality Jobs - Center for American Progress](#)

⁶ Port of Los Angeles, October 29, 2024, [Port of Los Angeles Awarded \\$412 Million Grant from U.S. EPA for Zero-Emission Transformation | News | Port of Los Angeles](#)

⁷ Metro, L.A. Metro Releases Measure M Five-Year Comprehensive Assessment, Equity Report, November 1, 2023, <https://www.metro.net/about/l-a-metro-releases-measure-m-five-year-comprehensiveassessment-equity-report/>

⁸ Metro 28 Projects by 28, [28 Projects by 2028 Games - LA Metro](#).

⁹ Landmark Transportation Investment, [About SB 1](#).

¹⁰ Metro provided PLA Reports and Metro Project Management Dashboard, <https://mtadash.mlmpojectservices.com/projects/5773#/scope>.

- **Airport Metro Connector** – a transportation center along the Crenshaw/LAX Line in the final stages of construction that will connect the Metro bus and rail system to Los Angeles International Airport (LAX).¹¹
- **Crenshaw/LAX Transit Corridor** – completed in 2022 and providing major transit links between LAX and cities to the south including Inglewood, El Segundo and Hawthorne. It represented over 9.5M hours in construction labor.¹²

Construction continues or is in the pre-construction assessment and planning phases for other major regional projects through Metro and other agencies. Notable projects include:

- **Metro Westside Purple Line Extension Projects** (Sections 1, 2, 3) to be completed in 2025, 2026, 2027.¹³
- **Metro Gold Line Foothill Extension** – phases expected to be completed in 2025 and 2028.¹⁴
- **Metro Southeast Gateway Line** – a \$7B 14.5-mile light rail transit line to southeast LA County projected to open in 2035.¹⁵
- **Southern California Optimized Rail Expansion (SCORE) program** – through the Southern California Regional Rail Authority, a series of ongoing Metrolink commuter rail enhancement and expansion projects totaling over \$10 billion to improve regional rail service completed from 2023-2028¹⁶
- **Metro East San Fernando Valley Light Rail Transit Project** – a \$3.57B project to improve connections to East San Fernando Valley. The 6.7-mile southern segment includes 11 new stations and a Maintenance & Storage Facility and is forecasted to open in 2031.¹⁷
- **Link Union Station** – a mega-project transforming Union Station from stub end tracks station into a run-through tracks station creating a primary transportation hub for the region that could begin construction as early as 2025.¹⁸
- **Los Angeles International Airport (LAX) Modernization** – \$30 billion in Capital improvement projects, many of which are already complete or underway. Los Angeles World Airports (LAWA) has indicated projects will shift from terminal builds to improving existing infrastructure in reaction to slower post-pandemic passenger volume returns.¹⁹
- **LA Convention Center (LACC) Expansion and Modernization Project** – an LA City \$1.5B design/build expansion in partnership with the private sector is slated to start construction in 2025 and be complete by 2028.²⁰
- **Los Angeles County Harbor-UCLA Medical Center Replacement Project** – led by Los Angeles County Public Works, a \$1.7B project that will construct six new buildings on the Harbor-UCLA campus by 2027.²¹
- **Los Angeles Community College District infrastructure projects** – such as the new academic building at LA Pierce College funded by \$15B in bond investments.²²

¹¹ Metro provided PLA Reports and Metro Project Management Dashboard, <https://mtadash.mlmpojectservices.com/projects/1403#/status>

¹² Metro provided PLA Reports and Metro Project Management Dashboard, <https://mtadash.mlmpojectservices.com/projects/1203#/status>.

¹³ Metro Program Management Master Schedule, January 2024 and <https://mtadash.mlmpojectservices.com/?portfolio=Transit>

¹⁴ Metro Program Management Master Schedule, January 2024 and Metro Projects, <https://www.metro.net/projects/foothill-extension/>

¹⁵ <https://la.streetsblog.org/2024/10/31/metro-breaks-ground-on-early-phase-of-southeast-gateway-light-rail-construction>

¹⁶ [SCORE | Metrolink](#)

¹⁷ L.A. Metro Awarded an \$893 Million U.S. Department of Transportation Grant to Help Fund New 6.7 Mile East San Fernando Valley Light Rail Transit Project, September 6, 2024. <https://www.metro.net/about/l-a-metro-awarded-an-893-million-u-s-department-of-transportation-grant-to-help-fund-new-6-7-mile-east-san-fernando-valley-light-rail-transit-project/>

¹⁸ Metro Link Union Station, <https://www.metro.net/projects/link-us/>

¹⁹ LA Times, <https://www.latimes.com/california/story/2024-09-06/lax-shifts-focus-from-terminal-expansion-to-infrastructure-updates-as-passenger-forecasts-drop>. September 6, 2024.

²⁰ <https://la.urbanize.city/post/city-council-gives-go-ahead-convention-center-expansion-plan>

²¹ [Harbor-UCLA Medical Center Replacement Program - LA County Public Works](#)

²² <https://www.build-laccd.org/about-buildlaccd/the-bond-measure/> and <https://www.laccd.edu/news/construction-starts-new-academic-east-building>.

The California Employment Development Department (EDD) projected that from 2020-2030, the Los Angeles region construction industry would see 15.7% growth (1.6% annualized).²³

Federal funding from the IJA and the IRA as well as demand for housing developments has spurred the demand for construction and infrastructure projects. However, there are forces that may temper construction growth such as inflation, price volatility of material costs, and labor shortages.²⁴

For the purposes of this analysis, the Greater LA Area consists of five counties including LA County, Orange County, Riverside County, San Bernardino County, and Ventura County.²⁵ Per Metro request, the 34 occupations identified for analysis, mirror the 34 occupations used in the 2019 study. Occupations are characterized according to the Bureau of Labor Statistics' (BLS) standard occupational classification (SOC) system²⁶ (Exhibit 1). The ICF Team collected unionized and non-unionized employment data for the 34 occupations across all industry sectors.

Exhibit 1: Selected SOC Occupations

SOC	Occupation
17-1022	Surveyors
37-3011	Landscaping and Groundskeeping Workers
47-2021	Brickmasons and Blockmasons
47-2022	Stonemasons
47-2031	Carpenters
47-2042	Floor Layers, Except Carpet, Wood, and Hard Tiles
47-2051	Cement Masons and Concrete Finishers
47-2053	Terrazzo Workers and Finishers
47-2061	Construction Laborers
47-2071	Paving, Surfacing, and Tamping Equipment Operators
47-2072	Pile-Driver Operators
47-2073	Operating Engineers and Other Construction Equipment Operators
47-2081	Drywall and Ceiling Tile Installers
47-2082	Tapers
47-2111	Electricians
47-2121	Glaziers
47-2131	Insulation Workers, Floor, Ceiling, and Wall
47-2132	Insulation Workers, Mechanical
47-2141	Painters, Construction and Maintenance
47-2151	Pipelayers

²³ California Employment Development Department. (2023). *Employment Projections*. Retrieved July 03, 2024. <https://labormarketinfo.edd.ca.gov/data/employment-projections.html>

²⁴ Los Angeles County Metropolitan Transit Authority. (2024, March). 2023 Construction market analysis: <https://boardagendas.metro.net/board-report/2024-0009/>

²⁵ United States Office of Management and Budget (2018). *OMB BULLETIN NO. 18-04*. Retrieved from <https://www.whitehouse.gov/wp-content/uploads/2018/09/Bulletin-18-04.pdf>.

²⁶ United States Department of Labor, Bureau of Labor Statistics. *Standard Occupational Classification (SOC)*. Retrieved July 12, 2024 from <https://www.bls.gov/soc/>.

SOC	Occupation
47-2152	Plumbers, Pipefitters, and Steamfitters
47-2161	Plasterers and Stucco Masons
47-2171	Reinforcing Iron and Rebar Workers
47-2181	Roofers
47-2211	Sheet Metal Workers
47-2221	Structural Iron and Steel Workers
47-4011	Construction and Building Inspectors
47-4021	Elevator and Escalator Installers and Repairers
47-4041	Hazardous Materials Removal Workers
47-4061	Rail-Track Laying and Maintenance Equipment Operators
49-9051	Electrical Power-Line Installers and Repairers
51-4032	Drilling and Boring Machine Tool Setters, Operators, and Tenders, Metal and Plastic
51-9023	Mixing and Blending Machine Setters, Operators, and Tenders
53-3032	Heavy and Tractor-Trailer Truck Drivers

The ICF Team conducted analyses using labor market information from Lightcast Developer, a labor market analytics tool from Lightcast (formerly Emsi Burning Glass), a leading labor market data vendor.²⁷ Lightcast compiles data from a wide variety of government sources and job postings including information on employment, skills, and labor force supply and demand and includes both union and non-union employment.

ICF also utilized LCPtracker data, provided by Estolano Advisors and Metro, to determine Metro’s unionized workforce projections and employment rates relative to the Greater LA Area. The LCPtracker data included employment information by craft for contractors working on Metro projects. A separate LCPtracker dataset covered the Greater LA area (five county area) and included employment information for contractors and workers subject to prevailing wage laws. Metro crafts were mapped to their most closely associated SOC occupation, based on the mapping conducted in 2019 using the California Apprenticeship Coordinators Association (CalApprenticeship.org) and updated in 2024 to include new crafts. Each craft from LCPtracker was successfully mapped to an associated SOC occupation. See Occupation Mapping in Appendix A.

Given that Metro’s construction workforce is comprised of unionized workers, the ICF Team identified the 2023 national average union membership among the selected 34 SOC occupations to determine the percentage of unionized workers in each SOC occupation. To identify the percentage of labor union membership for each SOC occupation, the ICF Team mapped each SOC occupation to its equivalent Census Occupation Code (COC), a designation used in the Union Membership and Coverage Database prepared using data from the Census Bureau’s Current Population Survey (CPS).²⁸ The equivalent COC occupations represent the following industries: “Architecture and Engineering Occupations,” “Construction and Extraction Occupations,” “Installation, Maintenance, and Repair Occupations,” and “Transportation and Material Moving Occupations.” Once mapped, the ICF Team leveraged the *Union Membership, Coverage, Density, and Employment by*

²⁷ Lightcast Data is a combination of labor market information, job postings, global data, skills data, compensation data, and online profiles. Lightcast compiles data from more than 90 government and private-sector sources (including official, published data from BLS, BEA, Census, and other agencies). More information on Lightcast data can be found here: <https://lightcast.io/products/data/overview>

²⁸ Barry T. Hirsch, David A. Macpherson, and William E. Even. Hirsch, B.T., Macpherson, D. A, and Even, W.E. (2024). *Union Membership, Coverage, and Earnings from the CPS*. Retrieved August 05, 2024 from <http://www.unionstats.com/>. and Hirsch, B.T., Macpherson, D. A. & Even, W. E. (2024, January 16). *Union Membership, Coverage, Density, and Employment by Occupation, 1983-2023*. Union Membership and Coverage Database from the CPS. Retrieved August 05, 2024 from <http://www.unionstats.com/>.

Occupation²⁹ data table for 2023 to populate the national average labor union metric for each SOC occupation shown below in Exhibit 2.

Six sets of SOC occupations (“Reinforcing Iron and Rebar Workers” and “Structural Iron and Steel Workers”; Brickmasons and Blockmasons” and “Stonemasons”; “Cement Masons and Concrete Finishers” and “Terrazzo Workers and Finishers”; “Operating Engineers and Other Construction Equipment Operators” and “Pile-Driver Operators”; “Drywall and Ceiling Tile Installers” and “Tapers”; and “Insulation Workers, Floor, Ceiling, and Wall” and “Insulation Workers, Mechanical) have the same union data percentages because they are grouped under the same COC. In the Greater LA Area in 2023, 15.1% of all workers were members of a union, which is about the same as the rates in California as a whole (15.4% in 2023). For the private construction industry in the Greater LA Area, 15.1% of workers were members of a union while the statewide rate was 16.8%.³⁰ The rate of union membership for the construction industry in the Greater LA Area and California was higher than the national average (10.7%) in 2023.³¹

Exhibit 2: National Average of Union Membership in 2023

SOC	SOC Occupation	% Employed Members of a Union
47-4021	Elevator and Escalator Installers and Repairers	75.00%
47-4061	Rail-Track Laying and Maintenance Equipment Operators	48.52%
47-2171	Reinforcing Iron and Rebar Workers	41.49%
47-2221	Structural Iron and Steel Workers	41.49%
49-9051	Electrical Power-Line Installers and Repairers	35.99%
47-2211	Sheet Metal Workers	34.67%
47-2111	Electricians	28.63%
47-2121	Glaziers	24.97%
47-2152	Plumbers, Pipefitters, and Steamfitters	22.29%
47-4011	Construction and Building Inspectors	21.18%
47-2051	Cement Masons and Concrete Finishers	21.12%
47-2053	Terrazzo Workers and Finishers	21.12%
47-4041	Hazardous Materials Removal Workers	21.08%
47-2131	Insulation Workers, Floor, Ceiling, and Wall	18.06%
47-2132	Insulation Workers, Mechanical	18.06%
47-2072	Pile Driver Operators	17.80%
47-2073	Operating Engineers and Other Construction Equipment Operators	17.80%
47-2071	Paving, Surfacing, and Tamping Equipment Operators	17.78%
47-2021	Brickmasons and Blockmasons	17.34%
47-2022	Stonemasons	17.34%
47-2161	Plasterers and Stucco Masons	16.95%

²⁹ Ibid.

³⁰ Ibid.

³¹ Bureau of Labor Statistics, Union Membership (Annual) News Release (2024, January 23), Table 3. Union affiliation of employed wage and salary workers by occupation and industry, 2022-2023 annual. Retrieved from: <https://www.bls.gov/news.release/pdf/union2.pdf>.

SOC	SOC Occupation	% Employed Members of a Union
47-2031	Carpenters	13.84%
51-4032	Drilling and Boring Machine Tool Setters, Operators, and Tenders, Metal and Plastic	11.10%
47-2061	Construction Laborers	10.35%
53-3032	Heavy and Tractor-Trailer Truck Drivers	9.60%
47-2042	Floor Layers, Except Carpet, Wood, and Hard Tiles	6.85%
17-1022	Surveyors	6.54%
47-2181	Roofers	6.09%
51-9023	Mixing and Blending Machine Setters, Operators, and Tenders	5.97%
37-3011	Landscaping and Groundskeeping Workers	5.81%
47-2141	Painters, Construction and Maintenance	5.36%
47-2081	Drywall and Ceiling Tile Installers	3.76%
47-2082	Tapers	3.76%
47-2151	Pipelayer	3.03%

Source: Hirsch, B.T., Macpherson, D. A. & Even, W. E. (2024, January 16). *Union Membership, Coverage, Density, and Employment by Occupation, 1983-2023*. Union Membership and Coverage Database from the CPS. Retrieved August 05, 2024 from <http://www.unionstats.com/>. and Hirsch, B.T. & Macpherson, D. A. (2003). *Union Membership and Coverage Database from the Current Population Survey*. Industrial and Labor Relations Review, Vol. 56, No. 2, 349-54. Retrieved August 05, 2024 from <http://www.unionstats.com/>.

1. Historical and Current Workforce Demand

This section examines historical and current employment trends, hiring trends, and female employment (both unionized and non-unionized) in the Greater LA Area across the selected 34 occupations.

1.1 Historical Occupational Trends

The ICF Team analyzed data from 2008 to 2023 in the Greater LA Area and calculated the percentage change across that 15 year-span and between each five-year increment. Exhibit 3 includes the 34 SOC occupations (comprised of unionized and non-unionized employment) with their associated percentage change every five years and the net percentage change from 2008 to 2023. While 2008 was a peak year for the construction industry, a significant decline in construction employment is evident between 2008 and 2013 due to the 2007-2009 economic recession. Construction was one of the hardest-hit industries by the Great Recession, experiencing its largest percentage decline in employment since the mid-1940s.³² According to BLS data, between 2007 and 2012, employment in construction fell by 35% in the U.S. and 51% in California.³³ Between 2013 and 2018, employment in construction slowly recovered, but only slightly above half (55%) of the 34 target occupations surpassed 2008 levels.

Of note, the “Floor Layers, Except Carpet, Wood, and Hard Tiles” occupation (including unionized and non-unionized workers in the Greater LA Area) experienced the most growth during this 15 year-span, as the number of jobs more than doubled from

³² United States Department of Labor, Bureau of Labor Statistics. (2012). Spotlight on Statistics: The Recession of 2007-2009. Retrieved from <https://www.bls.gov/spotlight/2012/recession/>.

³³ United States Department of Labor, Bureau of Labor Statistics. (2018). Quarterly Census of Employment and Wages. Retrieved from <https://www.bls.gov/qcew/>.

1,525 in 2008 to 3,490 in 2023 (an increase of 129%). Additionally, while the “Hazardous Materials Removal Workers” occupation had 1,666 union and non-union jobs in the Greater LA Area in 2008, this occupation experienced 103% growth by 2023. On the other hand, “Terrazzo Workers and Finishers” had 419 workers in 2008 and only 29 workers in the Greater LA Area in 2023 (a decrease of 93%) and “Drilling and Boring Machine Tool Setters, Operators, and Tenders, Metal and Plastic,” and the “Tapers,” occupations also greatly declined over the past 15 years, having reductions of 76% and 49%, respectively. Of the top volume occupations, “Heavy and Tractor-Trailer Truck Drivers” grew from 80,995 jobs in 2008 to 124,236 jobs in 2023, a 53% growth rate and “Electricians” grew from 27,352 to 33,968, a 24% growth between 2008 and 2023.

Despite the declines in employment during the recession, from 2008 to 2023, the Greater LA Area experienced nearly 5% growth in employment across the selected 34 SOC occupations. In the more recent period, 2018-2023, employment grew more slowly across selected occupations with an increase from 504,022 jobs to 507,238 (.64% growth). Overall, the breakdown of the historical employment trends by occupation in Exhibit 3 demonstrates significant historical growth for some occupations (indicating strong and consistent demand for these specific jobs and their required skill sets) and substantial decline for others.

Exhibit 3: Historical Employment Trends (Unionized and Non-unionized) by Occupation in Greater LA Area from 2008-2023

SOC	Occupation	Jobs (2008)	Jobs (2013)	% Change (2008-2013)	Jobs (2018)	% Change (2013-2018)	Jobs (2023)	% Change (2018-2023)	% Change (2013-2023)	% Change (2008-2023)
17-1022	Surveyors	2,628	1,709	-34.98%	1,625	-4.89%	1,792	10.24%	4.85%	-31.83%
37-3011	Landscaping and Groundskeeping Workers	81,476	75,638	-7.17%	75,029	-0.80%	70,376	-6.20%	-6.96%	-13.62%
47-2021	Brickmasons and Blockmasons	5,038	3,247	-35.55%	2,920	-10.07%	2,595	-11.12%	-20.07%	-48.48%
47-2022	Stonemasons	1,564	1,030	-34.17%	1,356	31.74%	854	-37.00%	-17.00%	-45.37%
47-2031	Carpenters	67,009	59,437	-11.30%	70,714	18.97%	65,452	-7.44%	10.12%	-2.32%
47-2042	Floor Layers, Except Carpet, Wood, and Hard Tiles	1,525	1,349	-11.56%	2,118	57.02%	3,490	64.78%	158.73%	128.83%
47-2051	Cement Masons and Concrete Finishers	10,404	9,038	-13.13%	11,992	32.67%	13,277	10.72%	46.90%	27.62%
47-2053	Terrazzo Workers and Finishers	419	236	-43.66%	118	-50.14%	29	-75.22%	-87.64%	-93.04%
47-2061	Construction Laborers	71,778	65,041	-9.39%	72,066	10.80%	63,086	-12.46%	-3.01%	-12.11%
47-2071	Paving, Surfacing, and Tamping Equipment Operators	1,933	2,166	12.03%	1,354	-37.50%	1,002	-25.94%	-53.71%	-48.14%
47-2072	Pile Driver Operators	147	148	0.40%	186	26.08%	295	58.44%	99.77%	100.56%
47-2073	Operating Engineers and Other Construction Equipment Operators	11,238	10,271	-8.60%	11,436	11.34%	13,954	22.02%	35.86%	24.17%
47-2081	Drywall and Ceiling Tile Installers	14,245	11,760	-17.45%	15,858	34.85%	14,939	-5.79%	27.03%	4.87%

SOC	Occupation	Jobs (2008)	Jobs (2013)	% Change (2008-2013)	Jobs (2018)	% Change (2013-2018)	Jobs (2023)	% Change (2018-2023)	% Change (2013-2023)	% Change (2008-2023)
47-2082	Tapers	4,012	3,041	-24.21%	3,423	12.57%	2,037	-40.48%	-33.00%	-49.22%
47-2111	Electricians	27,352	28,226	3.20%	33,851	19.93%	33,968	0.35%	20.34%	24.19%
47-2121	Glaziers	2,504	2,398	-4.25%	2,897	20.84%	3,464	19.57%	44.49%	38.34%
47-2131	Insulation Workers, Floor, Ceiling, and Wall	924	775	-16.12%	1,025	32.21%	676	-34.08%	-12.85%	-26.89%
47-2132	Insulation Workers, Mechanical	677	678	0.08%	356	-47.41%	381	7.01%	-43.72%	-43.68%
47-2141	Painters, Construction and Maintenance	27,830	26,415	-5.08%	28,071	6.27%	24,764	-11.78%	-6.25%	-11.02%
47-2151	Pipelayers	1,806	1,686	-6.64%	1,203	-28.65%	1,084	-9.93%	-35.74%	-40.01%
47-2152	Plumbers, Pipefitters, and Steamfitters	21,864	20,107	-8.04%	23,409	16.43%	22,706	-3.01%	12.92%	3.85%
47-2161	Plasterers and Stucco Masons	6,614	3,662	-44.63%	4,059	10.82%	3,612	-11.02%	-1.39%	-45.39%
47-2171	Reinforcing Iron and Rebar Workers	2,439	1,838	-24.62%	2,188	19.02%	1,862	-14.93%	1.25%	-23.68%
47-2181	Roofers	8,081	7,808	-3.37%	9,408	20.48%	9,277	-1.39%	18.80%	14.80%
47-2211	Sheet Metal Workers	6,460	5,987	-7.32%	5,892	-1.60%	4,654	-21.00%	-22.26%	-27.95%
47-2221	Structural Iron and Steel Workers	3,055	3,041	-0.45%	4,469	46.94%	3,816	-14.62%	25.46%	24.90%
47-4011	Construction and Building Inspectors	5,071	4,507	-11.12%	5,348	18.67%	6,386	19.39%	41.68%	25.93%
47-4021	Elevator and Escalator Installers and Repairers	1,139	962	-15.56%	1,202	25.03%	1,092	-9.21%	13.52%	-4.14%
47-4041	Hazardous Materials Removal Workers	1,666	1,854	11.27%	2,981	60.84%	3,382	13.44%	82.45%	103.00%
47-4061	Rail-Track Laying and Maintenance Equipment Operators	432	460	6.52%	405	-12.09%	424	4.81%	-7.87%	-1.86%
49-9051	Electrical Power-Line Installers and Repairers	3,047	3,397	11.49%	3,703	9.00%	3,900	5.34%	14.82%	28.01%
51-4032	Drilling and Boring Machine Tool Setters, Operators, and Tenders, Metal and Plastic	1,957	1,631	-16.68%	1,189	-27.06%	467	-60.76%	-71.38%	-76.15%
51-9023	Mixing and Blending Machine Setters, Operators, and Tenders	7,263	6,295	-13.33%	7,178	14.03%	3,909	-45.54%	-37.89%	-46.17%
53-3032	Heavy and Tractor-Trailer Truck Drivers	80,995	77,813	-3.93%	94,992	22.08%	124,236	30.79%	59.66%	53.39%
Total		484,592	443,649	-8.45%	504,022	13.61%	507,238	0.64%	14.33%	4.67%

Source: Lightcast and ICF.

Nearly 60% of the 34 target occupations (20 of 34) have declined below peak 2008 levels. Between 2018 and 2023, the average target occupation grew only 0.64%, but Exhibit 4 shows that the year-to-year changes in employment were more volatile around the time of the pandemic. After modest growth from 2018-2019, the onset of the pandemic in 2020 was associated with an almost 5% employment drop in the construction occupations. While over 70% of occupations experienced a decline in employment, the greatest declines from 2019-2020 include “Drilling and Boring Machine Tool Setters, Operators, and Tenders, Metal and Plastic” (29% decline) and “Mixing and Blending Machine Setters, Operators, and Tenders” (16% decline). In the two years that followed, around half of the 34 target occupations saw growth each year and the average employment growth was around 2%. Most recently, employment growth stalled from 2022 to 2023 (0.06% growth), which industry reports have linked to several pressures on the industry including high inflation rates, continued volatility of materials prices, and skilled labor shortage driven by an aging workforce and a lack of young people entering the construction industry.³⁴

Exhibit 4. Historical Employment Trends (Unionized and Non-unionized) by Occupation in Greater LA Area as impacted by the pandemic (2018-2023)

SOC	Occupation	Pre-Pandemic			Peak Pandemic				Post-Pandemic			
		Jobs (2018)	Jobs (2019)	% Change (2018 – 2019)	Jobs (2020)	% Change (2019 – 2020)	Jobs (2021)	% Change (2020 – 2021)	Jobs (2022)	% Change (2021 – 2022)	Jobs (2023)	% Change (2022 – 2023)
17-1022	Surveyors	1,625	1,543	-5.05%	1,451	-5.99%	1,665	14.78%	1,718	3.21%	1,792	4.26%
37-3011	Landscaping and Groundskeeping Workers	75,029	72,433	-3.46%	68,577	-5.32%	71,063	3.62%	70,459	-0.85%	70,376	-0.12%
47-2021	Brickmasons and Blockmasons	2,920	2,677	-8.33%	2,633	-1.64%	2,634	0.06%	2,515	-4.52%	2,595	3.19%
47-2022	Stonemasons	1,356	1,472	8.54%	1,360	-7.63%	975	-28.28%	1,067	9.44%	854	-19.94%
47-2031	Carpenters	70,714	72,523	2.56%	69,051	-4.79%	67,093	-2.84%	67,649	0.83%	65,452	-3.25%
47-2042	Floor Layers, Except Carpet, Wood, and Hard Tiles	2,118	2,527	19.33%	2,558	1.24%	2,560	0.08%	2,948	15.15%	3,490	18.36%
47-2051	Cement Masons and Concrete Finishers	11,992	12,455	3.86%	11,903	-4.43%	11,323	-4.88%	12,610	11.37%	13,277	5.29%
47-2053	Terrazzo Workers and Finishers	118	175	48.89%	240	36.88%	273	13.71%	31	-88.76%	29	-4.82%
47-2061	Construction Laborers	72,066	69,801	-3.14%	65,660	-5.93%	65,713	0.08%	64,622	-1.66%	63,086	-2.38%
47-2071	Paving, Surfacing, and Tamping	1,354	1,393	2.95%	1,439	3.28%	1,506	4.67%	1,097	-27.20%	1,002	-8.58%

³⁴ Associated Builders & Contractors (ABC) of Southern California. (2024, January). *2023 Construction Sector Analysis: Navigating Inflation, Material Cost Fluctuations, and Rising Labor Expenses*. <https://abcsocal.org/2023-construction-sector-analysis/>

SOC	Occupation	Pre-Pandemic			Peak Pandemic				Post-Pandemic			
		Jobs (2018)	Jobs (2019)	% Change (2018 – 2019)	Jobs (2020)	% Change (2019 – 2020)	Jobs (2021)	% Change (2020 – 2021)	Jobs (2022)	% Change (2021 – 2022)	Jobs (2023)	% Change (2022 – 2023)
	Equipment Operators											
47-2072	Pile-Driver Operators	186	207	11.27%	267	29.18%	359	34.34%	301	-16.33%	295	-1.93%
47-2073	Operating Engineers and Other Construction Equipment Operators	11,436	12,017	5.09%	11,839	-1.49%	12,435	5.03%	13,457	8.22%	13,954	3.69%
47-2081	Drywall and Ceiling Tile Installers	15,858	16,065	1.31%	15,338	-4.53%	15,517	1.17%	15,092	-2.74%	14,939	-1.01%
47-2082	Tapers	3,423	3,187	-6.89%	2,798	-12.21%	2,390	-14.57%	2,166	-9.39%	2,037	-5.94%
47-2111	Electricians	33,851	35,345	4.42%	33,365	-5.60%	32,567	-2.39%	34,455	5.80%	33,968	-1.41%
47-2121	Glaziers	2,897	2,960	2.18%	2,985	0.83%	3,185	6.71%	3,314	4.03%	3,464	4.54%
47-2131	Insulation Workers, Floor, Ceiling, and Wall	1,025	1,009	-1.55%	914	-9.44%	768	-15.92%	695	-9.57%	676	-2.75%
47-2132	Insulation Workers, Mechanical	356	397	11.45%	434	9.32%	508	16.97%	412	-18.89%	381	-7.43%
47-2141	Painters, Construction and Maintenance	28,071	28,296	0.80%	25,763	-8.95%	25,261	-1.95%	25,448	0.74%	24,764	-2.69%
47-2151	Pipelayers	1,203	1,118	-7.08%	1,023	-8.53%	976	-4.58%	1,087	11.38%	1,084	-0.30%
47-2152	Plumbers, Pipefitters, and Steamfitters	23,409	23,360	-0.21%	21,949	-6.04%	21,594	-1.62%	22,097	2.33%	22,706	2.76%
47-2161	Plasterers and Stucco Masons	4,059	4,430	9.14%	4,145	-6.43%	4,581	10.51%	4,196	-8.39%	3,612	-13.93%
47-2171	Reinforcing Iron and Rebar Workers	2,188	2,241	2.42%	2,200	-1.83%	1,992	-9.45%	2,115	6.19%	1,862	-12.00%
47-2181	Roofers	9,408	9,705	3.16%	9,102	-6.21%	9,076	-0.28%	9,194	1.29%	9,277	0.91%
47-2211	Sheet Metal Workers	5,892	5,631	-4.43%	5,215	-7.38%	4,997	-4.19%	4,962	-0.70%	4,654	-6.19%
47-2221	Structural Iron and Steel Workers	4,469	4,444	-0.57%	4,121	-7.25%	4,066	-1.35%	4,103	0.91%	3,816	-7.00%
47-4011	Construction and Building Inspectors	5,348	5,569	4.13%	5,676	1.91%	5,662	-0.24%	6,306	11.37%	6,386	1.26%

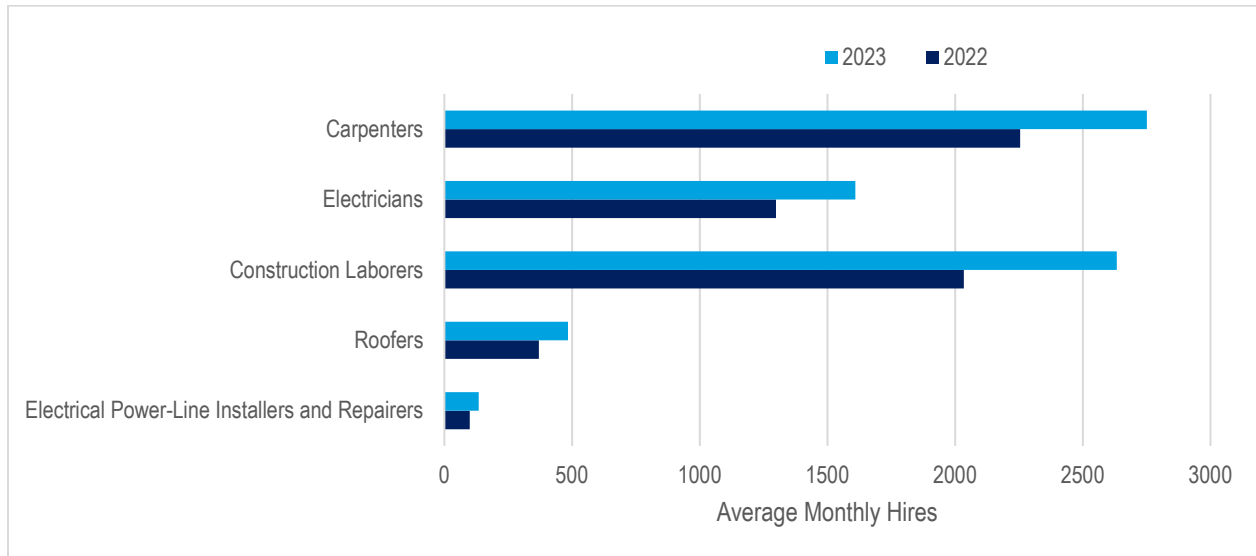
SOC	Occupation	Pre-Pandemic			Peak Pandemic				Post-Pandemic			
		Jobs (2018)	Jobs (2019)	% Change (2018 – 2019)	Jobs (2020)	% Change (2019 – 2020)	Jobs (2021)	% Change (2020 – 2021)	Jobs (2022)	% Change (2021 – 2022)	Jobs (2023)	% Change (2022 – 2023)
47-4021	Elevator and Escalator Installers and Repairers	1,202	1,309	8.87%	1,138	-13.04%	1,050	-7.78%	1,181	12.52%	1,092	-7.58%
47-4041	Hazardous Materials Removal Workers	2,981	3,046	2.15%	3,067	0.69%	3,146	2.60%	3,147	0.03%	3,382	7.46%
47-4061	Rail-Track Laying and Maintenance Equipment Operators	405	412	1.82%	630	52.86%	469	-25.55%	484	3.31%	424	-12.45%
49-9051	Electrical Power-Line Installers and Repairers	3,703	3,481	-5.99%	3,688	5.94%	4,196	13.78%	4,041	-3.70%	3,900	-3.48%
51-4032	Drilling and Boring Machine Tool Setters, Operators, and Tenders, Metal and Plastic	1,189	1,211	1.79%	863	-28.70%	599	-30.66%	595	-0.53%	467	-21.62%
51-9023	Mixing and Blending Machine Setters, Operators, and Tenders	7,178	6,450	-10.14%	5,432	-15.79%	4,319	-20.48%	4,027	-6.76%	3,909	-2.92%
53-3032	Heavy and Tractor-Trailer Truck Drivers	94,992	99,945	5.21%	98,449	-1.50%	112,990	14.77%	119,325	5.61%	124,236	4.12%
	Total	504,022	508,834	0.95%	485,273	-4.63%	497,509	2.52%	506,915	1.89%	507,238	0.06%

Source: Lightcast and ICF

1.2 Historical and Current Hiring Trends

Using Lightcast data, the ICF Team examined the average monthly hires across the 34 SOC occupations in the Greater LA Area from 2022 to 2023. The ICF Team calculated the percentage change from 2022 to 2023 to examine increased and decreased hiring by occupation in the Greater LA Area. Overall, the change in employment for the 34 targeted occupations from 2022 to 2023 was 2%, though there was substantial variation between occupations. Exhibit 5 displays the average monthly hires for the five SOC occupations that experienced the largest percentage increase between 2022 and 2023. For instance, the “Electrical Power-Line Installers and Repairers” occupation experienced 35.6% growth (99 to 135 average monthly hires), and the “Roofers” occupation experienced 30.9% growth (370 to 484 average monthly hires) during this time.

Exhibit 5: Top 5 SOC Occupations in Greater LA with the Highest Growth in Average Monthly Hires (2022-2023)



Source: Lightcast and ICF

The increase in hiring for some occupations may be associated with construction projects brought by federal and local infrastructure investments and the need for new housing developments in the LA region. However, while these occupations grew significantly in the number of average monthly hires from 2022 to 2023, a third (n=22, 65%) of the 34 occupations experienced a decrease. Eight of 10 target occupations that were identified as the most difficult to fill by Southern California construction contractors experienced a decrease in hiring between 2022 and 2023. These included “Pile Driver Operators” (45.8% decrease), “Stonemasons” (33.5% decrease), and “Reinforcing Iron and Rebar Workers” (7.8% decrease).³⁵ Two occupations experienced less than 1% change in the average monthly hires during this period, indicating a consistent but flat growth in demand for these occupations. These occupations were “Paving, Surfacing, and Tamping Equipment Operators” and “Elevator and Escalator Installers and Repairers.” For a complete breakdown of historical and current monthly average hires by occupation in the Greater LA Area, see Appendix B.

1.3 Occupational Landscape and Current Female Employment

To obtain an understanding of the current workforce within the 34 selected occupations across the Greater LA Area, the ICF Team used Lightcast data to look at median hourly earnings, education and work experience requirements, typical on-the-job training offered, and female employment (unionized and non-unionized) participation in those occupations (Exhibit 6).

Overall, female workers comprised 5.7% percent of the unionized and non-unionized Greater LA Area workforce across these 34 SOC occupations in 2023.³⁶ A statistical analysis was completed in Stata (Appendix C) to determine if strong relationships exist between occupations that employ a larger percent of women and the requisites for those positions in terms of wages, education level, work experience, and on-the-job training. Conducting this analysis may help Metro identify which occupations could be pipelines for future female employment. Using data from all 34 occupations, there is a statistically significant negative relationship between an occupation’s percentage of female workers and typical on-the-job training (e.g., apprenticeship, short-

³⁵ Los Angeles County Metropolitan Transit Authority. (2024, March). *2023 Construction market analysis: Supplemental contractor interview responses on labor availability*. <https://metro.legistar1.com/metro/attachments/1f8e3b2c-a459-4b37-89f1-f176a74c322f.pdf>

³⁶ Lightcast and ICF.

term on-the-job training) required. In other words, these results convey that there is a greater than 95% chance that there is a relationship between an occupation's percentage of female workers and on-the-job training requirement. In this case, the relationship is negative, suggesting that the less intensive the training, the more likely more women are employed. This may be driven by the fact that women are still under-represented nationally and in California construction apprenticeships, which has the most intensive on-the-job training.³⁷ Observationally, 23 of the 34 targeted SOC occupations were 6% or less female and all the 34 SOC occupations requiring apprenticeship are 6% or less female. Additionally, in Exhibit 6 and Exhibit 2, several occupations that have high female participation such as "Surveyor" and "Mixing and Blending Machine Setters, Operators and Tenders" have some of the lowest percentages of union membership (6.54% union membership for "Surveyor" and 5.97% for "Mixing and Blending Machine Setters, Operators and Tenders"). Conversely, some occupations with overall low female participation have high national union membership rates (e.g., "Elevator and Escalator Installers and Repair," "Rail-Track Laying and Maintenance Equipment Operators," "Reinforcing Iron and Rebar Workers," and "Electrical Power-Line Installers and Repairers"), reinforcing that women are still underrepresented in unionized workforces.

There was not a statistically significant correlation between an occupation's percentage of female workers and median hourly earnings, work experience requirements, or education requirements. Additionally, a statistically significant relationship was found between median hourly earnings and typical entry-level education. This makes intuitive sense, as the more education a worker has, the more they are likely to be compensated.

When this analysis was conducted in 2019, there also was no statistically significant correlation between the female percent of occupation and median hourly earnings or education requirements. However, there was a moderate correlation between the female percent of occupation and work experience requirement (at the 0.05 level), suggesting that the more work experience required, the more likely more females were employed. and unlike in the present analysis, there was no statistically significant relationship between the occupation's percentage of female workers and the typical on-the-job training an employer may provide. Given all the insights enumerated above, the small sample size of 34 variables (one that represents each SOC occupation) used in this analysis reduces the overall veracity of these results, as a smaller sample size decreases the statistical power of an analysis, increases the margin of error, and provides less conclusive results. The above findings should, therefore, be taken with that limitation in mind.

As of 2023, using Lightcast data (including union and non-union workers), the "Surveyors" occupation has the highest employment of women (17.0%) in the Greater LA Area (among the 34 selected occupations) and requires a bachelor's degree, no previous work experience but includes an internship or residency, and provides median hourly earnings of \$47.56, which is the third highest of the 34 target occupations. "Drilling and Boring Machine Tool Setters, Operators, and Tenders, Metal and Plastic" has the second highest female employment (16.7%) and requires a high school diploma or equivalent, requires no previous work experience, has moderate-term on-the-job training requirements, and provides median hourly earnings of \$22.62. Though no overall significant relationship was found, the five occupations with the highest employment of females (above 12.0%) require at least a high school diploma or equivalent or bachelor's degree. Additionally, all occupations, except one ("Construction and Building Inspectors"), do not require work experience.

³⁷ United States Department of Labor, Apprenticeship USA. (2024, June 4). *Apprenticeships by state: Interactive apprenticeship data*. <https://www.apprenticeship.gov/data-and-statistics/apprentices-by-state-dashboard>

Exhibit 6: 2023 Greater LA Occupational Landscape and Female Unionized and Non-unionized Employment

SOC	Occupation	Median Hourly Earnings	Typical Entry Level Education ³⁸	Work Experience Required	Typical on-the-job Training Offered	Females % of Occupation (2023)
17-1022	Surveyors	\$47.56	Bachelor's degree	None	Internship/residency	17.0%
51-4032	Drilling and Boring Machine Tool Setters, Operators, and Tenders, Metal and Plastic	\$22.62	HSD or equivalent	None	Moderate-term OJT	16.7%
51-9023	Mixing and Blending Machine Setters, Operators, and Tenders	\$21.57	HSD or equivalent	None	Moderate-term OJT	15.9%
47-4041	Hazardous Materials Removal Workers	\$22.71	HSD or equivalent	None	Moderate-term OJT	14.7%
47-4011	Construction and Building Inspectors	\$43.91	HSD or equivalent	5 years or more	Moderate-term OJT	12.6%
47-2131	Insulation Workers, Floor, Ceiling, and Wall	\$26.73	No formal	None	Short-term OJT	11.3%
47-2141	Painters, Construction and Maintenance	\$24.16	No formal	None	Moderate-term OJT	10.6%
37-3011	Landscaping and Groundskeeping Workers	\$18.31	No formal	None	Short-term OJT	10.5%
47-2081	Drywall and Ceiling Tile Installers	\$28.98	No formal	None	Moderate-term OJT	9.1%
47-2082	Tapers	\$25.53	No formal	None	Moderate-term OJT	8.8%
53-3032	Heavy and Tractor-Trailer Truck Drivers	\$27.57	Postsecondary nondegree award	None	Short-term OJT	7.2%
47-2132	Insulation Workers, Mechanical	\$44.30	HSD or equivalent	None	Apprenticeship	6.0%
47-2161	Plasterers and Stucco Masons	\$27.92	No formal	None	Long-term OJT	5.4%
47-2061	Construction Laborers	\$23.00	No formal	None	Short-term OJT	4.8%
47-2211	Sheet Metal Workers	\$32.29	HSD or equivalent	None	Apprenticeship	4.8%
47-2042	Floor Layers, Except Carpet, Wood, and Hard Tiles	\$25.09	No formal	None	Moderate-term OJT	4.6%
47-2221	Structural Iron and Steel Workers	\$33.45	HSD or equivalent	None	Apprenticeship	4.0%
47-2121	Glaziers	\$28.22	HSD or equivalent	None	Apprenticeship	3.7%
47-2181	Roofers	\$29.99	No formal	None	Moderate-term OJT	3.3%
47-2072	Pile Driver Operators *	\$47.00	HSD or equivalent	None	Moderate-term OJT	3.3%
47-2073	Operating Engineers and Other Construction Equipment Operators	\$39.96	HSD or equivalent	None	Moderate-term OJT	3.2%

³⁸ "HSD" indicates a high school diploma or equivalent is required, "No formal" indicates no formal education credential required, "Postsecondary" indicates postsecondary nondegree award is required, "Short-term" indicates short-term on-the-job training offered, "Moderate-term" indicates moderate-term on-the-job-training offered, and "Long-term" indicates long-term on-the-job-training offered.

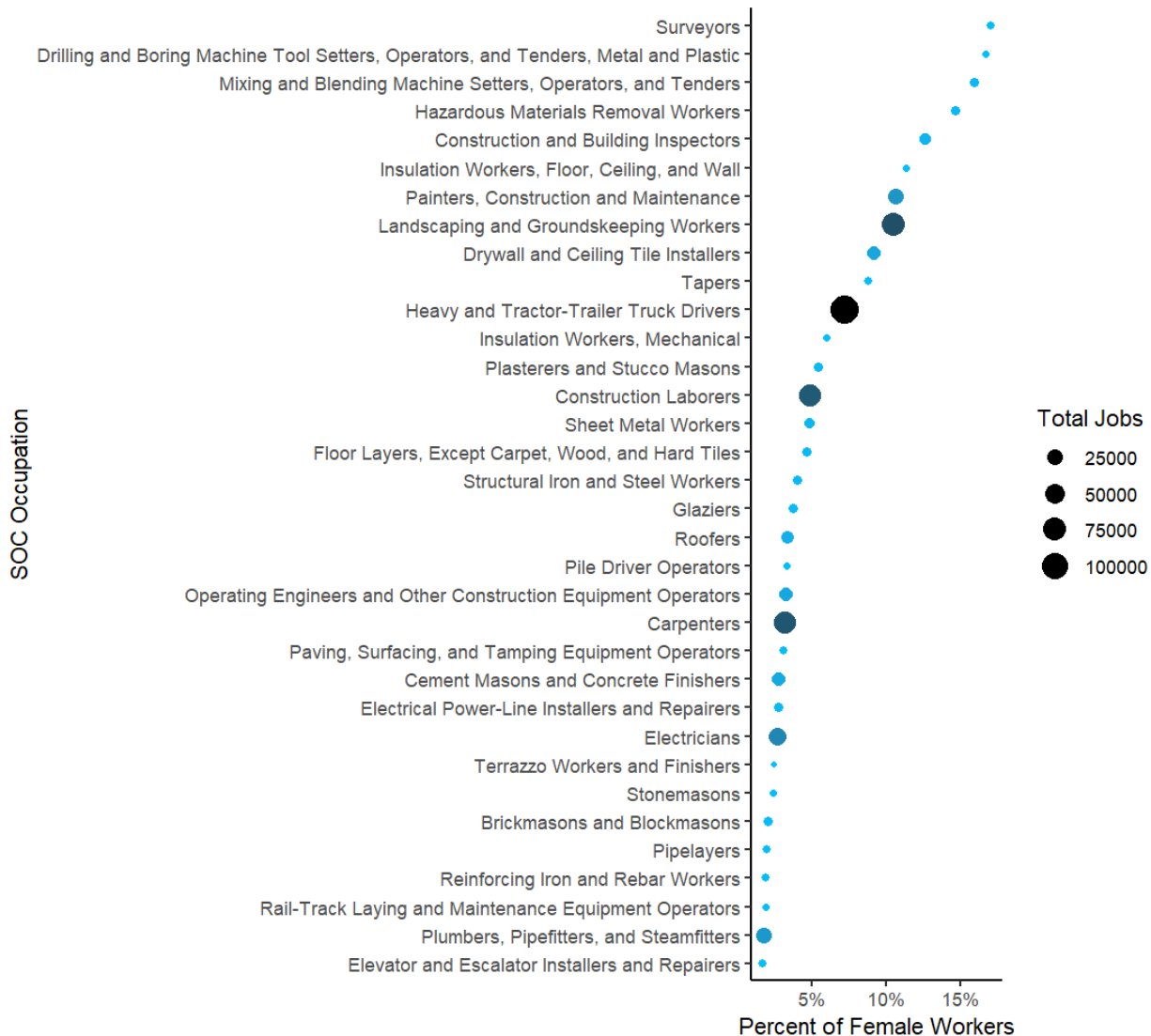
SOC	Occupation	Median Hourly Earnings	Typical Entry Level Education ³⁸	Work Experience Required	Typical on-the-job Training Offered	Females % of Occupation (2023)
47-2031	Carpenters	\$28.11	HSD or equivalent	None	Apprenticeship	3.1%
47-2071	Paving, Surfacing, and Tamping Equipment Operators	\$35.54	HSD or equivalent	None	Moderate-term OJT	3.1%
47-2051	Cement Masons and Concrete Finishers	\$29.32	No formal	None	Moderate-term OJT	2.7%
49-9051	Electrical Power-Line Installers and Repairers	\$58.19	HSD or equivalent	None	Long-term OJT	2.7%
47-2111	Electricians	\$34.24	HSD or equivalent	None	Apprenticeship	2.7%
47-2053	Terrazzo Workers and Finishers *	\$17.61	HSD or equivalent	None	Apprenticeship	2.4%
47-2022	Stonemasons	\$29.17	HSD or equivalent	None	Apprenticeship	2.3%
47-2021	Brickmasons and Blockmasons	\$28.55	HSD or equivalent	None	Apprenticeship	2.0%
47-2151	Pipelayers	\$37.95	No formal	None	Short-term OJT	2.0%
47-2171	Reinforcing Iron and Rebar Workers	\$27.87	HSD or equivalent	None	Apprenticeship	1.9%
47-4061	Rail-Track Laying and Maintenance Equipment Operators *	\$39.09	HSD or equivalent	None	Moderate-term OJT	1.9%
47-2152	Plumbers, Pipefitters, and Steamfitters	\$28.91	HSD or equivalent	None	Apprenticeship	1.7%
47-4021	Elevator and Escalator Installers and Repairers	\$64.42	HSD or equivalent	None	Apprenticeship	1.7%

Source: Lightcast and ICF

Note: * Indicates that the number of female workers for the occupation was reported by Lightcast to be “<10” in 2023. To identify the number of female workers for analysis, ICF subtracted the number of male workers from the total number of workers per occupation in 2023.

Exhibit 7 depicts the 34 targeted SOC occupations and their corresponding employment of unionized and non-unionized workers in 2023 and the percent of female workers in the occupation, sorted by the highest to lowest percent. There is not a clear pattern between the size of the occupation in the Greater LA Area and the percent of female workers employed. Of note, the six occupations with the highest female percent of occupation currently employ less than 6,500 workers each in the Greater LA Area. Over two-thirds of the occupations listed have female percent of occupation metrics equal to or lower than 6% but they vary in terms of actual numbers employed. For example, the “Construction Laborers” and “Sheet Metal Workers” occupations both have female employment of 4.8% but their employed population are 63,086 (3,028 female) and 4,654 (224 female), respectively, as of 2023. Overall, the occupations (including both unionized and non-unionized workers) with the highest numbers employed (of both genders) in the Greater LA include “Construction Laborers,” “Carpenters,” “Electricians,” and “Plumbers, Pipefitters, and Steamfitters.”

Exhibit 7: 2023 Employed Population (Unionized and Non-unionized) and Female Percent of Occupation in Greater LA Area



Source: Lightcast and ICF

2. Future Workforce Demand

To examine growth and decline in workforce demand for the selected 34 occupations across the Greater LA Area, the ICF Team looked at 3-year (2026) and 10-year (2033) employment projections using Lightcast data.

2.1 Projected Employment Demand in 2026 and 2033

Exhibit 8 shows the projected employment of unionized and non-unionized workers by occupation in the Greater LA Area in 2026 (3-year projection) and 2033 (10-year projection). Cumulatively, 17,954 new union and non-union jobs are projected in the 34 selected occupations over the next three years while 38,823 new union and non-union jobs are projected over the next



ten years, representing 3.5% and 7.7% growth from 2023, respectively. This represents an annualized growth of between .8% and 1.2%.

Over three-fourths of the 34 target occupations are projected to experience growth from both 2023-2026 and 2023-2033. Specifically, the “Insulation Workers, Mechanical” occupation is expected to experience relatively high job growth, with the projected number of jobs increasing from 381 to 407 by 2026 (7% increase from 2023) and to 435 by 2033 (14% increase from 2023). The “Electricians” occupation is also projected to continue to grow at a significant rate: an increase of roughly 2,030 jobs by 2026 (6% increase from 2023) and an increase of 4,743 jobs by 2033 (14% increase from 2023) in the Greater LA Area.

Five SOC occupations are projected to decline in both time periods. The “Stonemasons” occupation is estimated to experience a 2.3% decline from 2023 to 2026, and a 6.5% decline from 2023 to 2033. Additionally, the “Drilling and Boring Machine Tool Setters, Operators, and Tenders, Metal and Plastic” occupation is estimated to experience a 4.2% decline from 2023 to 2026, and a 12.8% decline from 2023 to 2033. Other occupations set to decline in both periods include “Brickmasons and Blockmasons,” “Tapers,” and “Terrazzo Workers and Finishers.”

There are six occupations that are not projected to change by a substantive percentage (less than 2%) in the next three or ten years. Most notably, the employment count for the “Drywall and Ceiling Tile Installers” occupation is set to decrease by only 0.4% by 2026 and is estimated to grow by 0.7% by 2033. Similarly, employment in the “Plasterers and Stucco Masons” occupation is projected to lose only six workers by 2026 (a decline of only 0.2%) before making up some ground to grow by 1.5% by 2033.

Notably, in 2023, skilled occupations including masons, ironworkers, and machine operators were identified by LA-area construction contractors as the most difficult positions to fill due to a labor shortage in these occupations.³⁹ This may be reflected in the projected downwards trends for “Brickmasons and Blockmasons”, “Stonemasons”, and “Drilling and Boring Machine Tool Setters, Operators, and Tenders, Metal and Plastic”, as well as the lower growth for the “Plasterers and Stucco Masons” and “Reinforcing Iron and Rebar Workers” occupations. However, other skilled labor occupations such as “Electricians” and “Operating Engineers” still project strong growth.

Exhibit 8: Projected Regional Employment Demand in 2026 and 2033

SOC	Occupation	Jobs (2023) Actual	Jobs (2026) Projected	Jobs (2033) Projected	% Change (2023 – 2026)	% Change (2023 – 2033)
17-1022	Surveyors	1,792	1,884	1,998	5.15%	11.55%
37-3011	Landscaping and Groundskeeping Workers	70,376	71,558	72,880	1.68%	3.56%
47-2021	Brickmasons and Blockmasons	2,595	2,574	2,548	-0.84%	-1.82%
47-2022	Stonemasons	854	835	799	-2.26%	-6.48%
47-2031	Carpenters	65,452	66,271	66,631	1.25%	1.80%
47-2042	Floor Layers, Except Carpet, Wood, and Hard Tiles	3,490	3,592	3,781	2.95%	8.35%
47-2051	Cement Masons and Concrete Finishers	13,277	13,372	13,177	0.71%	-0.75%

³⁹ Los Angeles County Metropolitan Transit Authority. (2024, March). 2023 Construction market analysis: Supplemental contractor interview responses on labor availability. <https://metro.legistar1.com/metro/attachments/1f8e3b2c-a459-4b37-89f1-f176a74c322f.pdf>



SOC	Occupation	Jobs (2023) Actual	Jobs (2026) Projected	Jobs (2033) Projected	% Change (2023 – 2026)	% Change (2023 – 2033)
47-2053	Terrazzo Workers and Finishers	29	28	27	-3.13%	-9.01%
47-2061	Construction Laborers	63,086	65,210	67,791	3.37%	7.46%
47-2071	Paving, Surfacing, and Tamping Equipment Operators	1,002	1,052	1,114	4.97%	11.08%
47-2072	Pile Driver Operators	295	301	304	2.01%	3.27%
47-2073	Operating Engineers and Other Construction Equipment Operators	13,954	14,681	15,579	5.21%	11.65%
47-2081	Drywall and Ceiling Tile Installers	14,939	14,879	15,037	-0.40%	0.66%
47-2082	Tapers	2,037	2,006	1,960	-1.52%	-3.80%
47-2111	Electricians	33,968	35,998	38,711	5.98%	13.96%
47-2121	Glaziers	3,464	3,572	3,702	3.11%	6.86%
47-2131	Insulation Workers, Floor, Ceiling, and Wall	676	707	752	4.61%	11.33%
47-2132	Insulation Workers, Mechanical	381	407	435	6.61%	14.16%
47-2141	Painters, Construction and Maintenance	24,764	25,206	25,826	1.78%	4.29%
47-2151	Pipelayers	1,084	1,121	1,160	3.50%	7.10%
47-2152	Plumbers, Pipefitters, and Steamfitters	22,706	23,725	24,810	4.49%	9.27%
47-2161	Plasterers and Stucco Masons	3,612	3,606	3,668	-0.16%	1.55%
47-2171	Reinforcing Iron and Rebar Workers	1,862	1,886	1,895	1.31%	1.82%
47-2181	Roofers	9,277	9,735	10,173	4.94%	9.67%
47-2211	Sheet Metal Workers	4,654	4,834	4,995	3.87%	7.31%
47-2221	Structural Iron and Steel Workers	3,816	3,938	4,071	3.22%	6.70%
47-4011	Construction and Building Inspectors	6,386	6,587	6,848	3.15%	7.24%
47-4021	Elevator and Escalator Installers and Repairers	1,092	1,141	1,190	4.53%	8.97%
47-4041	Hazardous Materials Removal Workers	3,382	3,547	3,678	4.89%	8.74%
47-4061	Rail-Track Laying and Maintenance Equipment Operators	424	443	486	4.39%	14.66%
49-9051	Electrical Power-Line Installers and Repairers	3,900	4,073	4,191	4.41%	7.44%
51-4032	Drilling and Boring Machine Tool Setters, Operators, and Tenders, Metal and Plastic	467	447	407	-4.19%	-12.77%
51-9023	Mixing and Blending Machine Setters, Operators, and Tenders	3,909	3,993	4,076	2.14%	4.26%
53-3032	Heavy and Tractor-Trailer Truck Drivers	124,236	131,982	141,361	6.23%	13.78%
	Total	507,238	525,192	546,061	3.54%	7.65%



Source: Lightcast and ICF.

The ICF Team also aggregated this data by construction trade, shown in Exhibit 9. At the more aggregate level, the “Bricklayer and Tile Setter” and the “Plasterer and Cement Mason” trades show decreasing employment over the next ten years.

Exhibit 9: Projected Regional Employment Demand (Union and Non-Unionized Labor) in 2026 and 2033 in Greater LA by Trade

Construction Trade	Jobs (2023) Actual	Jobs (2026) Projected	Jobs (2033) Projected	Change 2023-2026	Change 2023-2033
BRICKLAYER AND TILE SETTER	3,479	3,437	3,374	-1.21%	-3.02%
CARPENTER	80,686	81,451	81,972	0.95%	1.59%
ELECTRICIAN	37,868	40,071	42,901	5.82%	13.29%
ELEVATOR CONSTRUCTOR	1,092	1,141	1,190	4.53%	8.97%
INSPECTOR	6,386	6,587	6,848	3.15%	7.24%
IRON WORKER	5,677	5,824	5,967	2.59%	5.10%
LABORER	142,277	145,869	150,019	2.52%	5.44%
OPERATING ENGINEER	15,380	16,176	17,179	5.17%	11.69%
PAINTER	33,755	34,376	35,268	1.84%	4.48%
PLASTERER AND CEMENT MASON	16,889	16,977	16,845	0.52%	-0.26%
PLUMBER AND PIPEFITTER	23,789	24,847	25,970	4.45%	9.17%
ROOFER	9,277	9,735	10,173	4.94%	9.67%
SHEET METAL	4,654	4,834	4,995	3.87%	7.31%
SURVEYOR	1,792	1,884	1,998	5.15%	11.55%
TEAMSTER/DRIVER	124,236	131,982	141,361	6.23%	13.78%
Total	507,238	525,192	546,061	3.54%	7.65%

Source: Lightcast and ICF.

2.2 Projected Demand on Metro Projects in Annual Hours by Craft and Trade, 2026 and 2033

To project hours of employment on Metro projects per craft and trade through 2033 (Exhibits 10 and 11), the ICF Team estimated the current (2023 base year) Metro construction costs by applying budgeted construction costs⁴⁰ to projects identified in Metro’s project schedule (as of January 2024)⁴¹ as in an active construction phase in 2023. Total Metro construction costs for 2023 were estimated at \$2.13B. The proportion of labor costs is estimated based on industry averages

⁴⁰ Metro Adopted Budget FY2024, Appendix V: Transportation Infrastructure Development Project List. Retrieved August 5, 2024 from [Finance and Budget - LA Metro](#).

⁴¹ Metro Program Management Master Schedule, January 2024. Metro provided internal document.



at 35%⁴² of construction costs and therefore base year Metro labor construction costs were estimated at \$747,000,555. The construction cost estimated in 2023 was applied to the total hours worked for Metro, unionized workers in 2023 from LCPTracker data to determine the construction cost per hour, which was \$177.23. The ICF Team used upper and lower bound scenarios to project future labor construction costs. In the Flat (0%) Demand Growth scenario, the ICF team assume Metro labor construction costs and demand will remain flat through 2033 with no increase in labor hours. In the second 2% Demand Growth scenario, the ICF Team estimate Metro construction costs and demand will increase at 2% year over year, based on the Metro’s average growth over the last five years sourced from Metro annual budgets.⁴³ This methodology produced annual labor construction cost estimates for Metro. Subsequently, the percentage of total labor hours for each Metro craft in 2023 was applied to each future year to calculate the required labor hours by Metro craft for each year through 2033. For this analysis, the assumption is that the proportion of labor hours in 2023 for each Metro craft will remain constant relative to the total in each succeeding year. In the flat demand scenario, the hours stay constant at 2023 levels. In the 2% annual growth scenario, the hours needed per craft for Metro projects escalates based on the growing labor costs translated into total annual hours and proportioned based on the 2023 craft mix. Comparing the number of labor hours in 2023 to the number of labor hours estimated for each future year to calculate the number of additional hours required, represents the total demand gap in labor hours.

For example, in the Flat Demand Growth scenario the total projected hours for Metro in 2033 are 4,214,979 (equivalent to 2023 hours) and in the 2% Demand Growth scenario (Exhibit 10), in 2033 the total projected hours for all Metro crafts are 5,138,035. As further example, for the Metro craft “Building / Construction Inspector and Field Soils and Material Tester” specifically, 2033 hours are 216,518. By comparing the number of labor hours in 2023 to the number of labor hours estimated for each future year, the number of additional hours required are calculated, which represents the total demand gap in labor hours. For example, for the Metro craft of “Building / Construction Inspector and Field Soils and Material Tester” the demand gap hours (additional hours needed for 2033) comparing 2023 and 2033 is 38,898 and the total demand gap in 2033 is 923,056 hours.

Exhibit 10: Projected Metro Hours in 2026 and 2033 under 2% Demand Growth Scenario by Craft

Metro Craft	2023 Hours for Unionized Workers on Metro Projects	Projected 2026 Hours for Unionized Workers on Metro Projects	Additional Labor Hours Required for 2026	Projected 2033 Hours for Unionized Workers on Metro Projects	Additional Labor Hours Required for 2033
Apprentice Landscape Irrigation Fitter (2nd Shift)	48	51	3	59	11
Asbestos and Lead Abatement (Laborer)	2,549	2,705	156	3,107	558
Asbestos Worker, Heat and Frost Insulator	1,196	1,269	73	1,458	262
Brick Tender	11,042	11,718	676	13,460	2,418
Bricklayer	865	918	53	1,054	189
Bricklayer, Stonemason	37,838	40,154	2,316	46,124	8,286

⁴² Labor costs in construction projects typically range from 20-40% with specialized projects and major urban markets skewing higher in the range. See for example, [Labor vs material cost in construction: Overview - Bridgit](#).

⁴³ Metro Adopted Budgets FY2020-FY2025, <https://budget.metro.net/budget-documents.html>. Note that this outpaces EDD Construction Market growth projections in Greater LA (1.6% growth) and the annualized employment growth for the 34 SOC occupations estimated using Lightcast data (.8-1.2% growth).

Metro Craft	2023 Hours for Unionized Workers on Metro Projects	Projected 2026 Hours for Unionized Workers on Metro Projects	Additional Labor Hours Required for 2026	Projected 2033 Hours for Unionized Workers on Metro Projects	Additional Labor Hours Required for 2033
Building / Construction Inspector and Field Soils and Material Tester	177,620	188,492	10,872	216,518	38,898
Carpenter and Related Trades	513,518	544,950	31,431	625,976	112,458
Carpet, Linoleum	272	289	17	332	60
Carpet, Linoleum, Resilient	12	13	1	15	3
Cement Mason	134,682	142,925	8,244	164,176	29,495
Cranes, Pile Driver, and Hoisting Equipment (Operating Engineer)	33,781	35,848	2,068	41,178	7,398
Driver (On/Off-Hauling To/From Construction Site)	74,351	78,902	4,551	90,634	16,282
Drywall Finisher	1,788	1,897	109	2,180	392
Drywall Installer / Lather (Carpenter)	35,125	37,275	2,150	42,817	7,692
Electrical Utility Lineman	6,177	6,555	378	7,530	1,353
Electrician	475,231	504,318	29,088	579,303	104,073
Elevator Constructor	82,236	87,269	5,033	100,245	18,009
Fence Builder (Carpenter)	2	2	0	2	0
Field Surveyor	38,458	40,812	2,354	46,880	8,422
Fire Safety and Miscellaneous Sealing	184	195	11	224	40
Glazier	27,316	28,988	1,672	33,298	5,982
Gunite Worker (Laborer)	9,841	10,443	602	11,996	2,155
Horizontal Directional Drilling	7,135	7,572	437	8,698	1,563
Iron Worker	300,399	318,785	18,387	366,184	65,786
Laborer (Construction, Fence Erector, Gunite, Housemover, Tunnel)	235	249	14	286	51
Laborer and Related Classifications	954,083	1,012,480	58,397	1,163,021	208,939
Landscape Irrigation Fitter	203	216	12	248	44
Landscape Maintenance Laborer	58,772	62,369	3,597	71,643	12,871
Landscape Operating Engineer	175	186	11	213	38
Landscape / Irrigation Laborer / Tender	7,084	7,517	434	8,635	1,551
Marble Finisher	1,506	1,598	92	1,836	330
Modular Furniture Installer (Carpenter)	517	548	32	630	113
Operating Engineer	441,485	468,508	27,022	538,168	96,683
Operating Engineer (Landscape Construction)	134	142	8	163	29
Painter	55,080	58,452	3,371	67,143	12,062
Painter - Industrial	2,602	2,762	159	3,172	570
Parking and Highway Improvement (Striper-Laborer)	3,807	4,040	233	4,640	834
Parking and Highway Improvement (Striping, Slurry and Seal Coat Operations-Laborer)	642	681	39	782	140



Metro Craft	2023 Hours for Unionized Workers on Metro Projects	Projected 2026 Hours for Unionized Workers on Metro Projects	Additional Labor Hours Required for 2026	Projected 2033 Hours for Unionized Workers on Metro Projects	Additional Labor Hours Required for 2033
Pile Driver (Carpenter)	5,237	5,558	321	6,384	1,147
Plaster Tender	9,967	10,577	610	12,149	2,183
Plasterer	13,257	14,068	811	16,160	2,903
Plumber	83,861	88,993	5,133	102,225	18,365
Residential Electrician	8	8	0	10	2
Residential Sheet Metal Worker	341	362	21	416	75
Roofer	41,736	44,291	2,555	50,876	9,140
Sheet Metal Worker	26,026	27,619	1,593	31,726	5,700
Sheet Metal Worker (HVAC)	49,184	52,194	3,010	59,955	10,771
Teamster	36,572	38,811	2,239	44,581	8,009
Telecommunications Technician	341	362	21	416	75
Terrazzo Finisher	187	198	11	228	41
Terrazzo Worker	336	356	21	409	73
Tile Finisher	3,806	4,039	233	4,639	833
Tile Layer	2,466	2,617	151	3,006	540
Tile Setter	176	187	11	215	39
Tree Maintenance (Laborer)	4,255	4,515	260	5,187	932
Tunnel (Operating Engineer)	42,997	45,629	2,632	52,413	9,416
Tunnel Worker (Laborer)	396,239	420,492	24,253	483,013	86,774
Total Construction Labor Hours	4,214,979	4,472,969	257,990	5,138,035	923,056
Estimated Labor Construction Cost	747,000,555	792,722,965		910,589,508	

Source: LCPTracker and ICF.

To calculate the female labor demand gap, the ICF Team analyzed the LCPTracker data to calculate the sum of female hours incurred per Metro craft in 2023 and the percent of total hours completed by female workers in 2023 for each craft. This craft-specific proportion was applied to each respective Metro craft for each future year being analyzed to determine the projected number of female hours per year. The number of female labor hours required to meet the utilization goal of 6.9% per year was calculated and compared to the estimated female labor hours in each year to determine the additional hours required by female labor needed to satisfy Metro’s current and future demand. This metric represents the demand gap in female labor hours which is shown by craft for 2026 and 2033 in Exhibit 11 below. For example, the Metro craft “Building / Construction Inspector and Field Soils and Material Tester” incurred 11,959 female worker hours in 2023 and is projected to use 14,578 hours in 2033 based on future demand growth projections. To reach the 6.9% utilization goal, this craft needs to incur 14,940 total female hours in conjunction with accretions in hours for other crafts listed in the Exhibit 11. Thus, the additional hours required to meet this utilization goal, or the female labor hours demand gap, for the “Building / Construction Inspector and Field Soils and Material Tester” craft in 2033 is 362 female hours. In Appendix D, the variables reflected in Exhibits 10 and 11 are shown for each year from 2024 to 2033. Specifically, these tables enumerate the estimated total labor hours and female



labor hours for each craft and year based on Metro’s future project pipeline and show the additional female hours needed for each craft and year to achieve the 6.9% annual utilization target.

Exhibit 11: Projected Female Metro Hours in 2026 and 2033 under 2% Demand Growth Scenario by Craft

Metro Craft	2023 Hours for Female Workers on Metro Projects	Projected 2026 Hours for Female Workers on Metro Projects	Number of 2026 Female Hours Required to Meet Utilization Target	Additional 2026 Female Hours Required to Meet Utilization Target	Projected 2033 Hours for Female Workers on Metro Projects	Number of 2033 Female Hours Required to Meet Utilization Target	Additional 2033 Female Hours Required to Meet Utilization Target
Apprentice Landscape Irrigation Fitter (2nd Shift)	-	-	4	4	-	4	4
Asbestos and Lead Abatement (Laborer)	-	-	187	187	-	214	214
Asbestos Worker, Heat and Frost Insulator	40	42	88	45	49	101	52
Brick Tender	-	-	809	809	-	929	929
Bricklayer	-	-	63	63	-	73	73
Bricklayer, Stonemason	-	-	2,771	2,771	-	3,183	3,183
Building / Construction Inspector and Field Soils and Material Tester	11,959	12,691	13,006	315	14,578	14,940	362
Carpenter and Related Trades	12,370	13,127	37,602	24,475	15,079	43,192	28,114
Carpet, Linoleum	-	-	20	20	-	23	23
Carpet, Linoleum, Resilient	-	-	1	1	-	1	1
Cement Mason	298	316	9,862	9,546	363	11,328	10,965
Cranes, Pile Driver, and Hoisting Equipment (Operating Engineer)	779	826	2,474	1,647	949	2,841	1,892
Driver (On/Off-Hauling To/From Construction Site)	836	887	5,444	4,557	1,019	6,254	5,235
Drywall Finisher	-	-	131	131	-	150	150
Drywall Installer / Lather (Carpenter)	218	231	2,572	2,341	266	2,954	2,689
Electrical Utility Lineman	-	-	452	452	-	520	520
Electrician	24,984	26,513	34,798	8,285	30,455	39,972	9,517
Elevator Constructor	7,152	7,590	6,022	(1,568)	8,718	6,917	(1,801)
Fence Builder (Carpenter)	-	-	0	0	-	0	0
Field Surveyor	486	516	2,816	2,300	592	3,235	2,642



Metro Craft	2023 Hours for Female Workers on Metro Projects	Projected 2026 Hours for Female Workers on Metro Projects	Number of 2026 Female Hours Required to Meet Utilization Target	Additional 2026 Female Hours Required to Meet Utilization Target	Projected 2033 Hours for Female Workers on Metro Projects	Number of 2033 Female Hours Required to Meet Utilization Target	Additional 2033 Female Hours Required to Meet Utilization Target
Fire Safety and Miscellaneous Sealing	-	-	13	13	-	15	15
Glazier	293	311	2,000	1,689	357	2,298	1,940
Gunite Worker (Laborer)	-	-	721	721	-	828	828
Horizontal Directional Drilling	-	-	522	522	-	600	600
Iron Worker	9,341	9,913	21,996	12,083	11,387	25,267	13,880
Laborer (Construction, Fence Erector, Gunite, Housemover, Tunnel)	-	-	17	17	-	20	20
Laborer and Related Classifications	54,689	58,037	69,861	11,824	66,666	80,248	13,583
Landscape Irrigation Fitter	-	-	15	15	-	17	17
Landscape Maintenance Laborer	508	539	4,303	3,765	619	4,943	4,325
Landscape Operating Engineer	-	-	13	13	-	15	15
Landscape / Irrigation Laborer / Tender	-	-	519	519	-	596	596
Marble Finisher	-	-	110	110	-	127	127
Modular Furniture Installer (Carpenter)	-	-	38	38	-	43	43
Operating Engineer	4,204	4,461	32,327	27,866	5,124	37,134	32,009
Operating Engineer (Landscape Construction)	-	-	10	10	-	11	11
Painter	2,089	2,217	4,033	1,816	2,546	4,633	2,086
Painter - Industrial	1,216	1,291	191	(1,100)	1,483	219	(1,264)
Parking and Highway Improvement (Striper-Laborer)	47	50	279	229	57	320	263
Parking and Highway Improvement (Striping, Slurry and Seal Coat Operations-Laborer)	-	-	47	47	-	54	54
Pile Driver (Carpenter)	-	-	383	383	-	440	440
Plaster Tender	-	-	730	730	-	838	838
Plasterer	504	535	971	436	614	1,115	501



Metro Craft	2023 Hours for Female Workers on Metro Projects	Projected 2026 Hours for Female Workers on Metro Projects	Number of 2026 Female Hours Required to Meet Utilization Target	Additional 2026 Female Hours Required to Meet Utilization Target	Projected 2033 Hours for Female Workers on Metro Projects	Number of 2033 Female Hours Required to Meet Utilization Target	Additional 2033 Female Hours Required to Meet Utilization Target
Plumber	3,088	3,276	6,141	2,864	3,764	7,054	3,290
Residential Electrician	-	-	1	1	-	1	1
Residential Sheet Metal Worker	-	-	25	25	-	29	29
Roofer	2,072	2,199	3,056	857	2,526	3,510	985
Sheet Metal Worker	1,080	1,146	1,906	760	1,317	2,189	873
Sheet Metal Worker (HVAC)	-	-	3,601	3,601	-	4,137	4,137
Teamster	3,532	3,748	2,678	(1,070)	4,305	3,076	(1,229)
Telecommunications Technician	-	-	25	25	-	29	29
Terrazzo Finisher	-	-	14	14	-	16	16
Terrazzo Worker	-	-	25	25	-	28	28
Tile Finisher	-	-	279	279	-	320	320
Tile Layer	-	-	181	181	-	207	207
Tile Setter	-	-	13	13	-	15	15
Tree Maintenance (Laborer)	-	-	312	312	-	358	358
Tunnel (Operating Engineer)	-	-	3,148	3,148	-	3,617	3,617
Tunnel Worker (Laborer)	15,772	16,737	29,014	12,277	19,225	33,328	14,103
Total Female Labor Hours	157,554	167,198	308,635	141,437	192,058	354,524	162,467

Source: LCPTracker and ICF.

Additionally, to illustrate the female current and future demand by construction trade, the ICF Team mapped each craft to its respective construction trade to show current and future demand gaps (Exhibits 12 and 13). For example, in Exhibit 13 the Teamster/Drive trade will need an additional 4,005 hours in 2033 to meet projected demand. Appendix E illustrates the female labor hours for each trade and year based on Metro's future project pipeline and shows the additional female hours needed for each trade and year to achieve the 6.9% utilization target on an annual basis.

Exhibit 12: Current Female Workforce Gap on Metro Projects in 2023 by Trade

Construction Trade	2023 Hours (Actual)	Female Hours Required for 6.9%	2023 Female Hours (Actual)	Current Female Workforce Gap
BRICKLAYER AND TILE SETTER	47,180	3,255	-	3,255
CARPENTER	554,399	38,254	12,588	25,666
ELECTRICIAN	481,757	33,241	24,984	8,258
ELEVATOR CONSTRUCTOR	82,236	5,674	7,152	(1,478)
INSPECTOR	177,620	12,256	11,959	297
IRON WORKER	300,399	20,728	9,341	11,387
LABORER	1,467,077	101,228	71,055	30,173
OPERATING ENGINEER	518,571	35,781	4,204	31,578
PAINTER	87,071	6,008	3,598	2,410
PLASTERER AND CEMENT MASON	147,939	10,208	802	9,406
PLUMBER AND PIPEFITTER	84,064	5,800	3,088	2,713
ROOFER	41,736	2,880	2,072	808
SHEET METAL	75,551	5,213	1,080	4,133
SURVEYOR	38,458	2,654	486	2,168
TEAMSTER/DRIVER	110,923	7,654	5,146	2,507
Total	4,214,979	290,834	157,554	133,279

Source: LCPtracker and ICF.

Exhibit 13: Projected Female Metro Hours in 2026 and 2033 under 2% Demand Growth Scenario by Trade

Construction Trade	Actual 2023 Hours for Female Workers on Metro Projects	Projected 2026 Hours for Female Workers on Metro Projects	Number of 2026 Female Hours Required to Meet Utilization Target	Additional 2026 Female Hours Required to Meet Utilization Target	Projected 2033 Hours for Female Workers on Metro Projects	Number of 2033 Female Hours Required to Meet Utilization Target	Additional 2033 Female Hours Required to Meet Utilization Target
BRICKLAYER AND TILE SETTER	0	0	3,455	3,455	0	3,968	3,968
CARPENTER	12,588	13,358	40,595	27,237	15,344	46,631	31,286
ELECTRICIAN	24,984	26,513	35,276	8,763	30,455	40,521	10,066
ELEVATOR CONSTRUCTOR	7,152	7,590	6,022	(1,568)	8,718	6,917	(1,801)
INSPECTOR	11,959	12,691	13,006	315	14,578	14,940	362
IRON WORKER	9,341	9,913	21,996	12,083	11,387	25,267	13,880
LABORER	71,055	75,404	107,424	32,020	86,616	123,397	36,781

Construction Trade	Actual 2023 Hours for Female Workers on Metro Projects	Projected 2026 Hours for Female Workers on Metro Projects	Number of 2026 Female Hours Required to Meet Utilization Target	Additional 2026 Female Hours Required to Meet Utilization Target	Projected 2033 Hours for Female Workers on Metro Projects	Number of 2033 Female Hours Required to Meet Utilization Target	Additional 2033 Female Hours Required to Meet Utilization Target
OPERATING ENGINEER	4,982	5,287	37,972	32,684	6,073	43,617	37,544
PAINTER	3,598	3,819	6,376	2,557	4,386	7,324	2,937
PLASTERER AND CEMENT MASON	802	851	10,833	9,981	978	12,443	11,466
PLUMBER AND PIPEFITTER	3,088	3,276	6,155	2,879	3,764	7,071	3,307
ROOFER	2,072	2,199	3,056	857	2,526	3,510	985
SHEET METAL	1,080	1,146	5,532	4,386	1,317	6,355	5,038
SURVEYOR	486	516	2,816	2,300	592	3,235	2,642
TEAMSTER/DRIVER	4,368	4,635	8,122	3,487	5,325	9,330	4,005
Total Female Labor Hours	157,554	167,198	308,635	141,437	192,058	354,524	162,467

Source: LCPtracker and ICF.

C& D Current and Future Workforce Gap Analyses

3. Current and Future Workforce Gap Analyses

The ICF team compared measures of construction labor supply and demand to project the workforce gap both regionally and specifically for Metro projects. These projections consider different growth scenarios for the labor supply and demand from 2024 to 2033.

3.1 Projected Female Metro Workforce Gap

EA developed supply side labor projections using historical Greater LA data from LCPtracker. To capture the volatility in many of the trades over the past five years, EA developed Rapid Growth, Moderate Growth, No Growth, and Decline scenarios for each trade. To incorporate supply-side projections into the gap analysis, the ICF Team developed scenarios assuming Moderate and Rapid growth supply. The projected supply for each scenario includes the number of projected female hours in Greater LA Area by trade and by year from through 2033. Because the supply scenarios represent projections for Greater LA region, not all of which would be available to Metro based on competition for these resources, supply side availability of female labor for Metro contractors was estimated based on the historical average of the percent of the Greater LA female supply Metro captured from 2019-2023 by trade. For example, on average historically over the last five years Metro has captured 78% of the “Elevator Constructor” trade and 6.5% of the “Surveyor” trade. The female supply projections for Greater LA were

multiplied by the historical percent of female supply that Metro has captured to create hour supply estimates by year and trade. See Appendix F.

Using the two demand and two supply scenarios, the ICF team compared demand and supply estimates under the four resulting scenarios (Flat Demand/Moderate Supply Growth, 2% Demand/Moderate Supply Growth, Flat Demand/Rapid Supply Growth, and 2% Demand Growth/Rapid Supply Growth) to project the annual gap in female labor hours and projected female utilization rate by year. For the Flat (0%) Demand Growth/Moderate Supply Growth scenario, Exhibit 14 shows the current or base year (2023) gap between 2023 female hours and the female hours that would be needed to meet an annual 6.9% female participation rate of 133,280 hours. That gap decreases as demand remains flat and supply moderately increases and by 2033 is 48,942 hours. The projected annual female utilization rate is 4.56% in 2026 and 5.74% by 2033, under this scenario.

Exhibit 14. Metro Female Annual Gap & Utilization: Flat (0%) Demand Growth and Moderate Supply Growth, Current, 3-Year, and 10-Year Projections

	Female Labor Hours 2023 (Current)	Female Labor Hours 2026 (Projected)	Female Labor Hours 2033 (Projected)
Scenario: Flat (0%) Demand Growth and Moderate Supply Growth			
Projected Total Hours (all genders)	4,214,979	4,214,979	4,214,979
Projected Female Hours at 2023 Participation Rate	157,554	157,554	157,554
Female hours required to meet target utilization	290,834	290,834	290,834
Additional female hours needed to meet target utilization	133,279	133,279	133,279
Projected female hours available to Metro (supply)	157,554	192,384	241,891
Difference between available female hours and projected demand at 2023 participation rate	--	34,829	84,337
Difference between available female hours and hours needed to meet target utilization rate	(133,280)	(98,450)	(48,942)
Metro Percent Female Hours	3.74%	3.74%	3.74%
Percent Female Hours required to meet target utilization	6.90%	6.90%	6.90%
Metro Female Hours as % of total hours (Female Participation)	3.74%	4.56%	5.74%

Sources: LCPTracker, ICF, and Estolano Advisors. Note: Base year female utilization is calculated from LCPTracker data and may vary slightly from other point in time estimates of Metro female utilization.

Exhibit 15 shows the three- and ten-year projections, assuming demand is increasing at 2% a year and moderate supply growth. As expected, the female workforce gap is larger than under the previous scenario and by 2033 the female utilization rate is at 4.71%.

Exhibit 15. Metro Female Annual Gap & Utilization: 2% Annual Demand Growth and Moderate Supply Growth, Three-Year and Ten-Year Projections

	Female Labor Hours 2026 (Projected)	Female Labor Hours 2033 (Projected)
Scenario: 2% Demand Growth and Moderate Supply Growth		
Projected Total Hours (all genders)	4,472,969	5,138,035



Projected Female Hours at 2023 Participation Rate	167,198	192,058
Female hours required to meet target utilization	308,635	354,524
Additional female hours needed to meet target utilization	141,437	162,467
Projected female hours available to Metro (supply)	192,384	241,891
Difference between available female hours and projected demand at 2023 participation rate	25,186	49,833
Difference between available female hours and hours needed to meet target utilization rate	(116,251)	(112,633)
Metro Female Hours as % of total hours (Female Participation)	4.30%	4.71%

Sources: LCPTracker, ICF, and Estolano Advisors.

In the most optimistic scenario modeled, Flat (0%) Demand Growth and Rapid Supply Growth, Metro contractors could surpass the 6.9% goal for female utilization by 2032, on an annual basis, reaching 7.08% in 2032 and 7.42% in 2033. See Exhibit 16. In the final scenario, Exhibit 17, 2% Demand Growth per year and Rapid Supply Growth, female utilization surpasses 6% by 2033 but not does reach 6.9% within the ten-year period.

Exhibit 16. Metro Female Annual Gap & Utilization: Flat Demand Growth and Rapid Supply Growth, Three-Year and Years 8-10 Projections

Scenario: Flat (0%) Demand Growth and Rapid Supply Growth	Female Labor Hours 2026 (Projected)	Female Labor Hours 2031 (Projected)	Female Labor Hours 2032 (Projected)	Female Labor Hours 2033 (Projected)
Projected Total Hours (all genders)	4,214,979	4,214,979	4,214,979	4,214,979
Projected Female Hours at 2023 Participation Rate	157,554	157,554	157,554	157,554
Female hours required to meet target utilization	290,834	290,834	290,834	290,834
Additional female hours needed to meet target utilization	133,279	133,279	133,279	133,279
Projected female hours available to Metro (supply)	213,601	284,326	298,471	312,616
Difference between available female hours and projected demand at 2023 participation rate	56,047	126,772	140,917	155,062
Difference between available female hours and hours needed to meet target utilization rate	(77,232)	(6,507)	7,638	21,783
Metro Female Hours as % of total hours (Female Participation)	5.07%	6.75%	7.08%	7.42%

Sources: LCPTracker, ICF, and Estolano Advisors.

Exhibit 17. Metro Female Annual Gap & Utilization: 2% Annual Demand Growth and Rapid Supply Growth, Three-Year and Ten-Year Projections

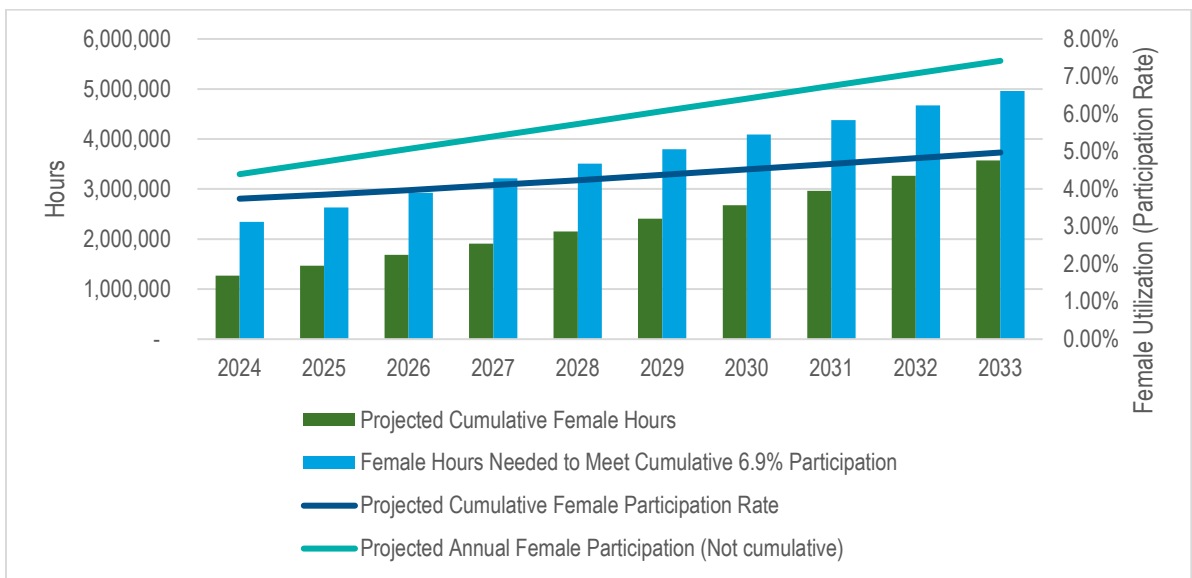
Scenario: 2% Demand Growth and Rapid Supply Growth	Female Labor Hours 2026 (Projected)	Female Labor Hours 2033 (Projected)
Projected Total Hours (all genders)	4,472,969	5,138,035



Projected Female Hours at 2023 Participation Rate	167,198	192,058
Female hours required to meet target utilization	308,635	354,524
Additional female hours needed to meet target utilization	141,437	162,467
Projected female hours available to Metro (supply)	213,601	312,616
Difference between available female hours and projected demand at 2023 participation rate	46,403	120,559
Difference between available female hours and hours needed to meet target utilization rate	(95,034)	(41,908)
Metro Female Hours as % of total hours (Female Participation)	4.78%	6.08%

As noted above, under the most favorable scenario modeled: Flat Demand Growth and Rapid Supply Growth, Metro contractors could achieve a 7.08% female utilization in 2032 and 7.42% in 2033, on an annual basis. However, due to historical hours (29.7M as of November 2023)⁴⁴ included in the PLA utilization calculations and Metro contractors' historical female utilization rates below 2023 levels dating back to 2012, the cumulative female utilization would still be less than 5% by 2033. Under the most optimistic scenario, the graph in Exhibit 18, shows the difference between the Female Utilization rate annually each year and the lower cumulative rate when accounting for historical hours. Cumulative female utilization increases at a lower rate than annual utilization because it is weighted by lower historical female utilization rates. Exhibit 19 below shows for each of the four scenarios, the projected cumulative female utilization rate for 2026 and 2033 accounting for historical PLA hours and female utilization rates. The cumulative Female Utilization rate in 2033 under the four scenarios ranges from 4.15% (with a shortfall in hours of 2.11M) under a 2% annual demand growth, moderate supply growth scenario to 4.97% (with a shortfall in hours of 1.39M) assuming flat demand growth and rapid supply growth. If demand were to increase more than the 2% annual projected growth, under both the moderate and rapid supply growth scenarios Female Utilization rates would be lower than those shown here, all other assumptions equal.

Exhibit 18. Metro Annual and Cumulative Female Utilization: Flat Demand Growth and Rapid Supply Growth, 2024-2033



⁴⁴ Sourced from Metro provided PLA documents.

Exhibit 19. Metro Cumulative Female Workforce Gap & Utilization: All Scenarios, Three-Year and 10-Year Projections

Scenario: Flat (0%) Demand Growth and Moderate Supply Growth	2026	2033
Projected Cumulative Hours	42,379,823	71,884,672
Projected Cumulative Female Hours	1,641,318	3,186,034
Projected Cumulative Female Utilization Rate	3.87%	4.43%
Cumulative Female Hours Needed to Reach 6.9% Utilization	2,924,208	4,960,042
Scenario: 2% Demand Growth and Moderate Supply Growth		
Projected Cumulative Hours	42,892,398	76,810,783
Projected Cumulative Female Hours	1,641,318	3,186,034
Projected Cumulative Female Utilization Rate	3.83%	4.15%
Cumulative Female Hours Needed to Reach 6.9% Utilization	2,959,575	5,299,944
Scenario: Flat (0%) Demand Growth and Rapid Supply Growth		
Projected Cumulative Hours	42,379,823	71,884,672
Projected Cumulative Female Hours	1,683,753	3,575,022
Projected Cumulative Female Utilization Rate	3.97%	4.97%
Cumulative Female Hours Needed to Reach 6.9% Utilization	2,924,208	4,960,042
Scenario: 2% Demand Growth and Rapid Supply Growth		
Projected Cumulative Hours	42,892,398	76,810,783
Projected Cumulative Female Hours	1,683,753	3,575,022
Projected Cumulative Female Utilization Rate	3.93%	4.65%
Cumulative Female Hours Needed to Reach 6.9% Utilization	2,959,575	5,299,944

Source: LCPtracker, ICF, and Estolano Advisors.

3.2 Projected Female Metro Workforce Gap by Trade

The ICF Team also calculated the annual female utilization and gap for each trade through 2033. As shown in Exhibit 20, historically over the last five years, the top five trades with the most hours annually on Metro projects are: Laborers, Electricians, Operating Engineers, Carpenters, and Iron Workers. Trades with the highest number of female hours over the 2019-2023 period are: Laborers, Electricians, Carpenters, Iron Workers, and Inspectors. The trades with highest average female utilization from 2019-2023 are Inspector, Elevator Constructor, Plumber and Pipefitter, Laborer, and Electrician, though none meet the target utilization goal when looking at the average over five years.

Exhibit 20. Hours and Female Utilization on Metro Construction Projects, 2019-2023

Construction Trade	All Hours (2019-2023)	Female Hours (2019-2023)	Average Female Utilization
BRICKLAYER AND TILE SETTER	51,455	-	0.00%
CARPENTER	2,313,989	71,455	3.09%
ELECTRICIAN	3,036,702	124,789	4.11%
ELEVATOR CONSTRUCTOR	442,879	22,798	5.15%
INSPECTOR	776,406	41,435	5.34%



IRON WORKER	1,199,382	42,009	3.50%
LABORER	8,049,139	376,251	4.67%
OPERATING ENGINEER	2,619,518	29,522	1.13%
PAINTER	367,025	12,331	3.36%
PLASTERER AND CEMENT MASON	645,272	3,197	0.50%
PLUMBER AND PIPEFITTER	336,765	16,408	4.87%
ROOFER	81,677	2,579	3.16%
SHEET METAL	283,736	6,651	2.34%
SURVEYOR	240,671	2,388	0.99%
TEAMSTER/DRIVER	1,081,961	18,456	1.71%
Total	21,526,576	770,268	3.58%

Source: LCPtracker, ICF and Estolano Advisors.

To project the female workforce gap and the projected female utilization for each trade, the ICF Team used the Moderate and Rapid Supply Growth scenarios developed by EA and scaled the projected Greater LA supply estimates to account for competition for the regional labor supply. Supply estimates for each trade were scaled based on the average percent of the female labor supply that Metro has captured out of the Greater LA female labor supply over the last five years. See Appendix F.

For the most and least optimistic scenarios, (Exhibits 21 and 22), annual projections for 2033 female utilization by trade for the top five Metro trades range from: Laborer: (5.72%-8.48%); Electrician: (5.35%-7.63%); Iron Workers: (3.80%-6.48%); Carpenters: (2.66%-4.21%) and Operating Engineer: (1.50%-2.49%).

Exhibit 21. Projected Female Workforce Gap and Utilization by Trade: Flat (0%) Demand Growth; Rapid Supply Growth, 2033 (Most Optimistic Scenario for achieving 6.9% female utilization)

Trade	Projected Hours 2033	Female Hours Required to Meet 6.9% 2033	Projected Female Hours (Supply) Available to Metro 2033	Female Workforce Gap - Hours 2033	Projected Female Utilization 2033
BRICKLAYER AND TILE SETTER	47,180	3,255	0	(3,255)	0.00%
CARPENTER	554,398.90	38,253.52	23,351	(14,902.28)	4.21%
ELECTRICIAN	481,756.50	33,241.20	36,762	3,521.04	7.63%
ELEVATOR CONSTRUCTOR	82,235.64	5,674.26	18,371	12,697.15	22.34%
INSPECTOR	177,620.27	12,255.80	32,472	20,216.24	18.28%
IRON WORKER	300,398.59	20,727.50	19,463	(1,264.69)	6.48%
LABORER	1,467,076.69	101,228.29	124,357	23,128.34	8.48%
OPERATING ENGINEER	518,571.36	35,781.42	12,923	(22,858.37)	2.49%
PAINTER	87,070.58	6,007.87	6,304	296.07	7.24%
PLASTERER AND CEMENT MASON	147,938.75	10,207.77	2,430	(7,777.60)	1.64%
PLUMBER AND PIPEFITTER	84,063.60	5,800.39	14,845	9,044.15	17.66%



ROOFER	41,736.00	2,879.78	1,575	(1,305.03)	3.77%
SHEET METAL	75,551.00	5,213.02	3,359	(1,854.18)	4.45%
SURVEYOR	38,457.75	2,653.58	1,366	(1,287.11)	3.55%
TEAMSTER/DRIVER	110,923.39	7,653.71	15,038	7,384.58	13.56%
Total	4,214,979	290,834	312,616	21,783	7.42%

Source: LCPtracker, ICF and Estolano Advisors.

Exhibit 22. Projected Female Workforce Gap and Utilization by Trade: 2% Demand Growth; Moderate Supply Growth, 2033 (Least Optimistic Scenario for achieving 6.9% female utilization)

Trade	Projected Hours 2033	Female Hours Required to Meet 6.9% 2033	Projected Female Hours (Supply) Available to Metro 2033	Female Workforce Gap - Hours 2033	Projected Female Utilization 2033
BRICKLAYER AND TILE SETTER	57,512	3,968	0	(3,968)	0.00%
CARPENTER	675,809.17	46,630.83	18,004.39	(28,626.44)	2.66%
ELECTRICIAN	587,258.49	40,520.84	31,398.64	(9,122.20)	5.35%
ELEVATOR CONSTRUCTOR	100,244.79	6,916.89	12,805.27	5,888.38	12.77%
INSPECTOR	216,518.12	14,939.75	22,243.73	7,303.98	10.27%
IRON WORKER	366,184.20	25,266.71	13,930.22	(11,336.49)	3.80%
LABORER	1,788,358.30	123,396.72	102,251.05	(21,145.67)	5.72%
OPERATING ENGINEER	632,135.59	43,617.36	9,492.50	(34,124.86)	1.50%
PAINTER	106,138.55	7,323.56	4,750.11	(2,573.45)	4.48%
PLASTERER AND CEMENT MASON	180,336.51	12,443.22	1,707.02	(10,736.20)	0.95%
PLUMBER AND PIPEFITTER	102,473.06	7,070.64	10,512.28	3,441.64	10.26%
ROOFER	50,875.95	3,510.44	1,155.45	(2,354.99)	2.27%
SHEET METAL	92,096.25	6,354.64	2,449.67	(3,904.97)	2.66%
SURVEYOR	46,879.78	3,234.71	905.89	(2,328.81)	1.93%
TEAMSTER/DRIVER	135,214.99	9,329.83	10,284.99	955.16	7.61%
Total	5,138,035	354,524	241,891	(112,633)	4.71%

Source: LCPtracker, ICF and Estolano Advisors.

Exhibits 23 and 24 show the projected progression of female utilization rates for each Trade under the most optimistic and least optimistic scenarios. Under the most optimistic scenario, 7 of the 15 trades would exceed 6.9% female utilization by 2033, some by significant margins. Under the least optimistic scenario, four trades are projected to exceed 6.9% by 2033 (Elevator Constructor, Inspector, Plumber and Pipefitter, and Teamster/Driver).

Exhibit 23. Projected Annual Female Utilization by Trade, 3-, 5-, and 10- year projections: Flat (0%) Demand Growth; Rapid Supply Growth (Most Optimistic Scenario for achieving 6.9% female utilization)

Trade	Current Female Utilization (2023)	Projected Female Utilization (2026)	Projected Female Utilization (2029)	Projected Female Utilization (2033)
-------	-----------------------------------	-------------------------------------	-------------------------------------	-------------------------------------



BRICKLAYER AND TILE SETTER	0.00%	0.00%	0.00%	0.00%
CARPENTER	2.27%	2.86%	3.44%	4.21%
ELECTRICIAN	5.19%	6.07%	6.74%	7.63%
ELEVATOR CONSTRUCTOR	8.70%	12.86%	16.93%	22.34%
INSPECTOR	6.73%	10.22%	13.67%	18.28%
IRON WORKER	3.11%	3.90%	5.01%	6.48%
LABORER	4.84%	6.37%	7.27%	8.48%
OPERATING ENGINEER	0.96%	1.57%	1.96%	2.49%
PAINTER	4.13%	4.74%	5.81%	7.24%
PLASTERER AND CEMENT MASON	0.54%	0.96%	1.25%	1.64%
PLUMBER AND PIPEFITTER	3.67%	10.44%	13.54%	17.66%
ROOFER	4.96%	2.37%	2.97%	3.77%
SHEET METAL	1.43%	2.76%	3.48%	4.45%
SURVEYOR	1.26%	1.88%	2.60%	3.55%
TEAMSTER/DRIVER	3.94%	7.56%	10.13%	13.56%
Total	3.74%	5.07%	6.07%	7.42%

Source: LCPtracker, ICF and Estolano Advisors.

Exhibit 24. Projected Annual Utilization by Trade, 3-, 5- and 10- year projections: 2% Demand Growth; Moderate Supply Growth, 2033 (Least Optimistic Scenario for achieving 6.9% female utilization)

Trade	Current Female Utilization (2023)	Projected Female Utilization (2026)	Projected Female Utilization (2029)	Projected Female Utilization (2033)
BRICKLAYER AND TILE SETTER	0.00%	0.00%	0.00%	0.00%
CARPENTER	2.27%	2.42%	2.54%	2.66%
ELECTRICIAN	5.19%	5.41%	5.39%	5.35%
ELEVATOR CONSTRUCTOR	8.70%	10.21%	11.42%	12.77%
INSPECTOR	6.73%	8.00%	9.07%	10.27%
IRON WORKER	3.11%	3.15%	3.46%	3.80%
LABORER	4.84%	5.57%	5.65%	5.72%
OPERATING ENGINEER	0.96%	1.29%	1.39%	1.50%
PAINTER	4.13%	3.96%	4.21%	4.48%
PLASTERER AND CEMENT MASON	0.54%	0.76%	0.85%	0.95%
PLUMBER AND PIPEFITTER	3.67%	8.38%	9.27%	10.26%
ROOFER	4.96%	1.95%	2.10%	2.27%
SHEET METAL	1.43%	2.26%	2.45%	2.66%
SURVEYOR	1.26%	1.43%	1.67%	1.93%
TEAMSTER/DRIVER	3.94%	5.91%	6.71%	7.61%
Total	3.74%	4.30%	4.50%	4.71%

Source: LCPtracker, ICF and Estolano Advisors.



3.3 Projections for Achieving 6.9% Female Utilization

Only the most optimistic scenario, Flat (0%) Demand Growth / Rapid Supply Growth is projected to achieve an average 6.9% annual female utilization by 2033. Looking at a longer 20-year timeline, the two middle scenarios (Flat (0%) Demand Growth / Moderate Supply Growth and 2% Demand Growth / Rapid Supply Growth) would also achieve a 6.9% annual female utilization rate. The most optimistic scenario would also near cumulative 6.9% female utilization (accounting for historical PLA hours) by 2045. The least optimistic scenario would not achieve an average 6.9% female utilization by 2025. The Exhibit below shows the projected time to achieve 6.9% female utilization through 2045. Appendix G shows the projected female utilization rates by trade for the most optimistic scenario and Flat (0%) Demand Growth / Moderate Supply Growth.

Exhibit 25: Projected Year to Achieve 6.9% Female Utilization, through 2045

Scenario	Year to Achieve 6.9% Annually	Year to Achieve 6.9% Cumulatively
Flat (0%) Demand Growth and Moderate Supply Growth	2040	n/a
Flat (2%) Demand Growth and Moderate Supply Growth (least optimistic)	n/a	n/a
Flat (0%) Demand Growth and Rapid Supply Growth (most optimistic)	2032	2045
Flat (2%) Demand Growth and Rapid Supply Growth	2040	n/a

Appendices

Appendix A: Occupation Mapping

Metro Craft	SOC Occupation Equivalent(s)	SOC Code Equivalent(s)
Apprentice Landscape Irrigation Fitter (2nd Shift)	Construction Laborers	47-2061
Asbestos and Lead Abatement (Laborer)	Hazardous Materials Removal Workers	47-4041
Asbestos Worker, Heat and Frost Insulator	Construction Laborers	47-2061
Brick Tender	Construction Laborers	47-2061
Bricklayer	Brickmasons and Blockmasons	47-2021
Bricklayer, Stonemason	Stonemasons	47-2024
Building / Construction Inspector and Field Soils and Material Tester	Construction and Building Inspectors	47-4011
Carpenter and Related Trades	Carpenters	47-2031
Carpet, Linoleum	Floor Layers, Except Carpet, Wood, and Hard Tiles	47-2042
Carpet, Linoleum, Resilient	Floor Layers, Except Carpet, Wood, and Hard Tiles	47-2042
Cement Mason	Cement Masons and Concrete Finishers	47-2051
Cranes, Pile Driver and Hoisting Equipment (Operating Engineer)	Operating Engineers and Other Construction Equipment Operators	47-2073
Driver (On/Off-Hauling To/From Construction Site)	Heavy and Tractor-Trailer Truck Drivers	53-3032
Drywall Finisher	Tapers	47-2082
Drywall Installer / Lather (Carpenter)	Drywall and Ceiling Tile Installers	47-2081
Electrical Utility Lineman	Electrical Power-Line Installers and Repairers	49-9051
Electrician	Electricians	47-2111
Elevator Constructor	Elevator and Escalator Installers and Repairers	47-4021
Fence Builder (Carpenter)	Carpenters	47-2031
Field Surveyor	Surveyors	17-1022
Fire Safety and Miscellaneous Sealing	Insulation Workers, Floor, Ceiling, and Wall; Insulation Workers, Mechanical	47-2131; 47-2132
Glazier	Glaziers	47-2121
Gunite Worker (Laborer)	Mixing and Blending Machine Setters, Operators and Tenders	51-9023
Horizontal Directional Drilling	Drilling and Boring Machine Tool Setters, Operators, and Tenders, Metal and Plastic	51-4032
Iron Worker	Structural Iron and Steel Workers; Reinforcing Iron and Rebar Workers	47-2221; 47-2171
Laborer (Construction, Fence Erector, Gunite, HouseMover, Tunnel)	Construction Laborers	47-2061
Laborer and Related Classifications	Construction Laborers	47-2061
Landscape Irrigation Fitter	Pipelayers	47-2151
Landscape Maintenance Laborer	Landscaping and Groundskeeping Workers	37-3011

Metro Craft	SOC Occupation Equivalent(s)	SOC Code Equivalent(s)
Landscape Operating Engineer	Operating Engineers and Other Construction Equipment Operators	47-2073
Landscape/Irrigation Laborer/Tender	Landscaping and Groundskeeping Workers	37-3011
Marble Finisher	Terrazzo Workers and Finishers	47-2053
Modular Furniture Installer (Carpenter)	Carpenters	47-2031
Operating Engineer	Operating Engineers and Other Construction Equipment Operators; Rail-Track Laying and Maintenance Equipment Operators; Paving, Surfacing, and Tamping Equipment Operators	47-2073; 47-4061; 47-2071
Operating Engineer (Landscape Construction)	Operating Engineers and Other Construction Equipment Operators	47-2073
Painter	Painters, Construction and Maintenance	47-2141
Painter - Industrial	Painters, Construction and Maintenance	47-2141
Parking and Highway Improvement (Striper-Laborer)	Construction Laborers	47-2061
Parking and Highway Improvement (Striping, Slurry and Seal Coat Operations-Laborer)	Construction Laborers	47-2061
Pile Driver (Carpenter)	Pile-Driver Operators	47-2072
Plaster Tender	Plasterers and Stucco Masons	47-2161
Plasterer	Plasterers and Stucco Masons	47-2161
Plumber	Plumbers, Pipefitters, and Steamfitters	47-2152
Residential Electrician	Electricians	47-2111
Residential Laborer	Construction Laborers	47-2061
Residential Sheet Metal Worker	Sheet Metal Workers	47-2211
Roofer	Roofers	47-2181
Sheet Metal Worker	Sheet Metal Workers	47-2211
Sheet Metal Worker (HVAC)	Sheet Metal Workers	47-2211
Teamster	Heavy and Tractor-Trailer Truck Drivers	53-3032
Telecommunications Technician	Electricians	47-2111
Terrazzo Finisher	Terrazzo Workers and Finishers	47-2053
Terrazzo Worker	Terrazzo Workers and Finishers	47-2053
Tile Finisher	Terrazzo Workers and Finishers	47-2053
Tile Layer	Terrazzo Workers and Finishers	47-2053
Tile Setter	Terrazzo Workers and Finishers	47-2053
Tree Maintenance (Laborer)	Construction Laborers	47-2061
Tunnel (Operating Engineer)	Operating Engineers and Other Construction Equipment Operators	47-2073
Tunnel Worker (Laborer)	Construction Laborers	47-2061

Appendix B: Historical and Current Monthly Average Hires by Occupation in Greater LA Area

SOC	Occupation	2022	2023	Change	% Change
49-9051	Electrical Power-Line Installers and Repairers	99	135	35	35.6%
47-2181	Roofers	370	484	114	30.9%
47-2061	Construction Laborers	2035	2633	599	29.4%
47-2111	Electricians	1299	1610	311	24.0%
47-2031	Carpenters	2254	2751	497	22.0%
37-3011	Landscaping and Groundskeeping Workers	2501	2857	356	14.2%
47-2221	Structural Iron and Steel Workers	222	247	25	11.3%
47-2073	Operating Engineers and Other Construction Equipment Operators	622	675	53	8.5%
47-2141	Painters, Construction and Maintenance	739	800	62	8.4%
47-2211	Sheet Metal Workers	225	232	8	3.4%
47-2071	Paving, Surfacing, and Tamping Equipment Operators	51	51	0	0.6%
47-4021	Elevator and Escalator Installers and Repairers	48	48	0	0.2%
47-2161	Plasterers and Stucco Masons	211	201	-10	-4.8%
47-2152	Plumbers, Pipefitters, and Steamfitters	993	920	-73	-7.4%
47-2171	Reinforcing Iron and Rebar Workers	112	103	-9	-7.8%
47-4011	Construction and Building Inspectors	253	233	-20	-7.9%
53-3032	Heavy and Tractor-Trailer Truck Drivers	6420	5828	-592	-9.2%
47-2121	Glaziers	281	255	-26	-9.3%
47-2081	Drywall and Ceiling Tile Installers	881	768	-113	-12.8%
47-2131	Insulation Workers, Floor, Ceiling, and Wall	54	46	-8	-14.1%
47-2132	Insulation Workers, Mechanical	24	20	-5	-19.2%
51-9023	Mixing and Blending Machine Setters, Operators, and Tenders	197	158	-39	-19.8%
47-2051	Cement Masons and Concrete Finishers	1009	795	-214	-21.2%
47-4061	Rail-Track Laying and Maintenance Equipment Operators	26	20	-6	-22.8%
47-2021	Brickmasons and Blockmasons	131	98	-34	-25.7%
17-1022	Surveyors	67	50	-17	-25.9%
47-4041	Hazardous Materials Removal Workers	294	212	-82	-27.9%
51-4032	Drilling and Boring Machine Tool Setters, Operators, and Tenders, Metal and Plastic	29	20	-9	-29.8%
47-2022	Stonemasons	58	38	-19	-33.5%
47-2151	Pipelayers	71	47	-24	-34.4%
47-2072	Pile Driver Operators	30	16	-14	-45.8%
47-2082	Tapers	195	102	-94	-48.0%
47-2053	Terrazzo Workers and Finishers	3	1	-2	-51.9%

SOC	Occupation	2022	2023	Change	% Change
47-2042	Floor Layers, Except Carpet, Wood, and Hard Tiles	347	159	-188	-54.3%
	Total	22153	22615	462	2.1%

Source: Lightcast and ICF.

Appendix C: STATA Correlation Table

(N = 34)

Variables	Median Hourly Earnings	Typical Entry Level Education	Work Experience Required	Typical On-the-Job Training Offered	Occupation Percentage Female in 2023
Median Hourly Earnings	-				
Typical Entry Level Education	0.3680*	-			
Work Experience Required	0.1921	0.0636	-		
Typical On-the-Job Training Offered	0.1921	0.4159*	-0.1147	-	
Occupation Percentage Female in 2023	-0.2392	0.1405	0.2367	-0.3734*	-

Notes: * indicates statistical significance at the p<0.05 level.

Source: Lightcast and ICF

Appendix D: Projected Labor Demand and Female Labor Demand Gap from 2024 – 2033

Flat (0%) Demand Growth, annually from 2024-2033

Metro Craft	Projected Hours for Unionized Workers on Metro Projects	Projected Hours for Female, Unionized Workers on Metro Projects	Number of Female Hours Required to Meet Utilization Target	Additional Female Hours Required to Meet Utilization Target
Apprentice Landscape Irrigation Fitter (2nd Shift)	48	0	3	3
Asbestos and Lead Abatement (Laborer)	2,549	0	176	176
Asbestos Worker, Heat and Frost Insulator	1,196	40	83	43
Brick Tender	11,042	0	762	762
Bricklayer	865	0	60	60
Bricklayer, Stonemason	37,838	0	2,611	2,611
Building / Construction Inspector and Field Soils and Material Tester	177,620	11,959	12,256	297
Carpenter and Related Trades	513,518	12,370	35,433	23,063
Carpet, Linoleum	272	0	19	19
Carpet, Linoleum, Resilient	12	0	1	1
Cement Mason	134,682	298	9,293	8,995
Cranes, Pile Driver and Hoisting Equipment (Operating Engineer)	33,781	779	2,331	1,552
Driver (On/Off-Hauling To/From Construction Site)	74,351	836	5,130	4,294
Drywall Finisher	1,788	0	123	123
Drywall Installer / Lather (Carpenter)	35,125	218	2,424	2,206
Electrical Utility Lineman	6,177	0	426	426
Electrician	475,231	24,984	32,791	7,807
Elevator Constructor	82,236	7,152	5,674	-1,478
Fence Builder (Carpenter)	2	0	0	0
Field Surveyor	38,458	486	2,654	2,168
Fire Safety and Miscellaneous Sealing	184	0	13	13
Glazier	27,316	293	1,885	1,592
Gunite Worker (Laborer)	9,841	0	679	679
Horizontal Directional Drilling	7,135	0	492	492
Housemover (Laborer)	0	0	0	0
Iron Worker	300,399	9,341	20,728	11,387
Laborer (Construction, Fence Erector, Gunite, Housemover, Tunnel)	235	0	16	16
Laborer and Related Classifications	954,083	54,689	65,832	11,142

Metro Craft	Projected Hours for Unionized Workers on Metro Projects	Projected Hours for Female, Unionized Workers on Metro Projects	Number of Female Hours Required to Meet Utilization Target	Additional Female Hours Required to Meet Utilization Target
Landscape Irrigation Fitter	203	0	14	14
Landscape Maintenance Laborer	58,772	508	4,055	3,548
Landscape Operating Engineer	175	0	12	12
Landscape/Irrigation Laborer/Tender	7,084	0	489	489
Marble Finisher	1,506	0	104	104
Modular Furniture Installer (Carpenter)	517	0	36	36
Operating Engineer	441,485	4,204	30,462	26,259
Operating Engineer (Landscape Construction)	134	0	9	9
Painter	55,080	2,089	3,801	1,712
Painter - Industrial	2,602	1,216	180	-1,037
Parking and Highway Improvement (Striper-Laborer)	3,807	47	263	216
Parking and Highway Improvement (Striping, Slurry and Seal Coat Operations-Laborer)	642	0	44	44
Pile Driver (Carpenter)	5,237	0	361	361
Plaster Tender	9,967	0	688	688
Plasterer	13,257	504	915	411
Plumber	83,861	3,088	5,786	2,699
Residential Electrician	8	0	1	1
Residential Laborer	0	0	0	0
Residential Sheet Metal Worker	341	0	24	24
Roofer	41,736	2,072	2,880	808
Sheet Metal Worker	26,026	1,080	1,796	716
Sheet Metal Worker (HVAC)	49,184	0	3,394	3,394
Teamster	36,572	3,532	2,523	-1,009
Telecommunications Technician	341	0	24	24
Terrazzo Finisher	187	0	13	13
Terrazzo Worker	336	0	23	23
Tile Finisher	3,806	0	263	263
Tile Layer	2,466	0	170	170
Tile Setter	176	0	12	12
Tree Maintenance (Laborer)	4,255	0	294	294
Tunnel (Operating Engineer)	42,997	0	2,967	2,967
Tunnel Worker (Laborer)	396,239	15,772	27,340	11,569
Total Construction Labor Hours	4,214,979	157,554	290,834	133,279
Female Percent of Total Hours		3.74%	6.90%	



Metro Craft	Projected Hours for Unionized Workers on Metro Projects	Projected Hours for Female, Unionized Workers on Metro Projects	Number of Female Hours Required to Meet Utilization Target	Additional Female Hours Required to Meet Utilization Target
Estimated Construction Cost	\$747,000,555			

2% Demand Growth

2024 Projections

Metro Craft	Projected Hours for Unionized Workers on Metro Projects	Projected Hours for Female, Unionized Workers on Metro Projects	Number of Female Hours Required to Meet Utilization Target	Additional Female Hours Required to Meet Utilization Target
Apprentice Landscape Irrigation Fitter (2nd Shift)	49	0	3	3
Asbestos and Lead Abatement (Laborer)	2,600	0	179	179
Asbestos Worker, Heat and Frost Insulator	1,220	41	84	43
Brick Tender	11,263	0	777	777
Bricklayer	882	0	61	61
Bricklayer, Stonemason	38,595	0	2,663	2,663
Building / Construction Inspector and Field Soils and Material Tester	181,173	12,198	12,501	303
Carpenter and Related Trades	523,789	12,617	36,141	23,524
Carpet, Linoleum	277	0	19	19
Carpet, Linoleum, Resilient	12	0	1	1
Cement Mason	137,375	304	9,479	9,175
Cranes, Pile Driver and Hoisting Equipment (Operating Engineer)	34,456	794	2,377	1,583
Driver (On/Off-Hauling To/From Construction Site)	75,838	853	5,233	4,380
Drywall Finisher	1,824	0	126	126
Drywall Installer / Lather (Carpenter)	35,828	222	2,472	2,250
Electrical Utility Lineman	6,301	0	435	435
Electrician	484,735	25,483	33,447	7,963
Elevator Constructor	83,880	7,295	5,788	-1,507
Fence Builder (Carpenter)	2	0	0	0
Field Surveyor	39,227	496	2,707	2,211
Fire Safety and Miscellaneous Sealing	188	0	13	13
Glazier	27,862	299	1,922	1,624



Metro Craft	Projected Hours for Unionized Workers on Metro Projects	Projected Hours for Female, Unionized Workers on Metro Projects	Number of Female Hours Required to Meet Utilization Target	Additional Female Hours Required to Meet Utilization Target
Gunite Worker (Laborer)	10,037	0	693	693
Horizontal Directional Drilling	7,278	0	502	502
Housemover (Laborer)	0	0	0	0
Iron Worker	306,407	9,528	21,142	11,614
Laborer (Construction, Fence Erector, Gunite, Housemover, Tunnel)	240	0	17	17
Laborer and Related Classifications	973,164	55,783	67,148	11,365
Landscape Irrigation Fitter	207	0	14	14
Landscape Maintenance Laborer	59,948	518	4,136	3,619
Landscape Operating Engineer	179	0	12	12
Landscape/Irrigation Laborer/Tender	7,225	0	499	499
Marble Finisher	1,536	0	106	106
Modular Furniture Installer (Carpenter)	527	0	36	36
Operating Engineer	450,315	4,288	31,072	26,784
Operating Engineer (Landscape Construction)	136	0	9	9
Painter	56,182	2,131	3,877	1,746
Painter - Industrial	2,654	1,241	183	-1,057
Parking and Highway Improvement (Striper-Laborer)	3,883	48	268	220
Parking and Highway Improvement (Striping, Slurry and Seal Coat Operations-Laborer)	654	0	45	45
Pile Driver (Carpenter)	5,342	0	369	369
Plaster Tender	10,166	0	701	701
Plasterer	13,522	514	933	419
Plumber	85,538	3,149	5,902	2,753
Residential Electrician	8	0	1	1
Residential Laborer	0	0	0	0
Residential Sheet Metal Worker	348	0	24	24
Roofer	42,571	2,113	2,937	824
Sheet Metal Worker	26,547	1,102	1,832	730
Sheet Metal Worker (HVAC)	50,168	0	3,462	3,462
Teamster	37,304	3,603	2,574	-1,029
Telecommunications Technician	348	0	24	24
Terrazzo Finisher	191	0	13	13
Terrazzo Worker	342	0	24	24
Tile Finisher	3,882	0	268	268



Metro Craft	Projected Hours for Unionized Workers on Metro Projects	Projected Hours for Female, Unionized Workers on Metro Projects	Number of Female Hours Required to Meet Utilization Target	Additional Female Hours Required to Meet Utilization Target
Tile Layer	2,515	0	174	174
Tile Setter	180	0	12	12
Tree Maintenance (Laborer)	4,340	0	299	299
Tunnel (Operating Engineer)	43,857	0	3,026	3,026
Tunnel Worker (Laborer)	404,164	16,087	27,887	11,800
Total Construction Labor Hours	4,299,278	160,705	296,650	135,945
Female Percent of Total Hours		3.74%	6.90%	
Estimated Construction Cost	\$761,940,566			

2025 Projections

Metro Craft	Projected Hours for Unionized Workers on Metro Projects	Projected Hours for Female, Unionized Workers on Metro Projects	Number of Female Hours Required to Meet Utilization Target	Additional Female Hours Required to Meet Utilization Target
Apprentice Landscape Irrigation Fitter (2nd Shift)	50	0	3	3
Asbestos and Lead Abatement (Laborer)	2,652	0	183	183
Asbestos Worker, Heat and Frost Insulator	1,245	42	86	44
Brick Tender	11,488	0	793	793
Bricklayer	900	0	62	62
Bricklayer, Stonemason	39,367	0	2,716	2,716
Building / Construction Inspector and Field Soils and Material Tester	184,796	12,442	12,751	309
Carpenter and Related Trades	534,264	12,869	36,864	23,995
Carpet, Linoleum	283	0	20	20
Carpet, Linoleum, Resilient	12	0	1	1
Cement Mason	140,123	310	9,668	9,358
Cranes, Pile Driver and Hoisting Equipment (Operating Engineer)	35,145	810	2,425	1,615
Driver (On/Off-Hauling To/From Construction Site)	77,355	870	5,337	4,468
Drywall Finisher	1,860	0	128	128
Drywall Installer / Lather (Carpenter)	36,544	227	2,522	2,295
Electrical Utility Lineman	6,427	0	443	443
Electrician	494,430	25,993	34,116	8,123
Elevator Constructor	85,558	7,441	5,903	-1,537



Metro Craft	Projected Hours for Unionized Workers on Metro Projects	Projected Hours for Female, Unionized Workers on Metro Projects	Number of Female Hours Required to Meet Utilization Target	Additional Female Hours Required to Meet Utilization Target
Fence Builder (Carpenter)	2	0	0	0
Field Surveyor	40,011	506	2,761	2,255
Fire Safety and Miscellaneous Sealing	191	0	13	13
Glazier	28,419	305	1,961	1,656
Gunite Worker (Laborer)	10,238	0	706	706
Horizontal Directional Drilling	7,424	0	512	512
Housemover (Laborer)	0	0	0	0
Iron Worker	312,535	9,718	21,565	11,847
Laborer (Construction, Fence Erector, Gunite, Housemover, Tunnel)	244	0	17	17
Laborer and Related Classifications	992,628	56,899	68,491	11,593
Landscape Irrigation Fitter	211	0	15	15
Landscape Maintenance Laborer	61,147	528	4,219	3,691
Landscape Operating Engineer	182	0	13	13
Landscape/Irrigation Laborer/Tender	7,370	0	509	509
Marble Finisher	1,567	0	108	108
Modular Furniture Installer (Carpenter)	537	0	37	37
Operating Engineer	459,321	4,374	31,693	27,320
Operating Engineer (Landscape Construction)	139	0	10	10
Painter	57,306	2,173	3,954	1,781
Painter - Industrial	2,707	1,265	187	-1,079
Parking and Highway Improvement (Striper-Laborer)	3,961	49	273	224
Parking and Highway Improvement (Striping, Slurry and Seal Coat Operations-Laborer)	667	0	46	46
Pile Driver (Carpenter)	5,449	0	376	376
Plaster Tender	10,369	0	715	715
Plasterer	13,793	524	952	427
Plumber	87,248	3,212	6,020	2,808
Residential Electrician	8	0	1	1
Residential Laborer	0	0	0	0
Residential Sheet Metal Worker	355	0	24	24
Roofer	43,422	2,156	2,996	840
Sheet Metal Worker	27,077	1,124	1,868	745
Sheet Metal Worker (HVAC)	51,171	0	3,531	3,531



Metro Craft	Projected Hours for Unionized Workers on Metro Projects	Projected Hours for Female, Unionized Workers on Metro Projects	Number of Female Hours Required to Meet Utilization Target	Additional Female Hours Required to Meet Utilization Target
Teamster	38,050	3,675	2,625	-1,049
Telecommunications Technician	355	0	24	24
Terrazzo Finisher	195	0	13	13
Terrazzo Worker	349	0	24	24
Tile Finisher	3,960	0	273	273
Tile Layer	2,566	0	177	177
Tile Setter	183	0	13	13
Tree Maintenance (Laborer)	4,427	0	305	305
Tunnel (Operating Engineer)	44,734	0	3,087	3,087
Tunnel Worker (Laborer)	412,247	16,409	28,445	12,036
Total Construction Labor Hours	4,385,264	163,920	302,583	138,664
Female Percent of Total Hours		3.74%	6.90%	
Estimated Construction Cost	\$777,179,377			

2026 Projections

Metro Craft	Projected Hours for Unionized Workers on Metro Projects	Projected Hours for Female, Unionized Workers on Metro Projects	Number of Female Hours Required to Meet Utilization Target	Additional Female Hours Required to Meet Utilization Target
Apprentice Landscape Irrigation Fitter (2nd Shift)	51	0	4	4
Asbestos and Lead Abatement (Laborer)	2,705	0	187	187
Asbestos Worker, Heat and Frost Insulator	1,269	42	88	45
Brick Tender	11,718	0	809	809
Bricklayer	918	0	63	63
Bricklayer, Stonemason	40,154	0	2,771	2,771
Building / Construction Inspector and Field Soils and Material Tester	188,492	12,691	13,006	315
Carpenter and Related Trades	544,950	13,127	37,602	24,475
Carpet, Linoleum	289	0	20	20
Carpet, Linoleum, Resilient	13	0	1	1
Cement Mason	142,925	316	9,862	9,546
Cranes, Pile Driver and Hoisting Equipment (Operating Engineer)	35,848	826	2,474	1,647



Metro Craft	Projected Hours for Unionized Workers on Metro Projects	Projected Hours for Female, Unionized Workers on Metro Projects	Number of Female Hours Required to Meet Utilization Target	Additional Female Hours Required to Meet Utilization Target
Driver (On/Off-Hauling To/From Construction Site)	78,902	887	5,444	4,557
Drywall Finisher	1,897	0	131	131
Drywall Installer / Lather (Carpenter)	37,275	231	2,572	2,341
Electrical Utility Lineman	6,555	0	452	452
Electrician	504,318	26,513	34,798	8,285
Elevator Constructor	87,269	7,590	6,022	-1,568
Fence Builder (Carpenter)	2	0	0	0
Field Surveyor	40,812	516	2,816	2,300
Fire Safety and Miscellaneous Sealing	195	0	13	13
Glazier	28,988	311	2,000	1,689
Gunite Worker (Laborer)	10,443	0	721	721
Horizontal Directional Drilling	7,572	0	522	522
Housemover (Laborer)	0	0	0	0
Iron Worker	318,785	9,913	21,996	12,083
Laborer (Construction, Fence Erector, Gunite, Housemover, Tunnel)	249	0	17	17
Laborer and Related Classifications	1,012,480	58,037	69,861	11,824
Landscape Irrigation Fitter	216	0	15	15
Landscape Maintenance Laborer	62,369	539	4,303	3,765
Landscape Operating Engineer	186	0	13	13
Landscape/Irrigation Laborer/Tender	7,517	0	519	519
Marble Finisher	1,598	0	110	110
Modular Furniture Installer (Carpenter)	548	0	38	38
Operating Engineer	468,508	4,461	32,327	27,866
Operating Engineer (Landscape Construction)	142	0	10	10
Painter	58,452	2,217	4,033	1,816
Painter - Industrial	2,762	1,291	191	-1,100
Parking and Highway Improvement (Striper-Laborer)	4,040	50	279	229
Parking and Highway Improvement (Striping, Slurry and Seal Coat Operations-Laborer)	681	0	47	47
Pile Driver (Carpenter)	5,558	0	383	383
Plaster Tender	10,577	0	730	730
Plasterer	14,068	535	971	436



Metro Craft	Projected Hours for Unionized Workers on Metro Projects	Projected Hours for Female, Unionized Workers on Metro Projects	Number of Female Hours Required to Meet Utilization Target	Additional Female Hours Required to Meet Utilization Target
Plumber	88,993	3,276	6,141	2,864
Residential Electrician	8	0	1	1
Residential Laborer	0	0	0	0
Residential Sheet Metal Worker	362	0	25	25
Roofer	44,291	2,199	3,056	857
Sheet Metal Worker	27,619	1,146	1,906	760
Sheet Metal Worker (HVAC)	52,194	0	3,601	3,601
Teamster	38,811	3,748	2,678	-1,070
Telecommunications Technician	362	0	25	25
Terrazzo Finisher	198	0	14	14
Terrazzo Worker	356	0	25	25
Tile Finisher	4,039	0	279	279
Tile Layer	2,617	0	181	181
Tile Setter	187	0	13	13
Tree Maintenance (Laborer)	4,515	0	312	312
Tunnel (Operating Engineer)	45,629	0	3,148	3,148
Tunnel Worker (Laborer)	420,492	16,737	29,014	12,277
Total Construction Labor Hours	4,472,969	167,198	308,635	141,437
Female Percent of Total Hours		3.74%	6.90%	
Estimated Construction Cost	\$792,722,965			

2027 Projections

Metro Craft	Projected Hours for Unionized Workers on Metro Projects	Projected Hours for Female, Unionized Workers on Metro Projects	Number of Female Hours Required to Meet Utilization Target	Additional Female Hours Required to Meet Utilization Target
Apprentice Landscape Irrigation Fitter (2nd Shift)	52	0	4	4
Asbestos and Lead Abatement (Laborer)	2,759	0	190	190
Asbestos Worker, Heat and Frost Insulator	1,295	43	89	46
Brick Tender	11,952	0	825	825
Bricklayer	936	0	65	65
Bricklayer, Stonemason	40,957	0	2,826	2,826
Building / Construction Inspector and Field Soils and Material Tester	192,262	12,945	13,266	322



Metro Craft	Projected Hours for Unionized Workers on Metro Projects	Projected Hours for Female, Unionized Workers on Metro Projects	Number of Female Hours Required to Meet Utilization Target	Additional Female Hours Required to Meet Utilization Target
Carpenter and Related Trades	555,849	13,389	38,354	24,964
Carpet, Linoleum	294	0	20	20
Carpet, Linoleum, Resilient	13	0	1	1
Cement Mason	145,784	323	10,059	9,737
Cranes, Pile Driver and Hoisting Equipment (Operating Engineer)	36,565	843	2,523	1,680
Driver (On/Off-Hauling To/From Construction Site)	80,480	905	5,553	4,648
Drywall Finisher	1,935	0	134	134
Drywall Installer / Lather (Carpenter)	38,021	236	2,623	2,387
Electrical Utility Lineman	6,686	0	461	461
Electrician	514,405	27,043	35,494	8,451
Elevator Constructor	89,015	7,742	6,142	-1,600
Fence Builder (Carpenter)	2	0	0	0
Field Surveyor	41,628	526	2,872	2,346
Fire Safety and Miscellaneous Sealing	199	0	14	14
Glazier	29,568	317	2,040	1,723
Gunite Worker (Laborer)	10,652	0	735	735
Horizontal Directional Drilling	7,723	0	533	533
Housemover (Laborer)	0	0	0	0
Iron Worker	325,161	10,111	22,436	12,325
Laborer (Construction, Fence Erector, Gunite, Housemover, Tunnel)	254	0	18	18
Laborer and Related Classifications	1,032,730	59,197	71,258	12,061
Landscape Irrigation Fitter	220	0	15	15
Landscape Maintenance Laborer	63,617	549	4,390	3,840
Landscape Operating Engineer	189	0	13	13
Landscape/Irrigation Laborer/Tender	7,668	0	529	529
Marble Finisher	1,630	0	112	112
Modular Furniture Installer (Carpenter)	559	0	39	39
Operating Engineer	477,878	4,550	32,974	28,423
Operating Engineer (Landscape Construction)	145	0	10	10
Painter	59,621	2,261	4,114	1,853
Painter - Industrial	2,817	1,317	194	-1,122
Parking and Highway Improvement (Striper-Laborer)	4,121	51	284	233



Metro Craft	Projected Hours for Unionized Workers on Metro Projects	Projected Hours for Female, Unionized Workers on Metro Projects	Number of Female Hours Required to Meet Utilization Target	Additional Female Hours Required to Meet Utilization Target
Parking and Highway Improvement (Striping, Slurry and Seal Coat Operations-Laborer)	694	0	48	48
Pile Driver (Carpenter)	5,669	0	391	391
Plaster Tender	10,788	0	744	744
Plasterer	14,350	546	990	445
Plumber	90,773	3,342	6,263	2,921
Residential Electrician	9	0	1	1
Residential Laborer	0	0	0	0
Residential Sheet Metal Worker	369	0	25	25
Roofer	45,176	2,243	3,117	874
Sheet Metal Worker	28,171	1,169	1,944	775
Sheet Metal Worker (HVAC)	53,238	0	3,673	3,673
Teamster	39,587	3,823	2,732	-1,092
Telecommunications Technician	369	0	25	25
Terrazzo Finisher	202	0	14	14
Terrazzo Worker	363	0	25	25
Tile Finisher	4,120	0	284	284
Tile Layer	2,669	0	184	184
Tile Setter	191	0	13	13
Tree Maintenance (Laborer)	4,606	0	318	318
Tunnel (Operating Engineer)	46,541	0	3,211	3,211
Tunnel Worker (Laborer)	428,902	17,072	29,594	12,523
Total Construction Labor Hours	4,562,428	170,542	314,808	144,266
Female Percent of Total Hours		3.74%	6.90%	
Estimated Construction Cost	\$808,577,424			

2028 Projections

Metro Craft	Projected Hours for Unionized Workers on Metro Projects	Projected Hours for Female, Unionized Workers on Metro Projects	Number of Female Hours Required to Meet Utilization Target	Additional Female Hours Required to Meet Utilization Target
Apprentice Landscape Irrigation Fitter (2nd Shift)	53	0	4	4
Asbestos and Lead Abatement (Laborer)	2,814	0	194	194



Metro Craft	Projected Hours for Unionized Workers on Metro Projects	Projected Hours for Female, Unionized Workers on Metro Projects	Number of Female Hours Required to Meet Utilization Target	Additional Female Hours Required to Meet Utilization Target
Asbestos Worker, Heat and Frost Insulator	1,321	44	91	47
Brick Tender	12,191	0	841	841
Bricklayer	955	0	66	66
Bricklayer, Stonemason	41,776	0	2,883	2,883
Building / Construction Inspector and Field Soils and Material Tester	196,107	13,203	13,531	328
Carpenter and Related Trades	566,966	13,657	39,121	25,463
Carpet, Linoleum	300	0	21	21
Carpet, Linoleum, Resilient	13	0	1	1
Cement Mason	148,700	329	10,260	9,931
Cranes, Pile Driver and Hoisting Equipment (Operating Engineer)	37,296	860	2,573	1,714
Driver (On/Off-Hauling To/From Construction Site)	82,090	923	5,664	4,741
Drywall Finisher	1,974	0	136	136
Drywall Installer / Lather (Carpenter)	38,781	241	2,676	2,435
Electrical Utility Lineman	6,820	0	471	471
Electrician	524,693	27,584	36,204	8,620
Elevator Constructor	90,795	7,896	6,265	-1,632
Fence Builder (Carpenter)	2	0	0	0
Field Surveyor	42,460	537	2,930	2,393
Fire Safety and Miscellaneous Sealing	203	0	14	14
Glazier	30,159	323	2,081	1,757
Gunite Worker (Laborer)	10,865	0	750	750
Horizontal Directional Drilling	7,878	0	544	544
Housemover (Laborer)	0	0	0	0
Iron Worker	331,664	10,313	22,885	12,572
Laborer (Construction, Fence Erector, Gunite, Housemover, Tunnel)	259	0	18	18
Laborer and Related Classifications	1,053,384	60,381	72,684	12,302
Landscape Irrigation Fitter	224	0	15	15
Landscape Maintenance Laborer	64,889	560	4,477	3,917
Landscape Operating Engineer	193	0	13	13
Landscape/Irrigation Laborer/Tender	7,821	0	540	540
Marble Finisher	1,663	0	115	115
Modular Furniture Installer (Carpenter)	570	0	39	39

Metro Craft	Projected Hours for Unionized Workers on Metro Projects	Projected Hours for Female, Unionized Workers on Metro Projects	Number of Female Hours Required to Meet Utilization Target	Additional Female Hours Required to Meet Utilization Target
Operating Engineer	487,436	4,641	33,633	28,992
Operating Engineer (Landscape Construction)	147	0	10	10
Painter	60,813	2,306	4,196	1,890
Painter - Industrial	2,873	1,343	198	-1,145
Parking and Highway Improvement (Striper-Laborer)	4,203	52	290	238
Parking and Highway Improvement (Striping, Slurry and Seal Coat Operations-Laborer)	708	0	49	49
Pile Driver (Carpenter)	5,782	0	399	399
Plaster Tender	11,004	0	759	759
Plasterer	14,637	556	1,010	453
Plumber	92,589	3,409	6,389	2,980
Residential Electrician	9	0	1	1
Residential Laborer	0	0	0	0
Residential Sheet Metal Worker	376	0	26	26
Roofer	46,080	2,288	3,180	892
Sheet Metal Worker	28,735	1,192	1,983	790
Sheet Metal Worker (HVAC)	54,303	0	3,747	3,747
Teamster	40,379	3,900	2,786	-1,113
Telecommunications Technician	376	0	26	26
Terrazzo Finisher	206	0	14	14
Terrazzo Worker	370	0	26	26
Tile Finisher	4,202	0	290	290
Tile Layer	2,723	0	188	188
Tile Setter	194	0	13	13
Tree Maintenance (Laborer)	4,698	0	324	324
Tunnel (Operating Engineer)	47,472	0	3,276	3,276
Tunnel Worker (Laborer)	437,480	17,413	30,186	12,773
Total Construction Labor Hours	4,653,677	173,953	321,104	147,151
Female Percent of Total Hours		3.74%	6.90%	
Estimated Construction Cost	\$824,748,973			



2029 Projections

Metro Craft	Projected Hours for Unionized Workers on Metro Projects	Projected Hours for Female, Unionized Workers on Metro Projects	Number of Female Hours Required to Meet Utilization Target	Additional Female Hours Required to Meet Utilization Target
Apprentice Landscape Irrigation Fitter (2nd Shift)	54	0	4	4
Asbestos and Lead Abatement (Laborer)	2,871	0	198	198
Asbestos Worker, Heat and Frost Insulator	1,347	45	93	48
Brick Tender	12,435	0	858	858
Bricklayer	974	0	67	67
Bricklayer, Stonemason	42,612	0	2,940	2,940
Building / Construction Inspector and Field Soils and Material Tester	200,029	13,467	13,802	335
Carpenter and Related Trades	578,305	13,930	39,903	25,973
Carpet, Linoleum	306	0	21	21
Carpet, Linoleum, Resilient	14	0	1	1
Cement Mason	151,674	336	10,465	10,130
Cranes, Pile Driver and Hoisting Equipment (Operating Engineer)	38,042	877	2,625	1,748
Driver (On/Off-Hauling To/From Construction Site)	83,731	941	5,777	4,836
Drywall Finisher	2,014	0	139	139
Drywall Installer / Lather (Carpenter)	39,557	246	2,729	2,484
Electrical Utility Lineman	6,956	0	480	480
Electrician	535,187	28,136	36,928	8,792
Elevator Constructor	92,611	8,054	6,390	-1,664
Fence Builder (Carpenter)	2	0	0	0
Field Surveyor	43,310	547	2,988	2,441
Fire Safety and Miscellaneous Sealing	207	0	14	14
Glazier	30,762	330	2,123	1,793
Gunite Worker (Laborer)	11,082	0	765	765
Horizontal Directional Drilling	8,035	0	554	554
Housemover (Laborer)	0	0	0	0
Iron Worker	338,298	10,519	23,343	12,823
Laborer (Construction, Fence Erector, Gunite, Housemover, Tunnel)	265	0	18	18
Laborer and Related Classifications	1,074,452	61,589	74,137	12,548
Landscape Irrigation Fitter	229	0	16	16
Landscape Maintenance Laborer	66,187	572	4,567	3,995



Metro Craft	Projected Hours for Unionized Workers on Metro Projects	Projected Hours for Female, Unionized Workers on Metro Projects	Number of Female Hours Required to Meet Utilization Target	Additional Female Hours Required to Meet Utilization Target
Landscape Operating Engineer	197	0	14	14
Landscape/Irrigation Laborer/Tender	7,977	0	550	550
Marble Finisher	1,696	0	117	117
Modular Furniture Installer (Carpenter)	582	0	40	40
Operating Engineer	497,184	4,734	34,306	29,572
Operating Engineer (Landscape Construction)	150	0	10	10
Painter	62,030	2,353	4,280	1,927
Painter - Industrial	2,931	1,370	202	-1,168
Parking and Highway Improvement (Striper-Laborer)	4,287	53	296	243
Parking and Highway Improvement (Striping, Slurry and Seal Coat Operations-Laborer)	722	0	50	50
Pile Driver (Carpenter)	5,898	0	407	407
Plaster Tender	11,224	0	774	774
Plasterer	14,930	568	1,030	463
Plumber	94,441	3,477	6,516	3,039
Residential Electrician	9	0	1	1
Residential Laborer	0	0	0	0
Residential Sheet Metal Worker	384	0	26	26
Roofer	47,002	2,333	3,243	910
Sheet Metal Worker	29,310	1,216	2,022	806
Sheet Metal Worker (HVAC)	55,389	0	3,822	3,822
Teamster	41,186	3,978	2,842	-1,136
Telecommunications Technician	384	0	26	26
Terrazzo Finisher	211	0	15	15
Terrazzo Worker	378	0	26	26
Tile Finisher	4,286	0	296	296
Tile Layer	2,777	0	192	192
Tile Setter	198	0	14	14
Tree Maintenance (Laborer)	4,792	0	331	331
Tunnel (Operating Engineer)	48,422	0	3,341	3,341
Tunnel Worker (Laborer)	446,229	17,761	30,790	13,029
Total Construction Labor Hours	4,746,750	177,432	327,526	150,094
Female Percent of Total Hours		3.74%	6.90%	
Estimated Construction Cost	\$841,243,952			



2030 Projections

Metro Craft	Projected Hours for Unionized Workers on Metro Projects	Projected Hours for Female, Unionized Workers on Metro Projects	Number of Female Hours Required to Meet Utilization Target	Additional Female Hours Required to Meet Utilization Target
Apprentice Landscape Irrigation Fitter (2nd Shift)	55	0	4	4
Asbestos and Lead Abatement (Laborer)	2,928	0	202	202
Asbestos Worker, Heat and Frost Insulator	1,374	46	95	49
Brick Tender	12,683	0	875	875
Bricklayer	994	0	69	69
Bricklayer, Stonemason	43,464	0	2,999	2,999
Building / Construction Inspector and Field Soils and Material Tester	204,030	13,737	14,078	341
Carpenter and Related Trades	589,871	14,209	40,701	26,492
Carpet, Linoleum	312	0	22	22
Carpet, Linoleum, Resilient	14	0	1	1
Cement Mason	154,707	342	10,675	10,332
Cranes, Pile Driver and Hoisting Equipment (Operating Engineer)	38,803	894	2,677	1,783
Driver (On/Off-Hauling To/From Construction Site)	85,406	960	5,893	4,933
Drywall Finisher	2,054	0	142	142
Drywall Installer / Lather (Carpenter)	40,348	250	2,784	2,534
Electrical Utility Lineman	7,095	0	490	490
Electrician	545,890	28,698	37,666	8,968
Elevator Constructor	94,463	8,215	6,518	-1,697
Fence Builder (Carpenter)	2	0	0	0
Field Surveyor	44,176	558	3,048	2,490
Fire Safety and Miscellaneous Sealing	211	0	15	15
Glazier	31,377	337	2,165	1,828
Gunite Worker (Laborer)	11,304	0	780	780
Horizontal Directional Drilling	8,196	0	566	566
Housemover (Laborer)	0	0	0	0
Iron Worker	345,064	10,730	23,809	13,080
Laborer (Construction, Fence Erector, Gunite, Housemover, Tunnel)	270	0	19	19
Laborer and Related Classifications	1,095,941	62,821	75,620	12,799
Landscape Irrigation Fitter	233	0	16	16
Landscape Maintenance Laborer	67,511	583	4,658	4,075



Metro Craft	Projected Hours for Unionized Workers on Metro Projects	Projected Hours for Female, Unionized Workers on Metro Projects	Number of Female Hours Required to Meet Utilization Target	Additional Female Hours Required to Meet Utilization Target
Landscape Operating Engineer	201	0	14	14
Landscape/Irrigation Laborer/Tender	8,137	0	561	561
Marble Finisher	1,730	0	119	119
Modular Furniture Installer (Carpenter)	593	0	41	41
Operating Engineer	507,128	4,829	34,992	30,163
Operating Engineer (Landscape Construction)	153	0	11	11
Painter	63,270	2,400	4,366	1,966
Painter - Industrial	2,989	1,397	206	-1,191
Parking and Highway Improvement (Striper-Laborer)	4,373	54	302	248
Parking and Highway Improvement (Striping, Slurry and Seal Coat Operations-Laborer)	737	0	51	51
Pile Driver (Carpenter)	6,016	0	415	415
Plaster Tender	11,448	0	790	790
Plasterer	15,228	579	1,051	472
Plumber	96,329	3,547	6,647	3,100
Residential Electrician	9	0	1	1
Residential Laborer	0	0	0	0
Residential Sheet Metal Worker	392	0	27	27
Roofer	47,942	2,380	3,308	928
Sheet Metal Worker	29,896	1,241	2,063	822
Sheet Metal Worker (HVAC)	56,497	0	3,898	3,898
Teamster	42,010	4,057	2,899	-1,158
Telecommunications Technician	392	0	27	27
Terrazzo Finisher	215	0	15	15
Terrazzo Worker	385	0	27	27
Tile Finisher	4,372	0	302	302
Tile Layer	2,833	0	195	195
Tile Setter	202	0	14	14
Tree Maintenance (Laborer)	4,888	0	337	337
Tunnel (Operating Engineer)	49,390	0	3,408	3,408
Tunnel Worker (Laborer)	455,154	18,116	31,406	13,289
Total Construction Labor Hours	4,841,685	180,980	334,076	153,096
Female Percent of Total Hours		3.74%	6.90%	
Estimated Construction Cost	\$858,068,831			



2031 Projections

Metro Craft	Projected Hours for Unionized Workers on Metro Projects	Projected Hours for Female, Unionized Workers on Metro Projects	Number of Female Hours Required to Meet Utilization Target	Additional Female Hours Required to Meet Utilization Target
Apprentice Landscape Irrigation Fitter (2nd Shift)	56	0	4	4
Asbestos and Lead Abatement (Laborer)	2,987	0	206	206
Asbestos Worker, Heat and Frost Insulator	1,402	47	97	50
Brick Tender	12,937	0	893	893
Bricklayer	1,013	0	70	70
Bricklayer, Stonemason	44,333	0	3,059	3,059
Building / Construction Inspector and Field Soils and Material Tester	208,110	14,012	14,360	348
Carpenter and Related Trades	601,668	14,493	41,515	27,022
Carpet, Linoleum	319	0	22	22
Carpet, Linoleum, Resilient	14	0	1	1
Cement Mason	157,801	349	10,888	10,539
Cranes, Pile Driver and Hoisting Equipment (Operating Engineer)	39,579	912	2,731	1,819
Driver (On/Off-Hauling To/From Construction Site)	87,114	979	6,011	5,031
Drywall Finisher	2,095	0	145	145
Drywall Installer / Lather (Carpenter)	41,155	255	2,840	2,584
Electrical Utility Lineman	7,237	0	499	499
Electrician	556,808	29,272	38,420	9,148
Elevator Constructor	96,352	8,380	6,648	-1,731
Fence Builder (Carpenter)	2	0	0	0
Field Surveyor	45,059	569	3,109	2,540
Fire Safety and Miscellaneous Sealing	216	0	15	15
Glazier	32,005	343	2,208	1,865
Gunite Worker (Laborer)	11,530	0	796	796
Horizontal Directional Drilling	8,360	0	577	577
Housemover (Laborer)	0	0	0	0
Iron Worker	351,965	10,944	24,286	13,341
Laborer (Construction, Fence Erector, Gunite, Housemover, Tunnel)	275	0	19	19
Laborer and Related Classifications	1,117,860	64,077	77,132	13,055
Landscape Irrigation Fitter	238	0	16	16
Landscape Maintenance Laborer	68,861	595	4,751	4,157



Metro Craft	Projected Hours for Unionized Workers on Metro Projects	Projected Hours for Female, Unionized Workers on Metro Projects	Number of Female Hours Required to Meet Utilization Target	Additional Female Hours Required to Meet Utilization Target
Landscape Operating Engineer	205	0	14	14
Landscape/Irrigation Laborer/Tender	8,300	0	573	573
Marble Finisher	1,765	0	122	122
Modular Furniture Installer (Carpenter)	605	0	42	42
Operating Engineer	517,270	4,925	35,692	30,766
Operating Engineer (Landscape Construction)	156	0	11	11
Painter	64,536	2,448	4,453	2,005
Painter - Industrial	3,049	1,425	210	-1,215
Parking and Highway Improvement (Striper-Laborer)	4,460	55	308	253
Parking and Highway Improvement (Striping, Slurry and Seal Coat Operations-Laborer)	752	0	52	52
Pile Driver (Carpenter)	6,136	0	423	423
Plaster Tender	11,677	0	806	806
Plasterer	15,533	591	1,072	481
Plumber	98,256	3,617	6,780	3,162
Residential Electrician	9	0	1	1
Residential Laborer	0	0	0	0
Residential Sheet Metal Worker	400	0	28	28
Roofer	48,900	2,428	3,374	946
Sheet Metal Worker	30,494	1,265	2,104	839
Sheet Metal Worker (HVAC)	57,627	0	3,976	3,976
Teamster	42,850	4,138	2,957	-1,182
Telecommunications Technician	400	0	28	28
Terrazzo Finisher	219	0	15	15
Terrazzo Worker	393	0	27	27
Tile Finisher	4,459	0	308	308
Tile Layer	2,889	0	199	199
Tile Setter	206	0	14	14
Tree Maintenance (Laborer)	4,985	0	344	344
Tunnel (Operating Engineer)	50,378	0	3,476	3,476
Tunnel Worker (Laborer)	464,257	18,479	32,034	13,555
Total Construction Labor Hours	4,938,519	184,600	340,758	156,158
Female Percent of Total Hours		3.74%	6.90%	
Estimated Construction Cost	\$875,230,208			



2032 Projections

Metro Craft	Projected Hours for Unionized Workers on Metro Projects	Projected Hours for Female, Unionized Workers on Metro Projects	Number of Female Hours Required to Meet Utilization Target	Additional Female Hours Required to Meet Utilization Target
Apprentice Landscape Irrigation Fitter (2nd Shift)	57	0	4	4
Asbestos and Lead Abatement (Laborer)	3,046	0	210	210
Asbestos Worker, Heat and Frost Insulator	1,430	48	99	51
Brick Tender	13,196	0	911	911
Bricklayer	1,034	0	71	71
Bricklayer, Stonemason	45,220	0	3,120	3,120
Building / Construction Inspector and Field Soils and Material Tester	212,273	14,292	14,647	355
Carpenter and Related Trades	613,702	14,783	42,345	27,562
Carpet, Linoleum	325	0	22	22
Carpet, Linoleum, Resilient	14	0	1	1
Cement Mason	160,957	356	11,106	10,750
Cranes, Pile Driver and Hoisting Equipment (Operating Engineer)	40,371	930	2,786	1,855
Driver (On/Off-Hauling To/From Construction Site)	88,856	999	6,131	5,132
Drywall Finisher	2,137	0	147	147
Drywall Installer / Lather (Carpenter)	41,978	261	2,896	2,636
Electrical Utility Lineman	7,382	0	509	509
Electrician	567,944	29,858	39,188	9,330
Elevator Constructor	98,279	8,547	6,781	-1,766
Fence Builder (Carpenter)	2	0	0	0
Field Surveyor	45,961	581	3,171	2,590
Fire Safety and Miscellaneous Sealing	220	0	15	15
Glazier	32,645	350	2,253	1,902
Gunite Worker (Laborer)	11,760	0	811	811
Horizontal Directional Drilling	8,527	0	588	588
Housemover (Laborer)	0	0	0	0
Iron Worker	359,004	11,163	24,771	13,608
Laborer (Construction, Fence Erector, Gunite, Housemover, Tunnel)	281	0	19	19
Laborer and Related Classifications	1,140,217	65,359	78,675	13,316
Landscape Irrigation Fitter	243	0	17	17
Landscape Maintenance Laborer	70,238	607	4,846	4,240



Metro Craft	Projected Hours for Unionized Workers on Metro Projects	Projected Hours for Female, Unionized Workers on Metro Projects	Number of Female Hours Required to Meet Utilization Target	Additional Female Hours Required to Meet Utilization Target
Landscape Operating Engineer	209	0	14	14
Landscape/Irrigation Laborer/Tender	8,466	0	584	584
Marble Finisher	1,800	0	124	124
Modular Furniture Installer (Carpenter)	617	0	43	43
Operating Engineer	527,616	5,024	36,405	31,382
Operating Engineer (Landscape Construction)	160	0	11	11
Painter	65,826	2,497	4,542	2,045
Painter - Industrial	3,110	1,454	215	-1,239
Parking and Highway Improvement (Striper-Laborer)	4,549	56	314	258
Parking and Highway Improvement (Striping, Slurry and Seal Coat Operations-Laborer)	767	0	53	53
Pile Driver (Carpenter)	6,259	0	432	432
Plaster Tender	11,911	0	822	822
Plasterer	15,843	602	1,093	491
Plumber	100,221	3,690	6,915	3,225
Residential Electrician	10	0	1	1
Residential Laborer	0	0	0	0
Residential Sheet Metal Worker	408	0	28	28
Roofer	49,878	2,476	3,442	965
Sheet Metal Worker	31,103	1,291	2,146	855
Sheet Metal Worker (HVAC)	58,779	0	4,056	4,056
Teamster	43,707	4,221	3,016	-1,205
Telecommunications Technician	408	0	28	28
Terrazzo Finisher	223	0	15	15
Terrazzo Worker	401	0	28	28
Tile Finisher	4,549	0	314	314
Tile Layer	2,947	0	203	203
Tile Setter	210	0	15	15
Tree Maintenance (Laborer)	5,085	0	351	351
Tunnel (Operating Engineer)	51,385	0	3,546	3,546
Tunnel Worker (Laborer)	473,542	18,848	32,674	13,826
Total Construction Labor Hours	5,037,290	188,292	347,573	159,281
Female Percent of Total Hours		3.74%	6.90%	
Estimated Construction Cost	\$892,734,812			



2033 Projections

Metro Craft	Projected Hours for Unionized Workers on Metro Projects	Projected Hours for Female, Unionized Workers on Metro Projects	Number of Female Hours Required to Meet Utilization Target	Additional Female Hours Required to Meet Utilization Target
Apprentice Landscape Irrigation Fitter (2nd Shift)	59	0	4	4
Asbestos and Lead Abatement (Laborer)	3,107	0	214	214
Asbestos Worker, Heat and Frost Insulator	1,458	49	101	52
Brick Tender	13,460	0	929	929
Bricklayer	1,054	0	73	73
Bricklayer, Stonemason	46,124	0	3,183	3,183
Building / Construction Inspector and Field Soils and Material Tester	216,518	14,578	14,940	362
Carpenter and Related Trades	625,976	15,079	43,192	28,114
Carpet, Linoleum	332	0	23	23
Carpet, Linoleum, Resilient	15	0	1	1
Cement Mason	164,176	363	11,328	10,965
Cranes, Pile Driver and Hoisting Equipment (Operating Engineer)	41,178	949	2,841	1,892
Driver (On/Off-Hauling To/From Construction Site)	90,634	1,019	6,254	5,235
Drywall Finisher	2,180	0	150	150
Drywall Installer / Lather (Carpenter)	42,817	266	2,954	2,689
Electrical Utility Lineman	7,530	0	520	520
Electrician	579,303	30,455	39,972	9,517
Elevator Constructor	100,245	8,718	6,917	-1,801
Fence Builder (Carpenter)	2	0	0	0
Field Surveyor	46,880	592	3,235	2,642
Fire Safety and Miscellaneous Sealing	224	0	15	15
Glazier	33,298	357	2,298	1,940
Gunite Worker (Laborer)	11,996	0	828	828
Horizontal Directional Drilling	8,698	0	600	600
Housemover (Laborer)	0	0	0	0
Iron Worker	366,184	11,387	25,267	13,880
Laborer (Construction, Fence Erector, Gunite, Housemover, Tunnel)	286	0	20	20
Laborer and Related Classifications	1,163,021	66,666	80,248	13,583
Landscape Irrigation Fitter	248	0	17	17
Landscape Maintenance Laborer	71,643	619	4,943	4,325



Metro Craft	Projected Hours for Unionized Workers on Metro Projects	Projected Hours for Female, Unionized Workers on Metro Projects	Number of Female Hours Required to Meet Utilization Target	Additional Female Hours Required to Meet Utilization Target
Landscape Operating Engineer	213	0	15	15
Landscape/Irrigation Laborer/Tender	8,635	0	596	596
Marble Finisher	1,836	0	127	127
Modular Furniture Installer (Carpenter)	630	0	43	43
Operating Engineer	538,168	5,124	37,134	32,009
Operating Engineer (Landscape Construction)	163	0	11	11
Painter	67,143	2,546	4,633	2,086
Painter - Industrial	3,172	1,483	219	-1,264
Parking and Highway Improvement (Striper-Laborer)	4,640	57	320	263
Parking and Highway Improvement (Striping, Slurry and Seal Coat Operations-Laborer)	782	0	54	54
Pile Driver (Carpenter)	6,384	0	440	440
Plaster Tender	12,149	0	838	838
Plasterer	16,160	614	1,115	501
Plumber	102,225	3,764	7,054	3,290
Residential Electrician	10	0	1	1
Residential Laborer	0	0	0	0
Residential Sheet Metal Worker	416	0	29	29
Roofer	50,876	2,526	3,510	985
Sheet Metal Worker	31,726	1,317	2,189	873
Sheet Metal Worker (HVAC)	59,955	0	4,137	4,137
Teamster	44,581	4,305	3,076	-1,229
Telecommunications Technician	416	0	29	29
Terrazzo Finisher	228	0	16	16
Terrazzo Worker	409	0	28	28
Tile Finisher	4,639	0	320	320
Tile Layer	3,006	0	207	207
Tile Setter	215	0	15	15
Tree Maintenance (Laborer)	5,187	0	358	358
Tunnel (Operating Engineer)	52,413	0	3,617	3,617
Tunnel Worker (Laborer)	483,013	19,225	33,328	14,103
Total Construction Labor Hours	5,138,035	192,058	354,524	162,467
Female Percent of Total Hours		3.74%	6.90%	
Estimated Construction Cost	\$910,589,508			

Source: LCPTracker and ICF.



Appendix E: Projected Female Labor Demand Gap from 2024 – 2033, by Trade

Flat (0%) Demand Growth, annually from 2024-2033

Construction Trade	Projected Hours for Unionized Workers on Metro Projects	Projected Hours for Female, Unionized Workers on Metro Projects	Number of Female Hours Required to Meet Utilization Target	Additional Female Hours Required to Meet Utilization Target
BRICKLAYER AND TILE SETTER	47,180	0	3,255	3,255
CARPENTER	554,399	12,588	38,254	25,666
ELECTRICIAN	481,757	24,984	33,241	8,258
ELEVATOR CONSTRUCTOR	82,236	7,152	5,674	(1,478)
INSPECTOR	177,620	11,959	12,256	297
IRON WORKER	300,399	9,341	20,728	11,387
LABORER	1,467,077	71,055	101,228	30,173
OPERATING ENGINEER	518,571	4,982	35,781	30,799
PAINTER	87,071	3,598	6,008	2,410
PLASTERER AND CEMENT MASON	147,939	802	10,208	9,406
PLUMBER AND PIPEFITTER	84,064	3,088	5,800	2,713
ROOFER	41,736	2,072	2,880	808
SHEET METAL	75,551	1,080	5,213	4,133
SURVEYOR	38,458	486	2,654	2,168
TEAMSTER/DRIVER	110,923	4,368	7,654	3,286
Total Construction Labor Hours	4,214,979	157,554	290,834	133,279

2% Demand Growth

2024 Projections

Construction Trade	Projected Hours for Unionized Workers on Metro Projects	Projected Hours for Female, Unionized Workers on Metro Projects	Number of Female Hours Required to Meet Utilization Target	Additional Female Hours Required to Meet Utilization Target
BRICKLAYER AND TILE SETTER	48,123	0	3,320	3,320
CARPENTER	565,487	12,840	39,019	26,179
ELECTRICIAN	491,392	25,483	33,906	8,423
ELEVATOR CONSTRUCTOR	83,880	7,295	5,788	(1,507)
INSPECTOR	181,173	12,198	12,501	303
IRON WORKER	306,407	9,528	21,142	11,614
LABORER	1,496,418	72,476	103,253	30,777
OPERATING ENGINEER	528,943	5,082	36,497	31,415

Construction Trade	Projected Hours for Unionized Workers on Metro Projects	Projected Hours for Female, Unionized Workers on Metro Projects	Number of Female Hours Required to Meet Utilization Target	Additional Female Hours Required to Meet Utilization Target
PAINTER	88,812	3,670	6,128	2,458
PLASTERER AND CEMENT MASON	150,898	818	10,412	9,594
PLUMBER AND PIPEFITTER	85,745	3,149	5,916	2,767
ROOFER	42,571	2,113	2,937	824
SHEET METAL	77,062	1,102	5,317	4,216
SURVEYOR	39,227	496	2,707	2,211
TEAMSTER/DRIVER	113,142	4,455	7,807	3,351
Total Construction Labor Hours	4,299,278	160,705	296,650	135,945

2025 Projections

Construction Trade	Projected Hours for Unionized Workers on Metro Projects	Projected Hours for Female, Unionized Workers on Metro Projects	Number of Female Hours Required to Meet Utilization Target	Additional Female Hours Required to Meet Utilization Target
BRICKLAYER AND TILE SETTER	49,086	0	3,387	3,387
CARPENTER	576,797	13,096	39,799	26,703
ELECTRICIAN	501,219	25,993	34,584	8,591
ELEVATOR CONSTRUCTOR	85,558	7,441	5,903	(1,537)
INSPECTOR	184,796	12,442	12,751	309
IRON WORKER	312,535	9,718	21,565	11,847
LABORER	1,526,347	73,926	105,318	31,392
OPERATING ENGINEER	539,522	5,184	37,227	32,043
PAINTER	90,588	3,744	6,251	2,507
PLASTERER AND CEMENT MASON	153,915	834	10,620	9,786
PLUMBER AND PIPEFITTER	87,460	3,212	6,035	2,822
ROOFER	43,422	2,156	2,996	840
SHEET METAL	78,603	1,124	5,424	4,300
SURVEYOR	40,011	506	2,761	2,255
TEAMSTER/DRIVER	115,405	4,544	7,963	3,419
Total Construction Labor Hours	4,385,264	163,920	302,583	138,664

2026 Projections

Construction Trade	Projected Hours for Unionized Workers on Metro Projects	Projected Hours for Female, Unionized Workers on Metro Projects	Number of Female Hours Required to Meet Utilization Target	Additional Female Hours Required to Meet Utilization Target
BRICKLAYER AND TILE SETTER	50,067	0	3,455	3,455
CARPENTER	588,333	13,358	40,595	27,237
ELECTRICIAN	511,244	26,513	35,276	8,763
ELEVATOR CONSTRUCTOR	87,269	7,590	6,022	(1,568)
INSPECTOR	188,492	12,691	13,006	315
IRON WORKER	318,785	9,913	21,996	12,083
LABORER	1,556,874	75,404	107,424	32,020
OPERATING ENGINEER	550,312	5,287	37,972	32,684
PAINTER	92,400	3,819	6,376	2,557
PLASTERER AND CEMENT MASON	156,994	851	10,833	9,981
PLUMBER AND PIPEFITTER	89,209	3,276	6,155	2,879
ROOFER	44,291	2,199	3,056	857
SHEET METAL	80,175	1,146	5,532	4,386
SURVEYOR	40,812	516	2,816	2,300
TEAMSTER/DRIVER	117,713	4,635	8,122	3,487
Total Construction Labor Hours	4,472,969	167,198	308,635	141,437

2027 Projections

Construction Trade	Projected Hours for Unionized Workers on Metro Projects	Projected Hours for Female, Unionized Workers on Metro Projects	Number of Female Hours Required to Meet Utilization Target	Additional Female Hours Required to Meet Utilization Target
BRICKLAYER AND TILE SETTER	51,069	0	3,524	3,524
CARPENTER	600,099	13,625	41,407	27,781
ELECTRICIAN	521,469	27,043	35,981	8,938
ELEVATOR CONSTRUCTOR	89,015	7,742	6,142	(1,600)
INSPECTOR	192,262	12,945	13,266	322
IRON WORKER	325,161	10,111	22,436	12,325
LABORER	1,588,011	76,912	109,573	32,660
OPERATING ENGINEER	561,318	5,393	38,731	33,338
PAINTER	94,248	3,895	6,503	2,608
PLASTERER AND CEMENT MASON	160,134	868	11,049	10,181
PLUMBER AND PIPEFITTER	90,993	3,342	6,279	2,937



Construction Trade	Projected Hours for Unionized Workers on Metro Projects	Projected Hours for Female, Unionized Workers on Metro Projects	Number of Female Hours Required to Meet Utilization Target	Additional Female Hours Required to Meet Utilization Target
ROOFER	45,176	2,243	3,117	874
SHEET METAL	81,779	1,169	5,643	4,474
SURVEYOR	41,628	526	2,872	2,346
TEAMSTER/DRIVER	120,067	4,728	8,285	3,557
Total Construction Labor Hours	4,562,428	170,542	314,808	144,266

2028 Projections

Construction Trade	Projected Hours for Unionized Workers on Metro Projects	Projected Hours for Female, Unionized Workers on Metro Projects	Number of Female Hours Required to Meet Utilization Target	Additional Female Hours Required to Meet Utilization Target
BRICKLAYER AND TILE SETTER	52,090	0	3,594	3,594
CARPENTER	612,101	13,898	42,235	28,337
ELECTRICIAN	531,898	27,584	36,701	9,117
ELEVATOR CONSTRUCTOR	90,795	7,896	6,265	(1,632)
INSPECTOR	196,107	13,203	13,531	328
IRON WORKER	331,664	10,313	22,885	12,572
LABORER	1,619,771	78,451	111,764	33,313
OPERATING ENGINEER	572,545	5,501	39,506	34,005
PAINTER	96,133	3,973	6,633	2,660
PLASTERER AND CEMENT MASON	163,336	885	11,270	10,385
PLUMBER AND PIPEFITTER	92,813	3,409	6,404	2,995
ROOFER	46,080	2,288	3,180	892
SHEET METAL	83,414	1,192	5,756	4,563
SURVEYOR	42,460	537	2,930	2,393
TEAMSTER/DRIVER	122,468	4,823	8,450	3,628
Total Construction Labor Hours	4,653,677	173,953	321,104	147,151

2029 Projections

Construction Trade	Projected Hours for Unionized Workers on Metro Projects	Projected Hours for Female, Unionized Workers on Metro Projects	Number of Female Hours Required to Meet Utilization Target	Additional Female Hours Required to Meet Utilization Target
BRICKLAYER AND TILE SETTER	53,132	0	3,666	3,666
CARPENTER	624,343	14,176	43,080	28,904
ELECTRICIAN	542,536	28,136	37,435	9,299
ELEVATOR CONSTRUCTOR	92,611	8,054	6,390	(1,664)
INSPECTOR	200,029	13,467	13,802	335
IRON WORKER	338,298	10,519	23,343	12,823
LABORER	1,652,167	80,020	113,999	33,980
OPERATING ENGINEER	583,996	5,611	40,296	34,685
PAINTER	98,056	4,052	6,766	2,714
PLASTERER AND CEMENT MASON	166,603	903	11,496	10,592
PLUMBER AND PIPEFITTER	94,669	3,477	6,532	3,055
ROOFER	47,002	2,333	3,243	910
SHEET METAL	85,083	1,216	5,871	4,654
SURVEYOR	43,310	547	2,988	2,441
TEAMSTER/DRIVER	124,918	4,919	8,619	3,700
Total Construction Labor Hours	4,746,750	177,432	327,526	150,094

2030 Projections

Construction Trade	Projected Hours for Unionized Workers on Metro Projects	Projected Hours for Female, Unionized Workers on Metro Projects	Number of Female Hours Required to Meet Utilization Target	Additional Female Hours Required to Meet Utilization Target
BRICKLAYER AND TILE SETTER	54,194	0	3,739	3,739
CARPENTER	636,830	14,459	43,941	29,482
ELECTRICIAN	553,387	28,698	38,184	9,485
ELEVATOR CONSTRUCTOR	94,463	8,215	6,518	(1,697)
INSPECTOR	204,030	13,737	14,078	341
IRON WORKER	345,064	10,730	23,809	13,080
LABORER	1,685,210	81,620	116,279	34,659
OPERATING ENGINEER	595,675	5,723	41,102	35,379
PAINTER	100,017	4,133	6,901	2,768
PLASTERER AND CEMENT MASON	169,935	921	11,726	10,804
PLUMBER AND PIPEFITTER	96,563	3,547	6,663	3,116



Construction Trade	Projected Hours for Unionized Workers on Metro Projects	Projected Hours for Female, Unionized Workers on Metro Projects	Number of Female Hours Required to Meet Utilization Target	Additional Female Hours Required to Meet Utilization Target
ROOFER	47,942	2,380	3,308	928
SHEET METAL	86,784	1,241	5,988	4,748
SURVEYOR	44,176	558	3,048	2,490
TEAMSTER/DRIVER	127,416	5,017	8,792	3,774
Total Construction Labor Hours	4,841,685	180,980	334,076	153,096

2031 Projections

Construction Trade	Projected Hours for Unionized Workers on Metro Projects	Projected Hours for Female, Unionized Workers on Metro Projects	Number of Female Hours Required to Meet Utilization Target	Additional Female Hours Required to Meet Utilization Target
BRICKLAYER AND TILE SETTER	55,278	0	3,814	3,814
CARPENTER	649,567	14,749	44,820	30,072
ELECTRICIAN	564,455	29,272	38,947	9,675
ELEVATOR CONSTRUCTOR	96,352	8,380	6,648	(1,731)
INSPECTOR	208,110	14,012	14,360	348
IRON WORKER	351,965	10,944	24,286	13,341
LABORER	1,718,914	83,253	118,605	35,353
OPERATING ENGINEER	607,589	5,837	41,924	36,086
PAINTER	102,017	4,216	7,039	2,823
PLASTERER AND CEMENT MASON	173,334	940	11,960	11,020
PLUMBER AND PIPEFITTER	98,494	3,617	6,796	3,179
ROOFER	48,900	2,428	3,374	946
SHEET METAL	88,520	1,265	6,108	4,842
SURVEYOR	45,059	569	3,109	2,540
TEAMSTER/DRIVER	129,964	5,118	8,968	3,850
Total Construction Labor Hours	4,938,519	184,600	340,758	156,158

2032 Projections

Construction Trade	Projected Hours for Unionized Workers on Metro Projects	Projected Hours for Female, Unionized Workers on Metro Projects	Number of Female Hours Required to Meet Utilization Target	Additional Female Hours Required to Meet Utilization Target
BRICKLAYER AND TILE SETTER	56,384	0	3,890	3,890
CARPENTER	662,558	15,044	45,717	30,673
ELECTRICIAN	575,744	29,858	39,726	9,869
ELEVATOR CONSTRUCTOR	98,279	8,547	6,781	(1,766)
INSPECTOR	212,273	14,292	14,647	355
IRON WORKER	359,004	11,163	24,771	13,608
LABORER	1,753,292	84,918	120,977	36,060
OPERATING ENGINEER	619,741	5,954	42,762	36,808
PAINTER	104,057	4,300	7,180	2,880
PLASTERER AND CEMENT MASON	176,801	958	12,199	11,241
PLUMBER AND PIPEFITTER	100,464	3,690	6,932	3,242
ROOFER	49,878	2,476	3,442	965
SHEET METAL	90,290	1,291	6,230	4,939
SURVEYOR	45,961	581	3,171	2,590
TEAMSTER/DRIVER	132,564	5,220	9,147	3,927
Total Construction Labor Hours	5,037,290	188,292	347,573	159,281

2033 Projections

Construction Trade	Projected Hours for Unionized Workers on Metro Projects	Projected Hours for Female, Unionized Workers on Metro Projects	Number of Female Hours Required to Meet Utilization Target	Additional Female Hours Required to Meet Utilization Target
BRICKLAYER AND TILE SETTER	57,512	0	3,968	3,968
CARPENTER	675,809	15,344	46,631	31,286
ELECTRICIAN	587,258	30,455	40,521	10,066
ELEVATOR CONSTRUCTOR	100,245	8,718	6,917	(1,801)
INSPECTOR	216,518	14,578	14,940	362
IRON WORKER	366,184	11,387	25,267	13,880
LABORER	1,788,358	86,616	123,397	36,781
OPERATING ENGINEER	632,136	6,073	43,617	37,544
PAINTER	106,139	4,386	7,324	2,937
PLASTERER AND CEMENT MASON	180,337	978	12,443	11,466
PLUMBER AND PIPEFITTER	102,473	3,764	7,071	3,307



Construction Trade	Projected Hours for Unionized Workers on Metro Projects	Projected Hours for Female, Unionized Workers on Metro Projects	Number of Female Hours Required to Meet Utilization Target	Additional Female Hours Required to Meet Utilization Target
ROOFER	50,876	2,526	3,510	985
SHEET METAL	92,096	1,317	6,355	5,038
SURVEYOR	46,880	592	3,235	2,642
TEAMSTER/DRIVER	135,215	5,325	9,330	4,005
Total Construction Labor Hours	5,138,035	192,058	354,524	162,467

Source: LCPTracker, ICF and Estolano Advisors.

Appendix F: Percent Female Labor Supply Available for Metro Projects (Average 2019-2023)

Construction Trade	% of Female Supply Available to Metro Projects
BRICKLAYER AND TILE SETTER	0.0%
CARPENTER	14.4%
ELECTRICIAN	19.8%
ELEVATOR CONSTRUCTOR	77.5%
INSPECTOR	15.3%
IRON WORKER	26.4%
LABORER	28.5%
OPERATING ENGINEER	8.3%
PAINTER	7.6%
PLASTERER AND CEMENT MASON	9.5%
PLUMBER AND PIPEFITTER	8.6%
ROOFER	14.5%
SHEET METAL	10.3%
SURVEYOR	6.5%
TEAMSTER/DRIVER	10.5%

Source: LCPtracker and ICF.

Appendix G: Calculated Annual Female Utilization Rates by Trade, 2024-2045

Scenario: 0% Demand Growth; Moderate Supply Growth

Construction Trade	2024	2025	2026	2027	2028	2029	2030	2031
BRICKLAYER AND TILE SETTER	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
CARPENTER	2.38%	2.48%	2.57%	2.67%	2.77%	2.86%	2.96%	3.05%
ELECTRICIAN	5.52%	5.63%	5.74%	5.85%	5.96%	6.07%	6.18%	6.29%
ELEVATOR CONSTRUCTOR	9.48%	10.16%	10.83%	11.51%	12.19%	12.86%	13.54%	14.22%
INSPECTOR	7.34%	7.92%	8.49%	9.07%	9.64%	10.22%	10.80%	11.37%
IRON WORKER	2.98%	3.16%	3.35%	3.53%	3.72%	3.90%	4.08%	4.27%
LABORER	5.61%	5.76%	5.91%	6.07%	6.22%	6.37%	6.52%	6.67%
OPERATING ENGINEER	1.24%	1.30%	1.37%	1.43%	1.50%	1.57%	1.63%	1.70%
PAINTER	3.85%	4.03%	4.21%	4.38%	4.56%	4.74%	4.92%	5.10%
PLASTERER AND CEMENT MASON	0.71%	0.76%	0.81%	0.86%	0.91%	0.96%	1.01%	1.06%
PLUMBER AND PIPEFITTER	7.87%	8.38%	8.90%	9.41%	9.93%	10.44%	10.96%	11.47%
ROOFER	1.86%	1.96%	2.07%	2.17%	2.27%	2.37%	2.47%	2.57%
SHEET METAL	2.16%	2.28%	2.40%	2.52%	2.64%	2.76%	2.88%	3.00%
SURVEYOR	1.28%	1.40%	1.52%	1.64%	1.76%	1.88%	2.00%	2.12%
TEAMSTER/DRIVER	5.42%	5.84%	6.27%	6.70%	7.13%	7.56%	7.99%	8.42%
Average	4.23%	4.40%	4.56%	4.73%	4.90%	5.07%	5.24%	5.40%

Construction Trade	2032	2033	2034	2035	2036	2037	2038	2039
BRICKLAYER AND TILE SETTER	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
CARPENTER	3.15%	3.25%	3.34%	3.44%	3.54%	3.63%	3.73%	3.83%
ELECTRICIAN	6.41%	6.52%	6.63%	6.74%	6.85%	6.96%	7.07%	7.19%
ELEVATOR CONSTRUCTOR	14.89%	15.57%	16.25%	16.93%	17.60%	18.28%	18.96%	19.63%
INSPECTOR	11.95%	12.52%	13.10%	13.67%	14.25%	14.83%	15.40%	15.98%
IRON WORKER	4.45%	4.64%	4.82%	5.01%	5.19%	5.37%	5.56%	5.74%
LABORER	6.82%	6.97%	7.12%	7.27%	7.42%	7.57%	7.72%	7.87%
OPERATING ENGINEER	1.76%	1.83%	1.90%	1.96%	2.03%	2.10%	2.16%	2.23%
PAINTER	5.28%	5.46%	5.63%	5.81%	5.99%	6.17%	6.35%	6.53%
PLASTERER AND CEMENT MASON	1.10%	1.15%	1.20%	1.25%	1.30%	1.35%	1.40%	1.45%
PLUMBER AND PIPEFITTER	11.99%	12.51%	13.02%	13.54%	14.05%	14.57%	15.08%	15.60%
ROOFER	2.67%	2.77%	2.87%	2.97%	3.07%	3.17%	3.27%	3.37%
SHEET METAL	3.12%	3.24%	3.36%	3.48%	3.60%	3.72%	3.84%	3.96%



Construction Trade	2032	2033	2034	2035	2036	2037	2038	2039
SURVEYOR	2.24%	2.36%	2.48%	2.60%	2.71%	2.83%	2.95%	3.07%
TEAMSTER/DRIVER	8.84%	9.27%	9.70%	10.13%	10.56%	10.99%	11.41%	11.84%
Average	5.57%	5.74%	5.91%	6.07%	6.24%	6.41%	6.58%	6.75%

Construction Trade	2040	2041	2042	2043	2044	2045
BRICKLAYER AND TILE SETTER	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
CARPENTER	3.92%	4.02%	4.12%	4.21%	4.31%	4.40%
ELECTRICIAN	7.30%	7.41%	7.52%	7.63%	7.74%	7.85%
ELEVATOR CONSTRUCTOR	20.31%	20.99%	21.66%	22.34%	23.02%	23.69%
INSPECTOR	16.55%	17.13%	17.71%	18.28%	18.86%	19.43%
IRON WORKER	5.93%	6.11%	6.29%	6.48%	6.66%	6.85%
LABORER	8.02%	8.18%	8.33%	8.48%	8.63%	8.78%
OPERATING ENGINEER	2.29%	2.36%	2.43%	2.49%	2.56%	2.62%
PAINTER	6.70%	6.88%	7.06%	7.24%	7.42%	7.60%
PLASTERER AND CEMENT MASON	1.50%	1.54%	1.59%	1.64%	1.69%	1.74%
PLUMBER AND PIPEFITTER	16.11%	16.63%	17.14%	17.66%	18.17%	18.69%
ROOFER	3.47%	3.57%	3.67%	3.77%	3.87%	3.97%
SHEET METAL	4.08%	4.21%	4.33%	4.45%	4.57%	4.69%
SURVEYOR	3.19%	3.31%	3.43%	3.55%	3.67%	3.79%
TEAMSTER/DRIVER	12.27%	12.70%	13.13%	13.56%	13.99%	14.41%
Average	6.91%	7.08%	7.25%	7.42%	7.58%	7.75%

Source: LCPtracker, ICF and Estolano Advisors.

Scenario: 0% Demand Growth; Rapid Supply Growth (Most Optimistic)

Construction Trade	2024	2025	2026	2027	2028	2029	2030	2031
BRICKLAYER AND TILE SETTER	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
CARPENTER	2.48%	2.67%	2.86%	3.05%	3.25%	3.44%	3.63%	3.83%
ELECTRICIAN	5.63%	5.85%	6.07%	6.29%	6.52%	6.74%	6.96%	7.19%
ELEVATOR CONSTRUCTOR	10.16%	11.51%	12.86%	14.22%	15.57%	16.93%	18.28%	19.63%
INSPECTOR	7.92%	9.07%	10.22%	11.37%	12.52%	13.67%	14.83%	15.98%
IRON WORKER	3.16%	3.53%	3.90%	4.27%	4.64%	5.01%	5.37%	5.74%
LABORER	5.76%	6.07%	6.37%	6.67%	6.97%	7.27%	7.57%	7.87%
OPERATING ENGINEER	1.30%	1.43%	1.57%	1.70%	1.83%	1.96%	2.10%	2.23%



Construction Trade	2024	2025	2026	2027	2028	2029	2030	2031
PAINTER	4.03%	4.38%	4.74%	5.10%	5.46%	5.81%	6.17%	6.53%
PLASTERER AND CEMENT MASON	0.76%	0.86%	0.96%	1.06%	1.15%	1.25%	1.35%	1.45%
PLUMBER AND PIPEFITTER	8.38%	9.41%	10.44%	11.47%	12.51%	13.54%	14.57%	15.60%
ROOFER	1.96%	2.17%	2.37%	2.57%	2.77%	2.97%	3.17%	3.37%
SHEET METAL	2.28%	2.52%	2.76%	3.00%	3.24%	3.48%	3.72%	3.96%
SURVEYOR	1.40%	1.64%	1.88%	2.12%	2.36%	2.60%	2.83%	3.07%
TEAMSTER/DRIVER	5.84%	6.70%	7.56%	8.42%	9.27%	10.13%	10.99%	11.84%
Average	4.40%	4.73%	5.07%	5.40%	5.74%	6.07%	6.41%	6.75%

Construction Trade	2032	2033	2034	2035	2036	2037	2038	2039
BRICKLAYER AND TILE SETTER	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
CARPENTER	4.02%	4.21%	4.40%	4.60%	4.79%	4.98%	5.18%	5.37%
ELECTRICIAN	7.41%	7.63%	7.85%	8.08%	8.30%	8.52%	8.74%	8.97%
ELEVATOR CONSTRUCTOR	20.99%	22.34%	23.69%	25.05%	26.40%	27.75%	29.11%	30.46%
INSPECTOR	17.13%	18.28%	19.43%	20.59%	21.74%	22.89%	24.04%	25.19%
IRON WORKER	6.11%	6.48%	6.85%	7.22%	7.58%	7.95%	8.32%	8.69%
LABORER	8.18%	8.48%	8.78%	9.08%	9.38%	9.68%	9.98%	10.28%
OPERATING ENGINEER	2.36%	2.49%	2.62%	2.76%	2.89%	3.02%	3.15%	3.29%
PAINTER	6.88%	7.24%	7.60%	7.95%	8.31%	8.67%	9.02%	9.38%
PLASTERER AND CEMENT MASON	1.54%	1.64%	1.74%	1.84%	1.94%	2.03%	2.13%	2.23%
PLUMBER AND PIPEFITTER	16.63%	17.66%	18.69%	19.72%	20.75%	21.78%	22.81%	23.84%
ROOFER	3.57%	3.77%	3.97%	4.17%	4.38%	4.58%	4.78%	4.98%
SHEET METAL	4.21%	4.45%	4.69%	4.93%	5.17%	5.41%	5.65%	5.89%
SURVEYOR	3.31%	3.55%	3.79%	4.03%	4.27%	4.51%	4.75%	4.99%
TEAMSTER/DRIVER	12.70%	13.56%	14.41%	15.27%	16.13%	16.99%	17.84%	18.70%
Average	7.08%	7.42%	7.75%	8.09%	8.42%	8.76%	9.09%	9.43%

Construction Trade	2040	2041	2042	2043	2044	2045
BRICKLAYER AND TILE SETTER	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
CARPENTER	5.56%	5.76%	5.95%	6.14%	6.33%	6.53%
ELECTRICIAN	9.19%	9.41%	9.63%	9.86%	10.08%	10.30%
ELEVATOR CONSTRUCTOR	31.82%	33.17%	34.52%	35.88%	37.23%	38.58%
INSPECTOR	26.34%	27.50%	28.65%	29.80%	30.95%	32.10%



Construction Trade	2040	2041	2042	2043	2044	2045
IRON WORKER	9.06%	9.43%	9.79%	10.16%	10.53%	10.90%
LABORER	10.59%	10.89%	11.19%	11.49%	11.79%	12.09%
OPERATING ENGINEER	3.42%	3.55%	3.68%	3.82%	3.95%	4.08%
PAINTER	9.74%	10.10%	10.45%	10.81%	11.17%	11.52%
PLASTERER AND CEMENT MASON	2.33%	2.42%	2.52%	2.62%	2.72%	2.82%
PLUMBER AND PIPEFITTER	24.87%	25.90%	26.94%	27.97%	29.00%	30.03%
ROOFER	5.18%	5.38%	5.58%	5.78%	5.98%	6.18%
SHEET METAL	6.13%	6.37%	6.61%	6.85%	7.09%	7.33%
SURVEYOR	5.23%	5.47%	5.71%	5.95%	6.19%	6.43%
TEAMSTER/DRIVER	19.56%	20.41%	21.27%	22.13%	22.98%	23.84%
Average	9.77%	10.10%	10.44%	10.77%	11.11%	11.44%

Source: LCPtracker, ICF and Estolano Advisors.



Los Angeles / Orange Counties Building and Construction Trades Council

Affiliated with the Building & Construction Trades Dept., AFL-CIO

1626 Beverly Boulevard
Los Angeles, CA 90026-5784
Phone (213) 483-4222
(714) 827-6791
Fax (213) 483-4419



March 6th, 2025

Metro Board of Directors
One Gateway Plaza
Los Angeles, CA 90012

Re: Letter of Support

Dear Metro Board of Directors,

The Los Angeles/Orange Counties Building and Construction Trades Council (LAOCBCTC) recognizes the importance of increasing female participation in the construction industry within the Los Angeles region.

The LAOCBCTC and its non-profit Apprenticeship Readiness Fund is fully committed to supporting with Metro in the establishment of and participating in, a regional collaborative. This initiative will bring together various regional partners to develop a strategic plan aimed at creating systemic changes in the construction industry and enhancing female participation.

Additionally, LAOCBCTC will back the organization of a Women in the Trades Regional Summit. This event will convene public agencies, trade unions, workforce development boards, and academic institutions to discuss strategies and commitments to promote greater female involvement in the construction industry.

Thank you for considering our proposal.

In Solidarity,


Ernesto Medrano,
Executive Secretary

KH: em/OPEIU#537/afl-cio

BOARD OF SUPERVISORS

Hilda L. Solis
Holly J. Mitchell
Lindsey P. Horvath
Janice Hahn
Kathryn Barger

EXECUTIVE LEADERSHIP

Kelly LoBianco
Director

Jessica Kim
Chief Deputy

Leila Lee
*Assistant Director, Business
and Economic Development*

Kate Vacanti
Assistant Director, Workforce

Krystin HENCE
*Assistant Director, Capital
Development*

GET IN TOUCH

510 S. Vermont Avenue
Los Angeles, CA 90020
opportunity.lacounty.gov
deo@opportunity.lacounty.gov
844-777-2059

America's Job Centers:
(888) 226-6300
Office of Small Business:
(800) 432-4900



March 10, 2025

Metro Board of Directors
One Gateway Plaza
Los Angeles, CA 90012

**LETTER OF SUPPORT TO ESTABLISH A REGIONAL
COLLABORATIVE TO BUILD AN EQUITABLE
CONSTRUCTION WORKFORCE**

Dear Metro Board of Directors:

On behalf of the Los Angeles County Department of Economic Opportunity (DEO) and LA County Workforce Development Board, I am pleased to provide this Letter of Support to work with Metro to establish regional collaborative to implement a robust action plan to build an equitable workforce as a response to Metro's Construction Workforce Disparity Study which revealed a significant underrepresentation of women in the construction industry in the Los Angeles region.

As the County's agency responsible for workforce development, small business support, and economic mobility, DEO is committed to expanding quality jobs, strengthening employer partnerships, and fostering sustainable economic growth in Los Angeles County. We work to advance equity and inclusive, sustainable growth through all our programs and services by targeting economic benefits to the most vulnerable and marginalized communities, small businesses, and residents in LA County. With the LA County Workforce Development Board housed within our department and with our 18 America's Job Centers of California (AJCCs), we serve as one-stop hubs connecting County residents to career readiness, training programs, and supportive services, and employers to hiring and training incentives, recruitment services, and ultimately a diverse and skilled talent pipeline.

Letter of Support to Establish a Regional Collaborative to
Build an Equitable Construction Workforce
March 10, 2025
Page 2

DEO provides community members with an opportunity to participate in the High Road Training Partnerships (HRTPs). HRTPs target LA County residents who have been economically impacted by the pandemic including, but not limited to system-impacted individuals, people experiencing homelessness, women, and BIPOC communities within the impacted geographies. DEO has proudly worked with the Los Angeles/Orange Counties Building and Construction Trades Council – Apprenticeship Readiness Fund to collaboratively achieve our goals for a local and diverse workforce including parity among women.

As a result of these partnerships and collaboration with training partners, DEO launched a Construction HRTP cohort of women to increase the accessibility into industry and supported entry into career pathway opportunities. The 10-week registered pre-apprenticeship training in the form of the labor-approved Multi-Craft Core Curriculum (MC3) that lead to union apprenticeships or jobs in the building trades.

We believe that tackling the issue of underrepresentation of women in construction is not just essential but imperative. It is part of our mission, as workforce lead in the region, to transform the construction landscape and forge meaningful pathways for women seeking careers in this vital sector. To achieve these ambitious goals, DEO is eager to partner with Metro in launching a powerful regional collaborative. By uniting various stakeholders, we can strategize and implement a robust action plan designed to create systemic change in the construction industry and significantly boost female participation.

We look forward to continued collaboration in building an inclusive, high-road workforce that uplifts Los Angeles County communities.

For further information please feel free to contact me at klobianco@opportunity.lacounty.gov.

Sincerely,



Kelly LoBianco
Director
County of Los Angeles Department of Economic Opportunity



TRAINING, EDUCATING, AND PREPARING WOMEN FOR TRANSFORMATIVE CAREERS IN THE CONSTRUCTION INDUSTRY

March 11, 2025

Wendy L. White
Metropolitan Transportation Authority
Director, Labor Wage & Retention Programs – PLA/CCP/Workforce
Diversity & Economic Opportunity Department

BOARD OF DIRECTORS

Olivia Sanchez
Board Chair

Miriam Scott Long
Vice Chair

Daniel Sloan
Treasurer

Jim Reyes
Secretary

Stella Choi
Member

Scottie Oliver
Member

Anne-Marie Otey
Member

Angela Scott
Member

Lynn Shaw, PhD
Member

Dear Ms. White,

I am writing to express our full support for the establishment of a regional collaboration to address the systemic challenges facing the construction industry in the Los Angeles and Orange County regions. This collaboration, which will include key stakeholders, represents a critical opportunity to drive systemic change and foster sustainable development in the construction sector.

Established in 1987, Women In Non Traditional Employment Roles (WINTER) has a mission to train, educate and prepare women for transformative careers in the construction industry. As the only gender-specific workforce development program in the region, we strongly believe that this initiative will help sustain a strong labor force to meet regional needs.

As we work together to establish a regional strategic plan of action, our shared goal will be to focus on identifying and addressing the underlying issues impacting the workforce and industry at large. The current challenges, ranging from workforce development to diversity and inclusion, require coordinated action and collective problem-solving across all sectors of the construction industry.

We believe that through collaboration and dialogue among all stakeholders, we can build a stronger, more equitable, and more resilient construction industry in our region. This partnership will facilitate the development of concrete solutions to the complex challenges of workforce shortages, skill gaps, and the need for diverse representation in the industry. By working together, we can promote a more inclusive workforce while also ensuring the long-term sustainability and competitiveness of the construction sector in Los Angeles and Orange County.

We are excited about the prospect of participating in this important initiative and remain committed to supporting this collaboration in any way necessary. We look forward to the productive discussions and outcomes that will emerge from this regional partnership.

Thank you for your leadership in this critical endeavor.

SENIOR STAFF

Carlos Torres, MPA
Executive Director

Luz Flores
Director of Operations

Respectfully,

Carlos Torres, MPA
Executive Director

29000 S. Western Avenue, Suite 301
Rancho Palos Verdes, CA 90275
www.winterwomen.org
213.749.3970



Female Participation in PLA/CCP Construction Projects

Construction Committee

March 19, 2025

Item #13



Metro

Board Motion No. 29

At the February 2023 meeting, the Board approved Motion 29 by Directors Horvath, Mitchell, Bass, Hahn, and Dupont-Walker that directed the Chief Executive Officer to:

- A) Commission a refresh on the construction workforce disparity study and report back on findings and recommendations
- B) Report back on the potential application of cultural competency requirements in contractor and staff training related to working with historically underutilized populations in the trades, with a focus on tradeswomen, as well as similar qualitative metrics that can be used in Metro's proposal evaluation and contracting processes; and
- C) Report back on the feasibility of creating bid preference incentives that can be applied to increase the number of women working on Metro funded construction projects, while not compromising the Agency's race conscious contracting goals, including but not limited to: the history of a contractor's compliance with Metro's Female Utilization Goal; supporting working parents with the availability of dependent care spending account benefits in addition to access to child care; and working with organizations such as Women In Non-Traditional Employment Roles (WINTER) to apply best practices in future contracts, etc.

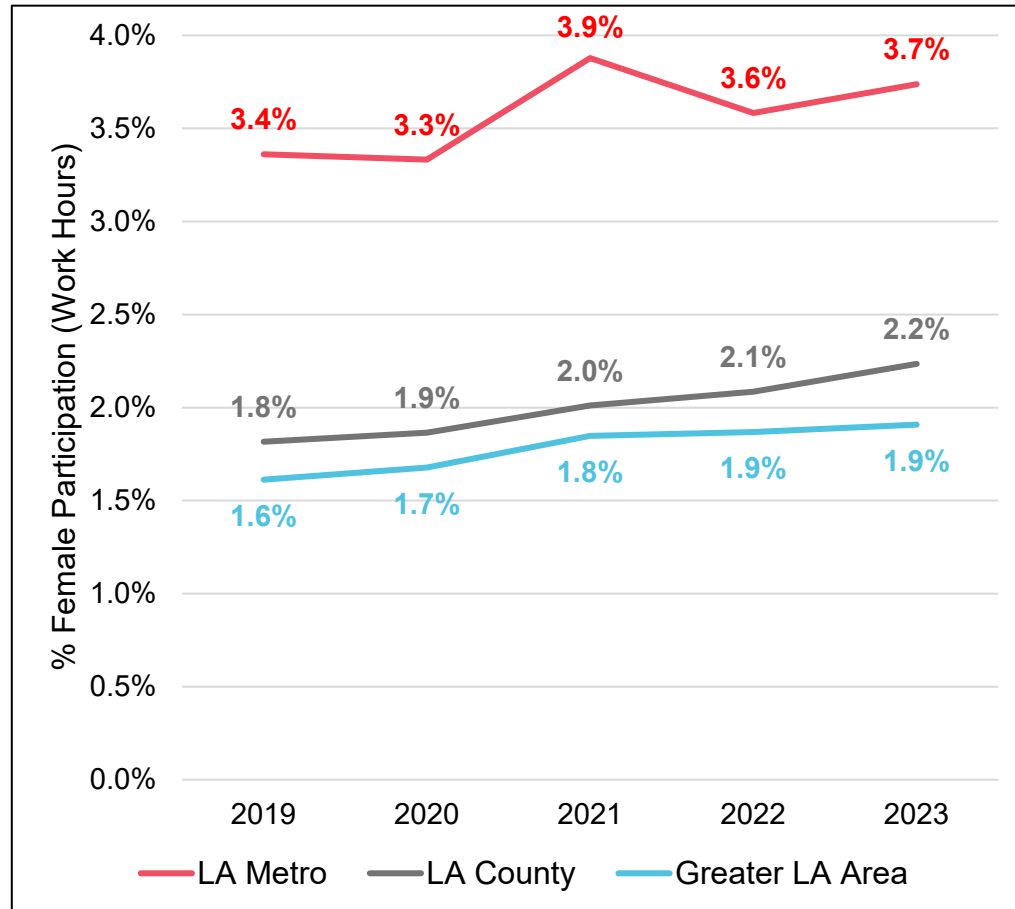
Construction Disparity Study Findings - Female Participation in the Region

Metro has **higher female construction workforce participation rates than the average public works project** in LA County and the Greater LA Area.

The **Greater LA Area** includes:

- Los Angeles County
- Orange County
- Riverside County
- San Bernardino County
- Ventura County

Female Participation for Metro, LA County Agencies, and Greater LA Area Agencies



Source: LCPtracker (2019-2023)



Female Construction Workforce Key Barriers

Barriers to Recruitment

- Lack of social connections limit access to construction careers
- Financial hardships exist for pre-apprentices and apprentices

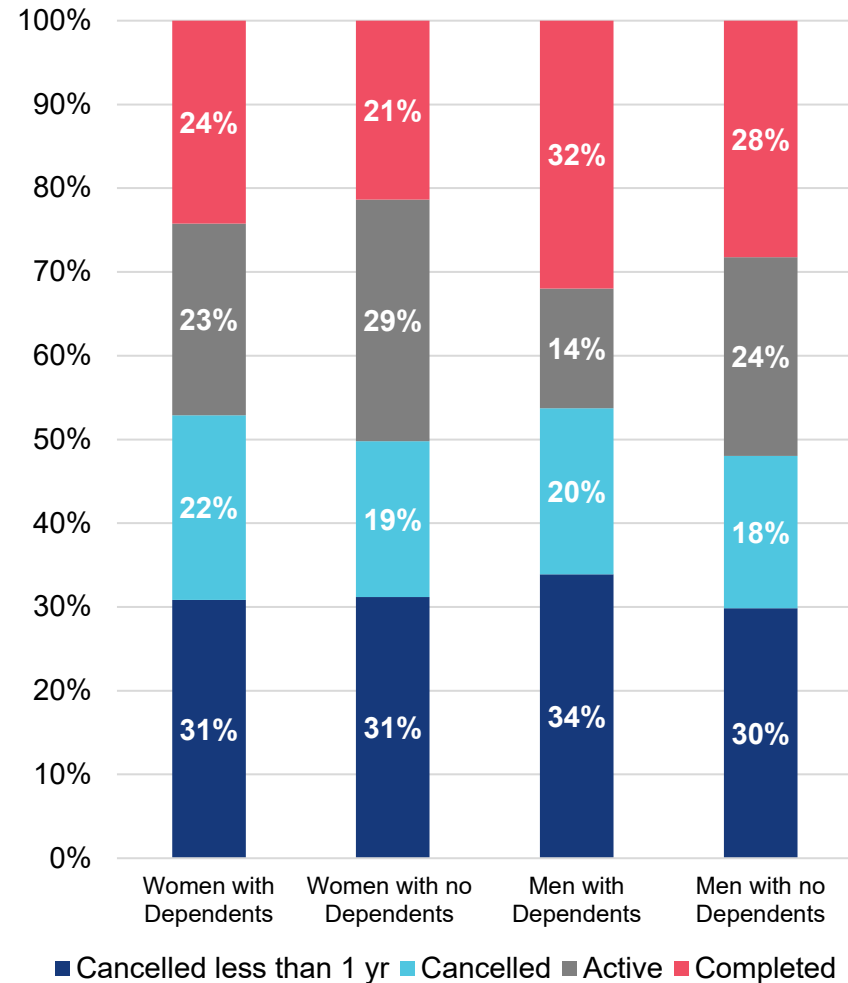
Barriers to Retention: Supportive Services

- Limited child care access and availability deters parents from entering and staying in the construction industry
- Construction workers lack access to reliable transportation to travel between various worksites
- Mental health services are in high demand across the region

Barriers to Retention: Workplace Culture

- On-site harassment and hostile job sites push women away
- Isolation of female workers perpetuates unsafe jobsites

Apprenticeship Status by Gender and Dependents



Enhancing Metro's Cultural Competency Standards and Implementation

- Metro will strengthen its Cultural Competency Plan requirements to explicitly integrate Workforce Equity Component. This enhancement will include targeted staff training to foster a more inclusive work environment for women and reinforce Metro's commitment to gender equity in construction.

Feasibility of Bid Preferences to Boost Women's Participation in Metro Construction

- Metro has explored the feasibility of implementing bid preferences to promote female participation. However, California Proposition 209 (Prop 209) prohibits preferential treatment based on sex, race, or ethnicity in public contracting.
- Metro is evaluating ways to incorporate commitments that align with workforce initiatives for RFP procurements. This will reinforce the importance of proactive efforts by our contractors in ways that increase the number of women in the field of our projects.

Study Recommendations

Strengthen Accountability on Female Hiring Goals

- a. Require contractors to provide documented evidence of good-faith efforts in meeting female participation goals.
- b. Foster collaboration between contractors, compliance teams, and oversight committees to ensure accountability.
- c. Expand partnerships with community organizations and training providers to support inclusive hiring practices.

Invest in Supportive Services, Including Childcare

- a. Address childcare accessibility as a major barrier to long-term employment.
- b. Develop solutions to mitigate the "benefits cliff" that disqualifies low-income apprentices from public assistance once they earn higher wages.
- c. Explore opportunities to expand childcare options and reduce waitlists in the Greater LA Region.

Establish a Regional Collaborative for Systemic Change

- a. Facilitate a joint effort among the region's public agencies, trade unions, and workforce development organizations to reduce barriers for women in apprenticeships and create further career opportunities.
- b. Develop a strategic action plan to increase female participation through targeted outreach, additional supportive services, and shared resources.

Action Items/Next Steps

- **Expand the Cultural Competency Plan requirement** to integrate Community Benefits and Workforce Equity components. Staff will identify mechanisms to embed workforce commitments—such as increasing female participation—into RFP procurements, ensuring alignment with Metro’s broader workforce initiatives.
- **Establish a regional roundtable** with the Program Management Office (PMO), general contractors’ associations, contractors, the Los Angeles Department of Economic Opportunity (DEO), LA/OCBCTC, union trades, and other key stakeholders. This forum will develop a strategic action plan to enact meaningful, lasting change in the construction industry.
- **Conduct a Women in the Trades Regional Summit** to bring together public agencies, trade unions, workforce development boards, and academic institutions. The summit will foster collaboration, share best practices, and drive commitments to increase female participation in the construction workforce.
- **Establish a Construction Female Advisory Group** composed of experienced women in the trades. This group will provide mentorship, guidance, and best practices to help dismantle barriers for women in construction, fostering a more inclusive and diverse workforce.
- **Launch a targeted social media campaign** focused on women, youth, and mentorship opportunities. This initiative will inspire and engage more individuals to pursue careers in construction, helping to build a stronger and more diverse pipeline of talent.



Board Report

File #: 2024-1145, File Type: Informational Report

Agenda Number: 28.

OPERATIONS, SAFETY, AND CUSTOMER EXPERIENCE COMMITTEE MARCH 20, 2025

SUBJECT: COMMUNITY ADVISORY COUNCIL (CAC) QUARTERLY UPDATE

ACTION: RECEIVE AND FILE

RECOMMENDATION

RECEIVE AND FILE quarterly status report on the Community Advisory Council (CAC).

ISSUE

This receive and file report is a Board-directed quarterly update on Community Advisory Council (CAC) activities from November 2024 through February 2025.

BACKGROUND

Per state statute, Metro must appoint a citizens advisory committee, whose membership “shall reflect a broad spectrum of interests and all geographic areas of the county.” The CAC prefers to be referred to as the Community Advisory Council because it better reflects its constituency.

Per the CAC's bylaws, the group consults, obtains, and collects public input on matters of interest and concern to the community, as well as those assigned by the Board of Directors or Metro staff. The CAC communicates their recommendations concerning key issues to the Board.

The CAC is currently comprised of 23 voting members. CAC members are directly appointed by the Metro Board of Directors and serve at the pleasure of their appointing Director. The CAC General Assembly has historically met monthly on the Wednesday evening before the Metro Board of Directors meeting but recently updated its bylaws to allow for flexibility within the fourth week of the month. The CAC's elected officers have historically met as an Executive Committee on the first Friday of each month but also updated the bylaws to allow for flexibility to meet within the first week of each month to lead agenda planning for the General Assembly meeting.

DISCUSSION

Since the November 2024, update to the Board, the CAC General Assembly convened three times - twice to discuss matters related to Metro business directly with agency staff working on critical programs, projects, operations, and agency initiatives, and once for a holiday celebration.

November 2024

At the November 20, 2024, meeting, SSLE presented an overview of Metro's Transit Community Public Safety Department (TCPD) Implementation Plan and multilayered approach to the department design and asked for input on the characteristics they wanted to see in the future Chief of Police. CAC members asked about coordination with other agencies and candidate selection considerations and suggested that the Chief of Police and Emergency Management have a strong engagement and community policing/relations background, as well as experience working with communities of color.

The CAC has set an intention to be able to align with and influence Metro board policy through the formation of subcommittees to delve more deeply on topics before the board. To that end, the CAC also voted to finalize subcommittees that mirror Metro Board committees, Planning and Programming and Operations, Safety, and Customer Experience.

December 2024

At its December 2024 meeting, the CAC had a holiday/end of the year meeting and celebration with the CEO. No business was conducted, rather the CAC informally shared input on various Metro projects and programs with the CEO.

At its December meeting, the Board approved the CAC's updated bylaws, which allow for some General Assembly meeting time flexibility to further the goals of aligning with and influencing Metro board priorities.

January 2025

At its January 2025 General Assembly meeting, the CAC received an overview from Service Planning regarding considerations for planning a new bus route and identifying route frequency and bus size. Staff shared emergency management resources and CAC members expressed support for Metro's emergency wildfire response, including temporarily waiving fares for affected riders. The CAC also discussed subcommittee formation and updating the list of interested CAC members based on a budget for a range of three to seven members per subcommittee.

February 2025

At its February 2025 meeting, the CAC received an update from SSLE on the Chief of Police hiring timeline, as well as presentations from Operations on Emergency service planning and OMB on the Budget Development Process and community input opportunities. They also formalized their subcommittee membership.

Membership Update

In December 2024, one CAC Member, Tony Banash, appointed by Director Najarian passed away. Tony Banash was one of the longest standing CAC Members and a past Chair Emeritus. He demonstrated an unwavering commitment and dedication to the CAC and was passionate about Metro being a pleasant experience for riders and employees, through investing in safety and

cleanliness initiatives. He also was a champion for fiscal responsibility and sustainability projects at Metro and beyond.

In February, the CAC Chair and Metro staff reached out to all Board Members' Deputy staff to identify new appointees, including any vacancies on the CAC. The 13 voting Metro Board of Directors, under AB 152, can appoint up to four CAC members each.

DETERMINATION OF SAFETY IMPACT

This Board action will not have an impact on safety standards for Metro.

EQUITY PLATFORM

CAC Members intentionally represent diverse ethnic, socio-economic, and geographic backgrounds and distinct perspectives to be reflective of Metro's ridership. Of the 23 members who self-disclosed their ethnic background, 61% identify as Black, Indigenous, and/or People of Color. Over recent years, the CAC has increasingly become more diverse in terms of race/ethnicity and gender and is comprised of several members that ride transit and Access services. Additionally, some CAC Members have disabilities - further increasing equitable representation and diverse perspectives. At present, there are seven women out of 23 total members (30%) and one transgender person serving on the CAC.

The CAC's increasing diversity is due to Metro staff and the CAC Chair collaborating to communicate with each Board of Directors' deputy and reminding them of current vacancies and which demographic/geographic needs can be filled by their appointments.

CAC members' concerns and feedback on various topics have helped inform the Metro's Board of Directors to make more equitably designed projects, programs, and initiatives by uplifting underserved voices, such as the Transit Community Public Safety Department (TCPSP) and Chief of Police job description, including a compassionate and sensitive approach to community policing.

IMPLEMENTATION OF STRATEGIC PLAN GOALS

Goal 1 - Provide high-quality mobility options that enable people to spend less time traveling

Goal 2 - Deliver outstanding trip experiences for all users of the transportation system

Goal 3 - Enhance community and lives through mobility and access to opportunity

Goal 4 - Transform LA County through regional collaboration and national leadership

Goal 5 - Provide responsive, accountable, and trustworthy governance within the Metro organization

The CAC's advisory input to Metro supports Metro's Strategic Vision Goals, as outlined above, per the State statute that created the CAC. Per the CAC's bylaws, its purview may be broad and needn't

be specific to one agency issue area or concern.

VEHICLE MILES TRAVELED (VMT) OUTCOME

VMT and VMT per capita in Los Angeles 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.* Metro's Board-adopted VMT reduction targets align with California's statewide climate goals, including achieving carbon neutrality by 2045. To ensure continued progress, all Board items are assessed for their potential impact on VMT.

As part of these ongoing efforts, this item is expected to contribute to further reductions in VMT. While this item does not directly encourage taking transit, sharing a ride, or using active transportation, it is a vital part of Metro operations, as it is a formal advisory body which provides community input on key agency priorities, projects and programs which can lead to an enhanced customer experience. Because the Metro Board has adopted an agency-wide VMT Reduction Target, and this item supports the overall function of the agency, this item is consistent with the goals of reducing VMT.

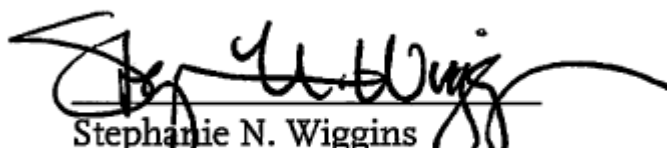
**Based on population estimates from the United States Census and VMT estimates from Caltrans' Highway Performance Monitoring System (HPMS) data between 2001-2019.*

NEXT STEPS

The CAC General Assembly will meet March 26 to discuss creating a strategic workplan for 2025, hear a requested presentation from Government Relations on Federal/State legislative and funding updates, and receive a Brown Act/Robert's Rules of Order training. Metro staff will continue to support the CAC.

Prepared by: Allison Mannos, Senior Manager, Community Relations, (213) 522-9952
Patricia Soto, Director, Community Relations, (213) 922-1249
Lilian De Loza-Gutierrez, Executive Officer, Communications, Community Relations,
(213) 922-7479
Yvette Rapose, Deputy Chief Customer Experience Officer, (213) 418-3154

Reviewed by: Jennifer Vides, Chief Customer Experience Office, (213) 922-4060



Stephanie N. Wiggins
Chief Executive Officer



*Community Advisory Council (CAC) Update
Operations, Safety, and Customer Experience*

March 20, 2025



Metro

Background

- Per State law, Metro appointed a Citizens' Advisory Council (CAC), now called the Community Advisory Council (CAC), whose membership shall reflect a broad spectrum of interests and all geographic areas of the county.
- Per the CAC's bylaws, the CAC may consult, obtain, and collect public input on matters of interest and concern to the community and make recommendations to Metro. Issues may also be assigned to the CAC by Metro for its review, comment, and recommendation.
- The CAC is currently comprised of 23 members and each member is directly appointed by an active/voting Metro Board Director and serves at the pleasure of their appointing Director.
- Each voting Metro Board Director can appoint up to four people to serve on the CAC.



November 20, 2024 – General Assembly Meeting

- During this meeting, the CAC discussed the following issues:
 - Input on the Transit Community Public Safety Department’s Implementation Plan and desired traits in a new Chief of Police & Emergency Management
 - Voted to finalize new CAC Planning & Programming and Operations, Safety, and Customer Experience Subcommittees



December 6, 2024 – General Assembly Meeting

- During this meeting, the CAC held a Holiday End-of-Year meeting with CEO Wiggins
- The group informally shared feedback on various Metro projects and programs with the CEO



January 22, 2025 – General Assembly Meeting

- During this meeting (held virtually due to the wildfires/State of Emergency), the CAC discussed the following issues:
 - Presentation on Service Planning efforts for new bus routes, identifying route frequencies and bus sizes.
 - Discussion regarding the CAC’s 2025 General Assembly meeting dates.
 - CAC members volunteered for the two new Subcommittees:
 - Planning & Programming
 - Operations, Safety, and Customer Experience



February 26, 2025 – General Assembly Meeting

At the General Assembly meeting, agenda items included:

- An update from SSLE on the Chief of Police Hiring timeline
- Presentations from:
 - The Operations Department on Emergency Service Planning
 - Metro’s Budget Development Process from the Office of Management & Budget (OMB)
- The committee also formalized its subcommittees’ membership

**Membership Update: One CAC member appointed by Board Member Najarian passed away. In February, the CAC Chair and Metro staff contacted all Board Members’ staff to encouraged them to identify new appointees, including any vacancies on the CAC. The 13 voting Metro Board members, under AB 152, can appoint up to four CAC members each.*



Board Report

File #: 2025-0162, File Type: Policy

Agenda Number: 30.

REGULAR BOARD MEETING MARCH 27, 2025

SUBJECT: FEDERAL AND STATE REPORT

ACTION: APPROVE RECOMMENDATION

RECOMMENDATION

CONSIDER:

- A. RECEIVING AND FILING the March 2025 Federal and State Legislative Report; and
- B. ADOPTING Staff Recommended Position:
 - AB 1237 (McKinnor). County of Los Angeles: sporting events: ticket charge: public transit. - SUPPORT-WORK WITH AUTHOR/SPONSOR (Attachment A).

DISCUSSION

**Executive Management Committee
Remarks Prepared by Raffi Haig Hamparian
Government Relations, Deputy Executive Officer: Federal Affairs**

Chair Hahn and members of the Executive Management Committee, I am pleased to provide an update on several key federal matters of interest to our agency. This report was prepared on March 4, 2025, and will be updated, as appropriate, at the Regular Board Meeting on March 27, 2025. The status of relevant pending legislation is monitored in the [Metro Government Relations Legislative Matrix <https://libraryarchives.metro.net/DB_Attachments/240315%20-%20March%202024%20-%20LA%20Metro%20Legislative%20Matrix.pdf>](https://libraryarchives.metro.net/DB_Attachments/240315%20-%20March%202024%20-%20LA%20Metro%20Legislative%20Matrix.pdf), which is updated monthly.

Trump Administration Executive Orders/USDOT Order

Metro's Government Relations team is actively engaged with our Los Angeles County Congressional Delegation on the Executive Orders and other actions being taken by the U.S. Department of Transportation (USDOT) on policy matters that could negatively impact the free flow of federal transportation dollars to our agency. Given our longstanding and positive relationship with the USDOT, we are carefully monitoring any actions that may diminish the amount of both formula and discretionary funding that our agency receives on an annual basis.

Specifically, staff has been in constant contact with members of the House Transportation and Infrastructure Committee from Los Angeles County and our two U.S. Senators, among others, to let them know our concerns and to encourage them to continue working in Congress to ensure that funds authorized and appropriated by Congress for mobility projects and initiatives - are safeguarded. While the full scope and impact of the USDOT's Order issued on January 29, 2025, remains to be seen, we will continue to make every effort to protect our agency from any negative impacts from these actions.

As Congress, and in some instances the judicial system, consider matters related to recent Trump Administration's actions, staff look forward to keeping our Board advised of any impact they may have on our agency and our ongoing work to deliver more mobility to the ten million people who reside in Los Angeles County.

U.S. Department of Transportation/2028 Olympic and Paralympic Games

As of the date this report was drafted, Metro continues to actively work to ensure that the \$200 million included in the FY2025 Senate Transportation, Housing and Urban Development spending bill for mobility related projects for the upcoming 2028 Olympic and Paralympic Games is included in the final FY2025 spending bill adopted by Congress. This work includes outreach to our LA County Congressional Delegation to enlist their continued support for maintaining the Senate's provision in the final spending deal that Congress is expected to conclude in the coming month(s).

Staff continues to advance Metro's request that President Trump include \$3.2 billion for mobility projects related to the 2028 Olympic and Paralympic Games in the President's Fiscal Year 2026 White House Budget. This request was formally made by the Board in a letter shared with the President-elect on November 21, 2024.

Los Angeles County Congressional Delegation

Metro is actively setting up briefings with Members of Congress and/or their aides to see how our agency can continue to work cooperatively with federal officials representing Los Angeles County residents in Washington, DC. Over the past several weeks, we have held conversations with several key members of Congress - including Congresswoman Norma Torres (D-CA) and Congresswoman Luz Rivas (D-CA)

More recently, Metro Board Chair, Supervisor Janice Hahn held a positive dialogue with Congressman Robert Garcia (D-CA) and the Ranking member of the House Committee on Transportation and Infrastructure, Congressman Rick Larsen (D-WA). This meeting focused on Metro's work to advance the Southeast Gateway Line through the Federal Transit Administration's Capital Investment Grant program. Chair Hahn emphasized in this meeting that the SGL is Metro's Board-approved number one federal priority project. Metro staff, alongside Director Yaroslavsky, also recently provided a tour of the Westside Purple Line Extension (Section 1) La Brea station for Congresswoman Laura Friedman (D-CA) and Ranking member Larsen (D-WA). Both Members of Congress were impressed with the mobility benefits that will be delivered to LA County residents when Section 1 of the WPLE is opened to the public.

Staff continues to collaborate with our LA County Congressional Delegation on a variety of subjects, including with respect to federal grants, wildfire assistance, matters related to spending bills for both Fiscal Years 2025 and 2026, and the anticipated Fiscal Year 2026 Budget that will be issued by the White House this Spring.

Leaders of Federal Transportation-Related Committees / Next Surface Transportation Authorization Bill

Metro CEO Stephanie Wiggins continues to extend invitations to the Chairs and Ranking members of key congressional committees that will play leading roles in crafting the next surface transportation authorization bill. The current surface transportation authorization bill, the Bipartisan Infrastructure Law (P.L. 117-59) expires on September 30, 2026.

Transit Operator Safety

Consistent with our Board-approved 2025 Federal Legislative Program, Metro maintains open lines of communication with the Los Angeles County Congressional Delegation on federal initiatives to enhance transit operator safety. The current surface transportation authorization measure - the Bipartisan Infrastructure Law - will be expiring in late 2026. This will provide our agency with an opportunity to work with a variety of stakeholders to authorize federal programs to further enhance transit operator safety.

Federal Transportation Grants

With the start of the Trump Administration and a new team of leaders set to begin their work at the U.S. Department of Transportation, Metro will aggressively pursue federal grant opportunities to fund Metro projects and initiatives. Consistent with our past practice, we will work closely with members of the Los Angeles County Congressional Delegation and other key stakeholders - like the LA/Orange County Building and Construction Trades Council, the LA Area Chamber of Commerce, among others - to solicit their support for our current and future grant applications.

Conclusion:

Chair Hahn and members of the committee, I look forward to expanding on this report at the Executive Management Committee meeting scheduled for March 20, 2025, with any new developments that may occur over the next several weeks.

**Executive Management Committee
Remarks Prepared by Madeleine Moore
Government Relations, Deputy Executive Officer: State Affairs**

Chair Hahn and members of the Board, I am pleased to provide an update on several state matters of interest to our agency. This report was prepared on March 4, 2025 and will be updated, as appropriate, at the Regular Board Meeting on March 27, 2025. The status of relevant pending legislation is monitored monthly in the Metro [Government Relations Legislative Matrix](https://libraryarchives.metro.net/DB_Attachments/240315%20-%20March%202024%20-%20LA%20Metro%20Legislative%20Matrix.pdf) [<https://libraryarchives.metro.net/DB_Attachments/240315%20-%20March%202024%20-%20LA%20Metro%20Legislative%20Matrix.pdf>](https://libraryarchives.metro.net/DB_Attachments/240315%20-%20March%202024%20-%20LA%20Metro%20Legislative%20Matrix.pdf).

Legislative Update

The deadline for new bill introductions for the first year of the legislative session was February 21. In the first year in which bill introduction limits were reduced to 35 bills per Assembly Member and Senator for the two-year session, there were 2,350 bills introduced this year, of which 1,500 were Assembly bills and 850 were Senate bills. Additionally, of those 2,350 bills, 481 are intent bills and 390 are spot bills, for a total of 871 placeholder bills, which is 37% of the total.

Sponsored Legislation

On February 19, Assemblymember Nick Schultz (D - Burbank) introduced AB 939, the Safe, Sustainable, Traffic-Reducing Transportation Bond Act of 2026. This legislation, sponsored by Metro, originated from the Board's direction during the December 2024 Board meeting, where staff were directed to explore a transportation bond that would provide agencies with ongoing capital funding from the State. AB 939 would, if passed by the Legislature by a 2/3 vote, be placed on the November 2026 ballot, where it would need a simple majority to pass. If approved, the bond would authorize the issuance of \$20 billion in State General Obligation Bonds to finance transit and passenger rail improvements, local streets and roads and active transportation projects, zero-emission vehicle investments, transportation freight infrastructure improvements, grade separations, and other critical safety improvements. Staff would like to thank the Assemblymember for his authorship of the bill and will continue to keep the Board apprised of the bill's progress through the legislature.

On February 21, Assemblymember Tina McKinnor (D - Inglewood) introduced AB 1237. This bill would authorize Metro to impose a charge of up to \$5 on the purchase of a ticket from a ticket vendor to a sporting event in the County of Los Angeles for the 2026 FIFA World Cup or the 2028 Olympic and Paralympic Games. The bill would require Metro to use any revenue collected from that charge to support its transit operations. The bill would require Metro, if the agency imposes this charge, to allow any person to use its transit services at no charge on the day of a sporting event in the County of Los Angeles for the 2026 FIFA World Cup or the 2028 Olympic and Paralympic Games if the person presents a ticket to that sporting event. Metro staff recommend a support-work with author position and sponsorship of this legislation. A full legislative analysis to support this recommendation is outlined in Attachment A.

As previously reported to the Board, Metro has signed on as a co-sponsor of SB 71 (Wiener), along with the California Transit Association, the Bay Area Council, and SPUR. SB 71 builds upon previous legislation (SB 288, SB 922) by the Senator that expedites bike, pedestrian, light rail, and bus rapid transit projects by exempting these projects from the California Environmental Quality Act (CEQA). SB 71 removes the SB 922 sunset date and clarifies that transit infrastructure maintenance projects, bus shelters and lighting, and shuttle and ferry service and terminal projects are also eligible for the exemption. Metro was proud to serve as a co-sponsor of SB 922, which is providing tangible benefits to our agency and projects and is proud to return as a co-sponsor of SB 71.

Other Relevant Legislation

Staff would like to highlight a few more recent bills of interest.

First, Metro has issued a formal letter for support for AB 394 by Assemblymember Lori Wilson (D - Suisun City). This bill would strengthen penalties for assaults against all transit employees that currently exist for bus and rail operators only. The bill would also broaden enforcement against

trespassing on transit systems, and empower courts to issue prohibition orders restricting access to individuals convicted of violent offenses against transit workers. Metro has continued to utilize all tools at our disposal to ensure greater safety for all, and AB 394 would be another critical tool in our toolbox. 2025 Board-approved State Legislative Program Goal #4 includes the activity “Explore legislation that supports Metro’s ability to more efficiently implement the Board-approved multi-layered approach to safety and security, including but not limited to increased penalties for operator assaults”. For this reason, Metro has issued a formal letter of support.

AB 861 by Assemblymember Jose Luis Solache (D - Lynwood) was introduced on February 19. This bill would establish the LA Metro Los Angeles Community College GoPass and Student Ambassador Program to promote the use of public transportation by students enrolled at a campus of the Los Angeles Community College District by (1) providing all students with a free transit pass to access the public transportation services provided by Metro, and (2) establishing a student ambassador program within Metro where students assist with security, rider assistance, and facility upkeep on Metro rail and bus lines serving campuses of the Los Angeles Community College District. The bill would require the Los Angeles Community College District to submit an annual report to the Department of Finance and the budget committees of the Assembly and Senate that includes specified information about the transit pass program and the student ambassador program. The bill would appropriate \$2.5 million from the general fund to the Community College District and Metro to develop and implement the free transit pass program and the student ambassador program.

Finally, SB 220 by Senator Ben Allen (D - Santa Monica) was introduced on January 23.. As introduced, the bill states that it is the “intent of the Legislature to enact subsequent legislation to update and modernize the membership of the board of directors of the Los Angeles County Metropolitan Transportation Authority.” Metro staff have shared the agency’s opposition to Board restructuring legislation, as we assert that any changes to the composition of the Board should be decided through a locally derived process. Senate spot bills have until March 26 to be substantially amended before they can be heard in committee.

Budget Update

Following the release of the Governor’s January budget proposal last month, the Senate and Assembly budget committees have begun holding hearings regarding the FY 25-26 process, including regarding the transportation budget proposal. Due to the uncertainty surrounding the direct impact of wildfire recovery, along with impacts to tax receipts and deadlines, Metro anticipates that the budget process will extend beyond the June 15 constitutional deadline to pass a budget with subsequent trailer bills through the fall.

On February 26, the Assembly held a joint hearing of the Emergency Management, Housing and Community Development, and Economic Development, Growth, and Household Impact Committees, regarding the recovery and rebuilding efforts around the Los Angeles wildfires. Staff from public and private sector organizations shared updates on recovery operations, along with insights on the path forward for the region with regard to helping individuals, businesses, and communities rebuild.

LA County Legislative Delegation Coordination

Government Relations staff continue to prioritize new member engagement and updating state Senate and Assembly offices on projects and programs relevant to their districts. CEO Wiggins has begun meeting with new members in order to introduce them formally to Metro and gauge their legislative priorities for potential partnerships between the State and our agency.

EQUITY PLATFORM

Government Relations will continue to work with the Office of Civil Rights, Racial Equity, and Inclusion in reviewing legislation introduced in Sacramento and Washington, DC, to address any equity issues in proposed bills and the budget process.

VEHICLE MILES TRAVELED OUTCOME

VMT and VMT per capita in Los Angeles 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.* Metro's Board-adopted VMT reduction targets align with California's statewide climate goals, including achieving carbon neutrality by 2045. To ensure continued progress, all Board items are assessed for their potential impact on VMT.

This item supports Metro's systemwide strategy to reduce VMT through administrative and legislative advocacy activities that will benefit and further encourage transit ridership, ridesharing, and active transportation. Increased state and federal funding received benefits Metro's projects and programs to reduce VMT. Metro's Board-adopted VMT reduction targets were designed to build on the success of existing investments, and this item aligns with those objectives.

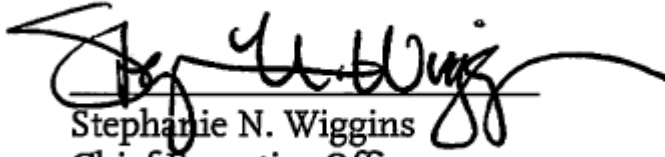
*Based on population estimates from the United States Census and VMT estimates from Caltrans' Highway Performance Monitoring System (HPMS) data between 2001-2019.

ATTACHMENT

Attachment A - AB 1237 (McKinnor) Legislative Analysis

Prepared by: Michael Turner, Executive Officer, Government Relations, (213) 922-2122
Madeleine Moore, Deputy Executive Officer, Government Relations, (213) 922-4604
Raffi Hamparian, Deputy Executive Officer, Government Relations, (213) 922-3769
Alex Amadeo, Senior Manager, Government Relations, (213) 922-2763

Reviewed by: Nicole Englund, Chief of Staff, (213) 922-7950



Stephanie N. Wiggins
Chief Executive Officer

ATTACHMENT A

BILL: ASSEMBLY BILL 1237
AS INTRODUCED FEBRUARY 21, 2025

AUTHOR: ASSEMBLYMEMBER TINA MCKINNOR (D – INGLEWOOD)

SUBJECT: COUNTY OF LOS ANGELES: SPORTING EVENTS: TICKET
CHARGE: PUBLIC TRANSIT.

STATUS: PENDING REFERRAL

ACTION: SUPPORT-WORK WITH AUTHOR/SPONSOR

RECOMMENDATION

Staff recommend that the Board of Directors adopt SUPPORT-WORK WITH AUTHOR position on Assembly Bill 1237 by Assemblymember Tina McKinnor, as introduced on February 21, 2025. Additionally, staff recommend that Metro becomes the formal sponsor of this legislation.

ISSUE

This bill:

- Would authorize LA Metro to impose a charge of up to \$5 on the purchaser of a ticket from a ticket vendor to a sporting event in the County of Los Angeles for the 2026 FIFA World Cup or the 2028 Olympic and Paralympic Games, as specified. The bill would require LA Metro to use any revenues collected from that charge to support its transit operations.
- Would require LA Metro, if it imposes this charge, to allow any person to use its transit services at no charge on the day of a sporting event in the County of Los Angeles for the 2026 FIFA World Cup or the 2028 Olympic and Paralympic Games if the person presents a ticket to that sporting event at the location where LA Metro collects fares for transit services.

DISCUSSION

Los Angeles County will be hosting a number of major events in the next few years, including the 2026 World Cup and the 2028 Olympic and Paralympic Games. Hundreds of thousands of visitors will take transit to reach venues during the “transit-first” Games in 2028. This bill would provide a simple way for fans to utilize transit as part of their experience, leading to increased ridership and reduced congestion. Funding received through the fee added to the tickets purchased will support the increased transportation

operational needs associated with the County hosting these major events. Fees would be assessed only on those who are attending the events, providing a climate-friendly vehicle for transporting these fans and ensuring that Metro's core ridership and system are further supported.

As currently drafted, the bill lays out a framework for this program. Staff are recommending that we also include a work with author element in our position so that we can address the following issues in the legislative process:

- The bill identifies an amount for the surcharge that is also not in keeping with what was charged in previous Olympic and Paralympic games. Staff would want to work to ensure that the surcharge reflects the costs of providing transit services today.
- Additionally, the bill does not currently provide an offramp for any entity that enters into an agreement with Metro to implement the surcharge. Lastly, the use of this type of surcharge would also improve mobility at other major events that would be held throughout the State. We would like to explore the possibility of implementing such a surcharge more broadly.

Staff therefore recommend that the Board adopt a SUPPORT-WORK WITH AUTHOR position on, and formal SPONSORSHIP of, AB 1237 (McKinnor). This position will allow us to work with Assemblymember McKinnor to advance the legislation and ensure that the provisions of the bill are supportive of Metro's goals regarding congestion relief, air pollution reduction, and a legacy of transit improvement for the region. Primary sponsorship of this legislation also allows for an opportunity for Metro to testify before the legislature on the goals and benefits of improving transit in the region.

DETERMINATION OF SAFETY IMPACT

The impact on safety is still being evaluated.

FINANCIAL IMPACT

The estimated financial impact of this action is still being evaluated.

EQUITY PLATFORM

Staff recommendation supports Metro's equity platform in that it not only increases access to venues for those who are attending these large scale events, but provides for funding to support Metro's core operations that serve our everyday ridership, and reduces congestion for residents and visitors alike, leading to improved local air quality for all. While the full list of venues for the 2028 Games is not yet finalized, we know that venues such as SoFi Stadium are located in Equity Focus Communities, and improving mobility around these venues supports the surrounding community.

IMPLEMENTATION OF STRATEGIC PLAN GOALS

Staff recommendation supports strategic plan goal #4: Transform LA County through regional collaboration and national leadership. This legislation would support projects and programs and operations that serve the 2028 Games.

ALTERNATIVES CONSIDERED

Staff have considered adopting an oppose position on the bill. An oppose position would be inconsistent with Metro's Board approved 2025 State Legislative Program Goal #14, Continue to work with Governor's Office and State Transportation Agency to successfully coordinate on the 2028 Olympic and Paralympic Games being held in Los Angeles County.

VEHICLE MILES TRAVELED OUTCOME

VMT and VMT per capita in Los Angeles 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.* Metro's Board-adopted VMT reduction targets align with California's statewide climate goals, including achieving carbon neutrality by 2045. To ensure continued progress, all Board items are assessed for their potential impact on VMT.

A support and sponsor position on this legislation would, if the bill were passed and signed by the Governor, likely lead to a reduction in vehicle miles traveled. Integrating a transit fee into the existing ticket price would ensure that fans have a more convenient way to get to these stadia, leading to greater transit ridership, and therefore lower vehicle miles traveled versus fans utilizing single-occupancy vehicles.

*Based on population estimates from the United States Census and VMT estimates from Caltrans' Highway Performance Monitoring System (HPMS) data between 2001-2019.

NEXT STEPS

Should the Board decide to adopt a SUPPORT-WORK WITH AUTHOR and SPONSOR position on the legislation; staff will communicate the Board's position to the author and work to ensure inclusion of the Board's priorities in the final version of the bill. Staff will continue to keep the Board informed as this issue is addressed throughout the legislative session.



Government Relations Federal and State Affairs Update

Board of Directors Meeting
March 27, 2025

Federal Affairs Update

- **Trump Administration Executive Orders/USDOT Order**
- **U.S. Department of Transportation/2028 Olympic and Paralympic Games**
- **Los Angeles County Congressional Delegation**
- **Next Surface Transportation Authorization Bill**
- **Transit Operator Safety**
- **Federal Transportation Grants**

- **Legislative Update:**
 - **Sponsored Bills**
 - **Other Relevant Legislation**
- **Fiscal Year 25-26 Budget Process and Considerations**
- **Delegation Outreach**



Board Report

File #: 2025-0224, **File Type:** Minutes

Agenda Number: 2.

**REGULAR BOARD MEETING
MARCH 27, 2025**

SUBJECT: MINUTES

RECOMMENDATION

APPROVE Minutes of the Regular Board Meeting held February 27, 2025.



CITY OF CULVER CITY

9770 CULVER BOULEVARD
CULVER CITY, CALIFORNIA 90232-0507
CITY HALL Tel. (310) 253-6000
FAX (310) 253-6010

DAN O'BRIEN
MAYOR

FREDDY PUZA
VICE MAYOR

COUNCIL MEMBERS
BRYAN "BUBBA" FISH
YASMINE-IMANI MCMORRIN
ALBERT VERA

February 18, 2025

The Honorable Janice Hahn, Chair and
Los Angeles County Metropolitan Transportation Authority Board Members
One Gateway Plaza, Mail Stop 99-3-1
Los Angeles, CA 90012

Subject: Sepulveda Transit Corridor Project – Support for Alternatives 4 and 5, a Direct, On-Campus Station at UCLA, and a Seamless Connection to the D Line at the Westwood/UCLA Station

Dear Chair Hahn and Board Members:

On behalf of the City of Culver City, I am writing to express our strong support for Alternatives 4 and 5, the inclusion of a direct, on-campus station at the University of California, Los Angeles (UCLA), and a seamless connection to the Metro D Line (Purple) at Westwood/UCLA Station for the Sepulveda Transit Corridor Project (STC). On February 10, 2025, the Culver City Council voted to support Alternatives 4 and 5 and a STC project that advances these objectives.

Commuters traveling between the San Fernando Valley and the Westside, and onward to final destinations across the region, face chronic traffic and limited transit alternatives. Metro estimates that the current journey between the Van Nuys Metrolink station in the San Fernando Valley and the E Line (Expo) on the Westside takes over an hour and half via transit, with transit riders stuck in the same congestion as drivers. Driving is not much faster, averaging 40-90 minutes at peak. This negatively affects quality of life, harms regional air quality, and undermines statewide efforts to reduce greenhouse gas emissions.

The Sepulveda Transit Corridor Project (STC) promises to cut that journey to as little as 20 mins, a transformative change that could bring tens of thousands of Angelenos out of their cars and onto transit. It is essential that Metro leverages this once in a generation opportunity to ensure a better mobility future for the region. To maximize mobility benefits and ridership, the STC project needs to directly connect the most popular destinations between the San Fernando Valley and the Westside. According to Metro's projections, which includes UCLA, a directly located station would be the busiest non-transfer station in the entire system. It also necessitates seamless connections with other transit lines to create a network that is fast and convenient for riders across the region. A seamless connection with the D Line (Purple) at Wilshire Blvd. is essential; it is projected to be the overall busiest station in the STC project and would serve as a key transfer point for the Metro system.

**The Honorable Janice Hahn, Chair and
Los Angeles County Metropolitan Transportation Authority Board Members
February 18, 2025
Page 2 of 2**

Alternatives 4 and 5 are best suited to support these goals. They have the highest projected ridership and the shortest projected travel times when factoring in peak frequency. They include a direct, on-campus station at UCLA and a seamless connection to the D Line (Purple) at Westwood/UCLA, both of which are projected to be the highest-ridership of all alternatives. They provide new rail transit service on Sepulveda Blvd. in the Valley, expanding access beyond existing planned service on Van Nuys Blvd. Additionally, Alternatives 4 and 5 terminate at the existing transit hub at Expo/Sepulveda, which is well served by Metro, Big Blue Bus, and Culver CityBus, furthering connections across the Westside and beyond.

We appreciate your ongoing leadership and respectfully urge you to support Alternatives 4 and 5, which include a direct, on-campus station at UCLA and a seamless connection to the D Line (Purple) at Westwood/UCLA Station, for the Sepulveda Transit Corridor Project.

Sincerely,

A handwritten signature in blue ink, appearing to read "Dan O'Brien", written over a circular stamp or seal.

Dan O'Brien
Mayor

cc: Stephanie Wiggins, Chief Executive Officer, Los Angeles Metro
The Honorable Members of the City Council
John M. Nachbar, City Manager
Diana Chang, Chief Transportation Officer

February 2025 RBM Public Comment – Item 33

From: [REDACTED]
Sent: Tuesday, February 25, 2025 10:28 PM
To: Board Clerk <BoardClerk@metro.net>
Subject: Item #33 - Against - Feb 27 2025 BOD Meeting

Hello LA Metro. My name is [REDACTED] I'm a resident of Downey, and I take LA Metro buses and trains everyday to work. I'm against the installation of taller faregates as LA Metro will be spending millions of even more dollars trying to enforce fares, when LA Metro instead should be moving towards universal free fares.

Taller faregates are going to make it a burden for passive fare evaders that are low income that need to use the LA Metro because they have no choice. If it's too much of a burden, they may be forced to take buses instead of trains and thus this will lower the rail ridership numbers and make taking trains less safe because there's less people taking the trains (because less riders = less safety in numbers = less safety). All while the minority of those that are aggressive fare evaders will continue pushing/finding their way through to get into the train system anyway (already you can see videos of the BART tall faregates where fare evaders are still getting through anyway). Even this item's board report states that the WMATA taller faregates do not eliminate 100% of fare evaders.

Again, the better way to improve public safety and a better investment for LA Metro's money is to move towards free fareless and to stop spending millions more dollars on fare enforcement for fare revenue that only make up less than 2% of LA Metro's budget.

Thank you for your time.

Sincerely,
[REDACTED]



MINUTES

Thursday, February 27, 2025

10:00 AM

Board of Directors - Regular Board Meeting

DIRECTORS PRESENT:

Janice Hahn, Chair

Fernando Dutra, 1st Vice Chair

Jacquelyn Dupont-Walker, 2nd Vice Chair

Kathryn Barger

Karen Bass

James Butts

Lindsey Horvath

Holly J. Mitchell

Ara J. Najarian

Imelda Padilla

Tim Sandoval

Hilda Solis

Katy Yaroslavsky

Gloria Roberts, non-voting member

Stephanie Wiggins, Chief Executive Officer

CALLED TO ORDER: 10:06 A.M.

ROLL CALL

1. APPROVED Consent Calendar Items: 2, 7, 8, 9, 10, 11, 17, 23**, 24, and 25.

**Item required 2/3 vote of the Full Board.

Consent Calendar items were approved by one motion; no items were held by a Director for discussion and/or separate action.

FD	JDW	LH	HS	JB	KB	KRB	AJN	HM	KY	TS	IP	JH
Y	Y	Y	A	Y	A	Y	Y	A	Y	Y	Y	Y

**Voting Deviations:*

Item 7 – the following Directors were conflicted: KRB and IP

Item 7 – the following Director voted no: LH

Item 11 – the following Director was conflicted: KRB

Item 17 – the following Director was conflicted: KRB

2. SUBJECT: MINUTES

2025-0146

APPROVED ON CONSENT CALENDAR Minutes of the Regular Board Meeting held January 23, 2025.

3. SUBJECT: REMARKS BY THE CHAIR

2025-0143

RECEIVED remarks by the Chair.

FD	JDW	LH	HS	JB	KB	KRB	AJN	HM	KY	TS	IP	JH
P	P	P	A	P	A	P	P	P	P	P	P	P

4. SUBJECT: REPORT BY THE CHIEF EXECUTIVE OFFICER

2025-0145

RECEIVED report by the Chief Executive Officer.

FD	JDW	LH	HS	JB	KB	KRB	AJN	HM	KY	TS	IP	JH
P	P	P	A	P	A	P	P	P	P	P	P	P

KB = K. Barger	FD = F. Dutra	IP = I. Padilla	KY = K. Yaroslavsky
KRB = K.R. Bass	JH = J. Hahn	AJN = A.J. Najarian	
JB = J. Butts	LH = L. Horvath	TS = T. Sandoval	
JDW = J. Dupont Walker	HJM = H.J. Mitchell	HS = H. Solis	

LEGEND: Y = YES, N = NO, C = CONFLICT, ABS = ABSTAIN, A = ABSENT, P = PRESENT

7. SUBJECT: SR 57/60 INTERCHANGE IMPROVEMENT PROJECT UPDATE

2024-1085

AUTHORIZED ON CONSENT CALENDAR the Chief Executive Officer to:

- A. EXECUTE Modification No. 1 to Project Identification No. MM500201 with the San Gabriel Valley Council of Governments (SGVCOG) for the SR-57/60 Interchange Improvement Project (Project) in the amount of \$13,344,233.05, increasing the contract value from \$29,525,000 to \$42,869,233.05 construction management services;
- B. EXECUTE Modification No. 5 to Contract No. AE51890001 with WKE, Inc. for the Project in the amount of \$3,037,366, increasing the contract value from \$29,213,933 to \$32,251,299 for design services during construction and extend the period of performance from December 31, 2026 to December 31, 2029; and
- C. APPROVE a reduction in the retention amount withheld in the Funding Agreement with SGVCOG from 10% to 5% to be consistent with other grantees awarded similar funding amounts and at this stage of construction.

8. SUBJECT: REGIONAL TRANSPORTATION IMPROVEMENT PROGRAM AMENDMENTS

2024-1140

APPROVED ON CONSENT CALENDAR the amendments to the Regional Transportation Improvement Program.

9. SUBJECT: MEASURE M MULTI-YEAR SUBREGIONAL PROGRAM ANNUAL UPDATE - LAS VIRGENES/MALIBU SUBREGION

2024-1162

AUTHORIZED ON CONSENT CALENDAR:

A. APPROVING:

- 1. programming an additional \$8,904,127 of Measure M Multi-Year Subregional Program (MSP) Active Transportation, Transit, and Tech Program, including inter-program borrowing of \$4,531,812 from the Measure M MSP Highway Efficiency Program;
 - 2. programming an additional \$15,221,093 within the capacity of Measure M MSP Highway Efficiency Program; and
- B. the Chief Executive Officer (CEO) or their designee to negotiate and execute all necessary agreements and/or amendments for approved projects.

10. SUBJECT: EAST SAN FERNANDO VALLEY LIGHT RAIL TRANSIT LINE PROJECT **2024-1100**

AUTHORIZED ON CONSENT CALENDAR the Chief Executive Officer to:

- A. INCREASE the Board approved Preconstruction Budget for the East San Fernando Valley Light Rail Transit Project (Project) by \$608,095,000 from \$879,731,000 to \$1,487,826,000; and
- B. NEGOTIATE and EXECUTE all project-related agreements and modifications to existing contracts within the authorized Preconstruction Budget.

11. SUBJECT: SOUTHEAST GATEWAY LINE PROJECT - ADVANCED WORKS CONSTRUCTION MANAGER/GENERAL CONTRACTOR PHASE 1 **2025-0007**

AUTHORIZED ON CONSENT CALENDAR the Chief Executive Officer to:

- A. AWARD Contract No. PS119518000 to Flatiron-Herzog, a SGL Joint Venture, for the Southeast Gateway Line Light Rail Transit (LRT) Project (Project) Advanced Works Construction Manager/General Contractor (CM/GC) Phase 1 in the amount of \$10,543,240 for Preconstruction Services, subject to the resolution of properly submitted protest(s), if any;
- B. ESTABLISH a Preconstruction Budget for the Project in an amount of \$997,750,195; and
- C. NEGOTIATE and EXECUTE all project-related agreements and modifications within the authorized Preconstruction Budget.

14. SUBJECT: COST-BENEFIT ANALYSIS FOR METRO CAPITAL PROJECTS MOTION **2025-0149**

APPROVED AS AMENDED MOTION by Directors Dutra, Najarian, Barger, Butts and Solis to direct the CEO to ~~incorporate~~ develop a standardized cost-benefit analysis framework, using USDOT analysis or a comparable methodology, for all Metro capital projects to help inform ~~the agency's~~ a more data-driven and transparent decision-making process ~~for projects Metro advances~~. This cost-benefit analysis framework should also include national economic impact data and a comparison to the cost-benefit analysis methodology currently used by Metro and required by State and Federal for significant grant opportunities. An update on this analysis framework shall be presented as part of the Annual Program Evaluation brought to the Board in 2025.

(continued on next page)

(Item 14 – continued from previous page)

HORVATH AMENDMENT: Direct the CEO to incorporate the project evaluation criteria approved by the Board in October 2023 and being applied to Metro’s Short Range Transportation Plan Update, into the framework of a standardized cost-benefit analysis.

FD	JDW	LH	HS	JB	KB	KRB	AJN	HM	KY	TS	IP	JH
Y	Y	Y	Y	Y	Y	A	Y	Y	Y	Y	Y	Y

17. SUBJECT: RISK MANAGEMENT INSURANCE BROKERAGE SERVICES 2024-1083

AUTHORIZED ON CONSENT CALENDAR the Chief Executive Officer to award a firm fixed price Contract No. PS126876000 to Marsh USA LLC for insurance brokerage services in the amount of \$1,503,513 for the five-year base term, and \$601,405 for each of the two, two-year options, for a total amount of \$2,706,323, effective March 1, 2025, subject to the resolution of any properly submitted protest(s), if any.

23. SUBJECT: ELECTRIC VEHICLE CHARGING STATIONS 2024-1074

AUTHORIZED ON CONSENT CALENDAR BY TWO-THIRDS VOTE OF THE BOARD the Chief Executive Officer (CEO) to solicit competitive negotiations Request for Proposals (RFPs), pursuant to Public Utilities Code (PUC) §130242 and Metro’s procurement policies and procedures for operations and maintenance of Electric Vehicle Charging Stations.

24. SUBJECT: ELECTRIC VEHICLE CHARGING POLICY 2025-0005

ADOPTED ON CONSENT CALENDAR Metro Electric Vehicle (EV) Charging Policy.

25. SUBJECT: ADDRESSING RIDER FEEDBACK FROM TELEPHONE TOWN HALL MOTION 2025-0132

APPROVED ON CONSENT CALENDAR Motion by Hahn, Sandoval and Dupont-Walker that the Board direct the Chief Executive Officer to report back in 90 days on how Metro is addressing, promoting and/or improving the following initiatives which were received as community feedback at the telephone town hall:

- A. Increased lighting throughout the system;
- B. Cleanliness on buses and trains;
- C. Timely elevator maintenance;

(continued on next page)

(Item 25 – continued from previous page)

D. Expansion of and interaction with small businesses and disadvantaged enterprises, including outreach to small businesses and disadvantaged businesses enterprises;

E. Metro’s Bike Share program; and

F. Metro’s Free and Reduced programs.

29. SUBJECT: OPERATION AND MAINTENANCE OF COMPRESSED NATURAL GAS FUELING STATIONS AT DIVISIONS 2, 8, 9, & 15 **2024-0193**

AUTHORIZED the Chief Executive Officer to award a firm fixed unit rate, Contract No. OP125246000 to Clean Energy, for the Operation and Maintenance (O&M) services of Compressed Natural Gas (CNG) fueling stations at Divisions 2, 8, 9, and 15, for a Not-To-Exceed (NTE) amount of \$6,150,097 for the three-year base period, and \$2,036,432 for the first one-year option term and \$2,036,432 for the second one-year option term, for a combined NTE amount of \$10,222,962, effective March 1, 2025, subject to the resolution of any properly submitted protest(s), if any.

FD	JDW	LH	HS	JB	KB	KRB	AJN	HM	KY	TS	IP	JH
Y	Y	Y	A	Y	Y	Y	Y	Y	Y	Y	Y	Y

31. SUBJECT: KINKYSHARYO P3010 LIGHT RAIL VEHICLE BALL BEARING SLEWING RING ASSEMBLY **2024-1143**

AUTHORIZED the Chief Executive Officer to award a 48-month firm fixed price Contract No. OP125304000 to Jamaica Bearings, the lowest responsive and responsible bidder, in the amount of \$1,691,769.20 for the purchase of Ball Bearing Slewing Ring Assemblies in support of the P3010 Light Rail Vehicle (LRV) fleet, subject to the resolution of any properly submitted protest(s), if any.

FD	JDW	LH	HS	JB	KB	KRB	AJN	HM	KY	TS	IP	JH
Y	Y	Y	A	Y	Y	Y	Y	Y	Y	Y	Y	Y

32. SUBJECT: I-710 INTEGRATED CORRIDOR MANAGEMENT CONSTRUCTION MANAGEMENT SUPPORT SERVICES

2024-1129

AUTHORIZED the Chief Executive Officer to award a 48-month, firm-fixed-price Contract No. AE52227000 to Jacobs Project Management Co. for Construction Management Support Services (CMSS) for the Interstate 710 Integrated Corridor Management (I-710 ICM) Project in the amount of \$5,521,039, subject to the resolution of any properly submitted protest(s), if any.

FD	JDW	LH	HS	JB	KB	KRB	AJN	HM	KY	TS	IP	JH
Y	Y	Y	A	Y	Y	Y	Y	Y	Y	Y	Y	Y

33. SUBJECT: FAREGATE RETROFIT (PHASE 2) - UPGRADE EXISTING GATED STATIONS WITH TALLER GATES

2024-1126

AUTHORIZED the Chief Executive Officer to:

- A. ESTABLISH a Life-of-Project (LOP) budget for an amount not-to-exceed \$15.3 million for the implementation of taller faregates at 11 additional stations to provide safety, and security, and enhance access control;
- B. AMEND the FY25 budget to add three (3) Non-Contract Full-Time Equivalent (FTE) positions to manage the gating analyses and implementation of taller gates across the 11 additional stations and expansion of taller gates across the Metro Rail system and new stations from new rail lines and transition into operations and maintenance; and
- C. AUTHORIZE the Chief Executive Officer, or their designee, to negotiate and execute all necessary agreements, contracts, and contract modifications associated with the increased LOP budget.

FD	JDW	LH	HS	JB	KB	KRB	AJN	HM	KY	TS	IP	JH
Y	Y	Y	Y	Y	Y	A	Y	Y	Y	Y	Y	Y

38. SUBJECT: WEAPONS DETECTION SYSTEMS PILOT FINDINGS

2024-1124

RECEIVED AND FILED the Weapons Detection System Proof-of-Concept Pilot Findings.

FD	JDW	LH	HS	JB	KB	KRB	AJN	HM	KY	TS	IP	JH
P	P	P	P	P	P	A	P	P	P	P	P	P

39. SUBJECT: CONTINUATION OF WEAPONS DETECTION PILOT MOTION

2025-0164

APPROVED Motion by Directors Hahn, Barger, Solis, Bass, Dutra and Butts to direct the Chief Executive Officer to:

- A. Extend and expand the deployment of the “pillar-type” weapons detection system pilot for 12 months to additional key high-traffic transit stations to gather additional data on effectiveness, false positives, staffing needs, and any impacts to passenger experience;
- B. Conduct a 12-month pilot of weapons detection technology aboard a minimum of (2) Metro buses;
- C. Provide a quarterly report on the requirements, feasibility, and timeline for upgrading Metro’s video and camera system, to include the integration of brandished firearm detection analytics. This report should outline the infrastructure needs, estimated costs, and privacy considerations to ensure alignment with the agency’s broader safety and security goals; and
- D. Report back to the Board in June 2025, and on an as-needed basis, with findings and recommendations from the continued pilots.

FD	JDW	LH	HS	JB	KB	KRB	AJN	HM	KY	TS	IP	JH
Y	Y	Y	Y	A	Y	A	Y	ABS	Y	Y	Y	Y

40. SUBJECT: ADOPT PUBLIC SAFETY POLICE PENSION PLAN FOR ELIGIBLE EMPLOYEES OF NEW TRANSIT COMMUNITY PUBLIC SAFETY DEPARTMENT

2025-0059

AUTHORIZED the Board of Directors for the Public Transportation Services Corporation to amend the contract with the California Public Employee’s Retirement System (CalPERS) to implement a Safety Police Pension Plan for sworn officers hired for the new Transit Community Public Safety Department (TCPSD).

FD	JDW	LH	HS	JB	KB	KRB	AJN	HM	KY	TS	IP	JH
Y	Y	Y	Y	A	A	A	Y	Y	A	Y	Y	Y

41. SUBJECT: CLOSED SESSION

2025-0161

A. Conference with Legal Counsel - Existing Litigation - G.C. 54956.9(d)(1)

1. Cameron Yale v. LACMTA, LASC Case No. 21STCV41653

APPROVED settlement in the amount of \$500,000.

FD	JDW	LH	HS	JB	KB	KRB	AJN	HM	KY	TS	IP	JH
Y	Y	Y	Y	A	Y	A	Y	Y	Y	Y	Y	Y

B. Conference with Legal Counsel - Anticipated Litigation - G.C. 54956.9(d)(2)

Significant Exposure to Litigation (one case)

No Report.

C. Conference with Legal Counsel - Anticipated Litigation - G.C. 54956.9(d)(4)

Initiation of Litigation (one case)

No Report.

D. Conference with Labor Negotiator - Government Code 54957.6

Agency Designated Representatives: Cristian Leiva and Dawn Jackson-Perkins

Employee Organizations: AFSCME, SMART and Teamsters

No Report.

ADJOURNED AT 2:11 P.M.

Prepared by: Jennifer Avelar
Sr. Administrative Analyst, Board Administration



Collette Langston, Board Clerk



Board Report

File #: 2025-0064, **File Type:** Project

Agenda Number: 5.

**PLANNING AND PROGRAMMING COMMITTEE
MARCH 19, 2025**

SUBJECT: PROGRAM FUNDS FOR CITY OF REDONDO BEACH IMPROVEMENTS AT AVIATION AND ARTESIA BOULEVARD

ACTION: APPROVE RECOMMENDATION

RECOMMENDATION

CONSIDER:

- A. APPROVING \$1,500,000 in additional programming within the capacity of Measure R Multimodal Highway Subregional Programs for improvements at the intersection of Aviation Blvd at Artesia Blvd in the City of Redondo Beach within the South Bay Subregion as shown in Attachment A; and
- B. AUTHORIZING the Chief Executive Officer or their designee to negotiate and execute all necessary agreements for the Board-approved projects.

ISSUE

At the January 2025 meeting, the Board approved the updated project list and proposed changes related to schedules, scope, and funding allocations for existing projects as part of the bi-annual Measure R Multimodal Highway Subregional Program.

The purpose of this Board report is to identify the project that will be added to the updated list and to program additional funds. The project was not included in the January 2025 Measure R Multimodal Highway Subregional Programs - Semi-Annual Update due to an administrative oversight and is needed at this time to avoid delays in the City’s procurement process for the construction of the project.

BACKGROUND

Per the Measure R Expenditure Plan, the South Bay Subregion (Line 33) allocated funds for multimodal highway operational improvement subfund programs. In coordination with local jurisdictions, Metro staff lead the implementation and development of multi-jurisdictional and regionally significant highway and arterial projects.

Local jurisdictions prioritize and develop projects that are within the eligibility of both Measure R and Measure M program criteria. Metro staff worked with the City of Redondo Beach to review the project for eligibility and compliance with the Board-adopted policies outlined in Metro's Complete Streets Policy, Active Transportation Strategic Plan, and First/Last Mile Strategic Plan. Projects are also further evaluated to ensure that projects aim to reduce congestion, resolve operational deficiencies, improve safety, and incorporate multimodal investments.

DISCUSSION

Additional programming in the amount of \$1,500,000 is being requested for improvements at the intersection of Aviation Blvd at Artesia Blvd in the City of Redondo Beach, in the South Bay Subregion, as described below and shown in Attachment A.

South Bay I-405, I-110, I-105 & SR-91 Improvements

A total of \$455,600,337 has been programmed for projects in the South Bay Subregion to date. This update includes funding adjustments for one existing project.

The project improves transportation operations, safety, and accessibility at the intersection of Aviation Boulevard and Artesia Boulevard through the construction of a northbound right-turn lane and various pedestrian enhancements. These roadway improvements will assist in optimization of transit operations at the intersection, benefiting Torrance Transit Lines 8 and 13.

Additionally, the project includes pedestrian safety and accessibility upgrades. These improvements involve replacing sidewalks, curbs, gutters, and driveways, as well as installing handrails, accessible pedestrian push buttons, countdown pedestrian signals, and a new ADA-compliant curb ramp at the southeast corner of the intersection. The project will also feature updated signage and landscaping to further enhance the area's functionality and aesthetics.

The Project is proceeding with the construction phase. The Right-of-Way (ROW) settlement has been finalized, and the Project budget had the necessary funds to cover the cost. However, this nearly exhausts the available funds for the construction phase. The city is scheduled to advertise the construction phase in March, and without the additional \$1.5M, construction would need to be delayed until the funds are secured. The programming of an additional \$1,500,000 for MR312.20 - Aviation Blvd at Artesia Blvd intersection improvements in FY25-26 will result in a revised budget of \$4,957,000.

DETERMINATION OF SAFETY IMPACT

The multimodal subregional programs support the development of a safer transportation system that will provide high-quality multimodal mobility options to enable people to spend less time traveling.

FINANCIAL IMPACT

The highway projects are funded by the Measure R 20% Highway Capital subfund earmarked for the subregions. FY25 funds are allocated for the South Bay subregion, and FY25 funds are allocated in Cost Center 0441 in Project 460312. Funding for this project comes from line 33 of the Measure R

Expenditure Plan.

Since the Measure R Multimodal Highway Subregional Programs are multiyear programs that contain various projects, Countywide Planning and Development will be responsible for budgeting the costs in current and future years.

Impact to Budget

This action will not impact the approved FY25 budget.

The source of funds for these projects is Measure R 20% Highway Funds. This fund source is not eligible for transit capital or operations expenses.

EQUITY PLATFORM

This update funds subsequent phases of Board-approved Highway Subsidy grants aligned with the Measure R Board-approved guidelines and the Metro Objectives for Multimodal Highway Investments. The Highway Subsidy Grants offer opportunities to address transportation disparities via the development of projects through city contracts, which lead to locally determined and prioritized projects that represent the needs of cities. As with all subregions, the City of Redondo Beach independently and in coordination with its subregion, undertakes its jurisdictionally determined community engagement process specific to the type of transportation improvement it seeks to develop.

The intersection improvements at Aviation Blvd and Artesia Blvd in Redondo Beach will benefit Equity Focus Communities (EFC's) in the subregion, as the Project will include improvements to new sidewalks, traffic striping and signal detectors to improve upon the safety and operations of the intersection, including Torrance Transit Lines 8 and 13.

VEHICLE MILES TRAVELED OUTCOME

VMT and VMT per capita in Los Angeles 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.* Metro's Board-adopted VMT reduction targets align with California's statewide climate goals, including achieving carbon neutrality by 2045. To ensure continued progress, all Board items are assessed for their potential impact on VMT.

While the agency remains committed to reducing VMT through transit and multimodal investments, some projects may induce or increase personal vehicle travel. However, these individual projects aim to ensure the efficient and safe movement of people and goods.

This Board item will likely increase VMT in LA County, as it includes an investment that encourages driving alone or increased vehicle travel by funding the construction of a separate northbound right turn lane on Aviation Boulevard at the intersection with Artesia Boulevard to improve vehicular operations for northbound through traffic. The improvements include removing and constructing a

new sidewalk, along with curbs, gutters, and driveways, installing traffic striping modifications, and new signal loop detectors. The project also includes funding for safety improvements to facilitate pedestrian movement through the intersection and to ensure this item fits within the overall agency and statewide goals and to improve vehicular operations for northbound through traffic (including transit buses).

Although this item may not directly contribute to the achievement of the Board-adopted VMT Reduction Targets, the VMT Targets were developed to account for the cumulative effect of a suite of programs and projects within the Metro region, which individually may induce or increase VMT. Additionally, Metro has a voter-approved mandate to deliver multimodal projects that enhance mobility while ensuring the efficient and safe movement of people and goods.

**Based on population estimates from the United States Census and VMT estimates from Caltrans' Highway Performance Monitoring System (HPMS) data between 2001-2019.*

IMPLEMENTATION OF STRATEGIC PLAN GOALS

The recommendation supports the strategic plan goal:

“Goal 1: Provide high-quality mobility options that enable people to spend less time traveling.”

Goal 1.1. Approval of the multimodal highway subregional programs will expand the transportation system as responsibly and quickly as possible as approved in Measure R and M to strengthen and expand LA County's transportation system.

“Goal 4: Transform LA County through regional collaboration”

Goal 4.1. Metro will work closely with municipalities, council of governments, Caltrans to implement holistic strategies for advancing mobility goals”

ALTERNATIVES CONSIDERED

The Board may choose not to approve the funding allocation for this project. However, this option is not recommended as it will delay the development of the construction phase and will face significant cost implications by delaying the required amendments.

NEXT STEPS

Staff will begin working on amending the Funding Agreement. Metro staff will also continue working with the South Bay Subregion and the other subregions for their consideration of multimodal investments within the Measure R Multimodal Highway Subregional Program.

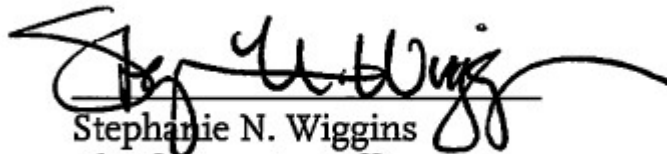
ATTACHMENTS

Attachment A - Measure R South Bay I-405, I-110, I-105 & SR-91 Improvements - March 2025

Prepared by: Roberto Machuca, Deputy Executive Officer, Complete Streets and Highways,
(213) 418-3467

Michelle Smith, Executive Officer, Complete Streets and Highways, (213) 547-4368
Avital Barnea, Senior Executive Officer, Multimodal Integrated Planning, (213) 547-4317

Reviewed by: Ray Sosa, Chief Planning Officer, (213) 547-4274



Stephanie N. Wiggins
Chief Executive Officer

Agency	Project ID No.	PROJECT/LOCATION	Funding Phases	Note	Prior Alloc	Alloc Change	Current Alloc	Prior Yr Program	FY2024-25	FY2025-26	FY2026-27	FY2027-28	FY2028-29	FY2029-30
		Total Measure R Programmed to Date			1,834,858	1,500	1,837,763	1,686,829	102,695	29,015	5,655	5,365	2,300	4,200
		South Bay I-405, I-110, I-105, & SR-91 Ramp / Interchange Imps (Expenditure Line 33)			454,100.2	1,500.0	455,600.3	427,624.1	19,967.0	2,667.5	1,976.4	3,365.3	0.0	0.0
Redondo Beach	MR312.20	Aviation Blvd at Artesia Blvd intersection improvements (Northbound right turn lane)	PS&E, ROW, Construction	CHG	3,457.0	1,500.0	4,957.0	2,457.0	1,000.0	1,500.0				
		TOTAL REDONDO BEACH			16,801.0	1,500.0	18,301.0	15,801.0	1,000.0	1,500.0	0.0	0.0	0.0	0.0
		TOTAL SOUTH BAY PROGRAMMING			454,100.2	1,500.0	455,600.3	427,624.1	19,967.0	2,667.5	1,976.4	3,365.3	0.0	0.0
		Total Measure R Programmed to Date			1,834,858	1,500	1,837,763	1,686,829	102,695	29,015	5,655	5,365	2,300	4,200

Definitions:

Lead Agency is the primary project manager for the administration of scope and use of funds
 Funding Agreement (FA): references the agreement number on file with Metro
 Project Location: Describes the general scope and parameters of the project
 Project Phase identifies which lifecycle phase the project is in at the time of reporting noted as follows:
PI - Project Initiation / PE - Preliminary Engineering / EA - Environmental Analysis / FD - Final Design / ROW - Right of Way Acq / CON - Construction
 Notes: Provide a quick reference to reported change for the period such as:
Add - Addition of a new project / REP - Reprogram of funds / CHG - Change in funding / SCAD - Scope Addition / SCCH - Scope Change / BAD - Budget Adjustment / DEL - Deletion
 Prior Allocation identifies the reported project allocation reported in the previous report
 Alloc Change denotes the amount of change occurring in the current reporting period.
 Current Allocation identifies the total current allocation planned for a project. This includes the prior year Programming and the sum of the future fiscal years



Program Funds for City of Redondo Beach Improvements at Aviation and Artesia Boulevard



MARCH 2025

Staff Recommendation

CONSIDER:

- A. APPROVING \$1,500,000 in additional programming within the capacity of Measure R Multimodal Highway Subregional Programs for improvements at the intersection of Aviation Blvd at Artesia Blvd in the City of Redondo Beach within the South Bay Subregion as shown in Attachment A; and
- B. AUTHORIZING the Chief Executive Officer or their designee to negotiate and execute all necessary agreements for the Board-approved projects.



Project Map



- Subject Property (± 54,885 Sq Ft)
- R/W Acquisition (1,813 Sq Ft)
- Temp. Construction Easement (1,440 Sq Ft)



Equity Section

- The South Bay subregion comprises of 15 cities and the adjacent unincorporated area of Los Angeles County. Although there are no Equity Focus Communities (EFC's) within the City of Redondo Beach, there are EFC's in Gardena, Hawthorne, Inglewood, the City of Los Angeles, and the unincorporated County of Los Angeles. Eighteen percent of the census tracts are defined as EFC in the Subregion.
- The intersection improvements at Aviation Blvd and Artesia Blvd in Redondo Beach will benefit EFC's in the subregion, as the Project will include improvements to new sidewalks, traffic striping and signal detectors to improve upon the safety and operations of the intersection, including Torrance Transit Lines 8 and 13.





Board Report

File #: 2024-1093, File Type: Project

Agenda Number: 6.

PLANNING AND PROGRAMMING COMMITTEE MARCH 19, 2025

SUBJECT: EXPO/CRENSHAW JOINT DEVELOPMENT

ACTION: APPROVE RECOMMENDATION

RECOMMENDATION

CONSIDER:

- A. AUTHORIZING the Chief Executive Officer (CEO), or designee, to execute and enter into a joint development agreement (JDA), ground lease, and other related documents with Expo Crenshaw Apartments, LP (Developer), for the construction and operation of a mixed-use affordable housing project (Project) on 1.77 acres of Metro-owned property located at the southeast corner of W. Exposition Blvd. and Crenshaw Blvd. (Metro Site), adjacent to the K Line Expo/Crenshaw Station in the City of Los Angeles (Attachment A - Site Map) in accordance with the Summary of Key Terms and Conditions (Attachment B) and upon receipt of concurrence by the Federal Transit Administration (FTA); and
- B. FINDING the Project complies with the requirements of the California Environmental Quality Act (CEQA) for using a Sustainable Communities Environmental Assessment (SCEA) as authorized pursuant to Public Resources Code Section 21155.2(b), which is consistent with the Environmental Studies and Reports set forth in Attachment C, making the CEQA findings set forth further below (CEQA Findings) and authorizing the CEO or designee to file a Notice of Determination for the Project in accordance with said findings by the Metro Board of Directors (Metro Board).

ISSUE

Since 2017, Metro staff, the County of Los Angeles (County), and the Developer have collaborated under a Metro Board and County Board of Supervisors (County Board) approved Exclusive Negotiation Agreement and Planning Document (ENA) to conduct community engagement, refine the design of a mixed-use affordable housing project to be developed on both the Metro Site and the County-owned property located at 3606 Exposition Blvd. (County Site), negotiate key terms and conditions for a JDA and ground lease, and study relevant CEQA issues. In order to advance the Project into construction, staff recommends that the Metro Board adopt the CEQA findings set forth herein, and authorize the CEO to (i) execute a JDA and subject to the satisfaction of conditions under the JDA, execute a ground lease, both in accordance with the terms and conditions set forth in the

Summary of Key Terms and Conditions (Term Sheet) attached as Attachment B; and (ii) adopt CEQA findings.

BACKGROUND

The Metro Site was originally purchased to serve as a Park-and-Ride for the K Line Station. In response to a March 2015 motion by the Metro Board, staff initiated joint development (JD) planning activities in partnership with Los Angeles County (acting through the Community Development Commission of the County of Los Angeles, now known as Los Angeles County Development Authority) for the Metro Site and County Site (collectively, the Sites). In 2016, staff received FTA approval to use the Metro Site for joint development instead of parking. The interim use has been construction staging, and with K Line construction completed, the Metro Site now sits vacant.

In June 2016 the Metro Board authorized entering into an implementation MOU, and Metro and County staff worked jointly in administering the JD process for both Sites. Following extensive community input on future development of the Sites, Development Guidelines were adopted by the Metro Board in June 2016 and integrated into a Request for Proposals (RFP) issued in 2017 for the Sites. In late 2017/early 2018, the Metro Board and County Board approved entering into a six-month ENA with Watt Companies doing business as WIP-A LLC (Watt, predecessor-in-interest to Developer), for a mixed-use affordable development of approximately 400 residential rental units (15% of which would be affordable) across both Sites (Metro-County Project). In the spring of 2018, Watt entered into an agreement with West Angeles Community Development Corporation (WACDC) to provide support in the delivery and operation of the Metro-County Project.

During the ENA period, Watt, WACDC, and Metro staff hosted four events with over 300 representatives from resident associations, business groups, faith-based organizations, and other community-based organizations. In response to community feedback, Watt revised the Metro-County Project proposal to reserve at least 20% of the units for households earning 60% of Area Median Income (AMI) or less. Following County and Metro Board approvals, a longer-term ENA was executed on October 15, 2018, between Metro, the County, and Watt. To allow for additional time to secure entitlements and funding, the Metro Board authorized additional extensions in November 2019 and March 2021. In April 2022, the Metro-County Project received entitlements from the City of Los Angeles.

In response to additional outreach and feedback from the community expressing a desire for the Metro-County Project to include more affordable housing, in 2022, Watt further revised the scope to reserve 100% of the residential rental units for households earning between 30% to 80% of AMI. With the goal of making the Metro-County Project more competitive for affordable housing financing sources, Watt and WACDC expanded their team and partnered with The Richman Group of California Development Company LLC (Richman) and the Housing Authority of the City of Los Angeles (HACLA); together these constituent entities or affiliates thereof formed a limited partnership called Expo Crenshaw Apartments, LP (the current Developer). In February 2023, the Metro Board approved an up-to 24-month extension and authorized the assignment of the ENA to a Developer entity comprised of the aforementioned entities or affiliates/instrumentalities of such entities. In March 2023, Watt assigned the ENA to the Developer, which, consistent with the Board authorization, is comprised of: (1) Expo Crenshaw GP, LLC, a Delaware limited liability company, which is a joint

venture entity comprised of affiliates of Richman and Watt, acting as the administrative general partner; (b) La Cienega LOMOD, Inc., a California nonprofit public benefit corporation (an affiliate of HACLA), acting as the managing general partner; (c) West Angeles Villas LLC, a California limited liability company, which is an affiliate of WACDC, as a co-general partner; and (d) Richman, as the initial limited partner. The current ENA expires in April 2025.

DISCUSSION

The Metro Site and the Project

When the Project shifted to a 100% income-restricted development, the Developer determined they would be more successful in securing funding if they submitted separate funding applications for the Metro Site and County Site. Although entitled together, the development of the Sites is now proceeding independently with separate financing plans and schedules.

The Project on the Metro Site proposes the construction, operation, and maintenance of an affordable housing project that includes approximately 176 residential for-rent units, of which two (2) will be unrestricted property manager units. For the entire ground lease term, all of the units (which are a mix of studios, one-, two-, and three-bedroom units), will (a) be reserved for households earning between thirty percent (30%) of AMI and eighty percent (80%) of AMI, with at least fifteen percent (15%) of the units being reserved for households earning thirty percent (30%) of AMI, and (b) be rented to such households at affordability levels consistent with applicable laws. Residential amenities will include a fitness center, multipurpose rooms, laundry room, lounge areas, outdoor amenity spaces, and a landscaped viewing deck. Community amenities include approximately 24,000 square feet of commercial space, approximately 4,500 square feet of community-serving space reserved for neighborhood retail, and 230 parking spaces, including nine stalls reserved exclusively for Metro Facilities Maintenance or other operational needs. The Developer is in advanced negotiations with a grocer to serve as the anchor tenant in the ground-floor commercial space of the Project. Since JD planning activities for this Site began in 2015, stakeholders have consistently emphasized to Metro the need for improved access to essential food items, fresh produce, and job opportunities. See Attachment D - Site Plan and Renderings.

JDA and Ground Lease Terms

The terms of the JDA, as set forth in greater detail in the attached Term Sheet, are focused on the Developer bringing the Project through full financing and construction readiness. The following are some of the key JDA terms and conditions recommended by staff:

- A term of three years with an option to extend up to two additional 12-month periods.
- Provide Metro with a Holding Rent of \$3,530/month during the JDA term, which would be credited towards the one-time capitalized rent due at execution of the ground lease.
- Provide Metro with the right to review and approve the design of the Project as it progresses to completion.
- Reimburse Metro for transaction-related costs, such as design and financial review.
- Set forth the conditions for executing the ground lease, including verifying project financing, governmental approvals, payment and performance bonds, and a completion guaranty are in place.

The unsubordinated ground lease would be executed once the conditions set forth in the

JDA are met. As described in greater detail in the attached Term Sheet, the following represent some of the key ground lease terms and conditions recommended by staff:

- A term of 75 years.
- Restriction to ensure continued affordability for the full term of the ground lease.
- Provides Metro with a maximum compensation of \$8,475,000 which would be accumulated through the following:
 - A one-time capitalized ground rent payment of \$1,000,000 upon executing the ground lease for the housing portion of the Project;
 - 10% of annual residual receipts for the housing portion of the Project; and
 - 20% of all net proceeds from the sale and/or refinancing of the Project.
- In addition to the above, also provides Metro with 15% of all annual commercial net rent paid, unless such businesses are providing goods or services essential to the daily needs of residents (further described below).
- Provides Metro with funds via a deposit to cover construction management and related inspection costs.

Affordable Housing Ground Lease Rent Discount

In October 2023, the Metro Site was appraised at a fair market value (FMV) of \$16,950,000. Rising construction costs, interest rate inflation, costs for commercial prevailing wage, geotechnical impacts (high water table), design/construction costs associated with development near complex transit infrastructure, and financing/operating expenses associated with a 100% affordable housing project significantly reduce the amount of funds available for ground rent. Based on staff analysis and third-party underwriting, the maximum capitalized ground lease payment that may be made to Metro while preserving the financial feasibility of the Project is \$1,000,000. In addition to the \$1,000,000 one-time, up-front ground rent payment, once the Project is in operation, Metro will receive 10% of annual residual receipts, as available, and be entitled to 20% of all sale or refinancing net proceeds of the Project. Inclusive of these potential revenues, the ground lease provides Metro with a maximum compensation of \$8,475,000, representing a 50% discount from the FMV of the Metro Site, or \$48,153 per unit which is the equivalent of \$642 per unit per year over the term of the ground lease.

Early in the engagement process, stakeholders communicated support to Metro and the Developer for affordable housing on the Sites and expressed preferences which informed the current unit makeup. Although the Project does not include a permanent supportive housing component for which much of the affordable housing financing currently available is targeted, the Developer has secured 100 project-based vouchers from HACLA and approximately \$67.6M in grant funding, representing approximately 42% of the total development costs of \$162.2M. While the Project will be one of the largest in the Metro joint development portfolio, affordable housing funding sources place limits on the per unit subsidy a project is eligible for and typically favor smaller projects which contribute to the Project's unique funding constraints.

Commercial Ground Lease Rent

If any of the Project's commercial space is subleased to businesses that provide goods or services essential to the daily needs of residents within the Project or within a 1-mile radius of the Site, no commercial rent will be owed to Metro. Such uses may include, but are not limited to, grocery stores, pharmacies, restaurants, cafés, barbershops, hair salons, childcare facilities, and other similar

neighborhood-serving businesses, as determined by Metro. If Metro determines the commercial use is not providing essential services to the community, the ground lease will require Metro receive 15% of all annual net rent paid for commercial uses, in addition to the upfront \$1,000,000 rent payment and 10% of the annual residual receipts for the housing portion of the Project, and 20% of all net proceeds from the sale and/or refinancing of the Project. Grocery stores are generally unable to contribute to ground lease rent payments as they operate on profit margins of just one to three percent, largely due to high costs for refrigeration, lighting, transportation, and spoilage. These high operating costs make it difficult to attract grocery stores, often resulting in food deserts. To help secure a grocery store tenant, Metro staff and third-party financial consultants have determined the commercial space should not be required to contribute to ground lease payments. In addition to the 174 affordable residential rental units, the inclusion of a grocery store will deliver a long-desired community benefit.

Metro's financial consultant has verified that the Developer has pursued all reasonable subsidies for the Project and has also indicated that the Project's cost is reasonable. These determinations have led the consultant to conclude that the discounted ground lease rent is justified and needed to make the Project financially viable.

If the Metro Board approves the JDA and ground lease terms, with site control, the Developer will pursue the maximum funding the Project is eligible for in tax credit equity, conventional debt, and other affordable housing financing sources. Per the JDA, the Project must be fully financed before entering into the ground lease.

CEQA Findings

Metro, acting as a responsible agency under CEQA, reviewed and considered the Project's Sustainable Communities Environmental Assessment (SCEA) and Erratum dated September 2021 (Erratum) and Mitigation and Monitoring Program (MMP) prepared and adopted pursuant to Public Resources Code Section 21155.2(b) by the City of Los Angeles (City) as the lead agency. The Metro Board has independently reviewed and considered the information contained in the SCEA, Erratum, and MMP and reached its own conclusions regarding the environmental effects of Metro's approval related to the Project as shown in the SCEA and the Erratum. The City's MMP is adequately designed to ensure compliance with the mitigation measures related to Metro's approvals during Project implementation. There is no substantial evidence that the Project will have a significant effect on the environment. With respect to each significant effect on the environment required to be identified in the initial study for the SCEA, and for the reasons set forth in the SCEA and supporting documents and the City's environmental findings, all such effects have been analyzed in the SCEA and changes or alterations have been required in or incorporated into the Project that avoid or mitigate the significant effects to a level of insignificance or those changes and alterations are within the responsibility and jurisdiction of another public agency and have been, or can and should be, adopted by that other agency. Metro's actions are within the scope of the City's SCEA and Erratum. None of the changes or factors identified in CEQA Guidelines 15162 and 15164 have arisen since the City's approval of the SCEA and the Project. Subject to and consistent with these findings, it is recommended that the Metro Board authorize staff to file a Notice of Determination for the Project with the Los Angeles County Registrar-Recorder/County Clerk and the State Clearinghouse of the Governor's Office of Planning and Research.

Compliance with Surplus Land Act (SLA)

The proposed ground leasing of the Metro Site for the Project qualifies for the “grandfathering provision” of the Surplus Land Act (Cal. Gov’t Code Section 54220 *et seq.*, hereinafter, SLA), pursuant to Government Code Section 54234, subdivision (a)(3). In order to qualify for the “grandfathering provision,” (i) prior to September 30, 2019, a public agency must have issued a competitive request for proposals for the development of property that includes at least 100 residential units (and at least 25 percent of the total residential units are restricted to lower-income households, as defined in the statute, with an affordable rent, as defined in Section 50053 of the Health and Safety Code, for a minimum of 55 years for rental housing), and (ii) a disposition and development agreement for the property must be entered into no later than December 31, 2027. As discussed in this report, a competitive solicitation process for the development of the Metro Site was initiated in 2017; the proposed Project meets the requirements concerning the number of units and percentage of units restricted to lower-income households, with an affordable rent; and following Metro Board approval, staff intends on entering into the JDA (which meets the definition of “disposition and development agreement” under the SLA) prior to December 31, 2027. As such, the ground leasing of the Metro Site for the Project would meet the requirements of the SLA “grandfathering provision” pursuant to Section 54234(a)(3) and, upon Metro Board approval, Metro may proceed with execution of the JDA.

Federal Transit Administration Review

The Metro Site was acquired using grant funding from the FTA. Metro has submitted the terms of the JDA and ground lease to FTA through their Joint Development Review process to ensure that the FTA is aware of the proposed Term Sheet and has no objections to the overall deal structure, including the proposed rental discount for affordable housing. Execution of the JDA is subject to receipt of FTA concurrence.

DETERMINATION OF SAFETY IMPACT

Approval of this item would improve safety and security conditions immediately around the K Line Station as well as the adjacent E Line Station. By replacing the vacant fenced lot with this Project, the respective stations will have a 24-hour presence of residents who will be able to monitor or report activities. The Developer will pay for Metro Construction Management staff to oversee the construction of the Project to ensure that it does not adversely impact the Metro Site or the continued safety of staff, contractors, and the public. Project oversight will be conducted via existing Metro processes. The Developer will submit Construction Work Plans, Track Allocation Requests, and all other required documentation for review and approval by Metro staff. All safety measures and associated requirements to be met by the Developer and its construction contractor will be identified in the JDA and subsequent ground lease.

FINANCIAL IMPACT

Financial compensation under the JDA and the ground lease is fair and reasonable as determined in the third-party financial feasibility analysis. Per the ground lease, the \$1M capitalized ground rent payment to Metro is guaranteed. Metro’s receipt of the remaining \$7,475,000 will depend on the Project’s financial performance. The ground lease will require annual financial reports for Metro’s review to ensure compliance with all terms.

Impact to Budget

Funding for activities related to the Project is included in the FY25 Budget under Project Code 401300 (Joint Development 10K Homes), Cost Center 2210. Furthermore, Metro staff, legal and consultant costs (excluding JD staff and in-house counsel time, which are covered by the program budgets) would be recovered from the Developer via a nonrefundable fee of \$50,000. No Metro funds are used to entitle or construct the Project.

EQUITY PLATFORM

The proposed Metro Board action will allow Metro to work with the Developer to advance towards construction of the Project, creating 174 units of affordable housing, approximately 24,000 square feet of commercial space, approximately 4,500 square feet of community-serving space reserved for neighborhood retail, a fitness center, outdoor amenity spaces, and other transit-supportive amenities. The Project will also benefit adjacent community members who may utilize the proposed full-service grocery store. Per the RFP issued in 2017, construction of the Project will be subject to the County's Local Hire Policy which establishes a goal that 30% of the construction hours be performed by qualified Local Residents from low-income zip codes, and a goal that 10% of the construction hours be performed by Targeted Workers facing barriers to employment. The Project will deliver affordable housing, enhanced public infrastructure, jobs, and other transit-supportive amenities benefiting community members adjacent to the Project as well as other low-income Los Angeles County residents.

Consistent with the Equity Platform pillar "listen and learn," the Project has gone through a lengthy and extensive community engagement process which directly led to revisions to the Project scope. Before initiating the developer selection process, from 2015 to 2016 Metro JD staff attended more than 25 community meetings and events to introduce the Metro JD process to local stakeholders and to build relationships in order to better understand the community priorities for future development along the K Line. During the ENA period, the Developer and Metro staff hosted events that were promoted via the distribution of 5,000 flyers within one-half mile of the Sites, e-blasts, social media, phone calls, and a Metro-County Project website. In 2019, an online survey aimed at gathering input on the Metro-County Project was circulated and over 200 responses were received. From 2020 to 2023, in addition to the City of Los Angeles' required public hearings, the Developer conducted outreach to more than a dozen community groups including neighborhood councils, block clubs and other local stakeholder organizations. The Developer has created and continues to maintain deep relationships with stakeholders. The Developer and Metro staff will continue to actively engage with and be responsive to all stakeholders throughout the construction and eventual operations of the Project. As in previous JD outreach efforts, engagement will be conducted in English, Spanish, and other languages deemed appropriate to reach a broad audience of stakeholders. As construction nears completion, affirmative marketing strategies will be utilized to encourage local residents within the income thresholds to apply for housing in the Project. As noted in Attachment B, the Developer is required to notify Metro prior to leasing the affordable residential units.

VEHICLE MILES TRAVELED OUTCOME

Vehicle Miles Traveled (VMT) and VMT per capita in Los Angeles County are lower than national

averages, the lowest in the Southern California Association of Governments (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.* Metro's Board-adopted VMT reduction targets align with California's statewide climate goals, including achieving carbon neutrality by 2045. To ensure continued progress, all Board items are assessed for their potential impact on VMT.

As part of these ongoing efforts, this item is expected to contribute to further reductions in VMT. This item supports Metro's systemwide strategy to reduce VMT through investment and partnership activities that will benefit and further encourage transit ridership, ridesharing, and active transportation by utilizing Metro-owned land adjacent to a major transit hub to advance transit-oriented communities. The Project also proposes Transportation Demand Management (TDM) strategies including limited parking supply, permitting residential area parking, promoting and marketing various modes of travel, providing bicycle parking per the Los Angeles Municipal Code, and improving the pedestrian network. Parking for residents will be "unbundled" from the residential units, meaning parking spaces will be a separate charge from rent thus encouraging households to go car-free. With these strategies, the household VMT per capita was forecasted to be 6.0 and no work VMT. The Project has also been awarded Affordable Housing Sustainable Community (AHSC) funding which provides tenants of 109 of the residential units with transit passes for three (3) years. These Project attributes reflect best practices in transit-oriented development, design, and management, and collectively will encourage transit utilization. Metro's Board-adopted VMT reduction targets were designed to build on the success of existing investments, and this item aligns with those objectives.

**Based on population estimates from the United States Census and VMT estimates from Caltrans' Highway Performance Monitoring System (HPMS) data between 2001-2019.*

IMPLEMENTATION OF STRATEGIC PLAN GOALS

These recommendations support the Strategic Plan Goal to "enhance communities and lives through mobility and access to opportunity," specifically Initiative 3.2 which states "Metro will leverage its transit investments to catalyze transit-oriented communities and help stabilize neighborhoods where these investments are made." The proposed Project will deliver several community benefits, including transit-accessible affordable housing and new commercial/community space.

ALTERNATIVES CONSIDERED

The Metro Board could choose not to authorize the execution of the JDA and ground lease. Staff is not recommending this option because the proposed Project is the product of a competitive solicitation, has had several years of extensive community engagement, has received entitlements from the City of Los Angeles, and is consistent with the goals of Metro's Joint Development Policy. Further, the terms of the proposed JDA and ground lease are fair and reasonable given the community benefits associated with this large-scale, 100% affordable housing development. Electing not to authorize execution of the JDA and ground lease would unnecessarily delay development of the Metro Site, inhibit the community from accessing a potential grocery store (or other community-serving use), and jeopardize the construction of 174 affordable housing units which are designated to serve very low- and low-income households.

NEXT STEPS

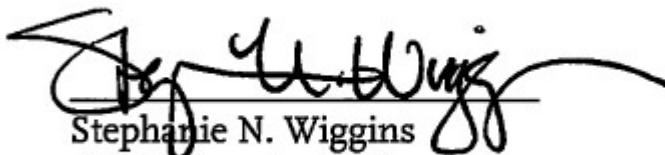
Upon approval of the recommended actions and necessary approval by FTA, staff would finalize and execute the JDA and file the Notice of Determination with the County Clerk and State Clearinghouse. Staff and the Developer will work to satisfy the conditions under the JDA necessary to finalize the ground lease in preparation for the construction of the Project. The JDA, ground lease, and related documents will be executed thereafter in substantial accordance with the terms and conditions set forth in Attachment B. In particular, the Developer will work to secure all financing necessary for the construction of the Project, which may commence on the Metro Site as early as 2026.

ATTACHMENTS

- Attachment A - Site Map
- Attachment B - Summary of Key Terms and Conditions
- Attachment C - Environmental Studies and Reports
- Attachment D - Site Plan and Renderings

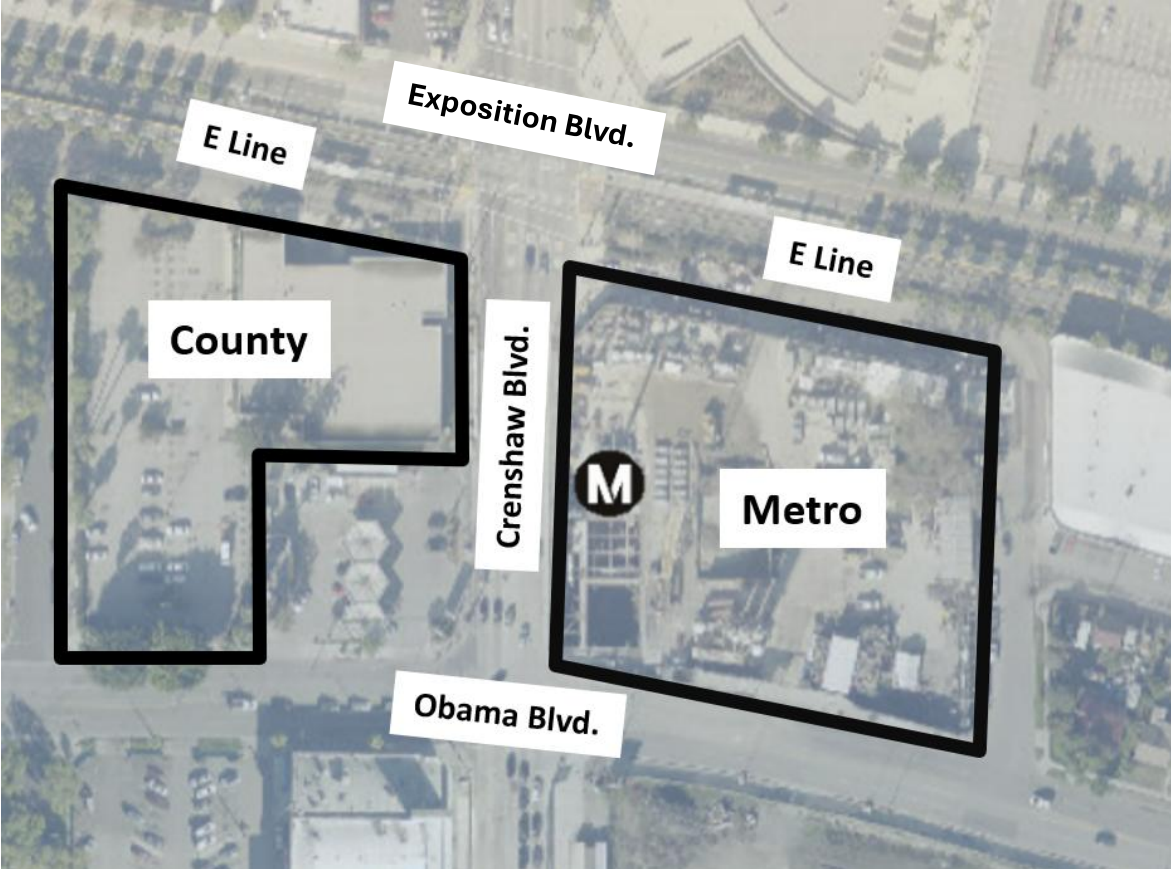
Prepared by: Christopher Lopez, Senior Manager, Countywide Planning & Development (213) 922-4803
Nicole Velasquez Avitia, Senior Director, Countywide Planning & Development (213) 314-8060
Nicholas Saponara, Executive Officer, Countywide Planning & Development, (213) 922-4313
Holly Rockwell, Senior Executive Officer, Countywide Planning & Development, (213) 547-4325

Reviewed by: Ray Sosa, Chief Planning Officer, Countywide Planning & Development, (213) 922-2920



Stephanie N. Wiggins
Chief Executive Officer

Site Map



**Non-Binding Summary of Key Terms and Conditions
for
Joint Development Agreement and Ground Lease**

Expo/Crenshaw Joint Development Project of

LACMTA Property

Dated: _____

This Non-Binding Summary of Key Terms and Conditions (“**Term Sheet**”) outlines the key terms and conditions of a development transaction by and between the Los Angeles County Metropolitan Transportation Authority (“**LACMTA**,” “**Lessor**” or “**Agency**”), as lessor, and Expo Crenshaw Apartments, LP, a Delaware limited partnership (“**Developer**”). Each of Lessor and the Developer are occasionally referred to herein as a “**Party**” and collectively as the “**Parties**.”

Developer intends to develop certain real property owned by Lessor, which is located at the intersection of Crenshaw and Exposition Boulevards, adjacent to the LACMTA Expo/Crenshaw light rail station in the City of Los Angeles (“**Expo/Crenshaw Station**”), with a mixed-use development project (the “**Project**”), as more particularly described in Section 1.4. The purpose and intent of this Term Sheet is to set forth the general terms and conditions pursuant to which the Parties would consider entering into a proposed Joint Development Agreement (“**JDA**”) and, upon satisfaction of certain conditions precedent set forth in the JDA, ground lease (the “**Ground Lease**”), which will set forth the terms and conditions for the development of the Premises (as defined in Section 1.2) with the Project.

Because this Term Sheet (i) is not intended by any Party to be binding, (ii) does not contain all of the terms and conditions needed to create a binding contract with regard to the JDA or the Ground Lease, (iii) has not been approved by either LACMTA’s Board of Directors (“**LACMTA Board**”), which approval is required under law prior to the execution of either the JDA or Ground Lease, and (iv) LACMTA’s Board has not completed all required review and made any required determinations in compliance with the California Environmental Quality Act, Public Resources Section 21000 *et seq.* (“**CEQA**”), this Term Sheet shall be nonbinding. Without limitation of the foregoing, except as set forth in the immediately following paragraph, nothing in this Term Sheet shall constitute a covenant or representation by any Party or obligate any Party to negotiate with any other Party concerning any matter contemplated by this Term Sheet or otherwise.

**ARTICLE 1.
GENERAL DESCRIPTION**

1.1 DEVELOPER:

1.1.1 Developer is a Delaware limited partnership that consists of the following: (a) Expo Crenshaw GP, LLC, a Delaware limited liability company, which is a joint venture entity comprised of affiliates of The Richman Group of California Development Company LLC, a California limited liability company (“**Richman**”) and Watt Companies, LLC, a California limited liability company (“**Watt**”), acting as the administrative general partner; (b) La Cienega LOMOD, Inc., a California nonprofit public benefit corporation (an affiliate of the Housing Authority of the City of Los Angeles), acting as the managing general partner; (c) West Angeles Villas LLC, a California limited liability

company, which is an affiliate of West Angeles Community Development Corporation, a California limited liability company, as a co-general partner; and (d) Richman, as the initial limited partner.

1.1.2 Developer shall be permitted, upon prior approval by LACMTA to assign its right, title, and interests in and under the JDA, including the right to enter into a Ground Lease with Lessor for the development and construction of the Project, to an Affiliate. As used herein, an “**Affiliate**” is an entity formed and Controlled (as defined in Section 6.7.4) by Developer for the development and construction of the Project (as defined in Section 1.4.1).

1.2 **DEVELOPMENT SITE:** LACMTA is the fee owner of approximately 98,000 square feet of real property that is adjacent to the Expo/Crenshaw Station on the southeast corner of Exposition and Crenshaw Boulevards in the City of Los Angeles, commonly known as 3630 S. Crenshaw Boulevard, 3642 S. Crenshaw Boulevard, 3510 W. Exposition Boulevard, 3505 W. Obama Boulevard, and 3635 S. Bronson Avenue, as depicted on Exhibit A (the “**LACMTA Property**”).

The portions of the LACMTA Property to be leased by the Developer are referred to herein as the “Premises” and depicted in Exhibit B.

1.3 **DEDICATIONS:** Lessor will consider any dedications and grants of Lessor real property rights to the City of Los Angeles or other public or quasi-public entities as are reasonably necessary to support the development, construction, and operation of the Project, subject to acceptable compensation to the Agency. Dedications and grants approved by Lessor shall be referred to herein as “**Dedications.**”

1.4 **PROPOSED PROJECT:**

1.4.1 Project. The proposed Project will be constructed at Developer’s sole cost and expense (except that Lessor shall bear its own costs and expenses in connection with its oversight functions related to the Project and negotiation and drafting of the JDA, Ground Lease and related documents, to the extent not constituting reimbursable Agency Transaction Costs (defined in Section 7.1)), and shall satisfy the following:

1.4.1.1 include an affordable housing project that satisfies the requirements of Section 54234(a)(3) of the California Government Code and includes approximately one hundred seventy-six (176) residential for-rent units, all of which shall, for the entire Ground Lease Term (as defined in Section 4.5), (a) be reserved for households earning between thirty percent (30%) of Area Median Income as defined by the U.S. Department of Housing and Urban Development for the Los Angeles-Long Beach Metropolitan Statistical Area (“**AMI**”) and eighty percent (80%) of AMI, with at least fifteen percent (15%) of the units being reserved for households earning thirty percent (30%) of AMI, and (b) be rented to such households at an affordable rent, as defined in Section 50053 of the California Health and Safety Code (“**Affordable Housing Project**”);

1.4.1.2 include commercial ground floor retail space (the “**Commercial Project**”), which may include space in the Project that is subleased for businesses that provide goods or services essential to the daily needs of residents within the Project or within a 1-mile radius of the Premises. Such uses may include, but are not limited to, grocery stores, pharmacies, restaurants, cafés, barbershops, hair salons, childcare facilities, and other similar neighborhood-serving businesses, as determined by LACMTA;

1.4.1.3 include approximately two hundred thirty (230) vehicle parking spaces serving the Project), with nine (9) vehicle spaces reserved for LACMTA’s exclusive use;

and 1.4.1.4 include approximately one hundred sixty (160) bicycle parking spaces;

1.4.1.5 be constructed to LEED Silver Standard or its equivalent.

ARTICLE 2. GENERAL CONDITIONS

2.1 FEDERAL TRANSIT ADMINISTRATION APPROVAL:

2.1.1 The LACMTA Property was acquired by LACMTA using Federal Transit Administration (“**FTA**”) funds, and the K Line and Expo/Crenshaw Station were constructed using similar funding sources. Therefore, the construction and operation of the Project, and the Ground Lease transaction, Dedications and other development-related matters contemplated in this Term Sheet are subject to funding source approvals (collectively, “**Funding Approvals**”):

2.1.1.1 applicable FTA-approval/concurrence; and

2.1.1.2 LACMTA confirmation that such actions will not violate any bond funding related requirements or restrictions imposed on LACMTA, the LACMTA Property or the K Line;

2.1.2 LACMTA will seek the required Funding Approvals as soon as possible.

2.2 DEVELOPMENT ENTITLEMENTS AND OTHER LEGAL REQUIREMENTS:

2.2.1 Developer has, or prior to execution of the Ground Lease for the Project will have, at its sole cost and expense (except that Lessor shall bear its own costs and expenses in connection with the negotiation and drafting of the JDA, Ground Lease and related documents, to the extent not constituting reimbursable Agency Transaction Costs) obtained all required entitlements for the Project, including adoption of CEQA findings, and shall comply with all applicable requirements of the the applicable governmental body having or asserting the jurisdiction to grant such entitlements “**Entitling Agency**,” as well as any other applicable legal requirements related to or required for the development, construction and operation of the Project, including, but not limited to, compliance with County of Los Angeles Local and Targeted Worker Hire Policy (see Attachment C of the LACMTA and County jointly issued Request for Proposals No. PS37025 issued on January 10, 2017). Prior to entering into the JDA, any Ground Lease or any other transaction documents, the LACMTA Board will need to make the requisite findings as a responsible agency (or lead agency, as applicable) pursuant to CEQA requirements.

2.2.2 Developer intends to process an air rights subdivision of the Premises, pursuant to which the Affordable Housing Project will be located on one or more separate legal parcels (collectively, the “**Affordable Parcel**”) and the Commercial Project will be located on one or more separate legal parcels (collectively, the “**Commercial Parcel**”). The Commercial Parcel will contain the parking structure to be constructed as part of the Project and all of the retail space in the Project.

2.2.2.1 Developer shall have the right, upon prior approval by LACMTA to assign to an Affiliate, all of Developer’s rights, title, and interests in and under the JDA with respect to the Commercial Parcel, which entity shall own the leasehold rights to the Commercial Parcel once a Ground Lease for the Commercial Parcel is executed (the “**Commercial Project Owner**”). If requested by Developer, LACMTA shall enter into a separate Ground Lease with respect to any Commercial Parcel, which Ground Lease terms and conditions shall be consistent with the terms and conditions applicable to a Ground Lease, as set forth in this Term Sheet.

2.2.2.2 Prior to completion of construction of the Project, a final map (the “**Final Map**”) will be recorded against the Premises.

2.2.2.3 In addition, concurrent with recordation of the Final Map, a reciprocal easement agreement (the “**REA**”) will be recorded against the Premises. The REA will set forth the rights and responsibilities of the Developer and Commercial Project Owner, including, among other matters, (a) Developer’s obligation to pay for its pro rata share of the cost of developing and operating the common areas in the Project, (b) the Commercial Project Owner’s obligation to pay its pro rata share of the cost of developing and operating the common areas in the Project, and (c) the Commercial Project Owner’s obligation to maintain the common areas and common building systems within the Project in accordance with the terms of the REA.

2.3 **AS-IS CONDITION:** Developer acknowledges and agrees that it shall accept the Premises “as is,” solely in reliance upon Developer’s own investigation, inspection, and research, and that no representations or warranties of any kind whatsoever, express or implied, have been made by LACMTA. Any information provided or disclosure made by LACMTA to Developer shall not constitute a representation or warranty regarding the condition or title to the Premises. Furthermore, Developer shall assume the cost and expense for the removal of any contaminated materials, toxic or hazardous substances, and asbestos on the Premises.

2.4 **SITE REMEDIATION:** Developer shall perform any required remediation or abatement deemed necessary in accordance with environmental and soils studies to be performed, if any.

2.5 **COMPLIANCE WITH LAWS:** During the term of the JDA and Ground Lease, Developer and Ground Lessee (as defined in [Section 4.1](#)), as applicable, at their sole expense, shall comply with all applicable federal, state and local laws, ordinances, regulations, rules and orders with respect to their respective rights and responsibilities under the JDA and Ground Lease. Furthermore, Developer shall acknowledge in the JDA that, in Lessor’s performance of its obligations and adherence to the terms and conditions of the JDA, Lessor is subject to all applicable federal and state laws (including, but not limited to, California Government Code Section 54220 *et seq.* (the “**Surplus Land Act**”), and that Lessor shall not be obligated to perform any obligation or adhere to any covenant under the JDA if such performance or adherence would result in a violation of any such laws.

2.6 **SUPERSEDURE:** This Term Sheet supersedes and replaces any and all term sheets or summaries of key terms and conditions relating to the Premises, the Project or any joint development agreement or ground lease with respect to the Premises dated prior to the date of this Term Sheet. Notwithstanding the foregoing, that certain Exclusive Negotiation Agreement and Planning Document dated as of October 15, 2018, as amended by that certain Amendment No. 1 thereto dated as of December 13, 2019, that certain Amendment No. 2 thereto dated as of December 10, 2020, that certain Amendment No. 3 thereto dated as of April 13, 2021, that certain Amendment No. 4 thereto dated as of April 15, 2022, that certain Amendment No. 5 thereto dated as of March 7, 2023, and that certain Amendment No. 6 thereto dated as of March 15, 2024 (collectively, the “**ENA**”), shall remain in full force and effect and be unchanged by this Term Sheet.

ARTICLE 3. KEY JDA TERMS

3.1 **JDA - GENERALLY:** After (a) the LACMTA Board has approved and Developer has accepted this Term Sheet, (b) Developer has met all CEQA requirements for the Project (as further described below in the Closing Conditions), and (c) the LACMTA Board has made the requisite findings as a responsible agency (or lead agency, as applicable) pursuant to the CEQA requirements for the

Project, then LACMTA and Developer will enter into a JDA (concerning the LACMTA Property), which JDA will contain terms and conditions that are substantially consistent with those set forth in this Term Sheet, subject to any modifications as directed by Lessor's Board and agreed to by Developer. The JDA will address matters between Developer and Lessor regarding the Project and the Premises during the JDA Term (defined in Section 3.3).

3.2 **ESCROW:** Within fifteen (15) days after the JDA Effective Date (defined in Section 3.3), Developer and Lessor shall enter into an escrow ("**Escrow**") with Kim Hernandez, Senior/ Commercial Escrow Officer, Commonwealth Land Title Company, 4400 MacArthur Blvd, Suite 880, Newport Beach, CA 92660 ("**Escrow Holder**" or "**Title Company**") to complete the Ground Lease transaction contemplated in the JDA. Unless requested by Escrow Holder or Title Company, Developer shall not be obligated to deliver any deposit or other amounts to Escrow Holder in connection with the opening of Escrow.

3.3 **JDA TERM:** The JDA shall be effective upon execution by LACMTA and Developer (the "**JDA Effective Date**") and continue for a period of three (3) years (the "**JDA Initial Term**"); provided, however, LACMTA shall have the option, in its discretion, after request for an extension by Developer to extend the JDA Initial Term for two (2) additional terms of one (1) year (as may be extended, the "**JDA Term**"), but in no event shall the term of the JDA exceed a maximum period of five (5) years. During the JDA Term, Lessor and Developer will endeavor to satisfy the conditions precedent to execution of the Ground Lease as set forth in the JDA, as more particularly described below (the "**Closing Conditions**"), and terminate upon the Closing (defined in Section 3.5).

3.4 **JDA CONSIDERATION / HOLDING RENT:** As consideration for the rights granted to Developer during the JDA Term, commencing with the JDA Effective Date and continuing throughout the JDA Term, Developer shall pay a non-refundable holding rent for the Ground Lease as set forth in this Section 3.4. Notwithstanding the foregoing, payment of such Holding Rent applicable to the Ground Lease shall be deferred by Developer until the later of (a) the expiration of the applicable JDA Term, or (b) the commencement of applicable Ground Lease. All Holding Rent due to Lessor shall be non-refundable, but all Holding Rent received by LACMTA shall be applied at Closing as a credit to the Annual Minimum Rent due under the Ground Lease, in the event the Ground Lease is executed by the Developer and LACMTA.

During the JDA Term, Developer shall pay LACMTA a monthly holding rent in the amount of three thousand five hundred and thirty dollars (\$3,530.00) (the "**Holding Rent**").

3.5 **CONDITIONS TO CLOSING:** During the JDA Term, Lessor and Developer shall work in good faith to satisfy certain conditions precedent to execution of the Ground Lease for the Project that shall be set forth in the JDA (the "**Closing Conditions**"). When all of the Closing Conditions for the Project have been satisfied (or waived by the applicable party) and when Developer has assigned to the applicable Ground Lessee all of Developer's right under the JDA to enter into the applicable Ground Lease, then such Ground Lessee and Lessor will enter into the Ground Lease. The closing for the Ground Lease (the "**Closing**") will occur when the Closing Conditions have been satisfied or waived by the applicable party, and Developer and the Lessor have entered into the Ground Lease for the Project and other transaction documents necessary to complete the Closing as contemplated in the JDA (the "**Closing Documents**"). The Closing Conditions will require, among other things, that:

3.5.1 No default by Developer under the JDA or by any Ground Lessee under any Ground Lease for the Project shall have occurred (and be continuing), and no representation or warranty made by Developer under the JDA or by any Ground Lessee under any Ground Lease for the Project shall be false;

3.5.2 Developer shall have delivered commitments for financing sufficient to fund the construction and operation of the Project;

3.5.3 Developer shall have delivered to Lessor evidence and assurances demonstrating that Developer has the financial resources in place to design, construct and operate the Project;

3.5.4 Developer shall have applied for and received all governmental approvals necessary (including LACMTA, County, and Entitling Agency approvals, as applicable) for the development, construction, and operation of the Project (including Lessor approval of the Final Construction Documents for the Project (defined in Section 3.6.6));

3.5.5 Developer shall have received all approvals/certifications in accordance with CEQA of all CEQA documents for the Project from the applicable governmental authorities, and all applicable statutes of limitation have run without a lawsuit having been timely filed or, if such a lawsuit has been filed, then such lawsuit has been finally adjudicated or dismissed with prejudice, upholding such approvals/certifications;

3.5.6 Developer shall have received a “ready to issue” letter from the Entitling Agency for all building permits necessary for the construction of the Project;

3.5.7 Developer and Lessor shall have executed and delivered all of their respective Closing Documents to Escrow;

3.5.8 Developer shall have provided Lessor with payment and performance bonds or a completion guaranty guaranteeing and securing Completion for the Project (defined in Section 5.1.1.1), each in a form as required by Developer’s construction lender and the Lessor;

3.5.9 Developer shall have received all Funding Approvals;

3.5.10 Title Company shall be irrevocably and unconditionally committed to issue in favor of Developer an ALTA extended coverage policy of title insurance, insuring Ground Lessee’s interest under the applicable Ground Lease, in the form of a pro forma title insurance policy (including endorsements thereto) showing no exceptions other than (1) any current levy or tax not yet due and (2) such exceptions as were reviewed and approved by Developer prior to entering into the JDA, dated as of the date of recordation of a memorandum in the official records of Los Angeles County, California providing notice of the existence of such Ground Lease;

3.5.11 Lessor shall not be in material default (beyond any applicable cure period) of any of its obligations under the JDA, nor shall any material representation made by Lessor under the JDA be false; and

3.5.12 Lessor shall be prepared to proceed to Closing under the JDA.

3.6 **JDA DESIGN REVIEW:**

3.6.1 It is contemplated that Developer will have completed design drawings and construction drawings for the Project at the time the Ground Lease is executed.

3.6.2 Prior to the execution of the Ground Lease, Lessor will review, and have the right to approve changes to the design of the Project, including:

3.6.2.1 the exteriors and massing of the Project;

3.6.2.2 any design elements of the Project that materially adversely affect (1) the transit-related operations of LACMTA, (2) Lessor's exercise of its Retained Rights (defined in Section 6.8.3), (3) public health and safety, (4) the Lessor Retained Area (defined in Section 4.4), any public transit facilities on the Premises and the access to or from the same, and (5) the lateral and subjacent support to the Lessor Retained Area, any public transit facilities and any area providing support necessary for Lessor to exercise its Retained Rights; and

3.6.2.3 as applicable, any LACMTA improvements that are developed by Developer in connection with the Project, including, but not limited to, any public open space, or connections to LACMTA transit facilities.

The items in sections 3.5.2.1 and 3.5.2.2 are referred to as the "**Agency Development-Related Concerns.**"

3.6.3 LACMTA's approval of Project plans that are not related to Agency Development-Related Concerns will be at LACMTA's reasonable discretion, except to the extent that the design of the Project depicted, described and specified on such plans does not represent a logical evolution of the design depicted, described and specified on plans approved by Lessor at the preceding level of design development (a "**Logical Evolution**").

3.6.4 Approval of Project plans that are related to Agency Development-Related Concerns or are not a Logical Evolution will be at Lessor's sole and absolute discretion.

3.6.5 Lessor's design approval rights as set forth herein are, in part, intended to ensure that the Project meets Lessor's public serving responsibilities, priorities and imperatives, and/or other obligations required by statute or pre-existing funding requirements, including but not limited to, LACMTA's Satisfactory Continuing Control Requirement (defined in Section 6.8.1.5).

3.6.6 Except as otherwise approved in writing by LACMTA, Developer shall not proceed with preparation of (a) the Project Design Development Drawings until it has received LACMTA's written approval of the Project's Schematic Design Drawings, or (b) the Project Final Construction Documents, until it has received LACMTA's written approval of the Project's Design Development Drawings and Schematic Design Drawings. The term "**Final Construction Documents**" shall mean the final plans and specifications required by the Entitling Agency for the issuance of all building permits with respect to construction for the Project, and containing details as would be reasonably necessary to allow Lessor to assess all impacts of such proposed construction in accordance with Lessor's rights under the Ground Lease for the Project.

3.7 **JDA/GROUND LEASE CLOSING:**

3.7.1 At the Closing for the Project, Lessor will lease Premises to the Ground Lessee, subject to the Retained Rights, in exchange for the rental payments described in Section 5.4 below to be paid under the Ground Lease.

3.8 **TRANSFERS, ASSIGNMENT AND SUBLETTING:**

Except (a) for a one-time transfer by Developer to the Ground Lessee immediately prior to the execution of the Ground Lease and (b) as otherwise approved in writing by Lessor in its sole and absolute

discretion, Developer shall not transfer or assign its rights or obligations under the JDA or any portion thereof.

**ARTICLE 4.
KEY GROUND LEASE TERMS:**

4.1 **GROUND LESSEE:** Developer (“**Ground Lessee**”).

4.2 **GROUND LEASE – GENERALLY:**

4.2.1 At the Closing for the Project, Lessor, as ground lessor, and Ground Lessee, as ground lessee, will enter into a ground lease with respect to the Premises (the “**Ground Lease**”), which will provide for the construction and operation of the Project. The Ground Lease will contain terms and conditions that are substantially consistent with those set forth in this Term Sheet, subject to any modifications as directed by the LACMTA Board, and agreed to by Developer.

4.2.2 During the course of construction of the Project, Ground Lessee will act as the sole lessee of the Premises and will undertake the construction and development of the Project.

4.2.3 Except for non-delinquent property taxes and assessments, any liens or encumbrances that do not affect Developer’s leasehold interest in the Premises and any liens or encumbrances caused by Developer or Ground Lessee, Lessor shall cause the release of any monetary liens and encumbrances placed on the Premises.

4.3 **UNSUBORDINATED GROUND LEASE:**

4.3.1 Lessor’s interests under the Ground Lease (including but not limited to, as to the LACMTA Property, the FTA’s interest as a provider of funds for such property’s initial acquisition and LACMTA’s Retained Rights) shall be subordinated to any interest that Ground Lessee or its lenders or investors will have in the Premises.

4.3.2 The Ground Lease shall contain customary (a) leasehold financing lender protection provisions (including, without limitation, the right of lenders to a separate agreement granting them a right to a new lease in the event of a termination of the Ground Lease under certain conditions, as approved by LACMTA at its sole and absolute discretion) and (b) subtenant non-disturbance provisions. Lessor will reasonably cooperate with Ground Lessee in entering into a customary Lease Rider in the form required by the California Tax Credit Allocation Committee (“**CTCAC**”).

4.4 **GROUND LEASE PREMISES:** The Premises will consist of the property necessary for the development of the Project, less any Dedications and portions of the LACMTA Property that, prior to Closing, become unavailable for development because they are retained by Lessor (the “**Lessor Retained Area**”).

4.5 **GROUND LEASE TERM; COMMENCEMENT OF AFFORDABLE HOUSING PROJECT LEASING:** The Ground Lease will commence on the date of the Closing in accordance with the terms of the JDA (such date being the “**Commencement Date**”). The term of the Ground Lease will be seventy-five (75) or such longer term as may be required to satisfy the tax and underwriting analysis of the tax credit investor (the “**Ground Lease Term**”), expiring on the day immediately prior to the seventy-fifth (75th) anniversary of the Commencement Date (or such longer period as may be required to satisfy the tax and underwriting analysis of the tax credit investor) (the “**Expiration Date**”). The Project shall include an affordable for-rent residential component, referred to herein as the Affordable Housing Project,

which shall be maintained for the entire Ground Lease Term beyond the expiration of any affordable housing covenants. Ground Lessee shall notify Lessor prior to leasing any portion of the Affordable Housing Project.

ARTICLE 5.
GROUND LEASE ANNUAL MINIMUM RENT, FIXED PERCENTAGE
GROUND RENT & OTHER COMPENSATION

5.1 **CONSTRUCTION PERIOD:** The construction period for the Ground Lease (“**Construction Period**”) will commence on the respective Commencement Date and terminate upon the earlier of (the “**Construction Period Termination Date**”):

5.1.1.1 completion of construction of the Project improvements as described in the respective Ground Lease (i.e., as a proxy, the date Ground Lessee obtains a temporary certificate of occupancy for substantially all of the Project improvements described in the Ground Lease) (“**Completion**”); or

5.1.1.2 the day preceding the second (2nd) anniversary of the respective Commencement Date, subject to extensions for force majeure events (as defined in the Ground Lease).

5.2 **CONSTRUCTION PERIOD:** The Ground Lease will require commencement of construction within thirty (30) days after Ground Lessee obtains a building permit for the work to be performed on the Premises, subject to extensions for force majeure events (as defined in the Ground Lease).

5.3 **NET LEASE:** The parties acknowledge that the rent to be paid by Ground Lessee under the Ground Lease is intended to be absolutely net to Lessor. Ground Lessee shall be responsible for all capital costs and operating expenses attributable to the operation and maintenance of the Premises, including all taxes and assessments levied upon any interest in the Ground Lease. Ground Lessee is aware that the Premises is also subject to possessory interest taxes, which shall be paid by Ground Lessee.

5.4 **RENTAL PAYMENTS:**

5.4.1 Affordable Housing Project: Ground Lessee shall pay Lessor an annual ground rent equal to the amount that is ten percent (10%) of Residual Receipts generated by the Affordable Housing Project (the “**Base Ground Rent**”). The term “**Residual Receipts**” shall mean the net operating income remaining after payment of operating expenses, partner asset management fees or partnership management fees, non-contingent debt service, deferred developer fee, tax credit adjuster payments and repayment of partner loans pursuant to the Ground Lessee entity partnership agreement approved by LACMTA at closing, and funding of required reserves). In addition to the annual Base Ground Rent, on the Commencement Date for the Ground Lease for the Affordable Housing Project, Ground Lessee shall make a capitalized payment of one million dollars (\$1,000,000) (the “**Capitalized Rent Payment**”). Notwithstanding anything to the contrary contained herein, in no event shall the aggregate amount of the Base Ground Rent, Capitalized Rent Payment and the Net Proceeds Payment paid during the term of the Ground Lease for the Affordable Housing Project exceed the total appraised fair market value of the Premises upon which the Project will be constructed, adjusted to eight million four hundred and seventy-five thousand dollars (\$8,475,000) based on impacts associated with development of affordable housing and other LACMTA requirements (the “**Total Adjusted AFMV**”), as agreed to by the parties prior to the JDA Effective Date.

5.4.2 **Commercial Project.** Ground Lessee shall pay LACMTA percentage rent in an amount equal to fifteen percent (15%) of all Net Rent paid or credited to Ground Lessee for commercial uses of the Project or Premises (“Commercial Percentage Rent”). For purposes of this section, “**Net Rent**” shall mean Gross Rent actually received by Ground Lessee, less reasonable and customary leasing commissions, any tenant improvement allowances, and operating expenses paid by Ground Lessee for the applicable commercial space; “**Gross Rent**” shall mean (a) rent paid or credited to Ground Lessee pursuant to a sublease for commercial uses of the Project or Premises; and (b) any fees or charges that are incidental or otherwise related to a commercial subtenant’s occupancy. Commercial Percentage Rent shall be calculated on a calendar year basis and shall be due to LACMTA from Ground Lessee annually, in arrears, on March 30 of each calendar year following the subject calendar year, with a full accounting of the amount due. Notwithstanding the foregoing, no Commercial Percentage Rent shall be due for the portion of the Premises used for Community Serving Retail. The term “**Community Serving Retail**” shall mean space in the Project that is subleased for businesses that provide goods or services essential to the daily needs of residents within the Project or within a 1-mile radius of the Premises. Such uses may include, but are not limited to, grocery stores, pharmacies, restaurants, cafés, barbershops, hair salons, childcare facilities, and other similar neighborhood-serving businesses, as determined by LACMTA.

5.5 **SALE/REFINANCING PROCEEDS:** Upon a Refinancing (defined below) of the Project, or of the Project, Ground Lessee shall pay Lessor an amount equal to twenty percent (20%) of all Refinancing Net Proceeds (defined below), unless prohibited by other public funding, received by Ground Lessee in connection with such Refinancing (“**Net Refinancing Payment**”). Upon a Sale (defined below) of the Project, Ground Lessee shall pay Lessor twenty percent (20%) of all Sale Net Proceeds (defined below), unless prohibited by other public funding, received by Ground Lessee in connection with such Sale (the “**Net Sale Payment**” and together with the Net Refinancing Payment, the “**Net Proceeds Payment**”). Notwithstanding the foregoing, in no event shall the Net Proceeds Payment, when combined with the aggregate amount of Base Ground Rent payments previously paid plus the Capitalized Rent Payment, exceed the Total Adjusted AFMV. Lessor shall have audit rights to verify the calculation of Refinancing Net Proceeds and Sale Net Proceeds.

5.5.1 “**Refinancing**” shall be defined as the creation or substantial modification of a loan secured directly or indirectly by any portion of the Premises, the Project, Ground Lessee, and/or Ground Lessee’s leasehold interest under the Ground Lease.

5.5.2 “**Refinancing Net Proceeds**” means with respect to each Refinancing, the gross principal amount of the Refinancing, less (a) the amount of any then-existing secured or unsecured debt incurred by Ground Lessee in connection with the Premises, the Project, Ground Lessee, and/or Ground Lessee’s leasehold interest under the Ground Lease that is satisfied out of the Refinancing proceeds, (b) amounts to be used by Ground Lessee to make repairs or capital improvements to the Project within twenty four (24) months after the closing date of the Refinancing, (c) amounts paid to the tax credit investor in Ground Lessee (the “**Investor Limited Partner**”) in connection with any purchase option and right of first refusal, and (d) the following transaction costs and expenses paid by Ground Lessee to any non-affiliate of Ground Lessee in connection with the consummation of the Refinancing, to the extent such costs are commercially reasonable: escrow fees, title charges, lender fees or charges, recording costs, brokerage commissions, attorneys’ fees and payment in full of any deferred developer fee earned in connection with the Project to Ground Lessee or an affiliate thereof to cover costs related to the consummation and administration of the Refinancing.

5.5.3 “**Sale**” means the direct or indirect transfer of any portion of the beneficial interest in the Premises, the Project, and/or Ground Lessee’s leasehold interest under the Ground Lease. Notwithstanding the foregoing, no payment shall be due under this Section 5.5 for any transfer of the limited partnership interest in Tenant in connection with the tax credit syndication for financing the

construction of the Improvements, or any subsequent re-syndication by the Investor Limited Partner involving a transfer by the Investor Limited Partner of its limited partnership interest in Tenant to a partnership which it or an affiliate is the general partner or to a limited liability company in which it or an affiliate is the managing member or manager.

5.5.4 “**Sale Net Proceeds**” means with respect to each Sale, the total consideration less (a) the amount of any then-existing debt secured directly or indirectly by any portion of the beneficial interest in the Premises, the Project, and/or Ground Lessee’s leasehold interest under the Ground Lease that is satisfied out of the Sale proceeds, and (b) the following transaction costs and expenses paid by Ground Lessee to any non-affiliate of Ground Lessee in connection with the consummation of the Sale, to the extent such costs are commercially reasonable: escrow fees, title charges, lender fees or charges, recording costs, brokerage commissions and attorneys’ fees (and, for re-syndications only, a reasonable developer fee to Ground Lessee or an affiliate thereof to cover costs related to the consummation and administration of the re-syndication proceeds).

ARTICLE 6. GROUND LEASE – OTHER TERMS AND CONDITIONS

6.1 DESIGN REVIEW:

6.1.1 Ground Lessee shall not make any changes to the Approved Construction Documents for the Project without the prior consent of Lessor. During the Construction Period, Lessor will have design review rights with respect to any changes to the Approved Construction Documents desired by Ground Lessee as set forth in Section 6.1.4.

6.1.1.1 Approval of such changes that represent Logical Evolutions of the design and are not related to Agency Development-Related Concerns will be at Lessor’s reasonable discretion.

6.1.1.2 Approval of such changes that are related to Agency Development-Related Concerns or are not a Logical Evolution of the design will be at Lessor’s sole and absolute discretion.

6.1.2 Lessor will retain the same design approval rights for any substantive Project changes or improvements later sought by Ground Lessee at any time during the Ground Lease Term.

6.1.3 Lessor’s design approval rights as set forth herein are, in part, intended to ensure that the Project meets Lessor’s public serving responsibilities, priorities and imperatives, and/or other obligations required by statute or pre-existing funding requirements including but not limited to, LACMTA’s Satisfactory Continuing Control Requirement.

6.1.4 The term “**Approved Construction Documents**” shall mean the Final Construction Documents approved by Lessor in writing, or deemed approved by Lessor, as applicable, as such Final Construction Documents may be subsequently modified, amended, or revised as a result of Ground Lessee changes to the Final Construction Documents approved by Lessor in writing, or deemed approved by Lessor, as applicable.

6.1.5 In addition to the foregoing, LACMTA shall retain similar design approval rights as set forth in Section 3.6 for any substantive Project changes or improvements sought by Ground Lessee after the initial construction of the Project. LACMTA’s design approval rights as set forth herein are, in part, intended to ensure that the Project meets LACMTA’s Satisfactory Continuing Control Requirement.

6.2 **MAINTENANCE AND OPERATIONS:** During the Ground Lease Term, Ground Lessee shall maintain and operate all portions of the Project and the Premises at its sole cost and expense pursuant to maintenance and operations standards that shall be mutually agreed between the parties and set forth in the Ground Lease.

6.3 **DEMOLITION/DEMOLITION SECURITY:** If required by LACMTA, Developer shall, at Developer's sole cost and expense, (a) demolish and remove the Project and any improvements then located on the Premises (or such portion thereof as indicated by LACMTA in writing), exclusive of any LACMTA improvements and/or transportation-related amenities and facilities then located on the Premises, (b) return the Premises to LACMTA in its otherwise original condition (the "**Demolition**") at the expiration or earlier termination of the Ground Lease and (c) provide reasonable assurances to LACMTA near the end of the Ground Lease Term that the Demolition shall be completed.

6.4 **FINANCING AND ENCUMBRANCES:** Subject to Lessor's reasonable approval, Ground Lessee may encumber its leasehold estate with mortgages, deeds of trust or other financing instruments; provided, however, in no event shall LACMTA's Satisfactory Continuing Control Requirement, or Lessor's fee title interest be subordinated or subject to Ground Lessee's financing or other claims or liens (except as set forth below for certain affordable housing and other covenants). Such encumbrances and financings shall be subject to Lessor's reasonable approval, except with respect to certain "**permitted financing events**" meeting specific criteria to be set forth in the Ground Lease, which shall not require Lessor's approval.

6.5 **COVENANTS:** Ground Lessee may encumber its leasehold estate with affordable housing and other covenants reasonably required by Ground Lessee's affordable housing funding sources or the Entitling Agency as a condition to granting Project approvals, entitlements and building permits, which covenants shall be subject to Lessor's review and reasonable approval. Agency will reasonably consider the encumbrance of its fee title interest with certain restrictive covenants, if required by Ground Lessee's affordable housing funding sources or the Entitling Agency as a condition to granting Project approvals, entitlements and building permits; provided that Ground Lessee agrees to perform all obligations under said covenants during the Ground Lease Term and to indemnify Agency for all claims and losses resulting from Ground Lessee's failure to do the same, except to the extent Ground Lessee's failure is caused by the gross negligence or willful misconduct of Lessor.

6.6 **FEDERAL CIVIL RIGHTS COVENANTS:** Ground Lessee shall comply with all applicable Federal nondiscrimination requirements, including applicable sections of Title 49 of the Code of Federal Regulations.

6.7 **TRANSFERS, ASSIGNMENT, AND SUBLETTING:**

6.7.1 Except for limited permitted exceptions to be set forth in the Ground Lease and subject to the Permitted Transfers discussed below (including, without limitation, in connection with (a) a transfer or assignment to an affiliate Controlled by Ground Lessee, (b) financing approved by the Lessor and obtained by Ground Lessee in connection with construction of the Project or (c) the exercise of remedies by a joint venture partner of Ground Lessee or its affiliates approved by the Lessor, as to be more particularly set forth in the JDA), Ground Lessee shall not transfer, assign or sublet (except for the typical subleasing of the apartments and retail space within the Project) its rights or obligations under the Ground Lease, or beneficial interests in Ground Lessee (each, a "**Transfer**"):

6.7.1.1 Prior to Completion; and

6.7.1.2 After Completion, other than in accordance with reasonable transfer criteria to be set forth in the Ground Lease, including, without limitation, criteria regarding (a) applicable FTA approval (for the LACMTA Property), (b) the creditworthiness, history and experience of any proposed transferee and its affiliates, and (c) FTA and State requirements, as applicable, concerning debarment, suspension, etc. stemming from FTA and State funding related to acquisition of the LACMTA Property.

6.7.2 Notwithstanding the foregoing, the Ground Lease will allow Ground Lessee to make certain “**Permitted Transfers**” without Lessor’s consent; provided that (a) Ground Lessee is not in breach or default under the Ground Lease, (b) Ground Lessee provides written notice to Lessor of Ground Lessee’s intent to effectuate a Permitted Transfer in accordance with time frames set forth in the Ground Lease and with sufficient detail for Lessor to reasonably determine that the intended Transfer is a Permitted Transfer, (c) Ground Lessee provides written notice to Lessor of the consummation of the Transfer in accordance with time frames set forth in the Ground Lease and with sufficient detail for Lessor to reasonably determine that the Transfer was a Permitted Transfer, (d) the Permitted Transfer complies fully with all applicable provisions of the Ground Lease, (e) no Permitted Transfer shall release Ground Lessee from any part of its obligations under the Ground Lease, except as expressly set forth in the Ground Lease, and (f) no such Permitted Transfer shall result in a Change of Control, except as expressly permitted in the Ground Lease. Subject to the conditions set forth in the previous sentence, Permitted Transfers shall include: (i) a transfer of the initial limited partnership interest in Ground Lessee to an investor limited partner and the subsequent transfer of such investor’s limited partnership interest in Ground Lessee to another investor or an affiliate of Ground Lessee (which Lessor and Ground Lessee acknowledge will result in a Change of Control), and (ii) the replacement of Ground Lessee’s general partner for cause with an affiliate of the limited partner in accordance with the terms of Ground Lessee’s partnership agreement (which Lessor and Ground Lessee acknowledge will result in a Change of Control), provided that in each case such investor or affiliate meets certain transferee requirements set forth in the Ground Lease.

6.7.3 “**Change of Control**” means (y) a change in the identity of the entity with the power to direct or cause the direction of the management and policies of Ground Lessee, whether through the ownership of voting securities, by contract or otherwise, or (z) the transfer, directly or indirectly, of fifty percent (50%) or more of the beneficial ownership interest in Ground Lessee.

6.7.4 “**Control**” or “**Controlled**” means the possession, directly or indirectly, of the power to direct or cause the direction of the management and policies of any entity, whether through the ownership of voting securities, by contract, family or trustee.

6.8 **RETAINED RIGHTS:**

6.8.1 LACMTA shall retain from its Ground Lease and Premises, certain rights as shall be further described in detail in the Ground Lease, relating to the following (the “**LACMTA Retained Rights**”):

6.8.1.1 the right to install, construct, inspect, operate, maintain, repair, expand, replace public transit facilities in, on, under, over, and adjacent to the Premises as LACMTA may deem those rights necessary (i.e., no interference with transit operations);

6.8.1.2 the right to use sidewalk areas and any Lessor Retained Areas (particular to LACMTA) for LACMTA and pedestrian ingress and egress and activities related to the operation of any public transit facilities;

6.8.1.3 the right to enter upon and inspect the Premises, subject to the rights of subtenants under their subleases and upon reasonable notice to Ground Lessee, and anytime during normal business hours, for purposes of conducting normal and periodic inspections of the Premises and the Project and to confirm Ground Lessee's compliance with the terms and conditions of the Ground Lease;

6.8.1.4 the right to install, use, repair, maintain, and replace along the perimeter of the Premises abutting the public streets, sidewalks or rights-of-way (including, without limitation, on the exterior of the Project) informational, directional and way-finding signs for the purpose of directing the public to, from and between LACMTA and other public transit options in the area; provided, however, LACMTA shall not install any such signage on the Premises or the Project without Ground Lessee's prior written approval, which shall not be unreasonably withheld, conditioned or delayed; and

6.8.1.5 all rights not explicitly granted to Ground Lessee in the Ground Lease. The LACMTA Retained Rights shall, among other things, ensure that the Premises remains available for the transit purposes originally authorized by the FTA ("**LACMTA's Satisfactory Continuing Control Requirement**").

6.9 **FIRST/LAST MILE PLAN:** During the Ground Lease Term, Developer shall, at its sole cost and expense, use commercially reasonable efforts to continue to collaborate in furtherance of LACMTA's First/Last Mile Strategic Plan to pursue grants and other funding for both on and offsite pedestrian improvements in relation to the Project.

6.10 **LOCAL HIRE POLICY:** Developer shall require that at least thirty percent (30%) of the total California construction labor hours worked on the Project be performed by a qualified Local Resident, and that at least ten percent (10%) of the total California construction labor hours be performed by County residents classified as a Targeted Worker facing barriers to employment, consistent with the Countywide Local and Targeted Worker Hire Policy adopted by the Board of Supervisors on September 6, 2016 (as may be amended from time to time, the "**Local Hire Policy**").

6.11 **OTHER:** Other provisions will be included in the Ground Lease, including, without limitation, provisions relating to (a) Ground Lessee's assumption of risk related to the Project's proximity to rail and other transit operations, (b) insurance, and (c) indemnity.

ARTICLE 7. AGENCY TRANSACTION COSTS

7.1 **AGENCY TRANSACTION COSTS:** Developer acknowledges and agrees that LACMTA will incur certain actual costs (the "**Agency Transaction Costs**") related to (a) the design, development, planning, and construction of the Project (including costs related to construction methods and logistics), and (b) negotiation of the terms and conditions of the transactions contemplated under the JDA and the Ground Lease. The Agency Transaction Costs shall include, without limitation, the actual cost of in-house staff time (including Agency overhead and administrative costs but excluding in-house costs incurred by County Counsel and LACMTA project manager) and third party consultation fees (including, but not limited to, fees related to consultants, engineers, architects, and advisors) for financial analyses, design review (including reviewing plans and specifications for the Project), negotiations, appraisals, document preparation, services related to development, planning, engineering, construction safety, construction management, construction support, and construction logistics and inspection, and other reasonable services related to the Project and the transactions contemplated under the JDA and Ground Lease.

7.2 **JDA DEPOSIT:** Upon the execution of the JDA, Developer shall provide a deposit to Lessor (the “**JDA Deposit**”), for Lessor to apply to Agency Transaction Costs (whether accruing prior to or after the JDA Effective Date), such initial deposit being in the amount of \$50,000. Any unspent deposit provided by Developer under the ENA shall be carried over and applied towards the JDA Deposit. If the JDA Deposit is not fully utilized by LACMTA in connection with the Project during the JDA Term, then the remaining balance of the JDA Deposit shall be credited against the Ground Lease Deposit due under the Ground Lease. LACMTA shall provide documentation of Agency Transaction Costs to Developer upon Developer’s request, provided that the form of documentation will be such that is available to Agency and in its possession.

7.3 **GROUND LEASE DEPOSIT:** On the Commencement Date, the Ground Lessee shall provide a deposit to Lessor, for Lessor to apply to Agency Transaction Costs, an initial deposit (the “**Ground Lease Deposit**” and together with the JDA Deposit, the “**Deposit**”) in the amount of \$100,000. To the extent that the Ground Lease Deposit under the Ground Lease is not utilized by Lessor in connection with the Project, any remaining balance shall be returned to the Ground Lessee upon completion of the Project. Ground Lessee will provide Lessor with additional Ground Lease Deposit funds, in an amount to be determined at the time, for Agency Transaction Costs accruing during the term of the Ground Lease in connection with any Ground Lessee improvements requiring LACMTA review/approval.

7.4 **DEPOSIT REPLENISHMENT:** During the term of the JDA, whenever any Deposit balance reaches \$25,000 or less, Developer or Ground Lessee (as applicable) will replenish such Deposit to \$50,000 (under the JDA) and \$100,000 (under the Ground Lease), as applicable, upon written notice from LACMTA. If Developer does not replenish the Deposit at the applicable times as set forth herein, LACMTA may decline to provide the services that are to be covered by the Deposit and/or terminate the JDA.

Exhibit A

Depiction of LACMTA Property

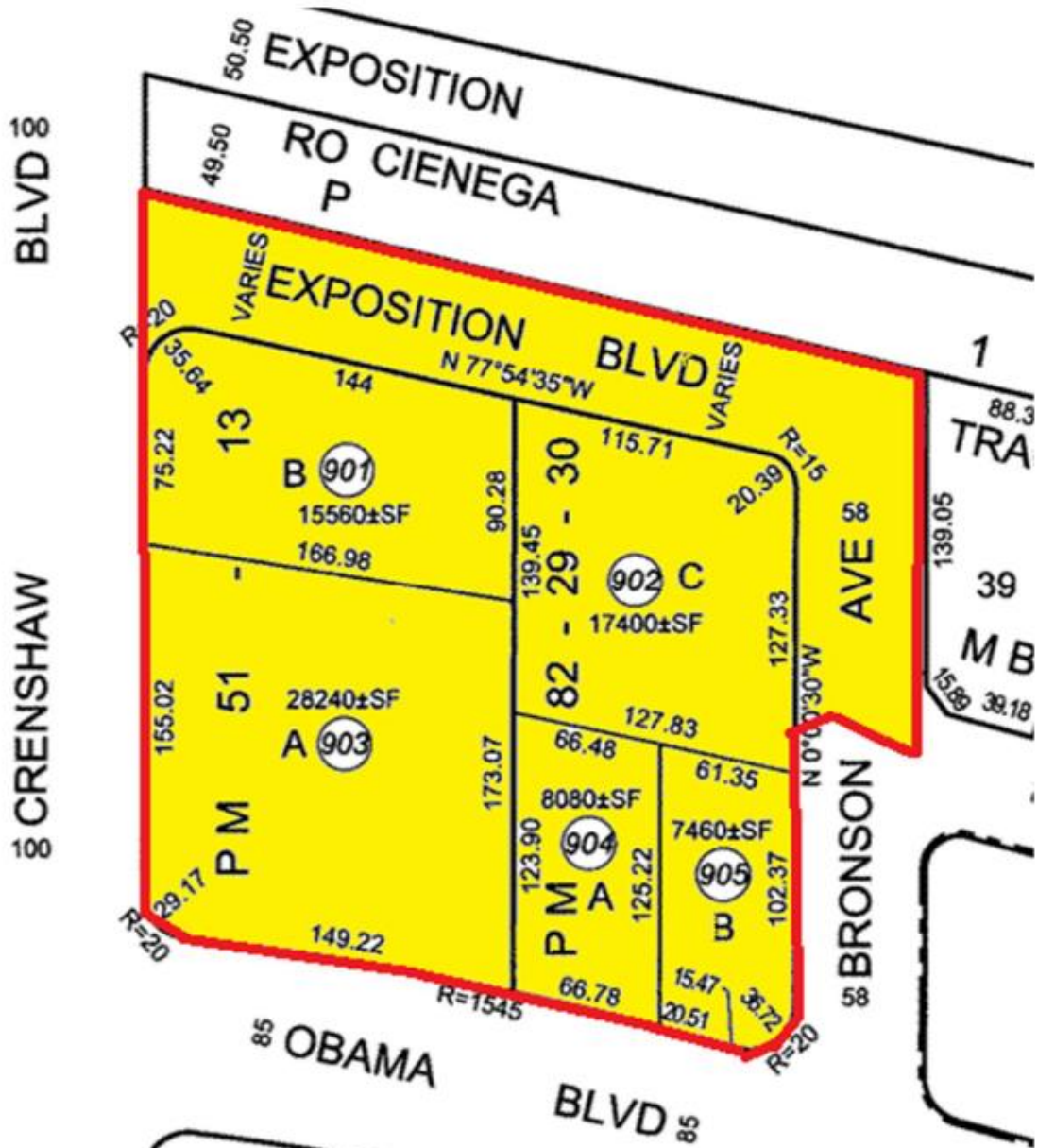


Exhibit B

Depiction of the Premises



ATTACHMENT C

Environmental Studies and Reports

https://www.dropbox.com/scl/fo/36bt6mv95dl623o2plizj/AEv5trn_evZNyE3etYPLMi0?rlkey=elhtutfjtbc1y234gl6kj6brv&e=1&st=9rqlmyd8&dl=0

Site Plan and Renderings



Site Plan - Metro Site



North Elevation - Metro Site



View of Metro Site (left) and County Site (right) Facing South on Crenshaw Blvd.



View of Metro Site Facing East from Crenshaw Blvd.



We're supporting thriving communities.

EXPO/CRENSHAW JOINT DEVELOPMENT

Planning and Programming Committee | March 19, 2025

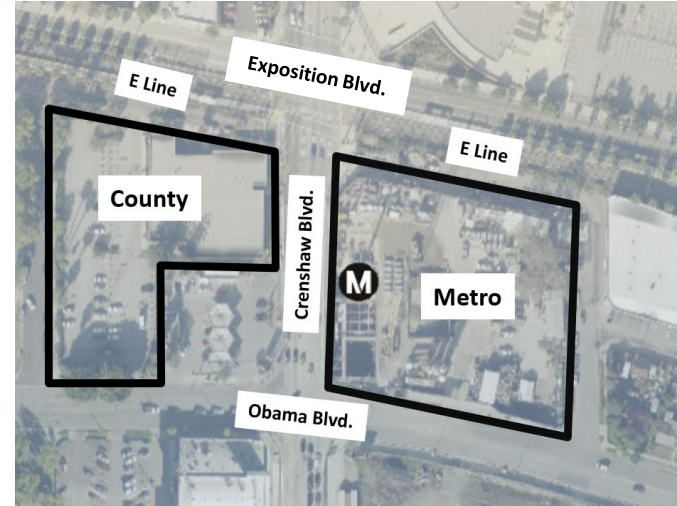
Legistar File# 2024-1093



Metro

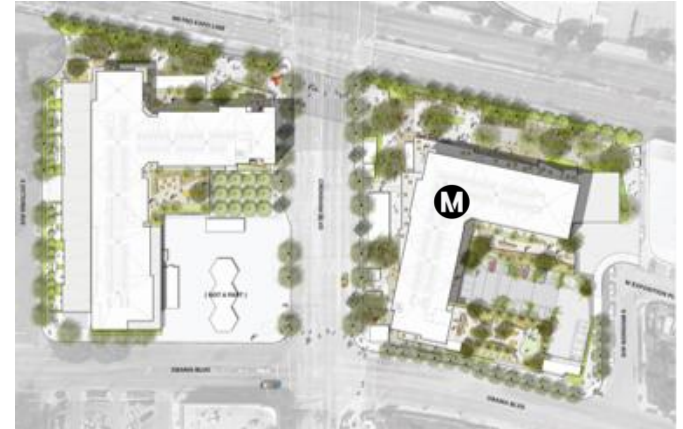
Recommendations

- A. **AUTHORIZING** the CEO, or designee, to execute and enter into a joint development agreement (JDA), ground lease, and other related documents with Expo Crenshaw Apartments, LP (Developer), for the construction and operation of a mixed-use affordable housing (Project) on 1.77 acres of Metro-owned property at the southeast corner of W. Exposition Bl. and Crenshaw Bl. (Metro Site) adjacent to the K Line Expo/Crenshaw Station in the City of LA (Attachment A - Site Map) in accordance with the Summary of Key Terms and Conditions (Attachment B) and upon receipt of concurrence by the FTA; and
- B. **FINDING** the Project complies with the requirements of the California Environmental Quality Act (CEQA) for using a Sustainable Communities Environmental Assessment (SCEA) as authorized pursuant to Public Resources Code Section 21155.2(b), which is consistent with the Environmental Studies and Reports set forth in Attachment C, making the CEQA findings set forth further below (CEQA Findings) and authorizing the CEO or designee to file a Notice of Determination for the Project in accordance with said findings by the Metro Board of Directors (Metro Board).



Background

- **2015:** Metro and County partner on Joint Development opportunity
- **2016:** Development Guidelines approved
- **2017:** RFP leads to Developer selection
- **2018-2022:** On-going engagement inform project refinements
- **2022:** City of L.A. Entitlements Approved
- **Development Team:** Expo Crenshaw Apartments, LP (affiliates of Watt Companies, West Angeles Community Development Corporation, Richman Group, Housing Authority of City of L.A.)



Site Plan. Metro Site is on the right.



View looking south. Metro Site is on the left.

Project Overview

- 174 affordable units (30% to 80% AMI)
- 2 manager's units
- mix of studios, one-, two-, and three-bedroom units
- 24,000 SF grocery store
- 4,500 SF of neighborhood-serving retail space
- Public and resident-serving open space amenities



View looking east towards the Metro Site



View looking southeast towards the Metro Site

Key Terms of the JDA and Ground Lease

JDA

- Three-year term with option to extend up to two additional 12-month periods.
- Holding Rent of \$3,530/month, credited towards capitalized rent due at execution of the ground lease.
- Metro right to review and approve the design.
- Reimburses Metro for transaction-related costs, such as design and financial review.
- Sets forth the conditions for executing the ground lease, including verifying that project financing, governmental approvals, payment and performance bonds, and a completion guaranty are in place.

Ground Lease

- 75-year term.
- Restriction to ensure continued affordability for the full term of the ground lease.
- Provides Metro with a maximum compensation of \$8,475,000 which would be accumulated through:
 - A one-time capitalized ground rent payment of \$1,000,000 for the housing portion of the Project.
 - 10% of Project's annual residual receipts proceeds for housing portion of the Project.
 - 20% of all sale and/or refinancing net proceeds of the Project.
- In addition to above, also provides Metro with 15% of annual net commercial gross rent paid, unless such businesses are providing goods or services essential to the daily needs of residents.
- Provides Metro with a deposit to cover construction management and related inspection costs.



Next Steps

Upon Board Approval:

- FTA concurrence
- Staff executes the JDA in accordance with the terms and conditions
- Developer secures all financing
- Developer submits design development and construction drawings for Metro review and approval
- JDA conditions met and ground lease executed
- Construction anticipated to start in 2026



Board Report

File #: 2025-0040, File Type: Plan

Agenda Number: 8.

PLANNING AND PROGRAMMING COMMITTEE
MARCH 19, 2025

SUBJECT: ADOPTION OF THE PROJECT PRIORITIZATION FRAMEWORK FOR THE 2025 SCAG CMAQ/STBG CALL FOR PROJECTS

ACTION: APPROVE RECOMMENDATION

RECOMMENDATION

AUTHORIZE the CEO or their designee to submit to SCAG the Project Prioritization Framework Metro will use to evaluate and rank projects for Los Angeles County as part of the 2025 SCAG CMAQ/STBG Call for Projects.

ISSUE

On March 31, 2025, the Southern California Association of Governments (SCAG) will release a call for nominations inviting agencies within Los Angeles County to submit applications for Congestion Mitigation and Air Quality (CMAQ) and Surface Transportation Block Grant (STBG) funding apportionments available for the SCAG region for federal fiscal year (FFY) 2027 and FFY 2028. Metro staff will be required to review and rank the applications for Los Angeles County. Staff is seeking Board approval of the project ranking criteria to be utilized in this process. The ranked projects for Los Angeles County will be presented for Board adoption at the July 2025 meeting. SCAG will then prioritize projects received from all six counties in the SCAG region and will make the final project funding awards at their November 2025 Regional Council (RC) Meeting.

BACKGROUND

The Congestion Mitigation and Air Quality Improvement (CMAQ) Program and Surface Transportation Block Grant (STBG) Program Guidelines, scheduled for adoption by the Southern California Association of Governments (SCAG) Regional Council in March 2025, establish the framework for project selection and allocation of CMAQ and STBG funds within the SCAG region in accordance with 23 CFR § 450.332(c) et al. These guidelines outline the SCAG-administered project selection process in compliance with federal requirements for the CMAQ and STBG programs.

In April 2021, the Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) issued a Corrective Action to Caltrans on the administration of the CMAQ and STBG. The findings require Caltrans to ensure that sub-recipients of CMAQ and STBG funds throughout the state administer these programs in compliance with federal program guidance and regulations. Subsequently, in August 2022, FHWA and FTA jointly issued a corrective action to SCAG, requiring a

review of Caltrans' CMAQ and STBG administrative policies and the development of a process that ensures compliance with federal program guidelines and regulations for the administration of these two programs.

The program guidelines adopted by SCAG to comply with the federal Corrective Action require that any new project or new project phase funded with CMAQ and/or STBG funds are subject to a competitive project selection process. SCAG's adopted CMAQ/STBG Compliance Action Plan outlines the regional approach for addressing the Corrective Action. The specific issues the SCAG Compliance Action Plan addresses are:

- Replacing the current federal transportation funding suballocations by population or mode to cities and counties with a performance-based approach.
- Modifying the eligibility screening conducted for compliance with Federal program guidance and regulations.
- Modifying the project selection process so federally funded transportation projects are selected by SCAG as the designated Metropolitan Planning Organization (MPO).

As part of the 2025 SCAG Call for Projects, all County Transportation Commissions (CTCs) in the SCAG region, which includes Metro, will assist in the process by providing initial project screening using the proposed project evaluation and ranking criteria described below. Following the Board's adoption of the ranked projects for Los Angeles County this July, SCAG staff will then evaluate all nominations against program criteria and recommend a list of projects and funding amounts for final SCAG Regional Council approval of the selected projects.

As part of the Corrective Action guidelines, SCAG developed performance-based funding nomination targets for each county in the SCAG region. For the CMAQ and STBG funds available through this call process, Los Angeles County's target is approximately \$660 million. This funding target will only guide the nomination submittals from each county; it is not a guaranteed funding level nor a nomination ceiling.

DISCUSSION

For the 2025 CMAQ/STBG Call for Projects process, SCAG will open the project application for funding on March 31, 2025. Metro staff then notify all cities and eligible agencies of the release of the application and the schedule to submit applications. To meet the August 1, 2025, deadline for CTCs to submit their prioritized projects to SCAG, agencies must submit their applications by May 16, 2025, to provide time for staff to review and rank the submitted projects.

Staff will also notify the Council of Governments (COGs) and subregions of the grant opportunity. Office hours will be available on Tuesday and Thursday mornings from 10 am to noon, during which agencies can schedule time to answer questions about project eligibility and the application process.

Project Ranking Criteria

The SCAG guidelines require each county to adopt and apply a Project Prioritization Framework consisting of criteria to evaluate and rank each project. Projects will be evaluated into four categories: Highly Recommended, Recommended, Contingency List, and Not Recommended.

Staff is proposing the following four criteria be used to evaluate and rank projects submitted in Los Angeles County:

1. **Eligibility:** Potential implementing agencies and projects must be eligible for CMAQ and/or STBG funds.
2. **Alignment with Metro Plans and Policies:** Projects must support adopted Metro plans, policies, and objectives
 - a. Given the Metro Boards' commitment to providing world-class mobility options during the 2028 Olympic and Paralympic Games, priority will be given to the projects that support the Games Mobility Concept Plan.
3. **Community/Stakeholder Engagement:** Project nomination applications must demonstrate community support. Community support may be determined through a variety of means, including (but not limited to):
 - a. Responses to public outreach, including comments received at public meetings or hearings, feedback from community workshops, survey responses, etc.; and/or
 - b. Endorsement by community-based organizations
 - c. Subregional support. Endorsement by Council of Government or Subregional Board
4. **Deliverability and Readiness:** Implementing agencies must demonstrate sufficient capacity and technical expertise to meet deadlines. Projects must demonstrate readiness and the ability to obligate the funds within the programming period.
 - a. To maximize the timely obligation of CMAQ/STBG funds and to provide maximum mobility benefits to support the 2028 Olympic and Paralympic Games, priority will be given to projects that can be delivered (i.e., open to public use) before June 2028.

To address the concerns raised by the Councils of Government (COG) during the previous SCAG Call process and to ensure transparency in the project ranking process, staff will ask two representatives from the COGs to participate in reviewing and ranking the applications submitted for projects in Los Angeles County. This collaboration will enhance transparency in evaluating all projects and ensure that the COGs are involved in the rankings for all projects seeking CMAQ/STBG funding. Ultimately, the Southern California Association of Governments (SCAG) will make the final decisions regarding project funding awards.

DETERMINATION OF SAFETY IMPACT

Approving this item will not directly impact the safety of Metro customers or employees. However,

since some of the projects eligible for these funds include safety enhancements, avoiding potential risks associated with maintaining the grant funding is essential for ensuring the timely realization of the anticipated safety benefits these projects will provide.

FINANCIAL IMPACT

There is no financial impact with this action.

EQUITY PLATFORM

CMAQ and STBG funds are intended to provide a flexible funding source to State and local governments for transportation projects and programs to reduce congestion and improve air quality for areas that do not meet the National Ambient Air Quality Standards. The Board action will help secure funding from a program intended to advance transit and other multimodal plans, programs, and infrastructure improvements within and for lower-resourced communities, areas of concentrated poverty, historically disadvantaged communities, and/or areas with lost or reduced service.

The proposed project ranking criteria in the CMAQ/STBG Call for Nominations process require applicants to assess project benefits to populations living in Areas of Persistent Poverty and Historically Disadvantaged Communities. These benefits include air quality improvements, infrastructure for safer active transportation and improvements to local transit services. The types of projects funded through the CMAQ/STBG Call include improvements to local transit, clean transportation technology, and transportation demand management strategies.

Nearly all Metro EFCs overlap with one or more of the indicators included in the U.S. Department of Transportation's BUILD Grant mapping tool used to identify Areas of Persistent Poverty and Historically Disadvantaged Communities in the evaluation of Community Economic Development Benefits. Census tracts identified as Areas of Persistent Poverty are similar to Metro's EFCs in that they are determined using socioeconomic factors, including a significant percentage of the population living in poverty.

VEHICLE MILES TRAVELED OUTCOME

VMT and VMT per capita in Los Angeles 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.* Metro's Board-adopted VMT reduction targets align with California's statewide climate goals, including achieving carbon neutrality by 2045. To ensure continued progress, all Board items are assessed for their potential impact on VMT.

As part of these ongoing efforts, this item is expected to contribute to further reductions in VMT. This item supports Metro's systemwide strategy to reduce VMT by providing funding to enhance transit systems and to support various multimodal plans, programs, and infrastructure improvements throughout the region. These investment activities will benefit and further encourage transit ridership, ridesharing, and active transportation. Metro's Board-adopted VMT reduction targets were designed to build on the success of existing investments, and this item aligns with those objectives.

*Based on population estimates from the United States Census and VMT estimates from Caltrans' Highway Performance Monitoring System (HPMS) data between 2001-2019.

IMPLEMENTATION OF STRATEGIC PLAN GOALS

Approval of these recommendations will support the following Strategic Plan Goals:

Goal 3: Enhance communities and lives through mobility and access to opportunity by securing funding to conduct planning, create and enhance programs, and build infrastructure that accelerates infill development that facilitates housing supply, choice, and affordability, affirmatively further fair housing, and reduce VMT.

Goal 4: Transform LA County through regional collaboration and national leadership by facilitating partnerships to deliver transportation projects with significant geographic or regionwide benefits.

ALTERNATIVES CONSIDERED

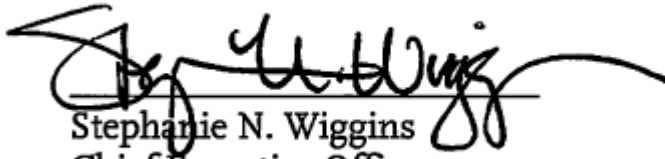
The Board may choose not to approve the recommended actions. SCAG requires each County Transportation Commission (CTC) to adopt project ranking guidelines. The Board can modify the guidelines for Los Angeles County or use the SCAG-adopted guidelines.

NEXT STEPS

Staff will ensure that all eligible agencies in Los Angeles County are aware of the opportunity to apply for CMAQ and STBG through the 2025 SCAG's Call for Projects by hosting workshops and regular "office hours" on Tuesday and Thursday mornings from 10 am to noon to answer questions until the application window closes.

Prepared by: Michael Richmai, Senior Manager, Countywide Planning and Development,
(213) 922-2558
Nancy Marroquin, Senior Director, Countywide Planning and Development, (213) 418-3086
Mark Yamarone, Executive Officer, Countywide Planning and Development, (213) 418-3452
Laurie Lombardi, Senior Executive Officer, Countywide Planning and Development,
(213) 418-3251

Reviewed by: Ray Sosa, Chief Planning Officer, (213) 547-4274



Stephanie N. Wiggins
Chief Executive Officer

The background features a large, stylized letter 'M' composed of several white, 3D rectangular blocks. The 'M' is set against a dark green circular backdrop. This green circle is partially overlapped by a larger, vibrant orange circular shape. The bottom portion of the slide is a solid black background.

ADOPTION OF THE PROJECT PRIORITIZATION FRAMEWORK FOR THE 2025 SCAG CMAQ/STBG CALL FOR PROJECTS

Planning and Programming Committee

March 19, 2025

File No. 2025-0040



Metro

Recommendation

Authorize the CEO or their designee to submit to SCAG the project prioritization framework Metro will use to evaluate and rank projects for Los Angeles County as part of the 2025 SCAG CMAQ/STBG Call for Projects.

Background

- SCAG, as the Metropolitan Planning Organization (MPO) for the six-county region that includes Los Angeles County, is required under a change in federal funding guidelines to program CMAQ/STBG funds
- On March 31, 2025, SCAG will release a call for nominations inviting agencies within Los Angeles County to submit applications for CMAQ and STBG funding apportionments available for the SCAG region for federal fiscal year (FFY) 2027 and FFY 2028.
- Metro staff, with two COG representatives, will review and rank the applications for Los Angeles County. Staff is seeking Board approval of the SCAG's project rankings criteria. The ranked projects for Los Angeles County will be presented for Metro Board adoption at the July 2025 meeting.
- SCAG will then prioritize projects received from all six counties in the SCAG region and will make the final project funding awards at their November 2025 Regional Council (RC) Meeting.



Metro

Project Prioritization Framework

The SCAG guidelines require each county to adopt and apply a Project Prioritization Framework consisting of criteria to evaluate and rank each project. Projects will be evaluated into four categories: Highly Recommended, Recommended, Contingency List, and Not Recommended.

Staff is proposing the following four criteria be used to evaluate and rank projects:

- 1. Eligibility:** Potential implementing agencies and projects must be eligible for CMAQ and/or STBG funds, as detailed in 23 USC Sec. 133, 149, et al.
- 2. Alignment with Metro Plans and Policies:** Projects must support adopted Metro plans, policies, and objectives.
 - Priority will be given to projects that support the Games Mobility Concept Plan and can be delivered before June 2028
 - Equity: Projects must align with Metro's Equity Program and provide benefits to Metro Equity Focus Communities.
- 3. Community/Stakeholder Engagement:** Project nomination applications must demonstrate community support.
- 4. Deliverability and Readiness:** Implementing agencies must demonstrate sufficient capacity and technical expertise to meet deadlines. Projects must demonstrate readiness and the ability to obligate the funds within the programming period.



Metro

Next Steps

- SCAG will open the project application for funding on March 31, 2025. Metro staff then notify all cities and eligible agencies of the release of the application and the schedule to submit applications.
- Agencies must submit their applications by May 16, 2025. This timeline allows staff sufficient time to review and rank the submitted projects.



Board Report

File #: 2025-0044, **File Type:** Project

Agenda Number: 9.

**PLANNING AND PROGRAMMING COMMITTEE
MARCH 19, 2025**

SUBJECT: VERMONT TRANSIT CORRIDOR ENVIRONMENTAL AND PLANNING STUDY

ACTION: APPROVE RECOMMENDATION

RECOMMENDATION

CONSIDER:

- A. RECEIVING AND FILING the Vermont Transit Corridor environmental study findings as per Senate Bill 922 Statutory Exemption requirements;
- B. APPROVING the proposed Vermont Transit Corridor Project, a new 12.4-mile at-grade, side-running bus rapid transit (BRT) line with 26 stations at 13 intersection locations (Attachment A), as the Locally Preferred Alternative (LPA);
- C. APPROVING the finding that the Project is statutorily exempt from CEQA under Section 21080.25(b); and
- D. AUTHORIZING the Chief Executive Officer to file a CEQA Notice of Exemption (NOE) for the Project with the Los Angeles County Clerk and the Governor’s Office of Planning and Research.

ISSUE

The Vermont corridor is the busiest bus transit corridor in Los Angeles County with approximately 38,000 weekday boardings and serves several communities heavily dependent on public transit providing connectivity to four Metro rail lines, several east-west bus routes, and major activity centers.

The Vermont Transit Corridor Project (Project) brings long-awaited improvements in travel time, service reliability, and customer experience along a 12.4-mile stretch of Vermont Avenue between

Sunset Boulevard and 120th Street (Attachment B).

The Vermont Transit Corridor is a Measure M Project with an anticipated opening date as early as 2028, in time for the 2028 Summer Olympic and Paralympic Games in Los Angeles. Critical to meeting this schedule, a Project and a Locally Preferred Alternative (LPA) must be identified, and the environmental review complete. The Project is statutorily exempt under CEQA through SB 922 and staff seek Board approval of this finding.

BACKGROUND

In December 2013, Metro completed the Los Angeles County Bus Rapid Transit (BRT) and Street Design Improvement Study identifying Vermont as one of the top candidate corridors for BRT. At that time, Vermont was the second busiest bus corridor with approximately 45,000 daily boardings. With the onset of the COVID-19 pandemic, systemwide ridership dropped significantly. However, the Vermont corridor today is the busiest bus corridor with 38,000 daily boardings, which are projected to increase to 66,000 by 2045.

The Vermont Transit Corridor has been under study for nearly a decade starting with the Vermont BRT Technical Study initiated in 2015 and completed in 2017. This was followed by the Vermont Transit Corridor Rail Conversion/Feasibility Study completed in 2019. Both studies examined potential BRT and rail alternatives for the corridor from Hollywood/Sunset Boulevards to 120th Street, where Metro's local and Rapid services on Vermont Avenue terminate and where Gardena Transit continues service. In June 2022, Metro implemented a community-based planning approach to engage with community partners and stakeholders to build a common vision for the corridor, listen to their transit needs and concerns, and incorporate their feedback into developing equitable mobility options for Vermont. Through the six months of extensive community outreach work with the CBOs, the community shared their desire for the following:

- Make immediate improvements to the existing bus service;
- Build a BRT line in the mid-term; and
- Deliver a rail project when funding becomes available longer-term.

As a result, in September 2022, the Board passed a motion (Attachment C) directing staff to advance a three-pronged strategy for immediate quick-build improvements, medium-term BRT, and long-term rail transit as funding becomes available. As part of the motion, the Board confirmed the limit of the transit improvements by directing staff to include an extension south of 120th Street in a list of Metro's future, strategic unfunded projects. Near-term improvements are being implemented through the Bus Speed and Reliability Program, which includes bus-only lanes in two areas of the Vermont corridor. To implement near-term improvements, existing and/or new extended weekday parking restrictions on Vermont Avenue between Sunset and Wilshire Boulevards will be implemented 7-10 a.m. and 3-7 p.m. Additionally, all-day bus-only lanes will be implemented between Gage Avenue and the Athens C Line Station. These improvements are underway, separate from the Vermont Transit Corridor Project, and are anticipated to be complete by Spring 2025.

In September 2023, the Board approved a contract award in support of developing a medium-term BRT, including consultant services for environmental clearance, design, and outreach. Work was initiated in November 2023 and included further evaluation of two initial bus lane configurations, end-to-end side-running bus lanes, and a combination side- and center-running bus lanes.

The 12.4-mile Bus Rapid Transit (BRT) Project features 26 stations at 13 locations (one on each side of the street) (Attachment A). The BRT Project extends from 120th Street (a discharge and layover

location), south of the Vermont/Athens Metro C Line Station, to Sunset Boulevard and a connection to the Vermont/Sunset Metro B Line Station in Hollywood. The study area encompasses several densely populated communities defined as Equity Focus Communities (EFCs) (Attachment D).

Most of the Study Area is within the City of Los Angeles and includes several communities, including East Hollywood/Los Feliz, University Park/Exposition Park, Koreatown, and South Los Angeles. Approximately 2.5 miles at the southern end (on the western side of Vermont Avenue only), the Study Area encompasses the West Athens and Westmont communities, which are in unincorporated Los Angeles County. These communities are among the most densely populated in the region and have a significantly higher percentage of transit-dependent residents. The corridor also features various cultural and institutional amenities as well as numerous major activity centers, including the University of Southern California (USC), BMO Stadium, the Exposition Park Museums, Kaiser Permanente Los Angeles Medical Center, Children's Hospital Los Angeles, and Los Angeles City College (LACC).

The Project seeks to enhance the existing north-south transit service for residents and businesses located west of the I-110 Harbor Freeway. Additionally, it aims to create opportunities for reinvestment in the communities along the corridor. The need for transit improvements along Vermont is highlighted through several key themes.

- **Growing Travel Market:** The high number of daily transit trips accessing or using the corridor is projected to increase over time from 38,000 daily riders today to 66,000 by 2045.
- **Deteriorating Traffic Conditions:** Segments of the corridor have constrained public rights-of-way, resulting in competition between modes, increased operating conflicts, inefficient movement of people, and decreased safety.
- **Degrading Transit Network Reliability:** Transit travel times, service quality, and service reliability are significantly impacted by traffic congestion in the corridor.
- **Inequitable Allocation of Resources:** The corridor has a disproportionately high number of transit-dependent riders. The entire corridor is within EFCs-resulting in disparate outcomes for those with the highest need when comparing service availability in corridors with a lower concentration of EFCs. Additionally, approximately one-third of the corridor's population resides within designated Federal Opportunity Zones.
- **Poor Safety and Customer Experience Conditions:** The poor condition or lack of transportation infrastructure (roadway, transit, bicycle, and pedestrian) near transit stops discourages riders. The Vermont Corridor is also on the City of Los Angeles' High Injury Network with more pedestrian incidents than any other street in LA over the last 10 years.

DISCUSSION

Project Goals

The goals and objectives for the Project are summarized as follows:

- Advance a premium transit service that is more competitive with private auto travel
- Improve transit access to major activity and employment centers
- Enhance connectivity to Metro and other regional transit services
- Provide improved passenger comfort and convenience
- Improved safety on the corridor

Stakeholder and Community Outreach

In addition to the community meetings required by SB 922, the Vermont Transit Corridor Project team has prioritized community engagement throughout Project development, achieving significant milestones and shaping its direction.

- **Cultural Needs and Equity Workshops** were conducted to ensure that the Project is responsive to the diverse communities along the corridor.
- **Station Design Workshops** provided a platform for residents and stakeholders to actively participate in shaping the design of future BRT stations. This collaborative approach ensured that station designs were functional, accessible, and integrated well with the surrounding neighborhoods.
- **Surveys** at key stops along Vermont Avenue and on Bus Lines 204 and 754 were completed with 371 transit riders who provided feedback on their experience and preferences for improvements along the corridor.
- **Ongoing Project updates** through various channels staff have kept the public informed about the Project's progress, critical decisions, and upcoming opportunities for engagement. This transparency has maintained community awareness and has reinforced its crucial role in shaping the future of the Vermont Transit Corridor. Engagement activities have included sharing information at 25 community events (5 CicLAVias, Leimert Park Jazz Festival, Honduran Business Fair, and several others), 22 briefings at key institutions, block clubs, and community groups located along Vermont Avenue, and presented to 22 neighborhood councils, block clubs, and community groups.

A robust Partnership Program was also implemented with 38 Community-, Community Development- or Faith-Based Organizations with deep roots in the corridor communities the Project will serve. The partnerships have allowed Metro to reach a wider audience and gain valuable insights from stakeholders who do not typically engage with Metro's planning processes, including reaching out to over 24,300 community members. Staff also conducted three rounds of community meetings as well as an additional five public meetings in early December 2024 to present the SB 922 analysis/reports and solicit comments. Attachment E includes a summary of the community engagement activities and comments received.

BRT Alternatives Considered

Based on the work done as part of the two earlier BRT studies in 2017 and 2019, two alternatives were brought forward as part of the Vermont Transit Corridor Planning and Environmental Study - an

all-day end-to-end side-running and an all-day combination side- and median-running BRT. Given the right-of-way constraints on Vermont Avenue, the majority (2/3) of the corridor north of Gage Avenue cannot physically accommodate median-running BRT and stations. After further analysis of the two alternatives and all the feedback received, the end-to-end side-running BRT alternative emerged as the best performing option. Additionally, 63% of those who commented preferred the side-running alternative well only 37% preferred the combination side- and median-running alternative.

The benefits of the end-to-end side-running BRT alternative outweigh the benefits of the combination side- and median-running BRT. Some of the advantages of the side-running alternative include:

- Preservation of more on-street parking (94%) versus the combination side and median-running alternative (77%), which was a key concern heard from the community and businesses;
- Shared bus lanes and BRT stations with local buses (Metro and DASH), thereby providing more BRT benefits to more riders;
- Access to stations from the sidewalk was preferred by the community as walking to/from stations in the middle of Vermont Avenue was perceived as being less safe from the perspective of user experience;
- Preservation of trees in the median valued by the community (total of 11 trees at two station locations);
- Extended pedestrian areas (bulb-outs) at stations enabling shorter crosswalks for improved pedestrian safety;
- Shorter construction schedule compared to the combination side and median-running alternative by at least 5 to 8 weeks; and
- Bus lanes that could continue to be used by buses when rail is eventually implemented.

Since the median-running BRT configuration is only feasible in about a two-mile segment south of Gage Avenue, only 3 of the 13 station locations could accommodate median stations (Century, Manchester, Florence). This is due to the additional right-of-way required for median-running bus lanes and stations resulting in additional time for demolition, median and street reconstruction, additional signal and utility conflict work, and some tree removal, resulting in a cost increase of \$20 to \$80 million. Because Metro's Line 204 and LADOT DASH need to make additional stops between Imperial and Gage Avenues, local buses would not be able to use the median-running bus lanes or stations.

Additionally, the overall travel time for the median-running bus lanes would be only 1-2 minutes less than the side-running bus lanes due to the relatively short section of the corridor that can accommodate median-running lanes and stations.

Recommended Project Description

The recommended Project would consist of 12.4 miles of all-day side-running dedicated bus lanes from 120th Street on the south to Sunset Boulevard on the north. This configuration allows 94% of the existing parking to remain, which is one of the most important assets to the community.

Dedicated bus lanes are one of the most crucial components of BRT. Combined with other BRT attributes such as transit signal priority, limited stops, frequent headways, all-door boarding, and enhanced stations, bus lanes significantly improve bus speeds and service reliability by allowing for more consistent travel times and enhancing the customer experience. Implementing these attributes ensures the BRT meets the Project goals and objectives and maintains its high performance over time even as traffic congestion worsens.

Additional Project features to be implemented at all 13 station locations include approximately 52 enhanced crosswalks to improve visibility and pedestrian safety, updated ADA-compliant curb ramps at 52 corners, and 26 bus bulb-outs. These bulb-outs will create larger pedestrian areas and reduce crosswalk distances. Additionally, bus bulb-outs will facilitate faster and more reliable bus operations by minimizing the time lost when buses merge in and out of bus or travel lanes.

Implementation of the Project is expected to result in travel times savings of 24% or 17 minutes end-to-end, as well as a 30% mile per hour improvement for buses. The Project is expected to increase corridor ridership from 38,000 daily boardings to approximately 66,000 daily boardings by 2045 due to more frequent service, faster travel speeds, and better reliability with dedicated bus lanes. The current on-time performance (OTP) of service on Vermont Avenue is approximately 70%. The goal is to improve OTP to at least 80% or better, and the bus-only lanes proposed in this project contribute to service reliability and on-time performance.

In March 2024, voters in the City of Los Angeles passed the Healthy Streets LA (HLA) initiative. HLA requires the City, when doing work on a city-owned street, to implement street enhancements described in its Mobility Plan 2035. Although the HLA ordinance does not specifically apply to Metro projects, the Vermont Transit Corridor Project helps achieve partial build-out of the Transit Enhanced Network (TEN) called for in the City of Los Angeles' Mobility Plan 2035. The Project also complements the City's goals of achieving a safer, more sustainable, and inclusive transportation network. Additionally, the Project and its associated street improvements do not preclude the City from implementing additional street improvements included in the Mobility Plan 2035.

A traffic analysis was conducted in 2024, in coordination with the City of Los Angeles, and estimated that approximately 25% of auto traffic on Vermont Avenue would divert to Hoover Street and Normandie Avenue, both of which have unused capacity that can accommodate the additional traffic. Another 15% of auto traffic on Vermont is expected to divert to other parallel major arterial streets outside of the study area (east of Hoover and west of Normandie). Consistent with the goals of the Mobility Plan 2035, the Project prioritizes transit in the corridor through the introduction of dedicated bus lanes with the expectation that auto traffic would adjust travel patterns as necessary. Staff also anticipate up to a 5% mode shift from single occupancy vehicles to transit.

Environmental Analysis and Findings

Metro is seeking a statutory exemption under the California Environmental Quality Act (CEQA) through Senate Bill 922 (SB 922), which is codified as California Public Resources Code (PRC) 21080.25 (b). SB 922 exempts active transportation projects, including BRT projects, from CEQA requirements.

To support the case for the applicability of statutory exemption under SB922, Metro prepared three required analyses/reports: 1) Racial Equity Analysis; 2) Residential Displacement Analysis; and 3) Business Case Analysis. The SB 922 analyses are presented in the Vermont Transit Corridor Project Senate Bill 922 Reports: Racial Equity Analysis, Residential Displacement Analysis, and Business Case available on the Metro website at <https://www.metro.net/projects/vermont>.

Additionally, SB 922 requires that at least one public meeting be held to discuss each of the three reports, offering the public a chance to review and comment on them. The SB 922 documents were made available for review and comments at public libraries located on or near the corridor, as well as on the Metro website. The Metro project page noted the period to provide comments on the reports were November 22 to December 20, 2024. In early December, Metro hosted five (5) public meetings (Attachment F) throughout the corridor to not only present the report's findings but also to:

- Communicate details of the statutory exemption process so stakeholders are aware of the legal and environmental framework governing the Project
- Provide a comprehensive description of the Project's benefits and impact
- Allow the public to review the SB 922 documents

Approximately 80 comments were received at those meetings on the SB 922 reports. The sections below describe the three required analyses that were provided to the public about the impacts and benefits of the Project.

Racial Equity Analysis

The purpose of the Racial Equity Analysis is to examine the impacts of the Project on different racial communities. The analysis identified which communities might benefit or be burdened by the Project, as well as strategies to mitigate any disproportionate impacts. Overall, based on data collected on race and ethnicity, low-income households, and zero-car households of the Project Area, 91.2% of the census tracts in the Project Study Area are considered Metro Equity Focus Communities (EFCs).

The findings showed that the Project would be implemented in a corridor with a high percentage of individuals identifying as Black or African American, Indigenous, or People of Color (BIPOC). In Los Angeles County, the BIPOC population is 74.8%, while in the City of Los Angeles, it is 71.9%. In contrast, the percentage of BIPOC individuals in the Project Study Area is significantly higher, at 88.8%. Additionally, the analysis revealed that the Project Area contains 55.6% of low-income households and 20.4% of households with no access to a car.

These communities will benefit from the project as it would provide improvements to north-south transit services and thus improved access to jobs, education, and essential services along the corridor. The BRT will help alleviate the existing inequities such as slow bus speeds due to heavy traffic that affect those who rely on transit services, especially zero-car households. The project will also provide BRT stations with overhead bus canopies, passenger amenities, and clear signage in a heavily transit-dependent corridor.

The Vermont Transit Corridor Project would narrow the existing inequities by investing in a transit

system that supports a broad base of current and future users and reflects the needs of each distinct community by improving access, safety, and comfort. The Project would improve transit performance, enhance the experience for customers, invest in the community, and develop a cost-effective project.

Residential Displacement Analysis

The purpose of the Residential Displacement Analysis was to identify areas at risk and the potential for residential displacement and develop strategies to mitigate the potential risks. The Project Study Area has a high percentage of BIPOC populations, low-income households, and renter-occupied homes, including vulnerable communities that could be affected by residential displacement. Residential displacement can occur in two ways: physical (direct) displacement and economic (indirect) displacement. Physical displacement results from eviction, property acquisition, rehabilitation, demolition, or the expiration of covenants on rent- or income-restricted housing. The Project involves a BRT project located entirely within the Vermont public right-of-way and would not directly contribute to residential displacement during either the construction or operation phases.

Economic displacement is related to unaffordable escalating rents or property taxes as related to development activities and changes in land uses. Metro does not have jurisdiction over land use or other community development efforts. The Project would provide better transit connectivity in the Vermont Corridor, which may indirectly spur new economic development opportunities and interest in housing development near transit stations that may benefit the community and increase the overall housing supply in the area. Strategies to avoid potential indirect impacts focus on Metro coordination and partnerships with Los Angeles County, the City of Los Angeles, public agencies, private developers, and the community. These coordination efforts would include encouraging land use plans and policies that minimize residential displacement, potential opportunities on public land to support housing, and joint development opportunities on Metro-owned parcels that could be developed to serve BRT users.

Business Case Analysis

The purpose of the Business Case Analysis was to assess the Project's benefits, feasibility, costs, and overall impact of the investment. This analysis answers several key questions, including how the Project aligns with Metro's long-term goals, what the associated costs and benefits are, what the societal impacts might be, what the long-term financial implications are, and how the Project would be developed and implemented.

The Vermont Transit Corridor is currently the busiest bus corridor in the Metro system, with about 38,000 daily boardings. The selected Project would improve efficiency along the congested corridor and facilitate safe and accessible transport to major employment, social services, educational facilities, and regional activity centers. The Project supports the ambitions and goals from federal, state, and local governments, including transportation goals in Metro's 2020 Long Range Transportation Plan. The Project objectives would meet these long-range goals by significantly improving service reliability and ridership, reducing passenger travel times, enhancing stations and passenger amenities, improving pedestrian/bicycle access and safety and security, and better access to key destinations. Additionally, this Project complements the City's goals of achieving a safer, more

sustainable, and inclusive transportation network as outlined in their Mobility Plan 2035.

Other Project benefits include the creation of an estimated 1,000 construction jobs per year, increased road safety, cleaner air, and \$5.40 in community benefits for every dollar spent. In addition, the Project is projected to save \$18.99 million by replacing Metro Rapid Route 754 and reducing Metro Line 204 travel times, resulting in a net operation and maintenance cost increase of \$8.54 million.

CEQA Determination

Metro staff have identified that the Project qualifies for statutory exemption under SB 922. The Project improvements fall within the exemptions described in Section 21080.25(b) as noted below.

- Introduction of a new premium BRT service on Vermont Avenue, an existing public right-of-way (Section 21080.25(b)(5))
- New all-day bus lanes on 12.4 miles of Vermont Avenue from 120th Street to Sunset Boulevard (Section 21080.25(b)(4))
- An increase in weekday headways from 10 to 5 minutes throughout most of the day (Section 21080.25(b)(5))
- The implementation of transit signal priority and all-door boarding (Section 21080.25(b)(3))
- The addition of 26 enhanced stations and passenger amenities at 13 station locations, including real-time next-bus information (Section 21080.25(b)(5))
- The addition of bus bulbs at the 13 station locations to reduce bus stop delays and increase space for bus stop amenities and pedestrians (Section 21080.25(b)(5))
- The use of zero-emission, battery-electric buses (Section 21080.25(b)(5) and (6))

Given the above, the Project meets the definition of a statutory exempt project and is consistent with SB 922's intent to accelerate sustainable transportation projects by providing an exemption from CEQA for a targeted set of sustainable transit projects, "active transportation" (walking and biking), and projects that expand sustainable mobility.

DETERMINATION OF SAFETY IMPACT

Approval of this item and eventual completion of the Project will enhance safety by introducing dedicated bus lanes and bus bulbs. These improvements will reduce potential conflicts caused by buses weaving in and out of traffic. Additionally, bus bulbs will improve pedestrian safety by providing larger waiting areas and shortening crossing distances at station locations. The Project will also feature improved crosswalks for increased visibility of pedestrians and enhanced lighting at stations to boost safety and security for our customers. The Project will not compromise the safety of Metro's customers or employees.

FINANCIAL IMPACT

The FY 2025 budget includes \$15M in Cost Center 4240 (Mobility Corridors Team 4), Project 471402 (Vermont Transit Corridor Project). Since this is a multiyear 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.

The preliminary cost estimate for the Project is \$393 million (year of expenditure) based on the 15% design developed for the end-to-end side-running configuration. Program Management will conduct an independent bottoms-up cost estimate during the Preliminary Engineering phase. The Measure M Expenditure Plan includes \$25 million in Measure M funds. The remaining \$400 million is anticipated to come from other local, state and federal sources. Staff are currently exploring opportunities for both state and federal funding opportunities, including a federal Small Starts Grant as directed by Motion 51 by Directors Dupont-Walker, Najarian, Mitchell, Solis, and Butts (Attachment C).

EQUITY PLATFORM

The Vermont Transit Corridor Planning and Environmental Review contract was awarded in October 2023, with a significant Disadvantaged Business Enterprise (DBE) goal of 41.16%. The Vermont Transit Corridor will provide new benefits of enhanced mobility and improved regional access and connectivity in a corridor with a high percentage of individuals identifying as Black or African American, Indigenous, or People of Color (BIPOC). In Los Angeles County, the BIPOC population is 74.8%, while in the City of Los Angeles, it is 71.9%. In contrast, the percentage of BIPOC individuals in the Project Study Area is significantly higher, at 88.8%. Additionally, the Project Area contains 55.6% of low-income households and 20.4% households do not have access to a car.

The Project will also help support transit-oriented communities' policies, improve safety, support first/last-mile connections, and invest in disadvantaged communities. The Vermont Transit Corridor is located almost entirely within (98%) Equity Focus Communities (EFCs). Throughout the planning and environmental review of this project, advancing transit equity was a critical part of setting up project objectives in evaluating alternatives, developing design elements, and engaging the community and stakeholders. In addition, Metro partnered with 38 CBOs/FBOs to support this work and advance equity in alignment with Metro's CBO Partnering Strategy. These partnerships were valuable in allowing Metro to reach a wider audience and gain valuable insights from stakeholders who may or may not typically engage with Metro's planning processes, resulting in a project that will reduce travel times by 24% (17 minutes end-to-end) and improve access to key destinations along the corridor. This partnership also resulted in the development of a recommended and/or preferred BRT alternative.

VEHICLE MILES TRAVELED OUTCOME

VMT and VMT per capita in Los Angeles 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.* Metro's Board-adopted VMT reduction targets align with California's statewide climate goals, including achieving carbon neutrality

by 2045. To ensure continued progress, all Board items are assessed for their potential impact on VMT.

As part of these ongoing efforts, the Vermont Transit Corridor Project is expected to contribute to further reductions in VMT as it includes the implementation of a high-quality Bus Rapid Transit alternative along Vermont Avenue. This BRT service will enhance transit along the corridor by shortening passenger travel times and increasing service reliability and efficiency. This project is expected to encourage a shift from single-occupancy vehicles to public transit. Additionally, it will enhance access for cyclists and pedestrians to/from the stations.

To help characterize the VMT effects of the Project and provide a basis for comparing Project scenarios, the travel demand model estimated the Project's VMT benefit by multiplying the number of person-trips shifted from automobiles to transit because of the Project (as forecasted by the CBM18 B model [Metro, 2019b]) by the associated station-to-station (or comparable zone-to-zone) trip distances. The estimated user benefit is a savings of about 85,000 VMT resulting in the removal of 37 metric tons of CO₂ daily due to the implementation of the Project. A dedicated BRT lane can move 3 times the number of people per hour than a mixed traffic lane. This analysis was conducted as part of the Vermont Transit Corridor Planning and Environmental Study and aligns with the State statutory goals of reducing greenhouse gas emissions and increasing multimodal transportation networks.

*Based on population estimates from the United States Census and VMT estimates from the highway performance monitoring system data between 2001-2019.

IMPLEMENTATION OF STRATEGIC PLAN GOALS

This 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 providing outstanding trip experiences.

ALTERNATIVES CONSIDERED

The Board could consider not approving the Project/Locally Preferred Alternative (LPA) nor concur that the Project should be exempt under SB 922. This option is not recommended as this would be contrary to the analysis conducted by staff and the community input received over the last year. The Board could also consider approving a combination side and median-running alignment. This option is also not recommended as it would result in a higher project cost, longer construction time, additional loss of on-street parking, and would not allow the local bus services to benefit from the BRT bus lanes and stations. This Project will provide long overdue benefits of enhanced mobility and improved regional access for transit-dependent and minority and/or low-income populations within the study area. Board approval of the Project and Locally Preferred Alternative does not preclude future extension of services beyond 120th Street to El Segundo Street.

NEXT STEPS

Upon Board approval, staff will file a CEQA Notice of Exemption (NOE) for the Project with the Los

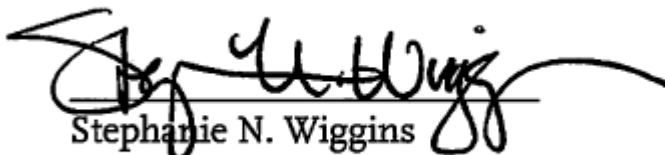
Angeles County Clerk and the Governor's Office of Planning and Research. Staff will also continue design work to 30% and continue coordination with the Federal Transit Administration on environmental clearance under the National Environmental Policy Act, which is anticipated to be complete by Summer 2025. Metro staff will continue to partner and work with the City of Los Angeles on any needed agreements in support of a timely construction schedule to meet the 2028 timeline. Additionally, staff will evaluate the potential extension of Metro and/or Gardena transit service on Vermont Avenue south of 120th Street to El Segundo Boulevard in response to some comments received.

ATTACHMENTS

- Attachment A - Map of Proposed Project with Station Locations
- Attachment B - Map of Vermont Transit Corridor
- Attachment C - September 2022 Board Motion
- Attachment D - Map of Vermont Corridor EFCs
- Attachment E - Community Engagement Activities
- Attachment F - December 2024 Public Meeting Details

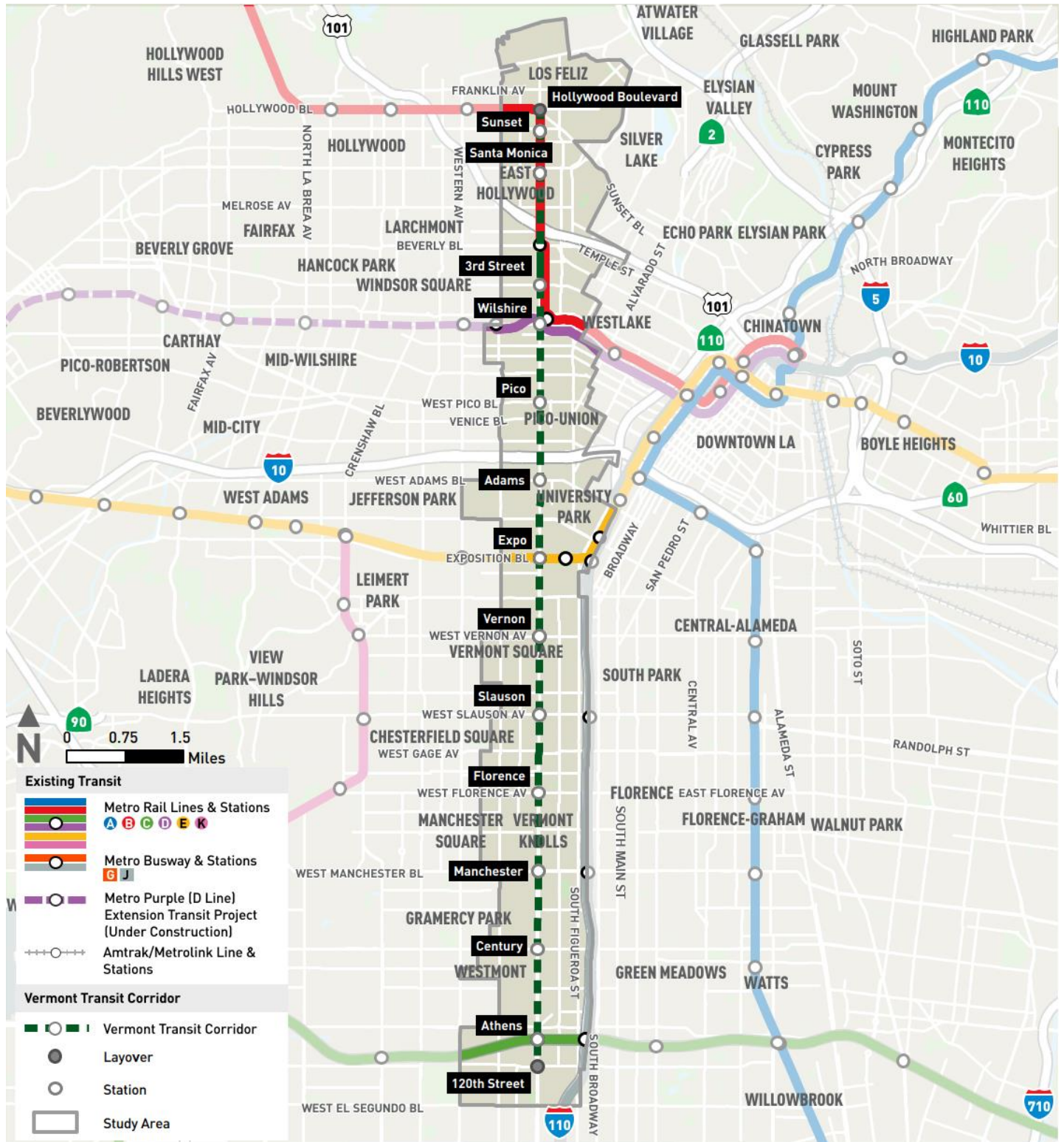
Prepared by: Annelle Albarran, Manager, Transportation Planning, (213) 922-4025
Heidi Jackson, Manager, Community Relations, (213) 418-8084
Rashanda Davis, Senior Manager, Transportation Planning, (213) 922-4483
Martha Butler, Senior Director, Countywide Planning and Development, (213) 922-7651
Cory Zelmer, Deputy Executive Officer, Countywide Planning and Development, (213) 922-1079
Lilian De Loza-Gutierrez, Executive Officer, Communications, (213) 922-7479
Allison Yoh, Executive Officer, Countywide Planning and Development, (213) 922-4812
David Mieger, Senior Executive Officer, Countywide Planning and Development, (213) 922-3040

Reviewed by: Ray Sosa, Chief Planning Officer, (213) 547-4274
Jennifer Vides, Chief Customer Experience Officer, (213) 922-4060



Stephanie N. Wiggins
Chief Executive Officer

MAP OF PROPOSED PROJECT WITH STATION LOCATIONS



MAP OF VERMONT TRANSIT CORRIDOR



SEPTEMBER 2022 BOARD MOTION

Metro



Board Report

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

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

Agenda Number: 51.

**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.

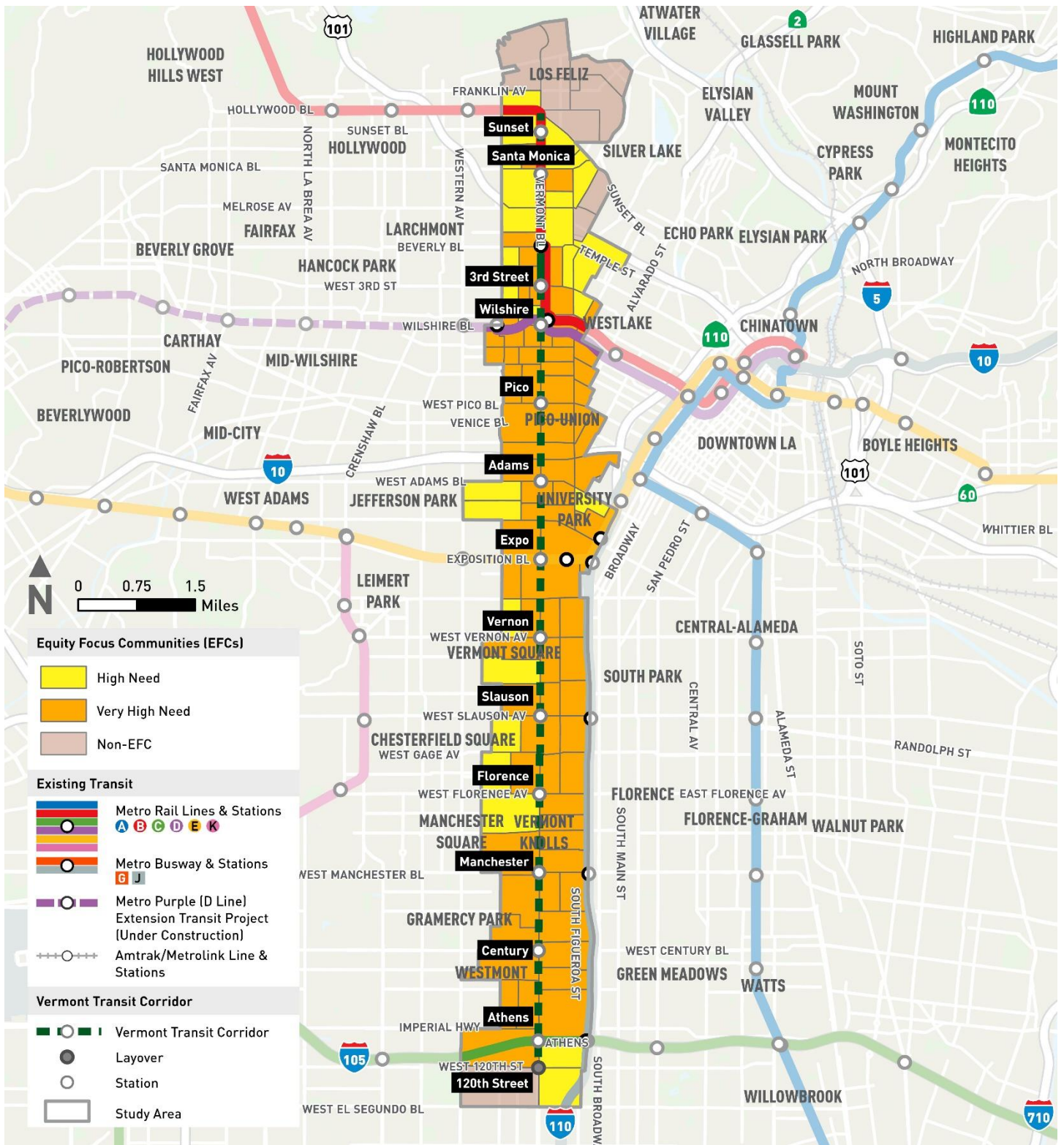
SUBJECT: VERMONT TRANSIT CORRIDOR MOTION

RECOMMENDATION

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

- A. 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;
- B. Evaluate the medium-term BRT project for a federal Small Starts application;
- C. 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;
- D. 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;
- E. 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.

MAP OF VERMONT CORRIDOR EFCs



COMMUNITY ENGAGEMENT ACTIVITIES

VERMONT TRANSIT CORRIDOR

Community Outreach Executive Summary

The Vermont Transit Corridor (VTC) is a 12.4-mile stretch where community collaboration is essential to shaping the future of transportation. Metro has prioritized a robust community engagement process centered on understanding residents' needs and ensuring their voices are heard. Metro provides ample opportunities for residents to share their input on Bus Rapid Transit (BRT) and rail alternatives through various channels.

Metro has woven community engagement into the fabric of the project's development. Since 2021, Metro has implemented an extensive outreach program to inform and involve local communities. This commitment is not merely a box to be checked but a fundamental principle guiding every step of the journey.

As of February 2025, the VTC project has actively engaged over 24,300 individuals through various community engagement activities.



Public Meetings & Workshops

- Eighteen public meetings, including three Cultural Needs Assessment workshops in February 2024 and seven Urban Design Workshops (May–June 2024), involving over 1,621 participants and 900 feedback responses.



CBO Partnership Program

- Collaborations with 38 hyper-local Community-Based, Community-Based Development and Faith-Based Organizations to expand outreach, gather insights, and build trust with communities along the corridor.



Elected Official and Stakeholder Briefings

- Engagements with City Council Districts 1, 8, 9, 10, 13, and 15, local institutions, business associations, and advocacy groups.



Project Updates

- Regular communication through canvassing, community meetings, newsletters, website updates, social media, and email notifications.

Background

In April 2019, the Metro Board directed its staff to advance both BRT and rail concepts into the environmental review.

At the same time, the Board directed staff to study the feasibility of extending these BRT and/or rail concepts further south—evaluated separately as the Vermont Transit Corridor South Bay Extension Feasibility Study, which was completed in December 2021.

Prior to the Vermont Transit Corridor Project moving into the environmental review process, Metro conducted a pre-environmental, community-based planning effort aligned with the agency’s Equity Platform Framework that has successfully elevated the voices of stakeholders who live, work, play, study, and/or worship along Vermont Av. The purpose of the community-based planning approach is to engage with community partners and stakeholders early to build a common vision for the corridor, listen to their transit needs and concerns, and incorporate their feedback into the development of an equitable transit solution for the corridor.

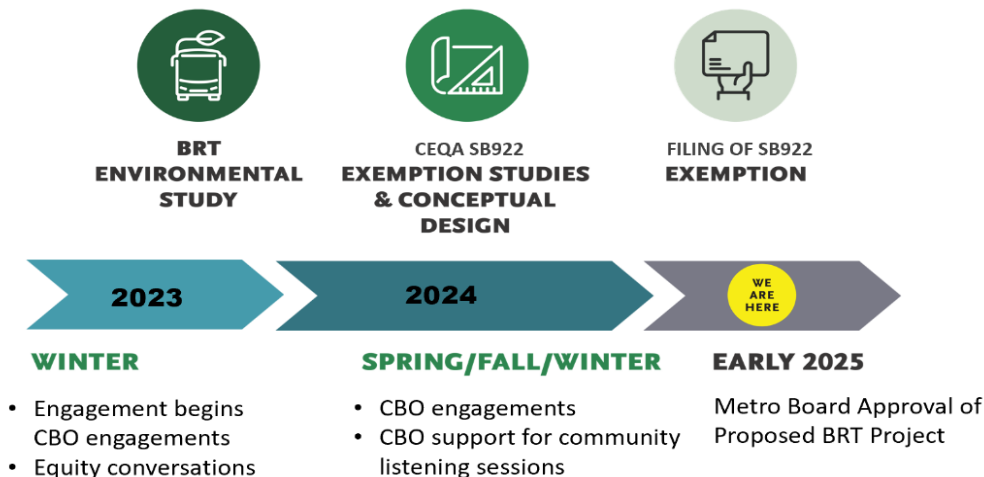
Over a seven-month period, from December 2021 to June 2022, Metro partnered with community-based organizations, faith-based groups, and local neighborhood groups to solicit feedback about the types of improvements that should be planned for the Vermont Transit Corridor (VTC) Project.

Project Area

The 12.4-mile-long corridor traverses six Los Angeles City Council Districts, two Supervisorial Districts, 14 neighborhood councils, and many key educational, cultural, medical, social, and faith-based centers. The various communities that make up the VTC include, but are not limited to, East Hollywood, Thai Town, Little Armenia, Little Bangladesh, Wilshire Center, Koreatown, West Adams, USC Village, Expo Park, Vermont Square, Vermont Knolls, Vermont Vista, Broadway-Manchester, and Westmont-Athens.

All corridor-wide communities are considered Equity-Focused Communities given their socioeconomic characteristics: More than 40% of households are low-income (making less than \$35,000 annually), 80% are non-white, and 10% do not have access to a vehicle.

Project Timeline





Engagement Approach

As an agency, Metro ensures people can safely and reliably reach everyday destinations, such as jobs, schools, healthy food outlets, and healthcare facilities. For Los Angeles County as a whole, but specifically for the Vermont Transit Corridor, public transportation services play an essential role for people who depend on it – such as those who are unable to drive or do not have access to personal vehicles; low-income adults; children; individuals with different abilities; older adults, among other populations.

Outreach was conducted in Armenian, English, Korean, Spanish, and Thai to ensure all groups participated. In addition, the team connected with stakeholders who spoke Russian, Bangladeshi, and Zapotec (an Indigenous dialect from the southern part of Mexico).

Transit investment along the Vermont corridor is a critical equity issue because improvements will provide people with faster, more reliable mobility options and improve access to employment, community resources, medical care, and recreational opportunities, which in turn will drastically improve the quality of life for area stakeholders.



Community-Based Organization Partnership Program

The CBO Partnership program is based on Metro’s CBO Partnering Strategy, written and adopted by the Metro Board of Directors in 2021. It plays a vital role in ensuring the VTC project is responsive to the needs and priorities of the diverse communities it serves.

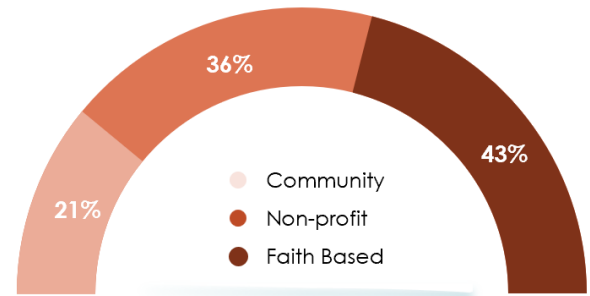
A key aspect of the engagement approach was implementing a CBO partnership program providing stakeholders various opportunities to engage with Metro.

The program currently partners with 38 Community and Faith-Based organizations with deep roots in the corridor communities the project will serve. These organizations vary in size and scope, ranging from large, established institutions to grassroots community groups.

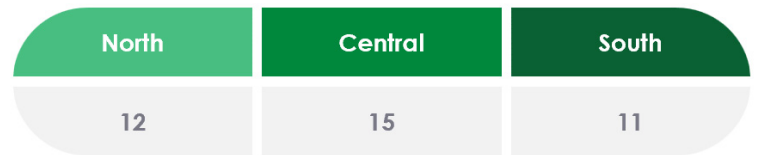
Partnering with them allows Metro to:

- **Reach a wider audience:** CBOs can help disseminate information about the project and encourage participation in engagement activities, especially among hard-to-reach populations and stakeholders who traditionally do not participate in the public involvement process with public agencies.
- **Gain valuable insights:** CBOs can provide helpful feedback on the project’s potential impacts and help identify solutions that address specific community concerns.
- **Build trust:** Working with trusted community partners helps foster a sense of collaboration and ensures that the project is responsive to local needs.

CBO Partners by Service Category



CBO Partners by Study Area Segment



Cultural Needs Assessment and Equity Assessments

To ensure residents had a voice in shaping the future of Vermont Av, Metro hosted a series of three (3) workshops in February 2024, spread strategically across the corridor, and specifically targeted community and thought leaders from various parts of the corridor. These workshops aimed at:

- **Identify and Prioritize Key Assets:** Participants helped refine the project’s cultural and historical assets list, highlighting those most important to the community.
- **Improve Transit Service:** Discussions focused on current transit service and proposed BRT stations, ensuring they effectively serve residents and commuters.
- **Enhance Community Spaces:** Breakout sessions allowed for detailed feedback on study area maps, identifying key community places, landmarks, and pedestrian areas that need improvement.

Metro conducted thorough assessments to understand each community’s unique transportation challenges and priorities along the corridor. These assessments considered income levels, vehicle access, spoken languages, and cultural preferences.

Station Design Workshops

Metro held a series of interactive workshops in May and June 2024 to ensure that future BRT stations along the Vermont corridor genuinely reflect the needs and character of the communities they serve. These workshops, attended by over 700 participants, provided a platform for community members to participate, ensuring that station designs were functional, accessible, and integrated well with the surrounding neighborhoods.

Key Focus Areas:

- **Station Location:** Participants provided input on the optimal placement of stations within their neighborhoods.
- **Accessibility:** Discussions centered on incorporating features like ramps, elevators, and tactile paving to ensure accessibility for all riders.
- **Amenities:** Community members shared their preferences for amenities such as seating, shelter from weather elements, real-time information displays, and public art.
- **Neighborhood Integration:** The workshops explored ways to seamlessly integrate stations with the surrounding neighborhood, including pedestrian walkways, bike paths, and community gathering spaces.





Project Update Meetings

Transparency and community involvement were fundamental priorities throughout the project. Metro conducted seven meetings in March and October 2024 to update community members and stakeholders on the project update, next steps, and anticipated timeline.

Key topics included pedestrian safety, station access, design options for the median parkway, and desired BRT amenities.

Senate Bill 922 Mandated Public Meetings

In December 2024, Metro held public meetings, which provided the opportunity for community engagement and a public comment period. In addition, Metro presented the three required reports under SB 922: 1) Racial Analysis 2) Residential Displacement 3) Business Case.

Metro offered in-person and virtual options to accommodate diverse schedules and preferences. It also held an open-house format where participants could learn about the project and engage with staff at information booths.

The meetings aimed to provide comprehensive information about the project and gather feedback on key aspects, including:

- Project plans and design
- Construction schedule and impacts
- Mitigation measures
- Community benefits

This multi-faceted approach ensured all stakeholders could engage with the project and provide valuable input.

Elected Official and Stakeholder Briefings

Regular briefings have been held with elected officials' staff members at the city, state, and federal levels to provide them with the overall project plans. These briefings have been essential throughout the project's lifecycle to seek guidance and gather input from our elected officials, who represent many of the communities and business owners along the corridor.

Key institutions and stakeholders along the corridor are also briefed to inform their representatives of the project schedule, plans, and invitations to upcoming project update meetings.





Transit Rider Survey

The transit rider intercept surveys were vital to the Vermont Transit Corridor's near-term improvement engagement initiative. These surveys gathered valuable data on rider experiences and satisfaction with the implemented changes. Metro surveyed 371 transit riders at key stops along Vermont Av and on Bus lines 204 and 754 to understand their experiences and preferences. The surveys were conducted in multiple languages during on- and off-peak times.

Metro implemented the following methodology:

- Onboard surveys: Distributing surveys on buses to gather feedback on travel times, service frequency, comfort, and amenities.
- Intercept surveys: Conduct surveys at bus stops and stations to gather information about rider demographics, trip purposes, and satisfaction with existing service.
- Online surveys: Using online platforms to reach a broader audience and gather feedback on proposed improvements and design options.

Canvassing Program

Canvassers educated small business owners, residents, transit riders, and street vendors about the project, invited them to attend upcoming meetings, and allowed stakeholders to share their opinions.

Since December 2023, Metro canvassed on 15 different occasions along the corridor during various hours on weekdays and weekends to ensure different groups of people were engaged. Canvassers engaged over 1,286 people in Armenian, English, Kiche, Korean, Spanish, Thai, and Zapotec.



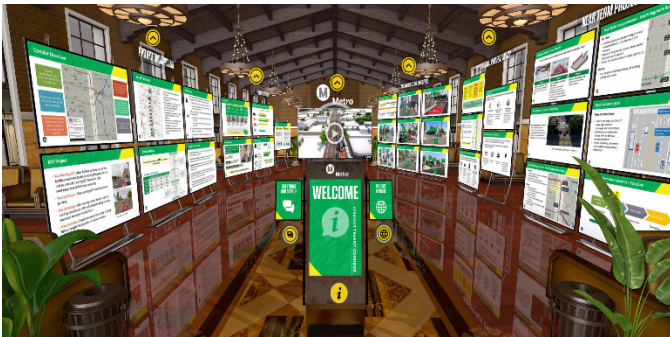
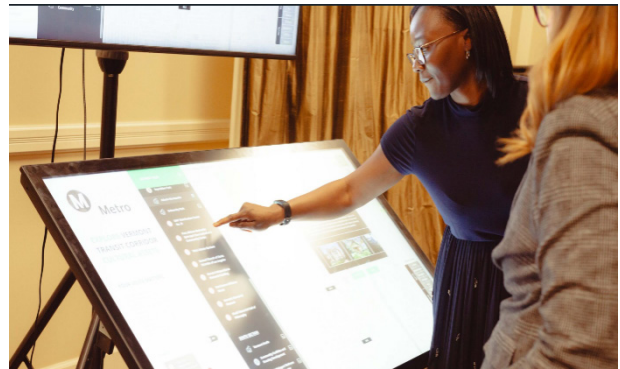
Ongoing Communication Methods

Metro has employed various communication channels to keep the public informed and engaged throughout the project's lifecycle. These channels include newsletters, [project websites](#), social media, direct contact, email notifications, and [interactive platforms](#), including virtual reality, [simulation videos](#), and virtual environments to share project information. These channels ensure stakeholders have multiple avenues to access information and participate in developing the Vermont Transit Corridor Project.

Community member participating in an interactive activity



Interactive Cultural Asst Map of the Vermont Transit Corridor



Virtual Open House for March and December Meetings



Community member experiencing a VR tour of Vermont Av

ATTACHMENT F**DECEMBER 2024 PUBLIC MEETING DETAILS**

Meeting	Date/Time	Location/Address
Community Meeting #1 Central Subarea	Saturday, December 7, 2024 10:00 AM-11:30 AM	Masjid Umar Ibn Al-Khattab 1025 Exposition Blvd Los Angeles, CA 90007
Community Meeting #2 South Subarea	Monday, December 9, 2024 6:00 PM-7:30 PM	Crenshaw Christian Center 7901 S Vermont Ave Los Angeles, CA 90044
Community Meeting #3 Virtual	Wednesday, December 11, 2024 12:00 PM-1:00 PM	Zoom Webinar
Community Meeting #4 North Subarea	Wednesday, December 11, 2024 6:00 PM-7:30 PM	Los Angeles City College 700 N. Heliotrope Drive Los Angeles
Community Meeting #5 Virtual	Monday, December 16, 2024 6:00 PM-7:30 PM	Zoom Webinar



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

Planning & Programming Committee

VERMONT TRANSIT CORRIDOR

Legistar File 2025-0044

March 19, 2025



Recommendation

CONSIDER:

- A. RECEIVING AND FILING the Vermont Transit Corridor environmental study findings as per Senate Bill 922 Statutory Exemption requirements;
- B. APPROVING the proposed Measure M Vermont Transit Corridor Project (a new 12.4-mile at-grade, side-running bus rapid transit (BRT) line with twenty-six (26) stations at thirteen (13) intersection locations);
- C. APPROVING the finding that the Project is statutorily exempt from CEQA under Section 21080.25(b); and
- D. AUTHORIZING the CEO to file a CEQA Notice of Exemption (NOE) for the Project with the Los Angeles County Clerk and the Governor's Office of Planning and Research



SB 922

- Metro is seeking a statutory exemption under CEQA through Senate Bill 922 (SB 922)
- SB 922 exempts active transportation projects, including BRT projects, from CEQA requirements
- To support the case for the statutory exemption under SB 922, Metro prepared the three (3) required analyses/reports:
 - Racial Equity Analysis
 - Residential Displacement Analysis
 - Business Case Analysis
- December 2024 - Metro held five (5) public meetings to present the findings of each report and solicit public comment

BRT Alternatives Studied

- November 2023 - staff initiated environmental clearance, design, and outreach including further study of two alternatives identified in earlier BRT feasibility studies on Vermont
 - An all-day end-to-end side running alternative
 - A combination side and median-running BRT
- Based on all public comments received over the last year and after further technical analysis of the two alternatives, staff is recommending an end-to-end, side-running BRT
- Some benefits of side-running bus lanes include:
 - Preserves more on-street parking (94%)
 - Local buses (Metro line 204 and Dash services) can use the bus lanes and stations providing more BRT benefits to more riders
 - Access to stations perceived by community as safer
 - Preserves trees valued by the community in center medians
 - Bulb-outs at stations increase pedestrian space and shorten crossing distances for pedestrian safety



Visual Simulation



Bike Lanes under Healthy Streets LA (HLA) Measure

- > The Project helps achieve partial build-out of the Transit Enhanced Network (TEN) in the City's Mobility 2035 Plan
- > Existing bike lanes on the corridor are maintained
- > Due to insufficient roadway widths, the addition of new Class II and Class IV bike lanes constitutes a betterment and is not included, however, the project would not preclude the City from pursuing the future implementation of bike infrastructure as per the City's Mobility 2035 Plan
- > Modifying the existing roadway widths to accommodate new bike lanes requires additional property acquisition (up to an est. 250-300 properties), parking loss (approx. 1,100 spaces), and additional civil work. NOTE: CEQA approval per SB 922 prohibits private property acquisition
- > Due to potential impacts of incorporating new bike lanes the project would experience delays of up to five years and significant cost impacts of up to \$400M beyond the identified funding
- > This week the Federal Transit Administration concurred with Metro's application into the Capital Investment Grant Small Starts program. The addition of new bike lanes would threaten this FTA concurrence, the viability of implementing the Measure M Vermont BRT Project, and would impact funding made available to other priority Metro projects in the pipeline



Next Steps

- Upon Board Approval, staff will:
 - File a CEQA NOE for the Project with LA County Clerk's office and the Governor's Office of Planning and Research
 - Continue Preliminary Engineering (PE) 30% design work
 - Continue coordination with FTA on environmental clearance under the National Environmental Policy Act (NEPA)
 - Continue to work with the City of Los Angeles on any needed agreements in support of a timely construction schedule to meet the 2028 timeline
- Additionally, staff will evaluate the potential extension of transit service south of 120th Street to El Segundo BI in the nearer term





Board Report

File #: 2025-0052, File Type: Contract

Agenda Number: 10.

PLANNING & PROGRAMMING COMMITTEE MARCH 19, 2025

SUBJECT: MAJOR CAPITAL PROJECT GRANTWRITING

ACTION: APPROVE RECOMMENDATION

RECOMMENDATION

AUTHORIZE the Chief Executive Officer to award a firm fixed unit rate Contract No. PS125381000 to Capitol Government Contract Specialists for Major Capital Project grantwriting services to support Board priorities, in an amount Not-to-Exceed (NTE) \$6,332,734 for a two-year base period, with one, two-year option in the amount of \$6,287,602, for a total NTE amount of \$12,620,336, effective April 7, 2025, subject to resolution of any properly submitted protest(s), if any.

ISSUE

Staff requires grant writing services to secure funding for Board priority projects such as those included in the Measure M Expenditure Plan and the 2020 Long Range Transportation Plan. The current contract has been in effect for four years and is set to expire on March 31, 2025.

BACKGROUND

The current grant writing contract was executed on December 23, 2019, and is set to expire on March 31, 2025. Under this contract valuing \$6.4 million, 167 task orders have been issued, resulting in grant awards totaling \$1.77 billion. 2020 Metro Long Range Transportation Plan aims to add over 100 miles of transit infrastructure over the next 30 years, making it the most ambitious transit expansion plan in the nation. In addition to transit improvements, Metro will invest in multimodal projects designed to improve safety and reduce congestion, such as the I-605 Hotspot Program. There will also be efforts to enhance alternative transportation modes through bicycle and pedestrian projects. Furthermore, Metro is committed to transitioning its entire bus fleet to zero-emission operations. Through these investments, Metro plans to improve regional mobility, support economic recovery, and promote sustainability with green construction practices.

Metro's Countywide Planning & Development Department is seeking a consultant to provide grant writing and related services to secure state and federal discretionary funding for these and other vital projects. The selected consultant will also be responsible for identifying, developing, and securing Capital Investment Grants and other federal funding opportunities, which are new tasks in the Major Investment Project scope. Additionally, the consultant will support Metro's applications and major

investment campaigns through special tasks. To accommodate the expanded scope, the contract capacity will be greater than that of the current contract.

DISCUSSION

In 2014, staff began contracting for grant writing services to help local jurisdictions replace funding lost due to the termination of a federal program with funds from the new state Active Transportation Program (ATP). This grant assistance program proved successful, with 44 percent of awards in Los Angeles County going to projects that utilized grant writing services. As a result, Metro decided to continue this program, which has benefited 24 local agencies, including 22 cities, the County of Los Angeles, and the San Gabriel Valley Council of Governments (SGVCOG). Seven of the cities were designated as low resource cities, based on income and population. Metro then began using some of the consultant capacity to support its efforts to advance Board priorities. To date, in addition to Metro, the following have benefited from the current contract for grant writing assistance:

Arcadia	Artesia	Baldwin Park
Bell	Compton	Covina
Diamond Bar	Duarte	Glendora
Huntington Park	La Puente	La Verne
Lancaster	Long Beach	Los Angeles City
Los Angeles County	Lynwood	Montebello
Palmdale	Pasadena	Pico Rivera
San Gabriel Valley COG	Santa Monica	South Gate

The Measure M Expenditure Plans assumed that \$20 billion in local, state, and federal funds would be available to leverage Metro's local sales tax revenues, enabling the implementation of a larger capital program valued at \$41 billion over 51 years. The technical assistance to be provided under the recommended grant writing contract is needed to help realize these assumptions. The current contract has delivered \$1.1 billion for projects to deliver the Measure M Expenditure Plan. Some of the major awards have been \$600 million in state Transit Intercity Capital Rail Program (TIRCP) funds for the East San Fernando Valley Transit Corridor, \$150 million in Senate Bill 1 Solutions for Congested Corridor funds for the I-105 Express Lanes project, and \$104 in federal Low and No Emission (LoNo) funds for LA Metro Zero Emission Bus and Infrastructure Deployment.

DETERMINATION OF SAFETY IMPACT

Approving this item will not jeopardize the safety of Metro’s customers or employees. On the contrary, granting this approval will enhance safety, as many of the grants that the grant writers will help staff develop will provide funding to expand and improve the Metro bus and rail fleet and infrastructure. Examples of past grant awards that have contributed to safety include the G Line Bus Rapid Transit improvements and the Huntington Park Safe Routes for Students and Seniors Project.

FINANCIAL IMPACT

The FY 2025 budget included \$1,950,000 in Cost Center 4420 (Federal/State Policy & Programming), Project 405510, Task 05.05.01. Since this is a multiyear contract, the Cost Center Manager and Chief Planning Officer will be responsible for budgeting in future years for the balance

of the remaining Contract budget.

Impact to Budget

Awarding the Major Capital Project Contract is anticipated to have a positive financial impact by obtaining billions of dollars for the agency. The source of funds for this contract are Administration funds from Proposition A, Proposition C, Measure R, Measure M and TDA, which are not eligible for bus & rail operations and capital projects.

EQUITY PLATFORM

Staff identifies potential projects for grant applications from two primary sources. The first source is the Active Transportation Program Grant Assistance Program. Under this program, Metro allows local jurisdictions and other ATP-eligible agencies to request grant assistance by submitting a Letter of Interest (LOI). The LOIs include information about whether the proposed project aims to benefit disadvantaged communities, such as Metro Equity Focus Communities (EFCs), which staff considers during its decision-making process, as published each cycle.

The second source for identifying projects is the Evaluative Criteria Framework (ECF). This process enables staff to consider projects from the Measure M Major Project Expenditure Plan, the Long-Range Transportation Plan, and other priorities set by the Board. The ECF consists of the following six steps:

1. Sustain Measure M and other Pre-Measure M/LRTP Priorities and Schedules
2. Align Project Competitiveness with New/Expanded Program Criteria
3. Evaluate Certainty (Formula) versus Risk (Competitive/Discretionary)
4. Ensure Consistency with Board Policies and Directives
5. Confirm Consistency with the Metro Long Range Transportation Plan (LRTP) and the Southern California Association of Governments (SCAG) Regional Transportation Plan (RTP)
6. Assess Transportation Equity and Geographic Balance

To address the Metro Equity Platform as a Board directive in Step 4 and transportation equity as a parameter in Step 6, staff assesses the transportation equity impacts of the projects under consideration, prioritizing projects that benefit people in disadvantaged communities and prioritizing outside assistance to lower-resource agencies.

VEHICLE MILES TRAVELED OUTCOME

VMT and VMT per capita in Los Angeles 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.* Metro's Board-adopted VMT reduction targets align with California's statewide climate goals, including achieving carbon neutrality by 2045. To ensure continued progress, all Board items are assessed for their potential impact on VMT.

As part of these ongoing efforts, this item is expected to contribute to further reductions in VMT. Over the previous two fiscal years, FY 2023 and FY 2024, approximately 87% of the awards Metro received under competitive programs, and with the support of grantwriting consultant services, were for active transportation and transit projects. This item supports Metro's systemwide strategy to reduce VMT through planning and administrative activities that will benefit and further encourage transit ridership, ridesharing, and active transportation. Metro's Board-adopted VMT reduction targets were designed to build on the success of existing investments, and this item aligns with those objectives.

*Based on population estimates from the United States Census and VMT estimates from Caltrans' Highway Performance Monitoring System (HPMS) data between 2001-2019.

IMPLEMENTATION OF STRATEGIC PLAN GOALS

The recommended action supports Strategic Plan Goal #2: Providing outstanding trip experiences for everyone. Metro's grant writers help staff develop applications for projects across all transportation modes. Our grant awards enhance mobility throughout Los Angeles County for pedestrians, cyclists, users of Metro Bus and Rail, Metro Express Lanes, highway travelers, and even for goods transportation.

ALTERNATIVES CONSIDERED

The Board has the option to forgo entering into a contract for grant writing assistance and rely solely on staff to prepare grant applications. However, the current staffing levels lack both the capacity and expertise needed to submit the number and quality of applications that could be prepared with the assistance of a grantwriting contractor.

NEXT STEPS

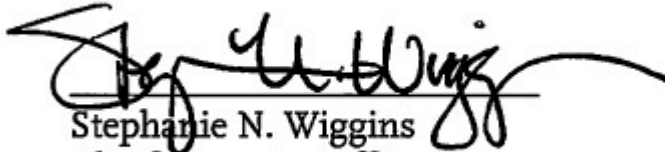
Upon approval, staff will execute Contract No. PS125381000 with Capitol Government Contract Specialists for Major Capital Project Grantwriting services effective April 7, 2025.

ATTACHMENTS

Attachment A - Procurement Summary
Attachment B - DEOD Summary

Prepared by: Patricia Chen, Senior Director, (213) 922-3041
Mark Yamarone, Executive Officer, Countywide Planning & Development, (213) 418-3452
Laurie Lombardi, Senior Executive Officer, Countywide Planning & Development, (213) 418-3251
Carolina Coppolo, Deputy Chief Vendor/Contract Management Officer, (213) 922-4471

Reviewed by: Ray Sosa, Chief Planning Officer, (213) 547-4274



Stephanie N. Wiggins
Chief Executive Officer

PROCUREMENT SUMMARY

MAJOR CAPITAL PROJECT GRANTWRITING/PS125381000

1.	Contract Number: PS125381000	
2.	Recommended Vendor: Capitol Government Contract Specialists	
3.	Type of Procurement (check one): <input type="checkbox"/> IFB <input checked="" type="checkbox"/> RFP <input type="checkbox"/> RFP-A&E <input type="checkbox"/> Non-Competitive <input type="checkbox"/> Modification <input type="checkbox"/> Task Order	
4.	Procurement Dates:	
	A. Issued: July 16, 2024	
	B. Advertised/Publicized: July 16, 2024	
	C. Pre-Proposal Conference: July 24, 2024	
	D. Proposals Due: August 20, 2024	
	E. Pre-Qualification Completed: January 23, 2025	
	F. Ethics Declaration Forms Submitted to Ethics: August 20, 2024	
	G. Protest Period End Date: March 25, 2025	
5.	Solicitations Downloaded: 77	Bids/Proposals Received: 3
6.	Contract Administrator: Yamil Ramirez Roman	Telephone Number: (213) 922-1064
7.	Project Manager: Patricia Chen	Telephone Number: (213) 922-3041

A. Procurement Background

This Board Action is to approve Contract No. PS125381000 issued in support of grant writing services for Metro’s major capital projects. Board approval of contract awards are subject to resolution of any properly submitted protest(s), if any.

Request for Proposals (RFP) No. PS125381 was issued in accordance with Metro’s Acquisition Policy and the contract type is firm fixed unit rate. The RFP was issued under the Medium-Size Business Enterprise Program 1 (MSZ-1). The Diversity & Economic Opportunity Department recommended a Small Business Enterprise (SBE) goal of 28% and a Disabled Veteran Business Enterprise (DVBE) goal of 3%. It was also subject to the Local Small Business Enterprise Preference program, which awards a bonus of 5 preference points for the utilization of local small business firms.

Two amendments were issued during the solicitation phase of this RFP:

- Amendment No. 1, issued on July 17, 2024, included Exhibit A, Scope of Services, which was inadvertently left out of the solicitation package;
- Amendment No. 2, issued on August 12, 2024, extended the proposal due date.

A total of 77 downloads of the RFP were included in the planholders list. A virtual pre-proposal conference was held on July 24, 2024, and was attended by 27

participants representing 18 firms. There were 16 questions received, and responses were provided prior to the proposal due date.

A total of three proposals were received on August 20, 2024, and are listed below in alphabetical order:

1. Advanced Avant-Garde Corporation
2. Capitol Government Contract Specialists
3. Ross Infrastructure Development, LLC

B. Evaluation of Proposals

A Proposal Evaluation Team (PET) consisting of staff from Metro’s State Analysis and Discretionary Grants department, Federal/State Policy & Programming department, and Multimodal Integrated Corridor & System Planning department was convened and conducted a comprehensive technical evaluation of the proposals received.

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

- Quality of Consultant Proposal 45 percent
- Project Experience and Staff Available 40 percent
- Cost Proposal 15 percent
- Local Small Business Enterprise (LSBE) Preference Program 5 percent

Several factors were considered when developing these weights, giving the greatest importance to the quality of consultant’s proposal.

During the period of September 5, 2024 to September 17, 2024, the PET independently evaluated and scored the technical proposals. Ross Infrastructure Development, LLC was determined to be outside the competitive range and was not included for further consideration. The remaining two firms were determined to be in the competitive range and were invited for oral presentations on September 30, 2024. The firms had the opportunity to present their qualifications, and respond to questions from the PET. Following the oral presentations, the PET finalized their scores and Capitol Government Contract Specialists was determined to be the highest ranked proposer. Staff conducted negotiations and clarifications with the firm during October through January.

Qualifications Summary of Firms within the Competitive Range:

Capitol Government Contract Specialists

Capitol Government Contract Specialists' (Capitol) proposal demonstrated grant development experience, and the task discussions showed a thorough understanding of the scope of services. Capitol's team includes experienced grant writers and the proposal demonstrated the team's schedule and availability to perform tasks as needed to successfully deliver on-time and visually compelling grant applications.

Capitol's proposal demonstrated a thorough quality control process with a dedicated team to review applications and ensure documents submitted to Metro are accurate and reduce redundancy of multiple drafts for grant applications. During the oral presentations, Capitol's team provided examples of previous experience successfully delivering applications within limited timeframes, specifically one grant delivered in two week's notice.

Capitol's proposal included a team with various areas of expertise such as greenhouse gas emissions analysis, Capital Investment Grants (CIG) analysis and successful grant writing experience in the public sector. The proposal included key staff with grant award experience and a history of positive application-to-award ratios.

Advanced Avant-Garde Corporation

Advanced Avant-Garde Corporation's (Avant-Garde) proposal demonstrated an understanding of the scope of services, the policies and guidelines required to perform the work. The proposal provided a thorough schedule demonstrating the timeline and expectations for each task required in the grant application process.

Avant-Garde's proposal demonstrated previous experience working with various public sector agencies and cities in the greater Los Angeles area. The proposal provided a detailed organizational chart that clearly assigned staff to their respective areas of expertise and application types.

However, Avant-Garde's proposal did not demonstrate thorough experience with non-motorized transit, highway projects, and greenhouse gas analysis, particularly work related to CIG analysis tasks.

A summary of the PET scores is provided below:

1	Firm	Average Score	Factor Weight	Weighted Average Score	Rank
2	Capitol Government Contract Specialists				
3	Quality of Consultant Proposal	88.89	45.00%	40.00	
4	Project Experience and Staff Available	86.68	40.00%	34.67	
5	Cost Proposal	73.60	15.00%	11.04	
6	Local Small Business Enterprise (LSBE) Preference Program (Bonus 5%)	0.00	5.00%	0.00	
7	Total		105.00%	85.71	1
8	Advanced Avant-Garde Corporation				
9	Quality of Consultant Proposal	80.00	45.00%	36.00	
10	Project Experience and Staff Available	65.83	40.00%	26.33	
11	Cost Proposal	100.00	15.00%	15.00	
12	Local Small Business Enterprise (LSBE) Preference Program (Bonus 5%)	100.00	5.00%	5.00	
13	Total		105.00%	82.33	2

C. Cost Analysis

The recommended price has been determined to be fair and reasonable based upon technical evaluation, cost analysis, and negotiations. Metro staff successfully negotiated cost savings of \$1,623,766. The variance between the Independent Cost Estimate (ICE) and the negotiated amount is attributed to the ICE underestimating the level of effort required to produce compelling narrative as well as high quality supporting graphics and analysis for the grant applications.

	Proposer Name	Proposal Amount	Metro ICE	NTE amount
1.	Capitol Government Contract Specialists	\$14,244,101	\$10,193,488	\$12,620,335
2.	Advanced Avant-Garde Corporation	\$10,480,494		

During negotiations, the proposer agreed to a moderate amount of reasonable and logical streamlining of the work. The contractor's negotiated level of effort was determined to be fair and reasonable to deliver the required services.

D. Background on Recommended Contractor

The recommended firm, Capitol Government Contract Specialists (Capitol), located in Irvine, CA, has been in business for 13 years and provides program management for rolling stock acquisition, transit operations and oversight consulting services for other public agencies such as Eagle Valley Transportation Authority, Colorado, and the City of Turlock, CA.

The proposed team includes ten subcontractors, five of which are Metro certified SBEs and one DVBE. The team's clients include Metrolink, City of Culver City, City of Lancaster, Golden Gate Bridge Highway and Transportation District, Riverside County Transportation Commission, and Washington State Department of Transportation. Capitol's project manager has 35 years of experience working in the aerospace and public transportation sectors.

Capitol has provided project control support, technical consulting and program management services to Metro and performance has been satisfactory. Capitol is a Metro-certified SBE firm.

DEOD SUMMARY

MAJOR CAPITAL PROJECT GRANTWRITING/PS125381000

A. Small Business Participation

The Diversity and Economic Opportunity Department (DEOD) established a 28% Small Business Enterprise (SBE) and 3% Disabled Veteran Business Enterprise (DVBE) goal for this Medium Size Business Enterprise (MSZ-I) solicitation. Capitol Government Contract Specialists, an SBE firm, exceeded the goal by making a 37.01% SBE and 3.17% DVBE commitment.

Small Business Goal	28% SBE 3% DVBE	Small Business Commitment	37.01% SBE 3.17% DVBE
----------------------------	----------------------------	----------------------------------	----------------------------------

	SBE Subcontractors	% Committed	LSBE	Non-LSBE
1.	Capitol Government Contract Specialists (SBE Prime)	30.15%		X
2.	Redman Consulting LLC	2.23%		X
3.	Evan Brooks Associates	1.11%	X	
4.	Deborah Murphy Urban Design + Planning	1.66%	X	
5.	Lemmon Planning	0.93%		X
6.	System Metrics Group	0.93%		X
	Total SBE Commitment	37.01%		

	DVBE Subcontractors	% Committed	LSBE	Non-LSBE
1.	OhanaVets, Inc.	3.17%		X
	Total DVBE Commitment	3.17%		

B. Medium Size Business Enterprise Program I (MSZ-I)

As a certified firm, Capitol Government Contract Specialists, is an eligible MSZ-I.

C. Local Small Business Enterprise (LSBE) Preference

Capitol Government Contract Specialists, a non-LSBE prime, did not subcontract at least 30% of its contract value with eligible LSBE firms and was ineligible for the preference.

D. Living Wage and Service Contract Worker Retention Policy Applicability

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

E. Prevailing Wage Applicability

Prevailing wage is not applicable to this contract.

F. 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.

PS125381000, MAJOR CAPITAL PROJECT GRANTWRITING, CAPITOL GOVERNMENT CONTRACT SPECIALISTS

Planning and Programming Committee

March 19, 2025



Metro

RECOMMENDATION

AUTHORIZE the Chief Executive Officer to award a firm fixed unit rate Contract No. PS125381000 to Capitol Government Contract Specialists for Major Capital Project Grantwriting services to support Board priorities, in an amount Not-to-Exceed (NTE) \$6,332,734 for a two-year base period, with one, two-year option in the amount of \$6,287,602, for a total NTE amount of \$12,620,336, effective April 7, 2025, subject to resolution of any properly submitted protest(s).

ISSUE AND DISCUSSION

ISSUE

- Staff requires grant writing services to secure funding for Board priority projects such as: Measure M Expenditure Plan and 2020 Long Range Transportation Plan projects
- Current contract has run for five years, obtaining \$1.77 billion in awards

DISCUSSION

- The Measure M Expenditure Plans assumed \$20 billion in local, state, and federal funds.
- The grantwriting to be provided under the proposed contract is needed to help realize these assumptions and advance other Board priorities.

PROCUREMENT EVALUATION

Evaluation Criteria	Maximum Points	Capitol Government Contract Specialists	Advanced Avant-Garde Corporation
Quality of Consultant Proposal	45.00	40.00	36.00
Project Experience and Staff Available	40.00	34.67	26.33
Cost Proposal	15.00	11.04	15.00
Local SBE Preference Program (Bonus 5 points)	5.00	0.00	5.00
Total Score	105	85.71	82.33

DEOD Goal: 28% SBE; 3% DVBE

CGC Commitment: 37.01% SBE; 3.17% DVBE



NEXT STEPS

Upon approval, staff will execute Contract No. PS125381000 for Major Capital Project Grantwriting services

- The Contract will be with Capitol Government Contract Specialists
- The effective date will be April 7, 2025



Board Report

File #: 2024-1164, File Type: Project

Agenda Number: 11.

CONSTRUCTION COMMITTEE MARCH 19, 2025

SUBJECT: METRO CENTER PROJECT CLOSE-OUT

ACTION: APPROVE RECOMMENDATION

RECOMMENDATION

AUTHORIZE an increase to the Life of Project budget in the amount of \$13,000,000 from \$143,688,310 to \$156,688,310 for the Metro Center Project to fully resolve all claims and complete the close-out of the Project.

ISSUE

The Metro Center Project (Project) achieved Substantial Completion on August 30, 2024, and occupancy of the facility on December 9, 2024. This Board Report requests a Life of Project (LOP) budget increase for the final settlement of all Project costs, including construction support services and contractor claims. This LOP budget increase encompasses a settlement of a comprehensive claim submitted by the design/builder contractor, S.J. Amoroso Construction Company, LLC (SJA), which fully resolves all outstanding changes and claims to close out the Project.

BACKGROUND

The Metro Center Project is 99% complete, pending administrative close-out. This Project, which co-locates the Emergency Operations Center (EOC) with a Security Operations Center (SOC) to enhance Metro's security, disaster, and counter-terrorism response capabilities in support of the existing and future transit facilities, was awarded by the Board to S.J. Amoroso Construction Company, LLC in October 2020 with an LOP budget of \$130,688,310.

The existing Metro EOC had reached capacity and required expansion to accommodate the new transit lines under Measures R and M. The new EOC enhances regional transportation response efforts by improving coordination and communication with regional partners to prevent, mitigate, respond to, and recover from major incidents, hazards, or terrorist threats.

Co-locating the EOC and SOC ensures continuous safety and security support, enhanced law enforcement coordination for bus and rail incidents, and seamless operational connectivity across all transit systems.

As previously reported to the Board in April 2023, the Project faced unexpected challenges due to its location on the site of the former Aliso manufactured gas plant. This site, dating back to the late 1800s and later redeveloped for industrial and commercial use in the 1970s, still contained remnants

of the old gas plant infrastructure encountered during excavation. These discoveries led to unanticipated design modifications and the need for hazardous waste mitigation. In addition, in February 2023, a Special Review of the Project was conducted by Management Audit Services for Proposition 1B California Transit Security Grant Program funds and independent assessment of cost to complete the Project. As a result, the budget was revised, and in April 2023, the Board approved an increase of \$13,000,000, bringing the total LOP budget to \$143,688,310.

A key assumption in the Project completion estimate was a significant delay in the design of the uninterrupted power supply (UPS) system. Initially attributed as a Contractor-caused delay that was later determined to stem from conflicts within various sections of the Contract Documents.

DISCUSSION

The Project schedule impacts cited above ultimately resulted in claims of cost escalation of materials, labor costs, and conflicts with the adjacent Division 20 Portal Widening Project that could be attributed to the delay of design approvals and supply-chain restraints. The impacts of delays on some materials resulted in certain inefficiencies or temporary conditions to advance the work. A total of seven claims were submitted by the Contractor for these and other impacts from delays in third-party approvals and design conflicts in the amount of \$18 million.

The Contractor asserted that the design changes required for the abandoned infrastructure, third-party approvals, and design specification discrepancies resulted in delays. These delays were also compounded with the adjoining Division 20 Portal Widening Project due to the shared access points and adjoining work impacting site access. The Contractor also asserted that the uninterrupted power supply (UPS) system, a key component of ensuring the functionality of the Operations Centers, had discrepancies in the design criteria that were not fully evident until the design development, resulting in delays of several months. Although Metro previously categorized this as a contractor-caused delay in the estimate to complete, the Contractor subsequently demonstrated that conflicting requirements in different sections of the technical specifications were the root cause. While the Project team initially reviewed and denied the claim, the team should have maintained the potential cost as a risk item, making the cost to complete estimate accurate of all known and potential costs.

The claims were all reviewed by Metro and, through several fact-finding meetings with the Contractor, further refined for cost and schedule delays. Concurrently, the claims were internally evaluated through Independent Cost Estimates (ICE) and a Quantitative Risk Assessment (QRA) that provided a range of cost probability. Ultimately, given the complexity of the impacts, Metro and the Contractor chose to consider a total closing settlement of \$11.15 million and a declaration that all changes are resolved and closed.

Due to the settlement amount and administrative costs, the Project must increase the LOP budget in the amount of \$13 million to make the final payment and properly close out the Project.

Attachment A provides the cost allocation of the \$13.0 million in the LOP Budget Increase. Attachment B includes the funding and expenditure plan.

DETERMINATION OF SAFETY IMPACT

This Project will enhance Metro's security, disaster, and counter-terrorism response capabilities by the following:

- Creating a central location to gather and process all threats/all hazards information and disseminate critical information to Metro staff, ROC, BOC, and security/law enforcement response teams.
- Creating a uniform incident command.
- Creating a central location to coordinate with 88 partner cities, federal government, local/state/federal/private emergency service, and private sector stakeholders.
- Establishing a direct line of communication with contract and non-contract law enforcement dispatch centers.
- Reducing response and incident management timeframes for greater effectiveness and early transition back to normal operations.
- Allowing for the collocated coordination of regional events/emergencies (National SEAR level events, 7.0 earthquakes, wildfires, floods, etc.).
- Establishing a central hub for Metro employees to contact in the event of a security incident or emergency.

FINANCIAL IMPACT

If the Board approves the action, the LOP budget will be increased by \$13.0 million from \$143.7 million to \$156.7 million. The projected expenditure in FY 2025 is \$26.7 million, which can be accommodated within the FY 2025 adopted budget.

Impact to Budget

The source of funds is Proposition C 40%, which is eligible for Metro bus and rail operations. Other operating-eligible and available funding sources may be considered. The funding plan for the proposed LOP budget is included as Attachment B.

EQUITY PLATFORM

The Metro Center Project is an essential facility that supports the entire Metro Bus and Rail systems serving communities in 88 cities across Los Angeles County. The facility co-locates emergency and security operations to enhance security, disaster, and counter-terrorism response capabilities of Metro's transit and is staffed with security professionals with specialized training to improve the overall rider safety on Metro's rail and bus lines.

Since project inception, Metro has engaged the surrounding communities and incorporated their input where feasible into the project, e.g., Metro Art programs during construction, including temporary construction banners reflecting the local community and architecturally integrated public artwork on the building façade, both selected by a community-based panel. Metro closely coordinated with the adjacent communities to avoid, reduce, and mitigate impacts during construction activities. Metro Construction Relations, Art, and Project teams provided in-person updates to the Los Angeles River Artists and Business Association Land Use Committee since 2020, as well as updates to the public

through bi-monthly virtual meetings.

VEHICLE MILES TRAVELED OUTCOME

VMT and VMT per capita in Los Angeles 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.* Metro's Board-adopted VMT reduction targets align with California's statewide climate goals, including achieving carbon neutrality by 2045. To ensure continued progress, all Board items are assessed for their potential impact on VMT.

As part of these ongoing efforts, this item is expected to contribute to further reductions in VMT. While this item does not directly encourage taking transit, sharing a ride, or using active transportation, it is a vital part of Metro operations, as it co-locates emergency and security operations to support the safety of Metro's entire Bus and Rail system. Because the Metro Board has adopted an agency-wide VMT Reduction Target, and this item generally supports the overall function of the agency, this item is consistent with the goals of reducing VMT.

*Based on population estimates from the United States Census and VMT estimates from Caltrans' Highway Performance Monitoring System (HPMS) data between 2001-2019.

IMPLEMENTATION OF STRATEGIC PLAN GOALS

The Project supports Strategic Goal 2: Deliver outstanding trip experiences for all users of the transportation system. The Project will enhance Metro's ability to plan and respond to special events. The Project also supports Strategic Goal 5: Provide responsive, accountable, and trustworthy governance within the LA Metro organization. The Project is being designed and constructed in close coordination with the community and third-party stakeholders as well as internal stakeholders within Metro to streamline Metro's systems and processes for efficient operations.

ALTERNATIVES CONSIDERED

The Board may choose not to move forward with amending the LOP budget. This is not recommended as the Project cannot be closed within the current LOP budget.

NEXT STEPS

Upon approval by the Board, the LOP budget will be amended, and staff will resolve all outstanding claims and close out the Project.

ATTACHMENTS

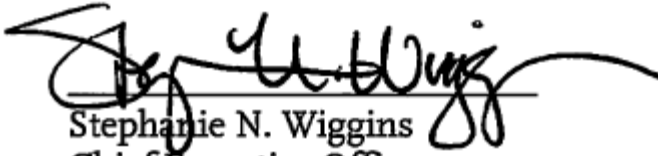
Attachment A - Projected Breakdown of Cost Allocation Funding
Attachment B - Funding and Expenditure Plan

Prepared by: Albert Soliz, Deputy Executive Officer, Project Management,
(213) 922-4002

Sameh Ghaly, Deputy Chief Program Management Officer
Robert Gummer, Deputy Chief, System Security and Law Enforcement, (213)
922-4513

Reviewed by:

Timothy Lindholm, Chief Program Management Officer,
(213) 922-7297
Kenneth Hernandez, Chief Transit Safety Officer (Interim), (213) 922-2990



Stephanie N. Wiggins
Chief Executive Officer

**METRO CENTER STREET PROJECT
 PROPOSED LOP INCREASE FEBRUARY 2025
 Projected Breakdown of Cost Allocation**

Amount		Description
\$11,150,000		<p>CONSTRUCTION</p> <ol style="list-style-type: none"> 1. Address all remaining open claims, Requests for Information (RFIs), and Change Orders (COs). 2. Complete final testing and commissioning activities. 3. Resolve punch list and project closeout items
\$1,850,000		<p>PROFESSIONAL SERVICES</p> <ol style="list-style-type: none"> 1. Metro Staff Oversight: Gateway and field office personnel providing oversight across various disciplines through project closeout. 2. Design Support During Construction (DSDC): Engineering and design support services provided by HDR. 3. Construction Support Services (CSS): Center Street Management Partners JV delivers support for Metro staff, including oversight in key construction disciplines such as field inspection, resident engineering, engineering, and other construction-related roles. 4. Metro Ops and Contingency
\$13,000,000		Total LOP Increase

Attachment B - Metro Center Project LOP Funding and Expenditure Plan

Item No.	Description	\$143.7 M LOP Budget (Apr 2023)	Expenditures		\$156.7 M Revised LOP Budget
			Actuals thru Nov 2024	Forecast thru End of FY25	
	USE OF FUNDS (\$ in Millions)				
1	Preliminary Engineering Design & Engineering Support Services	\$26.30	\$26.35	\$0.00	\$26.30
2	Contractor's Design Build Cost	\$86.00	\$89.38	\$11.15	\$97.15
3	Public Art	\$0.40	\$0.33	\$0.00	\$0.40
4	Design Support & Construction Support Consulting Services	\$14.40	\$16.08	\$0.27	\$14.67
5	Third Party/Street Vacation & Agency Staff Costs	\$8.40	\$7.87	\$0.80	\$9.20
6	Ops and Contingency	\$8.20	\$3.69	\$0.78	\$8.98
7	TOTAL PROJECT COSTS	\$143.70	\$143.69	\$13.00	\$156.70
	SOURCES OF FUNDS (\$ in Millions)				
8	Prop 1B: California Transit Security Grant Program Funds	\$81.20	\$81.20	\$0.00	\$81.20
9	Local, TDA ART 4, PROP C 5% & PROP C 40%	\$62.50	\$62.49	\$13.00	\$75.50
10	TOTAL FUNDING	\$143.70	\$143.69	\$13.00	\$156.70



Metro Center Project Close-Out

2024-1164

Construction Committee

March 19, 2025



Metro

Metro Center Project Close-Out

RECOMMENDATION:

A. Increase to the Life of Project budget in the amount of \$13,000,000 from \$143,688,310 to \$156,688,310 for the Metro Center Project to fully resolve all claims and complete the close-out of the Project.

Metro Center Project Close-Out

Project Completion: 99% Substantial Completion on August 30, 2024. Close-Out in process.

Previous LOP increase in April 2023 based on known claims, changes, and risk.

- Building UPS system claim was categorized as a Contractor caused delay.
- Considered in the audit as a credit of liquidated damages.

Contractor resubmitted claim in June 2023

- Contractor subsequently demonstrated that conflicting requirements in different sections of the technical specifications were the root cause.
- Duration of the delay was 11 months that would impact delays in plan approvals, ordering of materials; during a period of supply chain disruptions.
- Total of seven claims for \$18m
- Claims were evaluated through independent estimates, risk evaluations, and technical reviews.
- Given the complexity the timing of approval of plan sets, when materials were ordered, delays in supply chain issues, Metro and the Contractor chose to agree to a settlement of \$11.15M.

Metro Center Project Close-Out

Funding/Expenditure Plan

Item No.	Description	\$143.7 M LOP Budget (Apr 2023)	Expenditures		\$156.7 M Revised LOP Budget (Feb 2024)
			Actuals thru Nov 2024	Forecast thru End of FY25	
USE OF FUNDS (\$ in Millions)					
1	Preliminary Engineering Design & Engineering Support Services	\$26.30	\$26.35	\$0.00	\$26.30
2	Contractor's Design Build Cost	\$86.00	\$89.38	\$11.15	\$97.15
3	Public Art	\$0.40	\$0.33	\$0.00	\$0.40
4	Design Support & Construction Support Consulting Services	\$14.40	\$16.08	\$0.27	\$14.67
5	Third Party/Street Vacation & Agency Staff Costs	\$8.40	\$7.87	\$0.80	\$9.20
6	Ops and Contingency	\$8.20	\$3.69	\$0.78	\$8.98
7	TOTAL PROJECT COSTS	\$143.70	\$143.69	\$13.00	\$156.70
SOURCES OF FUNDS (\$ in Millions)					
8	Prop 1B: California Transit Security Grant Program Funds	\$81.20	\$81.20	\$0.00	\$81.20
9	Local, TDA ART 4, PROP C 5% & PROP C 40%	\$62.50	\$62.49	\$13.00	\$75.50
10	TOTAL FUNDING	\$143.70	\$143.69	\$13.00	\$156.70

The Proposed LOP includes:

- Construction settlement
- Construction Support Services
- Third-party costs
- Metro labor for admin/system integration





Board Report

File #: 2024-1073, **File Type:** Contract

Agenda Number: 12.

**CONSTRUCTION COMMITTEE
MARCH 19, 2025**

SUBJECT: ZERO EMISSION BUS (ZEB) CHARGING INFRASTRUCTURE FOR DIVISIONS 18 & 7

ACTION: APPROVE RECOMMENDATION

RECOMMENDATION

CONSIDER:

- A. FINDING that authorization of the use of alternative delivery methods, including Progressive Design Build Operate Maintain (PDBOM), pursuant to Public Utilities Code Section 130242 (b), will achieve integration of design, project works, and operations and maintenance of charging equipment in an efficient manner for ZEB Charging Infrastructure Projects at Divisions 18 & 7; and
- B. APPROVING a competitive solicitation of a PDBOM contract to achieve the proposed design approach, specific project features and functions, and other project criteria in addition to price, pursuant to Public Utilities Code 130242 (e).

(REQUIRES TWO-THIRDS VOTE OF THE FULL BOARD)

ISSUE

Pursuant to Public Utilities Code Section 130242, staff is requesting Board approval to use an alternative project delivery method prior to the release of a competitive solicitation process that employs other criteria in addition to price and includes operations and maintenance of the charging equipment within the scope for the selection of a PDBOM contractor to provide electric bus charging infrastructure at two Bus Maintenance Facilities (Division 18 located in the City of Gardena and Division 7 located in the City of West Hollywood). Upon determination of the qualified firm, staff will return to the Board with a recommended selection for approval.

BACKGROUND

In 2018, the California Air Resources Board (CARB) proposed the Innovative Clean Transit (ICT) regulation that required all transit agencies in the state to transition to all Zero Emission fleets by 2040. In addition, ICT ZEB purchase requirements for large transit agencies require 25% of bus

purchases to be zero emissions by 2023, 50% by 2026, and 100% by 2029. Metro has met all state-mandated program requirements a decade earlier than the ICT mandate of 2029. In September 2019, Metro awarded its final option for CNG buses and committed to having 100% zero emissions in all future procurements.

In 2021, Metro electrified the G Line, which has accumulated more than five million miles of zero-emission service. The electrification of the J Line is also underway, with both the Harbor Gateway Transit Center completed, and civil construction at Division 9 (El Monte) and the El Monte Transit Center underway. In April 2024, Metro released the largest solicitation for ZEBs in U.S. history, with a base order of 260 battery electric buses (BEBs) and 20 hydrogen fuel cell electric buses (FCEBs), with options to purchase up to 1,160 ZEBs. The option amounts were later increased to 1,980 ZEBs.

In April 2024, the Board approved Motion 31.1 by Directors Yaroslavsky, Bass, Krekorian, Dupont-Walker, and Solis (Attachment A), reaffirmed its commitment to transitioning Metro's bus fleet to zero emission while ensuring availability of operations and maintenance funding to support the full seven million annualized revenue service hours as planned through the NextGen Bus Plan.

In September 2024, staff prepared a more-detailed plan to deliver a 100% zero emission bus fleet no later than 2035. The plan identifies Divisions 18 & 7 as the next two bus divisions to be electrified and to be delivered through a progressive contracting approach. The project will create more than 400 electric bus charging positions between the two divisions. Staff have identified an opportunity to include operations and maintenance of the charging equipment, charge management system (CMS) and energy management systems (EMS) under the project scope and to proceed with a PDBOM alternative project delivery method.

DISCUSSION

The PDBOM approach would select a contractor under a three-phase contract. During Phase I, the contractor advances design, selects the charging equipment and operations and maintenance (O&M) provider, and executes early work packages (i.e. equipment purchase, utility upgrades, etc.). During Phase II, the contractor performs final design and construction. During Phase III, the contractor performs the activities necessary to meet performance requirements as outlined in the O&M scope of services for the charging equipment installed as part of this project.

The scope of work for the project was evaluated to determine the delivery method that is best-suited to meet Metro's needs. The anticipated scope of work includes the following features:

- Design and construction of electrical upgrades and civil infrastructure at bus Divisions 18 & 7
- Specification and procurement of charging equipment, CMS, and EMS
- Utility coordination with Southern California Edison (SCE)
- Operations and maintenance of battery electric bus (BEB) charging equipment, CMS, and EMS to performance standards required by the contract
- Development of a training program to train Metro staff on the operations and maintenance of BEB charging equipment

Staff recommends a PDBOM project delivery method to achieve project goals. A PDBOM approach will provide the following:

- Efficient risk allocation and pricing of risk of emerging technologies
- Competition and selection of a qualified contractor and single point of contact to deliver the full scope across all project phases
- Collaboration between Metro and the contractor to develop a scope of work that delivers a high-quality project throughout the design, construction, and operations and maintenance phases
- Reduced contractor risk premiums and claims over the life of the project as well as reduced probability and impact of risks that are retained by Metro
- Optimized interface management with both other Metro projects and bus service delivery
- Performance-based operations and maintenance phase that includes deductions for failure to meet performance requirements and incentives for meeting or exceeding performance requirements

The PDBOM contractor will be selected through a best value process that factors both qualifications and pricing. During the progression of the design, the contractor will provide Metro with open book detailed cost estimates that will become the basis of negotiations between Metro and the contractor. A contract will be awarded (subject to Board approval) if the final negotiated price is acceptable to Metro. If the price is not acceptable, Metro will have the option to not award a contract and release the design package as a separate solicitation.

Considerations

BEB charging equipment and charge management technologies remain emergent. While original equipment manufacturers (OEMs) continue to develop technologies and approaches to meet the needs of transit agencies transitioning to zero emission, emerging equipment, maintenance resources, and workforce have not yet fully matured. A PDBOM contracting approach will encourage OEMs to establish maintainable designs, provide robust product data and standard operating procedures, and enhance support and troubleshooting. Furthermore, by bundling the design, construction, operations, and maintenance activities under a single PDBOM contract, Metro will receive a turnkey solution that reduces Metro's exposure to technological risk. The contract would establish the PDBOM contractor as the sole entity responsible for all project phases and will ensure seamless execution of the O&M scope beginning with equipment acceptance. It will also reduce contractor interfaces (e.g. between Design Build and O&M contractors), which eliminates finger-pointing, and introduce incentives and deductions that give Metro the leverage necessary to ensure O&M performance requirements are met throughout the life of the contract. The approach also is anticipated to reduce life of project O&M costs, reduce administrative costs and Metro staff administrative level of effort, and introduce opportunities for innovation.

In the long run, a PDBOM approach will prioritize and ensure the reliability, availability, and

maintainability of the BEB charging equipment, as the contractor will be required to meet performance levels that guarantee equipment is working and available to charge buses when Metro needs it. The approach will also establish managed charging plans that ensure buses are charged sufficiently to meet service rollout while minimizing Metro's energy costs.

Metro is coordinating with ATU on the maintenance for BEB charging equipment and, per the Collective Bargaining Agreement, sent a subcontracting protocol letter informing them of project approach prior to release of the solicitation for industry review. The approach is analogous to the arrangement for compressed natural gas (CNG) fueling stations. While the contractor will be responsible for the overall performance of the BEB charging equipment, Metro ATU-represented employees will provide escort to support the activities of the contractor and perform preventative and corrective maintenance activities agreed upon by Metro and the contractor. Metro personnel will be trained by the contractor about safety and emergency procedures. The contractor will also prepare and provide a comprehensive training program for Metro personnel in anticipation of handover to Metro of all O&M activities at the end of the contract. Metro will continue to collaborate with its labor partners to prepare the workforce for and ensure a seamless transition to zero emissions.

DETERMINATION OF SAFETY IMPACT

The recommended Board action will have no detrimental safety impact.

FINANCIAL IMPACT

Approval of the recommendations will allow staff to proceed with a competitive solicitation process for a PDBOM project delivery method. Staff will plan for and use allocated fiscal year budgets to support the solicitation and early phases of the PDBOM process, until such time as an agreed upon price can be reached with the selected contractor. Metro has secured approximately \$272 million federal and state grant and fund allocations for charging equipment at these divisions. Federal sources include the Low or No Emission Grant Program, Carbon Reduction Program, Congestion Mitigation and Air Quality Program, and the Coronavirus response and Relief Supplemental Appropriations Act of 2021. State sources include the Transit and Intercity Rail Capital Program, Senate Bill 125 Zero Emission Transit Capital Program, and State Transportation Improvement Program. Upon completion of design and staff negotiations of an agreed upon price, a Life of Project (LOP) budget will be developed, and staff will seek Board approval of the recommended LOP.

Impact to Budget

The anticipated project development and program planning activities will be funded by their respective projects. The funds will be allocated to Division 18 project 802118, Division 7 project 802107. Staff continue to apply for grants and will apply other applicable funding sources as they become available.

EQUITY PLATFORM

The Zero Emission Bus (ZEB) Charging Infrastructure Projects at Divisions 18 and 7 align with LA Metro's Equity Platform by addressing key considerations related to environmental justice,

community benefits, workforce development, and improved service reliability for historically underserved populations. Transitioning Divisions 18 and 7 to zero-emission infrastructure will contribute to improved air quality in nearby communities, which have historically borne the brunt of transportation-related pollution. Both divisions are located in areas with significant populations of low-income residents and communities of color, aligning the project with Metro's commitment to reducing environmental health disparities. Incorporating clean energy solutions reduces greenhouse gas emissions and mitigates adverse climate change impacts that disproportionately affect vulnerable populations. The integration of advanced charge management and energy systems ensures buses are consistently charged and available for service. This supports the NextGen Bus Plan's goals of providing reliable and frequent service, particularly in neighborhoods where transit dependency is highest. The project expands charging capacity, enabling equitable access to zero-emission buses for all riders, ensuring that communities served by Divisions 18 and 7 benefit from improved mobility options.

The PDBOM approach emphasizes the inclusion of workforce training programs to prepare Metro staff for the operations and maintenance of BEB charging systems. This supports job creation and skill development, particularly for workers in disadvantaged communities. Metro will encourage contractors to adopt inclusive hiring practices, such as partnering with local workforce development organizations and prioritizing small, minority, and disadvantaged business enterprises (DBEs) in procurement. The project team will engage local stakeholders to develop and implement an engagement plan to mitigate construction impacts on neighboring communities. Clear communication strategies and disruption minimization plans will ensure that local residents and businesses are not disproportionately burdened during project implementation. This project exemplifies Metro's commitment to advancing equity and environmental justice by ensuring that underserved communities benefit from the transition to a zero-emission bus fleet. The proposed PDBOM delivery method supports innovation while aligning with Metro's strategic goals to enhance mobility, foster regional collaboration, and lead on sustainability. Through thoughtful planning and execution, the ZEB Charging Infrastructure Projects at Divisions 18 and 7 will deliver meaningful improvements to Metro's service and the communities it serves.

VEHICLE MILES TRAVELED OUTCOME

VMT and VMT per capita in Los Angeles 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.* Metro's Board-adopted VMT reduction targets align with California's statewide climate goals, including achieving carbon neutrality by 2045. To ensure continued progress, all Board items are assessed for their potential impact on VMT.

As part of these ongoing efforts, this item is expected to contribute to further reductions in VMT. This item supports Metro's systemwide strategy to reduce VMT through operational activities that will maintain and support transit ridership. By facilitating Metro's transition to a zero-emissions bus fleet, the PDBOM approach recommended here will support the operations and maintenance of emerging charging and vehicle technologies and ensure a high-quality customer experience both during and after this transition. Metro's Board-adopted VMT reduction targets were designed to build on the

success of existing investments, and this item aligns with those objectives.

*Based on population estimates from the United States Census and VMT estimates from Caltrans' Highway Performance Monitoring System (HPMS) data between 2001-2019.

IMPLEMENTATION OF STRATEGIC PLAN GOALS

These recommendations support Strategic Goal #1 to provide high-quality mobility options that enable people to spend less time traveling; Goal #3 to enhance communities and lives through mobility and access to opportunity; and Goal #4 to transform LA County through regional collaboration and national leadership.

ALTERNATIVES CONSIDERED

The Board may direct staff to pursue a traditional project delivery method without operations and maintenance components. This is not recommended because the party performing the O&M scope of work, whether Metro or another contractor, may not be able to take on the risk of guaranteeing charging equipment performance. It would also likely increase the cost of the O&M scope.

NEXT STEPS

Upon approval of the recommendations, staff will release a competitive solicitation to select a PDBOM contractor for the ZEB Charging Infrastructure Projects at Divisions 18 & 7. Staff will return to the Board with a recommendation to award a contract to a qualified proposer and establish a preconstruction budget for Phase I of the contract.

ATTACHMENTS

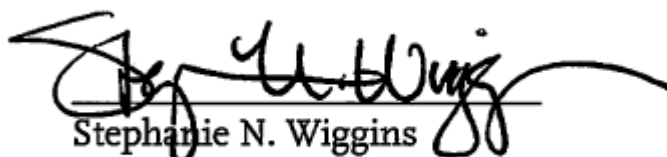
Attachment A - Zero Emission Buses Board Motion 31.1

Prepared by: Shaun Miller, Deputy Executive Officer, Project Management, (213) 922-4952

Michelle McFadden Quinn, Executive Officer, Projects Engineering (213) 922-3026

Reviewed by: Conan Cheung, Chief Operations Officer, (213) 418-3034

Timothy Lindholm, Chief Program Management Officer, (213) 922-7297



Stephanie N. Wiggins
Chief Executive Officer

Metro

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

**Board Report**

File #: 2024-0275, **File Type:** Motion / Motion Response**Agenda Number:** 31.1

REVISED
REGULAR BOARD MEETING
APRIL 25, 2024

Motion by:**DIRECTORS YAROSLAVSKY, BASS, KREKORIAN, DUPONT-WALKER, SOLIS**

Related to Item 31: Zero-Emission Bus Program Update

As transportation planner, designer, builder, and operator for the country's most populous county, Metro has an important role in the fight against climate change and in meeting global, state and local greenhouse gas reduction targets. A major part of Metro's role in fighting climate change is its Zero Emission Bus program.

The California Air Resources Board (CARB) proposed the Innovative Clean Transit (ICT) regulation in 2018 that required all transit agencies in the state to transition to all Zero Emission fleets by 2040.

In response, LA Metro has created a comprehensive Zero Emission Bus Program Master Plan which outlines the path to a complete transition to zero emission buses by 2030. The Board took action to endorse this aggressive goal, recognizing the need to act urgently against the climate crisis, improve air quality locally, and leverage Metro to advance the Zero Emissions Bus industry nationwide.

The Master Plan, updated in May 2023, builds off of the Metro CARB Innovative Clean Transit rollout plan, which evaluates service schedules, power needs, proposed technological advancements, bus production, and market conditions to determine the best path to a full fleet transition of Metro's fixed-route fleet by 2030.

According to Metro, and despite the significant progress made to date, staff is of the opinion that the Zero Emission Bus industry is evolving slower than previously anticipated and not mature enough to promote full fleet transition by the 2030 goal, particularly due to Zero Emission Bus costs, performance, and utility infrastructure.

Program challenges identified by Metro include costs, performance, grid capacity, supply chain and utilities' lead times, and market availability. As a result, according to Metro, shifting the program implementation from 2030 to no later than 2035 will help mitigate these challenges by allowing grid capacity to develop and technology to mature. There are also concerns about how attaining the 2030 goal would affect the overall Operations budget.

At the same time, the urgency of both the air quality and climate crises continue, which both disproportionately impact the health and well-being of Equity Focused Communities here locally and beyond. Additionally, Metro has substantial control to move more quickly to ensure that charging infrastructure is installed, regardless of the timing of delivery of new battery-electric buses. Changing a target of this significance cannot be undertaken lightly and must be thoroughly examined so a thoughtful public discourse can occur and solutions that can address the obstacles come forward. For these reasons, accepting a 2035 goal is premature at this time.

Metro has the responsibility to lead the region in mobile source GHG reduction - not only in its own fleet but by incentivizing Angelenos to get out of their cars and onto transit. Every dollar invested here will have a triple net benefit. Therefore, Metro should do everything in its power to strive for a 100% ZEB fleet by 2030. Each year that passes delays us in delivering the benefits of a fully zero emission fleet.

SUBJECT: ZERO EMISSION BUSES MOTION

RECOMMENDATION

APPROVE Motion by Yaroslavsky, Bass, Krekorian, Dupont-Walker, and Solis that the Board direct the Chief Executive Officer to:

- A. Report back to the September Operations Committee on a more detailed and updated plan to deliver a 100% Zero Emissions bus fleet as soon as is possible and fiscally responsible; with interim milestones and metrics for both rolling stock and electric vehicle infrastructure installation that reflect an ambitious and actionable schedule; The report back should include a timeline for the submission of relevant service requests to Southern California Edison and Los Angeles Department of Water & Power. The ZEB conversion schedule should ensure Metro's ability to continue providing reliable bus service, including availability of operations and maintenance funding to support the full 7 million annualized revenue service hours as planned through the NextGen Bus Plan.
- B. Provide quarterly reports beginning in January 2025 to the Operations Committee on progress towards accomplishing that plan, including status of grant applications;
- C. Present a list of alternative funding scenarios from what has been presented to date for zero emission bus fueling infrastructure deployment. The alternative scenarios should take into consideration all flexible capital dollars, including from Measures R and M, Propositions A and C, grants and any other revenues. The alternative scenarios should separate funding and timeline considerations between zero emission fueling infrastructure and rolling stock, focusing strictly on infrastructure deployment, and should provide the board options for moving near term funding from other capital projects to ZEB infrastructure projects where near term changes will not affect project delivery timelines for existing projects. It should also include a report back on any relevant Public Private Partnership opportunities, such as "charging as a service", or unsolicited proposals Metro has received thus far that could support lowering costs to Metro for the transition;
- D. ~~Issue a Request for Information to minimize Metro's capital outlay related to zero emission bus~~

~~procurements and infrastructure deployment;~~

- E. Develop a legislative and administrative advocacy strategy that supports increasing Metro's competitiveness in state and federal grant opportunities related to zero emission bus procurement and infrastructure deployment; and

- F. Present additional detail on the hydrogen bus procurement process including safety plans, sourcing strategies that protect public health, and justification for specific and narrow use cases where hydrogen buses are proposed to be deployed.

2024-1073 ZERO EMISSION BUS CHARGING INFRASTRUCTURE FOR DIVISION 18 AND 7



Metro®

DIVISION 18 & 7 ELECTRIFICATION



- RFP to electrify divisions through a Progressive Design Build Operate Maintain (PDBOM) contracting approach:
 - Design and construction of electrical upgrades and civil infrastructure
 - procurement of charging equipment and charge and energy management
 - Utility coordination with SCE
 - O&M of charging equipment to performance standards required by the contract
 - Development of a training program for Metro workforce on O&M of charging equipment
- Buses will be purchased in the open regional bus procurement



Division 18 located in the City of Gardena
Division 7 located in the City of West Hollywood

PROJECT GOALS



- Advance the transition of Metro's bus fleet to **100% zero emissions**
- **Minimize construction impacts** to Metro bus operations during the Project
- Establish an **operations and maintenance** regime to ensure reliable operation and availability of charging infrastructure to Metro
- Optimize bus charging **electricity costs**



Facility concept rendering from ZEB Program Master Plan (2023)

A PDBOM APPROACH WOULD OFFER



- Efficient risk allocation and pricing of risk of emerging technologies
- Competition and selection of a qualified contractor and single point of contact to deliver the full scope across all project phases
- Collaboration between Metro and the contractor to develop a scope of work that delivers a high-quality project throughout the design, construction, and operations and maintenance phases
- Reduced contractor risk premiums and claims over the life of the project as well as reduced probability and impact of risks that are retained by Metro
- Optimized interface management with both other Metro projects and bus service delivery
- Performance-based operations and maintenance phase that includes deductions for failure to meet performance requirements and incentives for meeting or exceeding performance requirements

PROGRESSIVE DESIGN BUILD, OPERATE AND MAINTAIN



PHASE 1 – PRECONSTRUCTION SERVICES | Est. January 2026 – March 2027

1. Project Administration
2. Evaluation of charging equipment and charge management system
3. Design development (30%, 60%, 85%)
4. Opinions of Probable Cost at Design Intervals
5. Utility coordination with Southern California Edison (SCE)

PHASE 2 – FINAL DESIGN & CONSTRUCTION | Est. April 2027 – May 2028

1. Final Design and Construction
2. Long Lead Item Procurement – will commence after Step 2 in Phase 1 above

PHASE 3 – EV CHARGING OPERATIONS AND MAINTENANCE | June 2028

1. 6 Year Base
2. 3 One-Year Options

RECOMMENDATION



1. **CONSIDER** finding that authorization of the use of alternative delivery methods, including Progressive Design Build Operate Maintain (PDBOM), pursuant to Public Utilities Code Section 130242 (b), will achieve integration of design, project works, and operations and maintenance of charging equipment in an efficient manner for ZEB Charging Infrastructure Projects at Divisions 18 & 7.
2. **APPROVE** a competitive solicitation of a PDBOM contract to achieve the proposed design approach, specific project features and functions, and other project criteria in addition to price, pursuant to Public Utilities Code 130242 (e).



Board Report

File #: 2025-0043, File Type: Policy

Agenda Number: 14.

FINANCE, BUDGET AND AUDIT COMMITTEE MARCH 20, 2025

SUBJECT: INVESTMENT POLICY

ACTION: APPROVE RECOMMENDATION

RECOMMENDATION

CONSIDER:

- A. ADOPTING the Investment Policy in Attachment A;
- B. APPROVING the Financial Institutions Resolution authorizing financial institutions to honor signatures of LACMTA's Officials in Attachment B; and
- C. DELEGATING to the Treasurer or their designees, the authority to invest funds for a one-year period, pursuant to California Government Code ("Code") Section 53607.

ISSUE

Section 53646 of the Code requires the Board, on an annual basis, to review and approve the Investment Policy at a public meeting. Section 53607 of the Code requires the Board to delegate investment authority to the Treasurer on an annual basis. In addition, Section 10.8 of the Investment Policy requires the Treasurer to submit the Financial Institutions Resolutions to the Board annually for approval.

BACKGROUND

Metro's Investment Policy allows for operating funds to be invested consistent with Board approved investment policy guidelines. The primary objectives of the Investment Policy, in priority order, are to maintain the safety of principal, to provide liquidity, and to achieve a return on funds invested. The Investment Policy, which was last updated on March 28, 2024, is updated annually to incorporate changes deemed necessary to meet Metro's primary objectives and to ensure it aligns with any changes in the California Government Code.

DISCUSSION

Changes to the Investment Policy have been made to be consistent with the California Government

Code, limit the number of nationally recognized statistical rating organizations to three, permit floating rate securities (limited to 10 percent maximum of total portfolio), and to add a new section in areas related to Environmental, Social, and Governance to promote potential investment opportunities in entities or projects that support diversity, equity, community development, and sustainability. A redlined version of the Investment Policy changes is presented as Attachment A.

In addition, financial institutions require the Board to approve the Financial Institutions Resolution in order to establish custody, trustee, and commercial bank accounts. The Financial Institutions Resolution is unchanged from the 2024 adopted resolution and is presented as Attachment B

To streamline this board report, the following reference materials may be found on the Internet:

- **Current Investment Policy:** <http://www.metro.net/about/financebudget/<https://gcc02.safelinks.protection.outlook.com/?url=http%3A%2F%2Fwww.metro.net%2Fabout/financebudget/>>
- **California Government Code:** https://leginfo.legislature.ca.gov/faces/codes_displayText.xhtml?<https://leginfo.legislature.ca.gov/faces/codes_displayText.xhtml?>

DETERMINATION OF SAFETY IMPACT

This Board Action will not have an impact on safety standards for Metro operations.

FINANCIAL IMPACT

The funds required to update the Investment Policy are included in the FY25 budget in cost center 5210 and project number 100002, 300076 and 610340 in the amount of \$2,565,600.00.

Impact to Budget

The sources of funds budgeted to manage assets in accordance with the Investment Policy are Proposition A, Proposition C, Measure R, Measure M and TDA administration funds. These administrative funds are not eligible for bus and rail operating and capital expenses.

EQUITY PLATFORM

The proposed Investment Policy incorporates a new Environmental, Social and Governance (ESG) section which encourages potential investment opportunities in entities that support community development, sustainability, labor fairness, and equality of rights regardless of sex, race, age, disability or sexual orientation. The Treasury staff will continue to refine the ESG section with guidelines aimed at promoting investments that support community well-being and environmental sustainability through demonstrated ESG policies.

VEHICLE MILES TRAVELED OUTCOME

Vehicles Miles Traveled (VMT) and VMT per capita in Los Angeles 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.* Metro's Board-adopted VMT reduction targets align with California's statewide climate goals, including achieving carbon neutrality by 2045. To ensure continued progress, all Board items are assessed for their potential impact on VMT.

While this item does not directly encourage taking transit, sharing a ride, or using active transportation, it is a vital part of Metro operations, as it creates a transparent policy for how excess operating funds can be invested. Because the Board has adopted an agency-wide VMT Reduction Target, and this item generally supports the overall function of the agency, this item is consistent with the goals of reducing VMT.

*Based on population estimates from the United States Census and VMT estimates from Caltrans' Highway Performance Monitoring System (HPMS) data between 2001-2019

IMPLEMENTATION OF STRATEGIC PLAN GOALS

The recommendation supports Metro Vision 2028 Strategic Plan Goal 5 as follows:

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

Goal 5.2: Metro will exercise good public policy judgment and sound fiscal stewardship.

ALTERNATIVES CONSIDERED

The Investment Policy and California Government Code requires an annual review and adoption of the Investment Policy, delegation of investment authority, and approval of the Financial Institutions Resolution. Should the Board elect not to delegate investment authority to the Treasurer or their designee, or approve the Investment Policy and Financial Institutions Resolution, the Board would assume responsibility for investing working capital funds on a daily basis and for the approval of routine administrative actions.

NEXT STEPS

Upon Board approval, Metro's Treasury staff shall distribute the Investment Policy to external investment managers and broker-dealers. The Investment Policy and Financial Institutions Resolution will be issued to financial institutions with whom Metro engages.

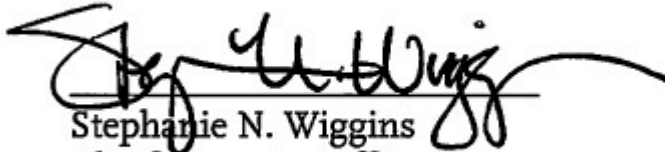
ATTACHMENTS

Attachment A - Investment Policy-Redline

Attachment B - Financial Institutions Resolution

Prepared by: Robert Suh, Principal Financial Analyst (213) 922-4102
Jin Yan, Assistant Treasurer (213) 922-2127
Rodney Johnson, Treasurer, (213) 922-3417

Reviewed by: Nalini Ahuja, Chief Financial Officer, (213) 922-3088



Stephanie N. Wiggins
Chief Executive Officer

ATTACHMENT A

Los Angeles County Metropolitan Transportation Authority

INVESTMENT POLICY

Approved on March 27⁸, 2025⁴

INVESTMENT POLICY

TABLE OF CONTENTS

<u>Section #</u>	<u>Section Description</u>	<u>Page #</u>
1.0	Policy	3
2.0	Scope	3
3.0	Investment Objectives	3
4.0	Delegation of Authority	4
5.0	Permitted Investments	4
6.0	Selection of Depository Institutions, Investment Managers and Broker-Dealers	6
7.0	Custody and Safekeeping	8
8.0	Reports and Communications	8
9.0	Portfolio Guidelines	9
10.0	Internal Control	9
11.0	Purchasing Guidelines	10
12.0	Benchmarks	10
13.0	Environmental, Social, and Governance (ESG) Considerations	11
Section 5.1A	Statement of Investment Policy including footnotes	12
Appendix A	Certification of Understanding	16
Appendix B	Broker-Dealer Receipt of Investment Policy	17
Appendix C	Broker-Dealer Questionnaire	18
Appendix D	Glossary	20

1.0 Policy

It is the policy of the Los Angeles County Metropolitan Transportation Authority (LACMTA) to ensure that the temporarily idle funds of the agency are prudently invested to preserve capital and provide necessary liquidity, while maximizing earnings, and conforming to state and local statutes governing the investment of public funds.

This investment policy conforms to the California Government Code ("Code") as well as to customary standards of prudent investment management. Investments may only be made as authorized by the Code, Section 53600 et seq., Sections 16429.1 through 16429.4 and this investment policy. Should the provisions of the Code become more restrictive than those contained herein, such provisions will be considered as immediately incorporated in this investment policy. Changes to the Code that are less restrictive than this investment policy may be adopted by the Board of Directors (Board).

2.0 Scope

- 2.1 This investment policy sets forth the guidelines for the investment of surplus General, Special Revenue, Capital Projects, Enterprise (excluding cash and investments with fiscal agents), Internal Service, and any new fund created by the Board, unless specifically exempted. Excluded from this investment policy are guidelines for the investment of proceeds related to debt financing, defeased lease transactions, Agency (Deferred Compensation, 401K, and Benefit Assessment District), Other Post Employment Benefit ("OPEB") Trust funds and Pension Trust Funds.
- 2.2 Internal and external portfolio managers may be governed by Portfolio Guidelines that may on an individual basis differ from the total fund guidelines outlined herein. The Treasurer is responsible for monitoring and ensuring that the total funds subject to this investment policy remain in compliance with this investment policy, and shall report to the Board regularly on compliance.

3.0 Investment Objectives

- 3.1 The primary objectives, in priority order, of investment activities shall be:
 - A. Safety: Safety of principal is the foremost objective of the investment program. The investments shall be undertaken in a manner that seeks to ensure the preservation of capital in the overall portfolio. ~~The~~ LACMTA shall seek to ensure that capital losses are avoided whether from institutional default, broker-dealer default, or erosion of market value. Diversification is required in order that potential losses on individual securities do not exceed the income generated from the remainder of the portfolio.
 - B. Liquidity: The investment portfolio will remain sufficiently liquid to meet all operating requirements that might be reasonably anticipated.
 - C. Return on Investments: ~~The~~ LACMTA shall manage its funds to maximize the return on investments consistent with the two objectives above, with the goal of exceeding the performance benchmarks (Section 12.0) over a market cycle (typically a three to five year period).

- 3.2 It is policy to hold investments to maturity. However, a security may be sold prior to its maturity and a capital gain or loss recorded if liquidity needs arise, or in order to improve the quality, or rate of return of the portfolio in response to market conditions and/or LACMTA risk preferences.

Internal and external investment managers shall report such losses to the Treasurer and Chief Financial Officer immediately.

- 3.3 When investing, reinvesting, purchasing, acquiring, exchanging, selling, or managing LACMTA funds, a trustee shall act with care, skill, prudence, and diligence under the circumstances then prevailing, including, but not limited to, the general economic conditions and the anticipated needs of the agency, that a prudent investor acting in a like capacity and familiarity with those matters would use in the conduct of funds of a like character and with like aims, to safeguard the principal and maintain the liquidity needs of the agency. Within the limitations of this section and considering individual investments as part of an overall strategy, investments may be acquired as authorized by law.
- 3.4 The standard of prudence to be used by investment officials shall be the "prudent investor" standard and shall be applied in the context of managing an overall portfolio. Investment officers acting in accordance with this investment policy, written portfolio guidelines and procedures and exercising due diligence shall be relieved of personal responsibility for an individual security's credit risk or market price changes, provided deviations from expectations are reported in the quarterly investment report to the Board, and appropriate action is taken to control adverse developments.

4.0 Delegation of Authority

- 4.1 The Board shall be the trustee of funds received by the LACMTA. In accordance with Code Section 53607, the Board hereby delegates the authority to invest or reinvest the funds, to sell or exchange securities so purchased and to deposit securities for safekeeping to the Treasurer for a one year period, who thereafter assumes full responsibility for such transactions and shall make a monthly report of those transactions to the Board. Subject to review by the Board, the Board may renew the delegation of authority each year.
- 4.2 The Treasurer shall establish written procedures for the operation of the investment program consistent with this investment policy, including establishment of appropriate written agreements with financial institutions. Such procedures shall include explicit delegation of authority to persons responsible for investment transactions. The Treasurer may engage independent investment managers to assist in the investment of its financial assets.
- 4.3 No person may engage in an investment transaction except as provided under the terms of this investment policy and the procedures established by the Treasurer.
- 4.4 Officers and employees involved in the investment process shall be governed by the standards regarding ethical behavior and conflicts of interest established in the Los Angeles County Metropolitan Transportation Authority Ethics Policy and annually shall file a Statement of Economic Disclosure with the Ethics Office.

5.0 Permitted Investments

5.1 All funds which are not required for immediate cash expenditures shall be invested in income producing investments or accounts, in conformance with the provisions and restrictions of this investment policy as defined in Section 5.1A and as specifically authorized by the Code, (Sections 53600, et seq.). Securities held by ~~the~~ LACMTA's custodial bank must be in compliance with Section 5.0 Permitted Investments at the time of purchase.

5.2 In order to reduce overall portfolio risk, investments shall be diversified among security type, maturity, issuer and depository institutions. See Section 5.1A for specific concentration limits by type of investment.

A. Percentage limitations where listed are only applicable at the date of purchase.

B. In calculating per issuer concentration limits commercial paper, bankers' acceptances, medium term notes, asset-backed securities, placement service assisted deposits, and negotiable certificates of deposit shall be included; deposits collateralized per Section 7.3 of this investment policy are excluded from this calculation.

C. Credit requirements listed in this investment policy indicate the minimum credit rating ~~or~~ its equivalent by ~~any~~ any of the following nationally recognized statistical rating organization ("NRSRO"): S&P Global, Moody's Analytics, and Fitch Ratings) required at the time of purchase without regard to modifiers (e.g., +/- or 1,2,3), if any.

5.3 Maturities of individual investments shall be diversified to meet the following objectives:

A. Investment maturities will be first and foremost determined by anticipated cash flow requirements.

B. Where this investment policy does not state a maximum maturity in Section 5.1A, no investment instrument shall be purchased which has a stated maturity of more than five years from the date of settlement, unless the instrument is specifically approved by the Board or is approved by the Board as part of an investment program and such approval must be granted no less than three months prior to the investment. The Board hereby grants express authority for the purchase of new issue securities with a 5 year stated maturity with extended settlement of up to 45 days from date of purchase.

C. The average duration of the externally managed funds subject to this investment policy shall not exceed 150% of the benchmark duration. The weighted average duration of the internal portfolios shall not exceed three (3) years.

~~5.4~~ 5.4 — State and local government sponsored ~~ij~~ investment ~~p~~ools and money market mutual funds as authorized by this investment policy are subject to due diligence review prior to investing and on a continual basis as established in Section 5.1A, #11 and #12.

~~5.5~~ 5.5 Floating Rate Notes ("FRNs") for U.S. Treasury, Federal Agency, Supranational and Medium-term notes issued by corporations as described in Section 5.1A are permissible provided that the total outstanding par value of FRNs does not exceed 10% of the total portfolio value.

~~5.6~~ 5.6 Securities which have a fixed-to-float rate structure are permissible and will be deemed as FRNs only upon conversion to floating rate mode.

Commented [RS1]: Justification: There are 10 agencies registered with the SEC as NRSROs. The revisions were made to limit the NRSRO's to 3 agencies that are most recognized and utilized by the financial industry.

Commented [RS2]: Justification: (FRNs) can reduce overall risk and potentially improve returns as variable coupon payments adjust upwards when market interest rates increase, effectively mitigating the negative impact on fixed income investments in a rising rate environment.

5.75 This investment policy specifically prohibits the investment of any funds subject to this investment policy in the following securities:

A. Derivative securities, defined as any security that derives its value from an underlying instrument, index, or formula, are prohibited. The derivative universe includes, but is not limited to, structured and range notes, securities that could result in zero interest accrual if held to maturity, ~~variable rate, floating rate or~~ inverse floating rate investments, financial futures and options, and mortgage derived interest or principal only strips. Callable or putable securities with no other option features, securities with one interest rate step-up feature, and inflation indexed securities including Treasury Inflation-Protected Securities meeting all other requirements of this investment policy are excluded from this prohibition, as are fixed rate mortgage-backed securities and asset-backed securities.

~~A.~~

B. Reverse repurchase agreements and securities lending agreements.

~~C. Securities of fossil fuel companies, tobacco or tobacco related companies, and companies in support of the production of weapons, military systems, or nuclear power.~~

Commented [RS3]: Justification: The language was struck from this section and incorporated in Section 13 ESG (page 11) of the investment policy.

6.0 Selection of Depository Institutions, Investment Managers and Broker-Dealers

6.1 To minimize the risk to the overall cash and investment portfolio, prudence and due diligence as outlined below shall be exercised with respect to the selection of Financial Institutions in which funds are deposited or invested.

- A. In selecting Depositories pursuant to Code Sections 53630 (et seq.), the credit worthiness, financial stability, and financial history of the institution, as well as the cost and scope of services and interest rates offered shall be considered. No funds will be deposited in an institution unless that institution has an overall rating of not less than "satisfactory" in its most recent evaluation by the appropriate federal financial supervisory agency. The main depository institutions will be selected on a periodic and timely basis.
- B. Deposits which are insured pursuant to federal law by the Federal Deposit Insurance Corporation (FDIC), or the National Credit Union Administration (NCUA) may be excluded from the collateralization requirements of Section 7.3 of this investment policy, at the Treasurer's discretion. A written waiver of securitization shall be executed, provided to the Depository Institution, and kept on file in the Treasury Department.
- C. The Treasurer shall seek opportunities to deposit funds with disadvantaged business enterprises, provided that those institutions have met the requirements for safety and reliability and provide terms that are competitive with other institutions.

6.2 In selecting external investment managers and brokers, past performance, stability, financial strength, reputation, area of expertise, and willingness and ability to provide the highest investment return at the lowest cost within the parameters of this investment policy and the Code shall be considered. External investment managers must be registered with the Securities and Exchange Commission (SEC) under the Investment Advisor Act of 1940.

- 6.3 Pursuant to Code Section 53601.5, the LACMTA and its investment managers shall only purchase statutorily authorized investments either from the issuer, from a broker-dealer licensed by the state, as defined in Section 25004 of the Corporations Code, from a member of a federally regulated securities exchange, a national or state-chartered bank, a federal or state association (as defined by Section 5102 of the Financial Code), or from a brokerage firm designated as a primary government dealer by the Federal Reserve Bank.
- A. Internal investment manager will only purchase or sell securities from broker-dealers that are Primary Dealers in U.S. Government Securities or are a direct affiliate of a Primary Dealer. Internal investment manager will only purchase securities from broker-dealers who have returned a signed Receipt of Investment Policy and completed the Broker-Dealer Questionnaire, and have been approved by the Treasurer (see Appendices B and C). A current copy of the Broker-Dealer's financial statements will be kept on file in the Treasury Department. ~~Should market conditions limit access to inventory, the~~ Treasurer may also approve executing transactions through non-Primary Dealers who meet all of the criteria listed below:
- a. The broker dealer must qualify under Securities Exchange Commission rule 15C3-1 (Uniform Net Capital Rule);
 - b. Must be licensed by the state as a broker/dealer as defined in Section 25004 of the Corporations Code or a member of a federally registered securities exchange (i.e. FINRA, SEC, MSRB);
 - c. Have been in operation for more than five years; and
 - d. Have a minimum annual trading volume of \$100 billion in money market instruments or \$500 billion in U.S. Treasuries and Agencies.
- B. In addition to Primary Dealers in U.S. Government Securities and direct affiliates of a Primary Dealer, external investment managers may purchase or sell securities from non-Primary Dealers qualified under U.S. Securities and Exchange Commission Rule 15C3-1, the Uniform Net Capital Rule, and provided that the dealer is a member of the Financial Industry Regulatory Authority. External investment managers shall submit, at least quarterly, a list of the non-Primary Dealers used during the period.
- C. External investment managers must certify in writing that they will purchase securities in compliance with this investment policy, LACMTA Procedures, and applicable State and Federal laws.
- 6.4 Financial institutions and external investment managers conducting investment transactions with or for LACMTA shall sign a Certification of Understanding. The Certification of Understanding (see Appendix A) states that the entity:

- A. Has read and is familiar with the Investment Policy and Guidelines as well as applicable Federal and State Law;
- B. Meets the requirements as outlined in this investment policy;
- C. Agrees to make every reasonable effort to protect the assets from loss;
- D. Agrees to notify the LACMTA in writing of any potential conflicts of interest.

Commented [RS4]: Justification: The language was revised so that LACMTA can provide smaller firms including regional firms and DVBE with an opportunity to provide broker dealer services to LCAMTA.

Completed certifications shall be filed in the Treasurer's Office. Failure to submit a Certification of Understanding shall result in the withdrawal of all funds held by that financial institution, or investment manager and/or the rescission of any and all authority to act as an agent to purchase or invest funds.

6.5 All broker-dealers who do business with the LACMTA's internal investment managers shall sign a Receipt of Investment Policy. The Receipt of Investment Policy (see Appendix B) states that the broker dealer ~~has received and read the investment policy.~~

~~A. Has received, read, and understands this investment policy;~~

~~B. Has communicated the requirements of this investment policy to all personnel who may select investment opportunities for presentation.~~

Failure to submit a Receipt of Investment Policy shall preclude the LACMTA from purchasing or selling securities from such broker-dealer. Completed receipts shall be filed in the Treasurer's Office.

7.0 Custody and Safekeeping of Securities and LACMTA Funds

7.1 A Master Repurchase Agreement must be signed with the bank or dealer before any securities and collateral for repurchase agreements shall be purchased and maintained for the benefit of the LACMTA in the Trust Department or safekeeping department of a bank as established by a written third party safekeeping agreement between the LACMTA and the bank. Specific collateralization levels are defined in Section 5.1A.

7.2 All investment transactions shall be settled "delivery vs. payment", with the exception of deposits, money market mutual fund investments, and Local Agency Investment Fund or other Local Government Investment Pools. Delivery may be physical, via a nationally recognized securities depository such as the Depository Trust Company, or through the Federal Reserve Book Entry system.

7.3 Funds deposited shall be secured by a Depository in compliance with the requirements of Code Section 53652. Such collateralization shall be designated and agreed to in writing.

8.0 Reports and Communications

8.1 The Treasurer is responsible for ensuring compliance with all applicable Local, State, and Federal laws governing the reporting of investments made with public funds. All investment portfolios will be monitored for compliance. Non-compliance issues will be included in the quarterly Board report as stated in Section 8.3 of this investment policy.

8.2 The Treasurer shall annually submit a statement of investment policy to the Board for approval. The existing approved investment policy will remain in effect until the Board approves the recommended statement of investment policy.

8.3 The Treasurer shall render a quarterly cash, investment, and transaction report to the CEO and Board, and quarterly to the Internal Auditor within 45 days following the end of the quarter covered by the report. The report shall include a description of LACMTA's funds, investments, or programs that are under the management of contracted parties, including lending programs. The report shall include as a minimum:

Commented [RS5]: Justification: The language was struck because broker-dealers do not select any investments for LACMTA. Instead the orders are directed by LACMTA Treasury staff.

- A. Portfolio Holdings by Type of Investment and Issuer
 - B. Maturity Schedule and Weighted Average Maturity (at market)
 - C. Weighted Average Yield to Maturity
 - D. Return on Investments versus Performance Benchmarks on a quarterly basis
 - E. Par, Book and Market Value of Portfolio for current and prior quarter-end
 - F. Percentage of the portfolio represented by each investment category
 - G. Total Interest Earned
 - H. Total Interest Received
 - I. A statement of compliance with this investment policy, or notations of non-compliance.
 - J. At each calendar quarter-end a subsidiary ledger of investments will be submitted with the exception listed in 8.3K.
 - K. For investments that have been placed in the Local Agency Investment Fund, in Federal Deposit Insurance Corporation-insured accounts in a bank or savings and loan association, in National Credit Union Administration insured accounts in a credit union, in a county investment pool, or in shares of beneficial interest issued by a diversified management company that invest in the securities and obligations as authorized by this investment policy and the Code, the most recent statement received from these institutions may be used in lieu of the information required in 8.3 J.
 - L. At each calendar quarter-end the report shall include a statement of the ability to meet expenditure requirements for the next six months.
 - M. A quarterly gain or loss report on the sale or disposition of securities in the portfolio.
- 8.4 Internal and external investment managers shall monitor investments and market conditions and report on a regular and timely basis to the Treasurer.
- A. Internal and external investment managers shall submit monthly reports to the Treasurer, such reports to include all of the information referenced in Section 8.3, items A-J of this investment policy. Portfolios shall be marked-to-market monthly and the comparison between historical cost (or book value) and market value shall be reported as part of this monthly report.
 - B. Internal and external investment managers shall monitor the ratings of all investments in their portfolios on a continuous basis and report all credit downgrades of portfolio securities to the Treasurer in writing within 24 hours of the event. If an existing investment's rating drops below the minimum allowed for new investments made pursuant to this investment policy, the investment manager shall also make a written recommendation to the Treasurer as to whether this security should be held or sold.
 - C. External and internal investment managers shall immediately inform the Treasurer, or the Chief Financial Officer in writing of any major adverse market condition changes and/or major

portfolio changes. The Chief Financial Officer or the Treasurer shall immediately inform the Board in writing of any such changes.

D. External investment managers shall notify ~~the~~ LACMTA internal managers daily of all trades promptly, ~~via fax or~~ via email.

E. Internal investment managers will maintain a file of all trades.

9.0 Portfolio Guidelines

Portfolio Guidelines are the operating procedures used to implement this investment policy approved by the Board. The Treasurer may impose additional requirements or constraints within the parameters set by this investment policy.

10.0 Internal Control

- 10.1 The Treasurer shall establish a system of internal controls designed to prevent losses of public funds arising from fraud, employee or third party error, misrepresentation of third parties, unanticipated changes in financial markets, or imprudent actions by employees or agents. Such internal controls shall be approved by the Chief Financial Officer and shall include authorizations and procedures for investment transactions, custody/safekeeping transactions, opening and dosing accounts, wire transfers, and clearly delineate reporting responsibilities.
- 10.2 Treasury personnel and LACMTA officials with signature authority shall be bonded to protect against possible embezzlement and malfeasance, or at the option of the governing board self-insured.
- 10.3 Electronic transfer of funds shall be executed upon the authorization of two official signatories.
- 10.4 Transaction authority shall be separated from accounting and record keeping responsibilities.
- 10.5 All investment accounts shall be reconciled monthly with custodian reports and broker confirmations by a party that is independent of the investment management function. Discrepancies shall be brought to the attention of the investment manager, the Treasurer and Deputy Executive Officer, Finance in the Treasury Department, the Controller, and if not resolved promptly, to the Chief Financial Officer.
- 10.6 The Treasurer shall establish an annual process of independent review by an external auditor. This review will provide independent confirmation of compliance with policies and procedures.
- 10.7 The Treasurer is responsible for the preparation of the cash flow model. The cash flow model shall be updated monthly based upon the actual and projected cash flow.

Annually, the Treasurer shall notify the external investment managers of the cash flow requirements for the next twelve months. The Treasurer shall monitor actual to maximum maturities within the parameters of this investment policy.

- 10.8 The Treasurer shall annually submit the Financial Institutions Resolution to the Board for approval. The existing resolution will remain in effect until the Board approves the recommended resolution.

11.0 Purchasing Guidelines

- 11.1 Investment managers shall purchase and sell securities at the price and execution that is most beneficial to the LACMTA. The liquidity requirements shall be analyzed and an interest rate analysis shall be conducted to determine the optimal investment maturities prior to requesting bids or offers. Investments shall be purchased and sold through a competitive bid/offer process. Bids/offers for securities of comparable maturity, credit and liquidity shall be received from at least three financial institutions, if possible.
- 11.2 Such competitive bids/offers shall be documented on the investment managers' trade documentation. Supporting documentation from the Wall Street Journal, Bloomberg or other financial information system shall be filed with the trade documentation as evidence of general market prices when the purchase or sale was effected.

12.0 Benchmarks

Internal and external investment managers' performance shall be evaluated against the following agreed upon benchmarks. If the investment manager does not meet its benchmark over a market cycle (3 to 5 years), the Treasurer shall determine and set forth in writing reasons why it is in the best interests of the LACMTA to replace or retain the investment manager.

Portfolio External Intermediate Duration Portfolios	Investment Benchmarks ICE Bank of America/Merrill Lynch AAA-A 1-5 <u>Y</u> year Government & Corporate Index (BV10)
External Short Duration Portfolios	ICE BofA <u>O</u> ne- <u>Y</u> ear US. Treasury Bill Index (GC03)
Internal Short Duration Portfolios	Three <u>M</u> month Treasury

13.0 Environmental, Social, and Governance (ESG) Considerations

While Safety, Liquidity and Return on Investments remain LACMTA's primary objectives, LACMTA encourages investments in entities that support community development, sustainability, labor fairness, and equality of rights regardless of sex, race, age, disability or sexual orientation. Additionally, LACMTA will not purchase securities of fossil fuel companies, tobacco or tobacco-related companies, and companies in support of the production of weapons, military systems, or nuclear power.

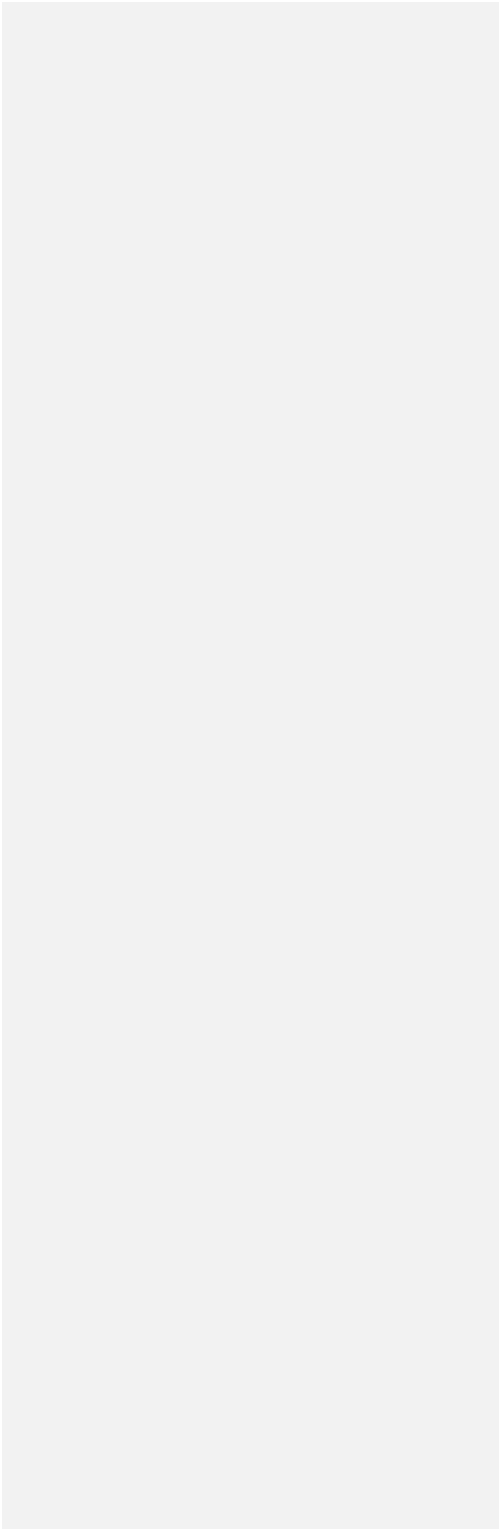
Commented [RS6]: Justification: The ESG section was included to promote potential investment opportunities that consider environmental, social and governance issues. The range of opportunities listed were intended to be broad as specificity may deter LACMTA and investment managers from meeting LACMTA's primary investment objectives.

**Los Angeles County Metropolitan Transportation Authority
Section 5.1A
Statement of Investment Policy ^a**

* The percentage of portfolio authorized is based on market value.

Investment Type	Maximum Maturity	Maximum Allowable Percentage of Portfolio *	Minimum Quality and Other Requirements
Bonds Issued by the LACMTA	5 years ^b	100%	None
U.S. Treasury notes, bonds, bills or certificates of indebtedness or those for which the full faith and credit of the United States are pledged for payment of principal and interest	5 years ^b	100%	None
Registered state warrants or treasury notes or bonds of the other 49 states in addition to California.	5 years ^b	25%	Such obligations must be rated “A-1” or its equivalent or better short term; or “AA” or its equivalent or better long term, by a nationally recognized statistical rating organization NRSRO
Bonds, notes, warrants, or other evidences of indebtedness of any local agency within the State of California	5 years ^b	25%	Such obligations must be rated “A-1” or its equivalent or better short term; or “AA” or its equivalent or better long term, by a nationally recognized statistical rating organization NRSRO
Federal Agency or United States government-sponsored enterprise obligations, participations, or other instruments, including those issued by or fully guaranteed as to principal and interest by federal agencies or United States government –sponsored enterprises	5 years ^b	100%	None
Bills of exchanges or time drafts drawn on and accepted by a commercial bank, otherwise known as bankers’ acceptances	180 days	40% ^c	The issuer’s short-term debt must have the highest letter and numerical rating as provided for by a nationally recognized statistical rating organization NRSRO
Commercial paper or “prime” quality of the highest ranking or of the highest letter and numerical rating as provided for by a nationally recognized statistical rating organization NRSRO	270 days	40% ^d	See Footnote e
Negotiable certificates of deposits issued by a nationally or state-chartered bank or a state or federal savings and loan association, a state or federal credit union, or by a state licensed	5 years ^b	30% ^c	See Footnote f

branch of a foreign bank, or a federally licensed branch of a foreign bank.			
---	--	--	--



Placement Service Assisted Deposits	5 years b	30% c	See Footnote g
Investments in repurchase agreements	90 days	20%	Limited to no more than 90 days. See Footnote h
United States dollar denominated senior unsecured unsubordinated obligations issued or unconditionally guaranteed by the International Bank for Reconstruction and Development, International Finance Corporation or Inter-American Development Bank.	5 years b	30% c	Maximum remaining maturity of five years or less, and eligible for purchase and sale within the United States. Investments shall be rated "AA" <u>or its equivalent</u> or better by a <u>nationally recognized statistical rating organization</u> NRSRO and shall not exceed 30% of the portfolio.
Medium-term notes issued by corporations organized and operating within the United States, or by depository institutions licensed by the United States or any state and operating within the United States	5 years b	30% d	Must be rated "A" <u>or its equivalent</u> or better by a <u>nationally recognized statistical rating organization</u> NRSRO . If rated by more than one rating agency, both ratings must meet the minimum credit standards.
Shares of beneficial interest issued by diversified management companies that are money market funds registered with the Securities and Exchange Commission, as authorized by Code Section 53601	Not applicable	20% c	See Footnote i
State of California Local Agency Investment fund (LAIF) Code Section 16429.1 through 16429.4 or other Local Government Investment Pool (LGIP) established by public California entities pursuant to Section 53684	Not applicable	Set by LAIF and LGIP	See Footnote j
Asset-backed Securities	5 years b	20% combined with mortgage-backed securities	See Footnote k
Mortgage-backed Securities	5 years b	20% combined with asset-backed securities	See Footnote l

Formatted: Indent: Left: 0"

**Los Angeles County Metropolitan Transportation Authority
Statement of Investment Policy**

Footnotes for Section 5.1A Statement of Investment Policy	
a	Sources: California Government Code Sections 16429.1, 53601, 53601.8, 53635 and 53638
b	Maximum maturity of five (5) years unless a longer maturity is approved by Board of Directors, either specifically or as part of an investment program, at least three (3) months prior to the settlement. New issue securities with a stated 5 year maturity can be purchased in the primary market with extended settlements of up to 45 days from the date of settlement.
c	Limited to no more than 10% of the portfolio in any one issuer (i.e. bankers' acceptances, negotiable certificates of deposit, and money market funds)
d	-Limited to no more than 10% of the portfolio in the commercial paper and the medium-term notes of any one issuer.
e	<p>-Commercial paper of "prime" quality of the highest ranking or of the highest letter and number rating as provided for by a nationally recognized statistical rating organizationNRSRO. The entity that issues the commercial paper shall meet all of the following conditions in either paragraph (1) or (2):</p> <p>(1) The entity meets the following criteria: Is organized and operating in the United States as a general corporation; Has total assets in excess of five hundred million dollars (\$500,000,000); Has debt other than commercial paper, if any, that is rated in a rating category of "A" or its equivalent or higher by a nationally recognized statistical rating organizationNRSRO.</p> <p>(2) The entity meets the following criteria: Is organized within the United States as a special purpose corporation, trust, or limited liability company; Has program-wide credit enhancements including, but not limited to, overcollateralization, letters of credit, or a surety bond; Has commercial paper that is rated "A-1" or higher, or the equivalent, by a nationally recognized statistical rating organizationNRSRO.</p>
f	The legislative body of the local agency, the treasurer or other official of the local agency having custody of the money are prohibited from investing in negotiable certificates of deposit of a state or federal credit union if a member of the legislative body or any other specified city officer or employee also serves on the board of directors or certain committees of that credit union
g	Investments in placement services assisted deposits is authorized under Sections 53601.8, 53635.8, and 53601 (i) of the California Government Code.
h	Repurchase agreements shall be executed through Primary Broker-Dealers. The repurchase agreement must be covered by a master repurchase agreement. Repurchase agreements shall be collateralized at all times. Collateral shall be limited to obligations of the United States and Federal Agencies with an initial margin of at least 102% of the value of the investment, and shall be in compliance if brought back up to 102% no later than the next business day. Collateral shall be delivered to a third party custodian in all cases. Collateral for term repurchase agreements shall be valued daily by the LACMTA's investment manager (for internal funds) or external investment manager. Investments in repurchase agreements shall be in compliance if the value of the underlying securities is brought back up to 102% no later than the next business day. The LACMTA shall obtain a first lien and security interest in all collateral
i	

	Companies must have either 1) the highest ranking or the highest letter and numerical rating provided by not less than two of the nationally recognized statistical rating organizations NRSROs, or (2) retained an investment advisor registered or exempt with the Securities and-Exchange Commission, with no less than five years experience investing in the securities and obligations authorized by California Government Code §53601 a-k inclusive and m-o inclusive and with assets under management in excess of five hundred million dollars (\$500,000,000). The purchase price may not include any commissions charged by these companies
j	Maximum investment per individual pool limited to the amount for LAIF as set by the State Treasurer's Office. Limit does not include funds required by law, ordinance, or statute to be invested in pool. Each pool must be evaluated and approved by the Treasurer, as to credit worthiness, security, and conformity to state and local laws. An evaluation should cover, but is not limited to establishing, a description of who may invest in the program, how often, what size deposit and withdrawal; the pool's eligible investment securities, obtaining a written statement of investment policy and objectives, a description of interest calculations and how it is distributed; how gains and losses are treated; a description of how the securities are safeguarded and how often the securities are priced and the program audited. A schedule for receiving statements and portfolio listings. A fee schedule, when and how fees are assessed
k	Limited to senior class securities with stated maturities of no more than 5 years. Further limited to securities rated in a rating category of "AAA" or its equivalent or better as provided for by a nationally recognized statistical rating organization NRSRO. Further limited to fixed rate, publicly offered, generic credit card, automobile receivables, and equipment receivables only. Deal size must be at least \$250 million, and tranche size must be at least \$25 million
l	Pass-Through securities; fixed rate, stated maturity no more than 5 years. CMOS: Limited to Government Agency or Government Sponsored Issuers and Planned Amortization Classes (PAC) <u>and</u> <u>Sequential Pay (SEQ)</u> only. Securities eligible for investment under this category shall be rated "AAA" or its equivalent or better by a nationally recognized statistical rating organization NRSRO. The following are prohibited: ARMS, floaters, interest or principal (IOs, POs), Targeted Amortization Classes, companion, subordinated, collateral classes, or zero accrual structures

Commented [RS7]: Justification: The AAA rating should be sufficient. If deals have delivered since their issuance and upgraded to AAA their credit risk should now be considered on par with newly issued senior AAA tranches.

Additionally, the upgraded bonds are likely now or nearer to senior in the capital structure as other senior bonds have likely paid off that prompted the deleveraging and upgrades to happen.

Commented [RS8]: Justification: SEQ is an alternative structure under CMOs that offer investors with various time horizons or risk profiles an opportunity to invest in a particular tranche that works best for their investment strategy. Each tranche is essentially amortized in order of its seniority or maturity.

APPENDIX A

LOS ANGELES COUNTY METROPOLITAN TRANSPORTATION
AUTHORITY

CERTIFICATION OF UNDERSTANDING

The Los Angeles County Metropolitan Transportation Authority (LACMTA) Investment Policy as approved by the Board of Directors requires that all Financial Institutions and Investment Managers' conducting investment transactions with or for LACMTA sign a Certification of Understanding acknowledging that:

1. *You have read and are familiar with the LACMTA's Investment Policy as well as applicable Federal and State laws.*
2. *You meet the requirements as outlined in Investment Policy.*
3. *You agree to make every reasonable effort to protect the assets from loss.*
4. *You agree to notify the LACMTA in writing of any potential conflicts of interest.*
5. *You agree to notify the LACMTA in writing of any changes in personnel with decision-making authority over funds within 24 hours of such event.*

Failure to submit a Certification of Understanding shall result in the withdrawal of all funds held by the financial institution or investment manager and the immediate revocation of any rights to act as an agent of the LACMTA for the purchase of securities or investment of funds on behalf of LACMTA.

The Board of Directors is committed to the goals of the Community Reinvestment Act (CRA). As part of the certification process for depository institutions, it is requested that you remit evidence of your most recent CRA rating.

SIGNED: _____ DATE: _____
Print Name and Title _____

After reading and signing this Certification of Understanding please return with *any* supporting documentation to:

LACMTA
Treasury Department
Attention: Treasurer
One Gateway Plaza
Los Angeles, CA 90012-2932

LACMTA use only:
Approved: _____ Disapproved: _____ Date: _____
Signature: _____
LACMTA Treasurer

APPENDIX C

LOS ANGELES COUNTY METROPOLITAN TRANSPORTATION
AUTHORITY

BROKER/DEALER QUESTIONNAIRE

1. Name of Firm _____

2. Address _____
(Local) (National Headquarters)

3. Telephone No. () _____ Telephone No. () _____ =
(Local) (National Headquarters)

4. Primary Representative Manager/Partner-in-Charge
Name _____ Name _____
Title _____ Title _____
Telephone No. _____ Telephone No. _____
No. of Yrs. in Institutional Sales _____ No. of Yrs. in Institutional Sales _____ =
Number of Years with Firm _____ Number of Years with Firm _____ =

5. Are you a Primary Dealer in U.S. Government Securities? [] YES [] NO

If NO, Is the parent company or its subsidiary a Primary Dealer in U.S. Government Securities? Provide proof of certification.
[] YES [] NO

Please explain your firm's relationship to the Primary Dealer below:

Please provide proof certification from the ~~National Association of Securities Dealer Financial Industry Regulatory Authority (FINRA)~~.

6. Are you a Broker instead of Dealer, i.e., you DO NOT own positions of Securities?
[] YES [] NO

Commented [RS10]: Justification: FINRA succeeded the NASD as the prime self-regulatory organization of the securities industry.

7. What is the net capitalization of your Firm? _____

8. What is the date of your Firm's fiscal year-end? _____

9. Is your Firm owned by a Holding Company? If so, what is its name and net capitalization?

10. If your firm is not a primary dealer, has your firm (i) been in operation for more than five years and (ii) have a minimum annual trading volume of \$100 billion in money market instruments or \$500 billion in U.S. Treasuries and Agencies?
 YES NO

Commented [RS11]: Justification: Question was included to determine whether non-primary dealers that want to provide broker dealer services meet LACMTA's minimum qualifications.

10-11. Please provide your Wiring and Delivery Instructions.

11. Which of the following instruments are offered regularly by your local desk?

Commented [RS12]: Justification: Language was struck since the instruments listed are general products offered by all broker dealers.

- T-Bills Treasury Notes/Bonds Discount Notes NCD's
- Agencies (specify) _____
- BA's (Domestic) BA's (Foreign) Commercial Paper
- Med-Term Notes Repurchase Agreements

12. Does your Firm specialize in any of the instruments listed above?

123. Please identify your comparable government agency clients in the LACMTA's geographical area.

Entity	Contact Person	Telephone No.	Client Since

13. What reports, confirmations, and other documentation would LACMTA receive? Please include samples of research reports or market information that your firm regularly provides to government agency clients.

Formatted: Indent: First line: 0.38", Tab stops: Not at 0.5"

14. What precautions are taken by your Firm to protect the interests of the public when dealing with government agencies as investors?

Formatted: Indent: First line: 0.38"

Commented [RS13]: Justification: Questions 14 and 15 were struck because broker-dealers do not select any investments for LACMTA. Instead the orders are directed by LACMTA Treasury staff.

Formatted: Indent: First line: 0.38", Tab stops: Not at 0.5"

Formatted: Indent: First line: 0.38"

15-13. Have you or your Firm been censored, sanctioned or disciplined by a Regulatory State or Federal Agency for improper or fraudulent activities, related to the sale of securities within the past five years? YES NO

Formatted: Font: ScalaLF-Regular, Font color: Black

Formatted: List Paragraph, Indent: Left: 0", Hanging: 0.31", Tab stops: 0.38", List tab + Not at 0.25" + 0.5"

16-14. If yes, please explain

Formatted: Indent: Left: 0", Hanging: 0.31", Tab stops: 0.31", Left + Not at 0.25" + 0.5"

17.15. Please provide your most recent audited financial statements within 120 days of your fiscal year-end.

Formatted: Indent: Left: 0", Hanging: 0.31", Tab stops: 0.31", List tab + Not at 0.25" + 0.5"

18.16. Please indicate the current licenses of the LACMTA representatives:

Formatted: Indent: Left: 0", Hanging: 0.31", Tab stops: 0.31", Left + Not at 0.25" + 0.5"

Agent: _____ License or registration: _____

Formatted: Indent: Left: 0.31", First line: 0"

APPENDIX D
LOS ANGELES COUNTY METROPOLITAN
TRANSPORTATION AUTHORITY
INVESTMENT POLICY GLOSSARY

ASKED: The price at which securities are offered from a seller.

ASSET-BACKED SECURITY (ABS): ABS is a debt instrument collateralized or backed by consumer receivables such as automobile loans, credit card receivables and equipment receivables;

BANKERS' ACCEPTANCE (BA): Time drafts which a bank "accepts" as its financial responsibility as part of a trade finance process. These short-term notes are sold at a discount, and are obligations of the drawer (or issuer - the bank's trade finance client) as well as the bank. Once accepted, the bank is irrevocably obligated to pay the BA upon maturity if the drawer does not.

BID: The price offered by a buyer of securities.

BOOK VALUE: The original cost of the investment, plus accrued interest and amortization of any premium or discount.

BROKER: A broker brings buyers and sellers together for a commission.

CERTIFICATE OF DEPOSIT (CD): A time deposit with a specific maturity evidenced by a certificate. Large-denomination CD's are typically negotiable (marketable or transferable).

COLLATERAL: Securities, evidence of deposit, or other property which a borrower pledges to secure repayment of a loan. Also refers to securities pledged by a bank to secure deposits of public moneys.

COMMERCIAL PAPER (CP): Unsecured promissory notes issued by companies and government entities at a discount. Commercial paper is negotiable, although it is typically held to maturity. The maximum maturity is 270 days, with most CP issued for terms of less than 30 days.

CUSTODY or SAFEKEEPING: A service to customers rendered by banks for a fee whereby securities and valuables of all types and descriptions are held in the bank's vaults for protection.

DEALER: A dealer, as opposed to a broker, acts as a principal in all transactions, buying and selling for his own account.

DELIVERY VERSUS PAYMENT: Delivery of securities with a simultaneous exchange of money for the securities.

FEDERAL AGENCIES AND U.S. GOVERNMENT SPONSORED ENTERPRISES (AGENCIES): U.S. Government related organizations, the largest of which are government financial intermediaries assisting specific credit markets (housing, agriculture). They include:

- ◆ Federal Home Loan Banks (FHLB)

- ◆ Federal Home Loan Mortgage Corporation (FHLMC or “Freddie Mac”)
- ◆ Federal National Mortgage Association (FNMA or “Fannie Mae”)
- ◆ Federal Farm Credit Banks (FFCB)
- ◆ Tennessee Valley Authority (TVA)

MARKET VALUE: The price at which a security is trading and could presumably be purchased or sold.

MASTER REPURCHASE AGREEMENT: A written contract covering all future transactions between the parties to repurchase/reverse repurchase agreements that establish each party’s rights in the transactions. A master agreement will specify, among other things, the right of the buyer-lender to liquidate the underlying securities in the event of default by the seller-borrower.

MATURITY: The date upon which the principal or stated value of an investment becomes due and payable.

MEDIUM TERM NOTES (MTN): Interest bearing, continuously offered debt, issued in the 9 month to ten year maturity range. Deposit notes, like Certificates of Deposit, actually represent an interest bearing deposit at a bank or other depository institution.

MORTGAGE-BACKED SECURITY (MBS): is a bond or security that reflects an interest in a pool of real estate loans as the underlying collateral.

OFFER: The price asked by a seller of securities.

PAR VALUE: The face value, or principal amount payable at maturity.

PRIMARY DEALER: A group of government securities dealers who submit daily reports of market activity and positions and monthly financial statements to the Federal Reserve Bank of New York, and are subject to its informal oversight.

QUALIFIED INSTITUTIONAL BUYER (QIB): Defined in SEC 144A as a class of investors that can be conclusively assumed to be sophisticated and in little need of the protection afforded by the Securities Act’s Registration Provisions. They must own and invest on a discretionary basis at least 100 million in securities of issuers that are not affiliated with such a qualified institutional buyer. This includes any institutional investors included in the accredited investor definition, provided they satisfy the \$100 million threshold.

REPURCHASE AGREEMENT (RP OR REPO): A purchase of securities under a simultaneous agreement to sell these securities back at a fixed price on some future date. This is in essence a collateralized investment, whereby the security “buyer” in effect lends the “seller” money for the period of the agreement, and the difference between the purchase price and sale price determining the earnings. Dealers use RP extensively to finance their positions.

SECURITIES & EXCHANGE COMMISSION (SEC): An agency created by Congress to protect investors in securities transactions by administering securities legislation.

SEQUENTIAL PAY: Bonds starts to pay principal when classes with an earlier priority have paid to zero. SEQ bonds enjoy uninterrupted payment of principal until paid to zero balance. SEQ bonds may share principal pay down on a pro rata basis w/another class.

TREASURY BILLS: A non-interest bearing discount security issued by the U.S. Treasury to finance the national debt. Most bills are issued to mature in three months, six months, or one year.

TREASURY NOTES AND BONDS: Long-term U.S. Treasury securities having initial maturities of 2 to 30 years.

YIELD: The rate of annual income return on an investment, expressed as a percentage.

YIELD TO MATURITY (YTM): The rate of return earned on an investment considering all cash flows and timing factors: interest earnings, discounts, and premiums above par.

ATTACHEMENT B
FINANCIAL INSTITUTIONS RESOLUTION

RESOLVED, that any financial institutions, including all banks and their correspondent banks doing business with the Los Angeles County Metropolitan Transportation Authority (LACMTA), are hereby authorized, requested and directed to honor all checks, drafts, wires, or other orders for payment of money drawn in the LACMTA's name on its account(s) (including those drawn on the individual order of any person or persons whose names appear thereon as a signer or signers thereof) when bearing the original and/or facsimile signature of the Chair; Chief Executive Officer; Chief Financial Officer; Deputy Chief Financial Officer; Treasurer; Deputy Executive Officer, Finance in Treasury Department; or Assistant Treasurer (collectively, LACMTA Officials). LACMTA Officials are the only representatives empowered to open, close or authorize changes to accounts on behalf of LACMTA. LACMTA Officials may designate individuals as Official Signatories for financial accounts. The duties of Official Signatories shall be limited to check signing, wire or fund transfers, balance reporting and/or monitoring of bank processes.

And, those financial institutions, including correspondent banks, currently doing business with LACMTA shall be entitled to honor and charge LACMTA for all such checks, drafts, wires, or other orders for the payment of money, regardless of by whom or by what means when the actual or facsimile signature or signatures resemble the specimens filed with those financial institutions by the Secretary or other officer of LACMTA.

CERTIFICATION

The undersigned, duly qualified and acting as Board Clerk of the Los Angeles County Metropolitan Transportation Authority, certifies that the foregoing is a true Resolution adopted at a legally convened meeting of the Board of Directors of the Los Angeles County Metropolitan Transportation Authority held on _____.

Dated: _____

Board Clerk

(SEAL)

Investment Policy

**Finance, Budget and Audit Committee
March 20, 2025**



Investment Policy

Recommendation:

- Adopt the Investment Policy;
- Approve the Financial Institutions Resolution; and
- Delegate to the Treasurer the authority to invest funds for a one-year period.

Investment Policy

Changes to the investment policy have been made to:

- Limit the number of nationally recognized statistical rating organizations to three
- Allow investment in Floating Rate Notes, 10% max
- Incorporate Environmental, Social and Governance section
- Allow more opportunities for non-primary dealers that meet the minimum qualifications of the Investment Policy such as SBE, MBE, WBE, VBE and DVBE broker-dealers to serve Metro

Investment Policy

Next Steps:

- Upon Board approval, staff shall distribute the Investment Policy to external investment managers and broker-dealers
- The Investment Policy and Financial Institutions Resolution will be issued to financial institutions with whom Metro does business



Board Report

File #: 2024-1163, File Type: Contract

Agenda Number: 15.

FINANCE, BUDGET AND AUDIT COMMITTEE MARCH 20, 2025

SUBJECT: WEB PLATFORM DEVELOPMENT SERVICES

ACTION: APPROVE RECOMMENDATION

RECOMMENDATION

AUTHORIZING the Chief Executive Officer to execute Modification No. 2 to Contract No. PS87947000 with Exemplifi, LLC in the amount of \$400,000 increasing the Not-to-Exceed (NTE) contract value from \$550,000 to \$950,000, and extend the period of performance from August 31, 2025 to June 30, 2026 to continue providing essential digital maintenance and development support for Metro.net and standalone websites (The Source, El Pasajero, and art.metro.net).

ISSUE

The current Contract No. PS87947000 is set to expire on August 31, 2025. Funding is projected to be exhausted by April 2025 due to higher-than-anticipated usage as the Customer Experience Department works to enhance key areas of its web and blog presence. Critical projects have included the development of the CX Hub, the Public Safety Hub, a new Projects hub and service alerts improvements, as well as the redesign of The Source and El Pasajero blogs.

BACKGROUND

Metro has contracted with various vendors to provide maintenance and support for Metro.net since at least 2016, ensuring the platform remains secure, accessible, and reliable for riders. Over the years, this work has included website security, infrastructure management, compliance monitoring, and user experience improvements.

Contract No. PS87947000 was awarded on August 30, 2022, for a NTE contract amount of \$450,000 for a two-year term. Contract Modification No. 1 continued web maintenance services, increased contract authority from \$450,000 to \$550,000, and extended the period of performance through August 31, 2025.

The scope of work under these contracts has included:

- Security & Compliance - Regular WordPress updates, security monitoring, and ADA Section 508 compliance checks to prevent vulnerabilities and legal risks.
- Infrastructure & Performance - Managing AWS hosting, optimizing performance, and

- preventing downtime to ensure fast, reliable access for riders.
- SEO & Site Maintenance - Fixing broken links, addressing mobile responsiveness issues, and maintaining search engine visibility to improve user experience.
- Emergency Support - Providing on-call assistance for critical website issues and outages.
- Front- and backend development support of website enhancement projects as necessary.

Since 2016, Metro has worked with three different vendors to perform these duties, adapting to evolving technology and agency needs. Extending the current contract ensures continued stability, security, and accessibility while Metro advances its long-term digital strategy.

DISCUSSION

Metro.net and its standalone websites are critical public resources, providing riders with real-time transit information, trip planning tools, and accessibility features that comply with ADA Section 508, Title VI, and Brown Act requirements. Metro.net and its associated websites serve over 4.2 million annual users.

Why Metro.net Matters to Riders:

Riders rely on Metro.net to :

- Check real-time arrivals
- Plan trips
- View schedules
- Access fare assistance (LIFE program)
- Stay updated on Metro services and projects

Ongoing Improvements & Unplanned Enhancements

To enhance the user experience and ensure critical information is accessible, Metro has undertaken major improvements to Metro.net and its blogs. Web development services have supported these initiatives, ensuring seamless integration, compliance, and platform stability.

Recent key enhancements include:

- The CX Hub - A dedicated section featuring plans, survey results, and updates to promote transparency and accountability in Metro's customer experience initiatives.
- The Safety Hub - A new section highlighting Metro's commitment to a safer, cleaner, and more welcoming transit system by providing safety resources, updates, and performance data (In progress).
- The Project Hub - A redesigned landing page for Metro project information, improving access to updates and engagement opportunities (In progress).
- Service Alert Improvements - Enhancements to Metro.net's service alert system, ensuring timely and accurate notifications for delays, disruptions, and service changes.
- Re-design and re-launch of The Source blog to modernize content delivery and accessibility.

Why additional funding is needed:

Metro historically spends \$13,400 per month (\$160,000 annually) on web maintenance and support. While efforts were made to reduce costs, recent unplanned but necessary improvements have exhausted available funds faster than anticipated.

Without this contract modification:

- Essential web services could be disrupted, affecting riders' ability to access information.
- Metro.net could face compliance risks, including ADA Section 508 violations.
- Operational costs could rise, as unexpected security issues or downtime would require emergency interventions.

This modification ensures continuity, stability, and compliance while Metro advances its long-term digital transformation, including a fully redesigned Metro.net by FY27. Renewing the contract is the most efficient and cost-effective solution, allowing Metro to maintain seamless service while improving rider experience and accessibility.

Modifying the existing contract is the most efficient and cost-effective solution to ensure continuity, stability, and compliance while Metro moves forward with long-term digital transformation plans.

Without this modification, Metro faces potential non-compliance risks, service disruptions, and a decline in the user experience for its 4.2 million annual users.

DETERMINATION OF SAFETY IMPACT

Without continued web development services support, Metro.net and associated websites would be vulnerable to security breaches, and becoming noncompliant with ADA Section 508 and Title VI requirements. This would compromise Metro's ability to deliver accurate and reliable information to riders, stakeholders, and the public.

FINANCIAL IMPACT

The funding for this contract modification will be allocated as follows:

- \$30,000 is included in the FY25 Budget under Cost Center 7140 (Marketing), Project 100001 (General Overhead) for planned expenditures.
- \$195,000 for planned work in FY26 will be funded through Project 306006.
- An additional \$175,000 is allocated for spec development work through FY26, ensuring Metro can respond to emerging digital needs as they arise. This contract authority will only be used if necessary, allowing Metro to maintain flexibility for unforeseen enhancement work while remaining fiscally responsible.

Impact to Budget

The source of funds will come from federal, state and local funding sources which may be eligible for

bus and rail operating and capital expenses. Since this is a multi-year contract, the Executive Officer, Marketing, the Deputy Chief, Customer Experience and the Chief Customer Experience Officer will be accountable for budgeting the cost in future years, including any option exercised.

EQUITY PLATFORM

Metro.net and its associated standalone websites, including The Source (Metro’s English language blog), El Pasajero (Metro’s Spanish-language blog), and Art.metro.net (showcasing visual and performing arts in the transit system), play a vital role in ensuring equitable access to transit information and resources. These platforms are especially vital for low-income, minority, and non-English-speaking populations, serving as key communication tools to provide critical updates, service alerts, and travel information in an accessible and inclusive manner.

Exemplifi has been instrumental in maintaining Metro.net’s compliance with Section 508 ADA standards, ensuring that users of all abilities can access the site, while providing translations in 9 additional languages. Their support will also include the upkeep of standalone sites like El Pasajero, which provides Spanish-language content tailored to the needs of Metro’s Spanish-speaking riders. This is central to Metro’s commitment to equity and inclusion, ensuring underserved communities can easily access reliable transit information.

By extending Exemplifi’s contract, Metro will maintain the accessibility and functionality of these platforms, avoiding service disruptions that could disproportionately impact marginalized populations. This contract modification upholds Metro’s responsibility to serve all communities equitably, ensuring that riders continue to benefit from the agency’s digital services. Exemplifi, LLC, a Small Business Enterprise (SBE) Prime, made a 60% SBE commitment. The project is 95% complete, and the current participation is 60% SBE, meeting the commitment.

VEHICLE MILES TRAVELED OUTCOME

VMT and VMT per capita in Los Angeles 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.* Metro’s Board-adopted VMT reduction targets align with California’s statewide climate goals, including achieving carbon neutrality by 2045. To ensure continued progress, all Board items are assessed for their potential impact on VMT.

As part of these ongoing efforts, this item is expected to contribute to further reductions in VMT. This item supports Metro’s systemwide strategy to reduce VMT through customer experience activities that will benefit and further encourage transit ridership, ridesharing, and active transportation. Metro.net and its standalone websites are critical public resources, providing riders with real-time transit information, trip planning tools, and accessibility, serving 17,607 daily users and 44,388 daily views, with over 4.2 million annual users. Metro’s Board-adopted VMT reduction targets were designed to build on the success of existing investments, and this item aligns with those objectives.

*Based on population estimates from the United States Census and VMT estimates from Caltrans’ Highway Performance Monitoring System (HPMS) data between 2001-2019.

IMPLEMENTATION OF STRATEGIC PLAN GOALS

Approving this contract modification aligns with Metro's strategic goals by ensuring the ongoing maintenance, reliability, and accessibility of Metro.net and its associated standalone websites.

1. Provide high-quality mobility options that enable people to spend less time traveling. Metro.net is an essential tool for riders to efficiently plan their journeys, access service alerts, and receive real-time transit information. Exemplifi's continued support guarantees that the site remains functional, reliable, and current, allowing riders to spend less time searching for information and more time traveling to their destinations.

2. Deliver outstanding trip experiences for all users of the transportation system. A well-maintained Metro.net enhances the overall rider experience by offering a seamless digital platform for planning, navigation, and service updates. Exemplifi has improved the usability, accessibility, and performance of Metro.net, ensuring that all users, regardless of ability or language, can access the information they need for a smooth and informed journey.

3. Enhance communities and lives through mobility and access to opportunity. Metro.net is more than just a website; it serves as a gateway to mobility and opportunity for communities throughout Los Angeles. Exemplifi's efforts ensure that the platform remains accessible to all riders, including low-income and minority communities, as well as Spanish-speaking audiences through sites like El Pasajero.

ALTERNATIVES CONSIDERED

The Board may elect not to approve these recommendations. This option is not recommended as Metro faces potential non-compliance risks, service disruptions, and a decline in the user experience for its 4.2 million annual users of our websites.

1. Allow the contract to expire and transition to internal staff. This option is not viable because developer positions are difficult to fill and Metro currently lacks the staff resources and expertise required to maintain and support Metro.net and the standalone websites. As a result, Metro.net and the standalone sites would be at risk of security breaches, non-compliance, and serious performance issues, all of which could jeopardize the rider experience and Metro's public-facing presence.

2. Issue a new RFP for web maintenance services to begin before this contract expires. Issuing a new RFP is not viable given the time constraints. It will take approximately a year for a new contract to be awarded and commence work with the selected vendor. Consequently, Metro would be without any web maintenance support for an extended period. This gap could result in outages, compliance violations, and disruptions to critical public-facing tools.

NEXT STEPS

Upon Board approval, staff will execute Modification No. 2 to Contract No. PS87947000 with Exemplifi, LLC to continue to provide critical digital services through June 30, 2026.

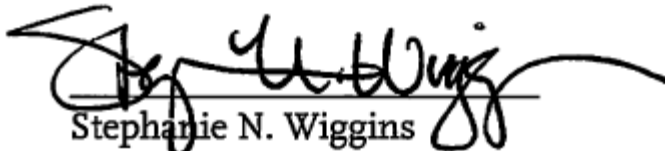
Staff will also begin work on a new procurement for web design and maintenance services contract.

ATTACHMENTS

Attachment A - Procurement Summary
Attachment B - Contract Modification/Change Order Log
Attachment C - DEOD Summary

Prepared by: Alex Chaparro, Product Manager, Customer Experience, (213) 922-4139
John Gordon, Deputy Executive Officer, Marketing, (213) 922-2290
Carolina Coppolo, Deputy Chief, Vendor/Contract Management Officer, (213) 922-4471
Monica Bouldin, Deputy Chief, Customer Experience, (213) 922-4081

Reviewed by: Jennifer Vides, Chief Customer Experience Officer, (213) 922-4060


Stephanie N. Wiggins
Chief Executive Officer

PROCUREMENT SUMMARY

WEB PLATFORM DEVELOPMENT SERVICES / PS87947000

1.	Contract Number: PS87947000		
2.	Contractor: Exemplifi, LLC.		
3.	Mod. Work Description : Continue existing services and extend the period of performance from August 31, 2025 through June 30, 2026.		
4.	Contract Work Description: Provide critical digital services for the maintenance and development support of the Metro websites.		
5.	The Following Data is Current as of: 03/02/2025		
6.	Contract Completion Status		Financial Status
	Contract Awarded:	08/30/22	Contract Award Amount: \$450,000
	Notice to Proceed (NTP):	N/A	Total of Modifications Approved: \$100,000
	Original Complete Date:	08/31/24	Pending Modifications (including this action): \$400,000
	Current Est. Complete Date:	06/30/26	Current Contract Value (with this action): \$950,000
7.	Contract Administrator: Antwaun Boykin		Telephone Number: (213) 922-1056
8.	Project Manager: Alex Chaparro		Telephone Numbers: (213) 922-4139

A. Procurement Background

This Board Action is to approve Modification No. 2 to continue to provide essential digital services for the maintenance and development support of the Metro websites and extend the period of performance from August 31, 2025 through June 30, 2026.

This Contract Modification will be processed in accordance with Metro's Acquisition Policy and the contract type is a firm fixed unit rate.

In August 2022, Metro awarded a two-year firm fixed unit rate Contract No. PS87947000 to Exemplifi, LLC to provide web platform development services.

One modification has been issued to date.

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

B. Price Analysis

The recommended price has been determined to be fair and reasonable based on the firm fixed unit rates established and evaluated as part of the competitive contract awarded in August 2022 that are lower than current market rates for similar services. The Independent Cost Estimate (ICE) is based on the original negotiated contract rates.

Proposed Amount	Metro ICE	Recommended Amount
\$400,000	\$400,000	\$400,000

CONTRACT MODIFICATION/CHANGE ORDER LOG

WEB PLATFORM DEVELOPMENT SERVICES / PS87947000

Mod. No.	Description	Status (approved or pending)	Date	Amount
1	Continue services and extend the period of performance (POP) through August 31, 2025	Approved	06/04/24	\$100,000
2	Continue services and extend POP through June 30, 2026	Pending	Pending	\$400,000
	Modification Total:			\$500,000
	Original Contract:		08/30/22	\$450,000
	Total:			\$950,000

DEOD SUMMARY

WEB PLATFORM DEVELOPMENT SERVICES / PS87947000

A. Small Business Participation

Exemplifi, LLC, a Small Business Enterprise (SBE) Prime, made a 60% SBE commitment. The project is 95% complete and the current participation is 60% SBE, meeting the commitment.

Small Business Commitment	60% SBE	Small Business Participation	60% SBE
----------------------------------	----------------	-------------------------------------	----------------

	SBE Subcontractors	% Committed	Current Participation¹
1.	Exemplifi, LLC (Prime)	60%	60%
	Total	60%	60%

¹Current 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

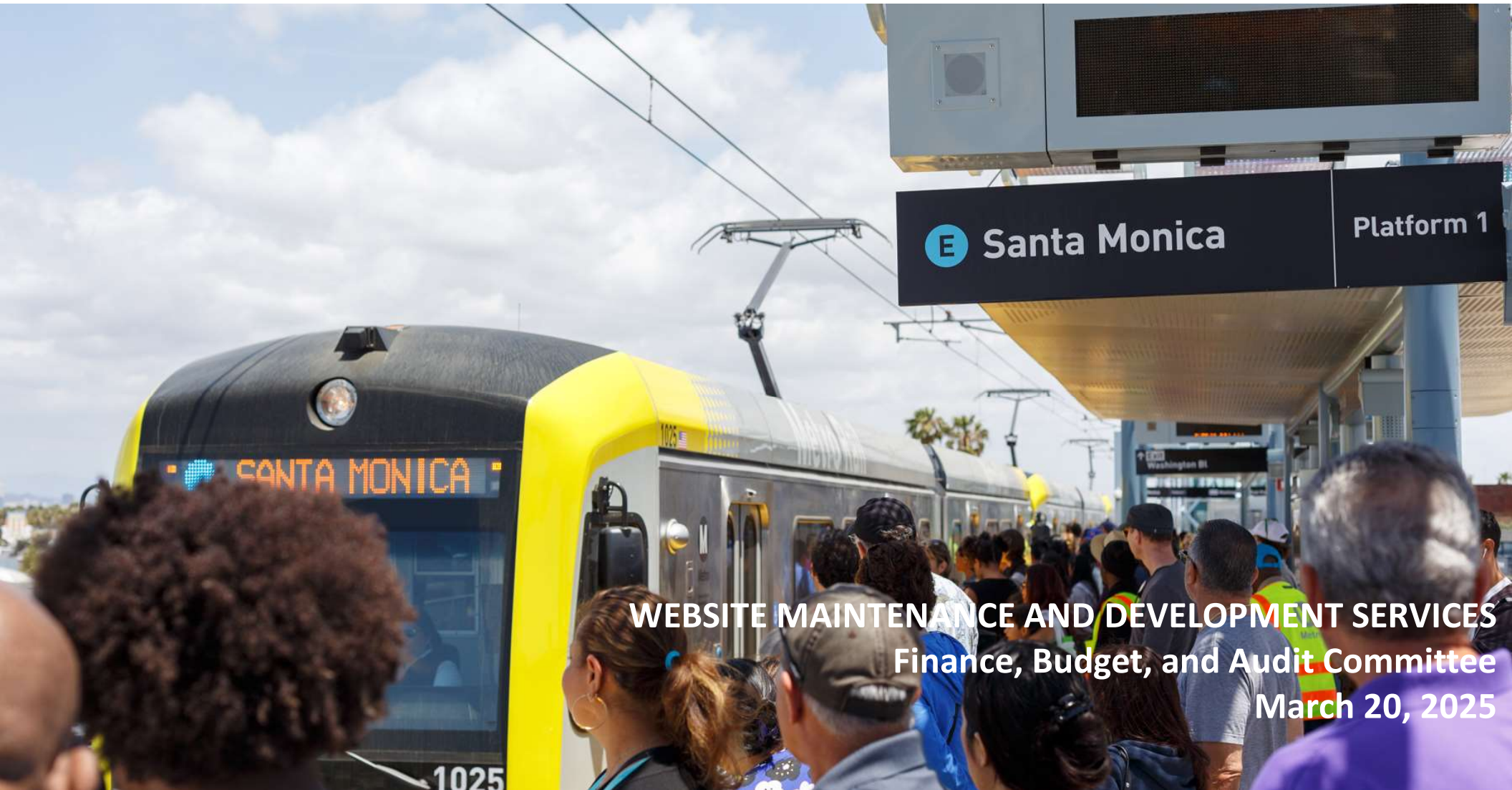
The Living Wage and Service Contract Worker Retention Policy is not applicable to this modification.

C. Prevailing Wage Applicability

Prevailing Wage is not applicable to this modification.

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.



WEBSITE MAINTENANCE AND DEVELOPMENT SERVICES
Finance, Budget, and Audit Committee
March 20, 2025



Metro

Background

Metro has contracted with various vendors to provide maintenance and support for Metro.net since at least 2016, ensuring the platform remains secure, accessible, and reliable for riders. Over the years, this work has included website security, infrastructure management, compliance monitoring, and user experience improvements.

Contract No. PS87947000 was awarded on August 30, 2022, for a NTE contract amount of \$450,000 for a two-year term. Contract Modification No. 1 continued web maintenance services, increased contract authority from \$450,000 to \$550,000, and extended the period of performance through August 31, 2025.

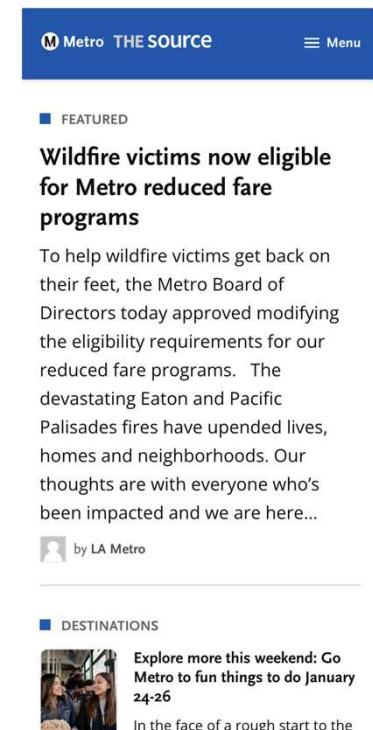
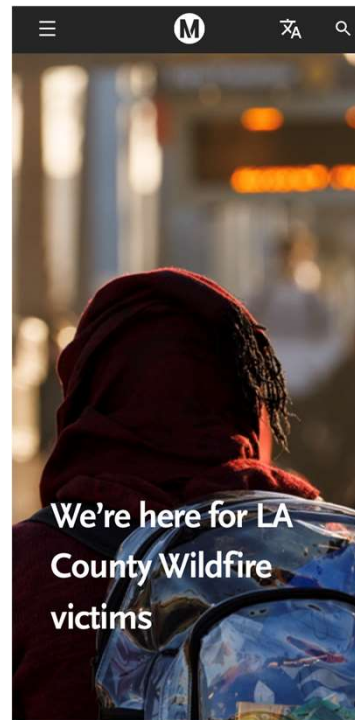
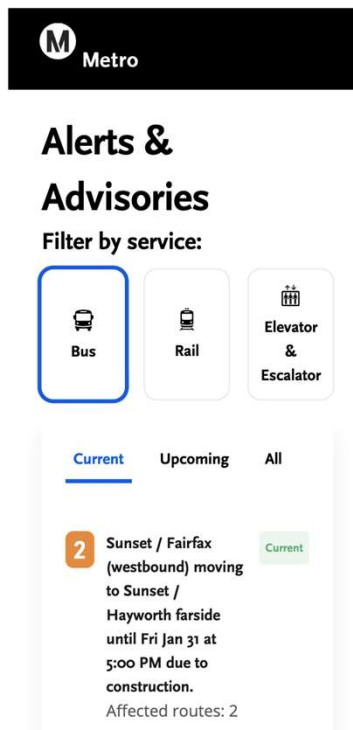
The scope of work under these contracts has included:

- Security & Compliance – Regular WordPress updates, security monitoring, and ADA Section 508 compliance checks to prevent vulnerabilities and legal risks.
- Infrastructure & Performance – Managing AWS hosting, optimizing performance, and preventing downtime to ensure fast, reliable access for riders.
- SEO & Site Maintenance – Fixing broken links, addressing mobile responsiveness issues, and maintaining search engine visibility to improve user experience.
- Emergency Support – Providing on-call assistance for critical website issues and outages.
- Front and backend development support of website enhancement projects as necessary.

Since 2016, Metro has worked with three different vendors to perform these duties, adapting to evolving technology and agency needs. Extending the current contract ensures continued stability, security, and accessibility while Metro advances its long-term digital strategy.

Contract Extension for Essential Communication

Metro.net and its associated websites, including The Source (English blog), El Pasajero (Spanish blog), and Art.metro.net (arts platform), ensure equitable access to transit information, particularly for low-income, minority, and non-English-speaking populations. These platforms provide vital updates, service alerts, and travel information in an inclusive manner, serving over 4.2 million annual users.



Alternatives Considered

The Board may elect not to approve these recommendations. This option is not recommended as Metro faces potential non-compliance risks, service disruptions, and a decline in the user experience for its 4.2 million annual users of our websites.

1. Allow the contract to expire and transition to internal staff. This option is not viable because developer positions are difficult to fill, and Metro currently lacks the staff resources and expertise required to maintain and support Metro.net and the standalone websites. As a result, Metro.net and the standalone sites would be at risk of security breaches, non-compliance, and serious performance issues, all of which could jeopardize the rider experience and Metro's public-facing presence.
2. Issue a new RFP for web maintenance services. Issuing a new RFP is not viable given the time constraints. It will take approximately a year for a new contract to be awarded and commence work with the selected vendor. Consequently, Metro would be without any web maintenance support for an extended period. This gap could result in outages, compliance violations, and disruptions to critical public-facing tools.

Recommendation

AUTHORIZING the Chief Executive Officer to execute Modification No. 2 to Contract No. PS87947000 with Exemplifi, LLC in the amount of \$400,000 increasing the Not-to-Exceed (NTE) contract value from \$550,000 to \$950,000, and extend the period of performance from August 31, 2025 to June 30, 2026 to continue providing essential digital maintenance and development support for Metro.net and standalone websites (The Source, El Pasajero, and art.metro.net).



Board Report

File #: 2024-1128, File Type: Contract

Agenda Number: 20.

OPERATIONS, SAFETY, AND CUSTOMER EXPERIENCE COMMITTEE MARCH 20, 2025

SUBJECT: METRO B AND D LINES UNINTERRUPTIBLE POWER SUPPLY BATTERIES

ACTION: APPROVE RECOMMENDATION

RECOMMENDATION

AUTHORIZE the Chief Executive Officer to amend Contract No. OP44570-2000B with Skyler Electric Company, Inc., in the amount of \$1,403,491 for Task Order No. 9, to provide Uninterruptible Power Supply (UPS) Batteries for Metro B and D Lines, increasing the cumulative Not-to-Exceed (NTE) contract amount from \$3,468,400 to \$4,871,891.

ISSUE

The battery banks for the UPS systems at six Metro B and D Line subway stations are nearing the end of their useful life and require replacement. These battery banks provide critical backup power, ensuring the uninterrupted operation of emergency lighting, communication, and Fire Life Safety (FLS) systems during utility power outages or fluctuations. This backup power is essential for maintaining the safety of passengers and employees, especially during station evacuations caused by utility outages. To proceed with the replacements, an increase in funding is necessary to award a task order for the battery banks.

BACKGROUND

In October 2018, the Board approved establishing a task order bench contract under Request for Information and Qualification (RFIQ) No. OP44570-2. The contract award was made to two firms, M.C. Dean, Inc., and Skyler Electric Company, Inc. The purpose of the contract was to supply and install UPS batteries at B and D Line subway stations to replace aging batteries nearing the end of their useful life. The contract was authorized for a total of \$2,244,000 for a two-year base period, with an additional \$1,000,000 allocated for three one-year options, resulting in a total not-to-exceed amount of \$3,468,400, inclusive of Contract Modification Authority (CMA). A no-cost contract modification was executed to extend the period of performance through May 30, 2025. Task orders totaling \$3,405,800.53 have been awarded to date. Skyler Electric Company, Inc. submitted a proposal in alignment with Metro's specifications and delivery requirements and M.C. Dean, Inc. has been non-responsive to past requests. The issuance of Task Order No. 9 will be to Skyler Electric Company, Inc. Refer to Attachment B which shows the task order history log and the locations of UPS battery replacements.

DISCUSSION

Batteries for a total of 17 UPS units were replaced under the original contract scope. However, as the work progressed, an additional 6 UPS units were identified as needing battery replacement, leading to an expansion of the project scope. In addition, battery costs have escalated since 2018 due to rising raw material prices for lithium, cobalt, and nickel, partly caused by increased demand from renewable energy and electric vehicle production. The increase in prices and expansion of the project scope contributed to the additional amount needed for Contract No. OP44570-2000B.

The project work scope under Task Order No. 9 is to replace the UPS battery banks for six stations: North Hollywood, Universal City, Hollywood/Western, Wilshire/Normandie, Hollywood/Vine, and Vermont/Beverly. These UPS battery systems provide backup power for critical infrastructure in the event of a power outage for emergency lighting, fire alarm panels, emergency ventilation control panels, and communications, such as TPIS (Transit Passenger Information Systems) monitors, cameras, radios, emergency / public telephones, public announcements, train control and Supervisory Control and Data Acquisition (SCADA). In the event of a utility power loss, each station uses emergency backup battery banks capable of supplying up to four hours of power. This ensures the functionality of the critical systems and allows the safe evacuation of passengers and employees in the event of an emergency on the subway system.

The work on the battery bank replacements under Task Order No. 9 will be the final task order issued under Contract No. OP44570-2000B. Separately, the Operations Engineering Department is actively preparing to procure a new contract dedicated to UPS battery banks, which will address the replacement of aging UPS batteries across the Metro rail network.

The replacement of UPS batteries is part of the Capital Improvement Program (CIP), which aims to renew transit infrastructure assets.

DETERMINATION OF SAFETY IMPACT

UPS batteries are safety components that ensure the proper functioning of critical systems, including emergency lighting in tunnels and passenger stations, communication networks, and FLS control systems. In underground rail stations, these systems are essential for guiding passengers to safety during power outages or emergencies. Without reliable UPS batteries, critical systems may fail to operate when needed most.

FINANCIAL IMPACT

This action will be funded from capital project 205126 - B and D Line UPS Batteries. The project was approved with a Life-of-Project (LOP) budget of \$5,640,000. It is within the project LOP). The Project Manager will ensure that the balance of funds is budgeted in future fiscal years.

Impact to Budget

The current source of funds for this action is Measure R 2%, which is eligible for Capital Projects.

This funding source maximizes the project funding allocation intent allowed by its approved provisions and guidelines.

EQUITY PLATFORM

The equity benefits of this action enhance the safety of Metro riders along transit lines that directly provide service for Equity Focus Communities (EFCs), specifically for low-income riders who are the primary users of the Metro system.

The B and D Lines serve numerous communities with a high EFC concentration, including Westlake/MacArthur Park, Koreatown, Hancock Park, Hollywood, East Hollywood, and North Hollywood. They also serve as a key transfer connection to other Metro rail lines and multiple bus lines for workers, students, and residents in these EFCs.

This task order bench contract promotes the inclusion of small business and disabled veteran business enterprise participation goals to ensure fairness and equitable opportunities for smaller contractors. Skyler Electric Company committed to a 5% Small Business Enterprise (SBE) and a 3% Disabled Veteran Business Enterprise (DVBE) participation on this task order-based contract. Currently, based on task order awards and payments, the participation levels stand at 4.44% for SBE and 2.14% for DVBE. Skyler Electric Company (SEI) has a shortfall mitigation plan on file and contends, and concurred by Metro's Project team, open orders with both SBE and DVBE subcontractors are still pending. SEI stated that once these orders are received and payment is reported, the company expects to meet its commitment goals. See Attachment C for the DEOD Summary information.

VEHICLE MILES TRAVELED OUTCOME

VMT and VMT per capita in Los Angeles 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. * Metro's Board-adopted VMT reduction targets align with California's statewide climate goals, including achieving carbon neutrality by 2045. To ensure continued progress, all Board items are assessed for their potential impact on VMT.

As part of these ongoing efforts, this item is expected to contribute to further reductions in VMT. This item supports Metro's systemwide strategy to reduce VMT through State of Good Repair (SGR) investments to renew UPS batteries, which provide backup power to critical systems at Metro B and D Line stations. These SGR investments further encourage transit ridership, ridesharing, and active transportation. Metro's Board-adopted VMT reduction targets were designed to build on the success of existing investments, and this item aligns with those objectives.

*Based on population estimates from the United States Census and VMT estimates from Caltrans' Highway Performance Monitoring System (HPMS) data between 2001-2019.

IMPLEMENTATION OF STRATEGIC PLAN GOALS

Approval of this recommendation aligns with Metro's Strategic Plan by advancing Goal No.2, which is

to deliver outstanding trip experiences for all transportation system users, and Goal No. 3, which is to enhance communities and lives through mobility and access to opportunity.

ALTERNATIVES CONSIDERED

The Board may choose not to increase the Contract Modification Authority for Contract No. OP44570-2000B. However, this is not recommended. The alternative of purchasing UPS batteries individually would result in higher costs and a longer time to procure.

NEXT STEPS

Upon Board approval of the recommendations, staff will amend Contract No. OP44570-2000B and award Task Order No. 9 needed to proceed with the project work.

ATTACHMENTS

Attachment A - Procurement Summary

Attachment B - Task Order Log

Attachment C - DEOD Summary

Prepared by:

Geyner Paz, Chief Administrative Analyst, (213) 922-3744

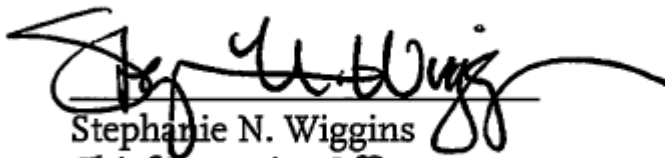
Darryl Lewis, Senior Director, Traction Power Engineering, (213) 613-2105

Kelvin Zan, Executive Officer, Operations Engineering, (213) 617-6264

Errol Taylor, Deputy Chief Operations Officer, Infrastructure Maintenance and Engineering, (213) 922-3227

Debra Avila, Deputy Chief Vendor/Contract Management, (213) 418-3051

Reviewed by: Conan Cheung, Chief Operations Officer, (213) 418-3034



Stephanie N. Wiggins
Chief Executive Officer

PROCUREMENT SUMMARY

METRO B AND D LINES UNINTERRUPTIBLE POWER SUPPLY (UPS) BATTERIES/OP44570-2000B

1.	Contract Number: OP44570-2000B		
2.	Contractor: Skyler Electric Company, Inc.		
3.	Mod. Work Description: Additional UPS batteries for Metro B Line (formerly the Red Line)		
4.	Work Description: Provide, install, and commission six UPS batteries.		
5.	The following data is current as of: January 8, 2025		
6.	Contract Completion Status:		Financial Status:
	Award Date:	11/13/2018	Board Approved NTE Amount: \$2,244,000
	Notice to Proceed (NTP):	1/31/2019	Total Contract Modification Authority (CMA) + Options: \$224,400 \$1,000,000
	Original Completion Date:	11/13/2023	Value of Task Orders and Mods. Issued to Date (including this action): \$4,809,291.53
	Current Est. Complete Date:	5/30/2025	Remaining Board Approved Amount: \$62,599.47
7.	Contract Administrator: Anush Beglaryan		Telephone Number: (213) 418-3047
8.	Project Manager: Winston Dixon		Telephone Number: (213) 922-3323

A. Contract Action Summary

This Board Action is to approve Task Order No. 9, under Contract No. OP44570-2000B for the purchase and installation of six Uninterruptible Power Supply (UPS) batteries, in support of Metro’s Maintenance of Way (MOW) Department for the Metro B Line Station (Formerly the Red Line).

All Task Orders and Contract Modifications are handled in accordance with Metro’s Acquisition Policy. The contract type is an indefinite delivery/indefinite quantity.

In October 2018, Metro’s Board of Directors approved the award of a bench Contract for goods and services for a two-year base period in the amount of \$2,244,000 and three one-year options in the amount of \$1,000,000 for a cumulative not-to-exceed value of \$3,244,000 and Contract Modification Authority in the amount of \$224,400.

Refer to Attachment B, Task Order Log for details on Task Orders issued to date.

B. Cost/Price Analysis

The recommended price has been determined to be fair and reasonable based on price analysis, technical evaluation, and an Independent Cost Estimate (ICE).

Proposal Amount	Metro ICE	Recommended Amount
\$1,403,491	\$1,420,000	\$1,403,491

TASK ORDER LOG
METRO B AND D LINES UNINTERRUPTIBLE POWER SUPPLY (UPS)
BATTERIES/OP44570-2000B

Task Order No.	Description	Status (approved or pending)	Date	Amount
1	Batteries for Hollywood/Highland UPS East, Vermont/Santa Monica UPS South, Union Station UPS East, Hollywood/Vine UPS West	Approved	1/31/19	\$764,506.00
2	Batteries for Wilshire/Western UPS East, Hollywood/Highland UPS West, Vermont/Beverly UPS South, Union Station UPS West	Approved	4/24/20	\$458,205.00
3	Batteries for Vermont/Santa Monica UPS North, 7th Metro Station UPS East	Approved	1/6/21	\$176,540.00
4	Task Order Canceled	-	-	-
5	Battery for Hollywood/Western UPS East	Approved	11/23/22	\$224,153.71
6	Batteries for Solar Drive UPS, North Hollywood UPS South, Civic Center UPS North	Approved	9/20/23	\$957,419.82
7	Batteries for Wilshire/Normandie UPS West, Pershing UPS North, Universal City Station UPS North	Approved	12/23/24	\$824,976.00
8	Task Order Canceled	-	-	-
9	Batteries for North Hollywood UPS North, Vermont/Sunset UPS North, Hollywood/Western UPS West, Wilshire/Normandie UPS East, Hollywood/Vine UPS East, Vermont/Beverly Stations UPS North	Pending	3/27/25	\$1,403,491.00
	TO Total:			\$4,809,291.53
	Original Contract:		11/13/18	\$2,244,000.00
	Options Total:			\$1,000,000.00
	CMA:			\$ 224,400.00
	Remaining CMA:			\$ 62,599.47

DEOD SUMMARY

**METRO B AND D LINES UNINTERRUPTIBLE POWER SUPPLY
BATTERIES/OP4570-2000B**

A. Small Business Participation

Skyler Electric, Inc. (SEI) made an overall 5% Small Business Enterprise (SBE) and a 3% Disabled Veteran Business Enterprise commitment on this Task Order (TO) based contract. SEI has been awarded eight (8) TO's to date. Based on payments, the project is 56% complete and the overall level of participation is 4.44% SBE and 2.14% DVBE, representing shortfalls of the commitments by 0.56% SBE and 0.86%.

SEI has a shortfall mitigation plan on file and contends, and concurred by Metro's Project team, that the shortfall is due to the SBE and DVBE work on the task orders being widely spaced apart and therefore the orders with these firms are placed throughout the entire life of the contract. SEI further contends that there are existing open orders with both subcontractors and once received and reported, SEI should meet their target numbers.

Small Business Commitment	5.00% SBE 3.00% DVBE	Small Business Participation	4.44% SBE 2.14% DVBE
----------------------------------	---------------------------------	-------------------------------------	---------------------------------

	SBE Subcontractors	% Committed	Current Participation¹
1.	South Bay Transportation, Inc.	TBD	4.44%
	SBE Participation	5.00%	4.44%

	DVBE Subcontractors	% Committed	Current Participation¹
1.	SigTel, Inc.	TBD	2.14%
	DVBE Participation	3.00%	2.14%

¹Current 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

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

C. Prevailing Wage Applicability

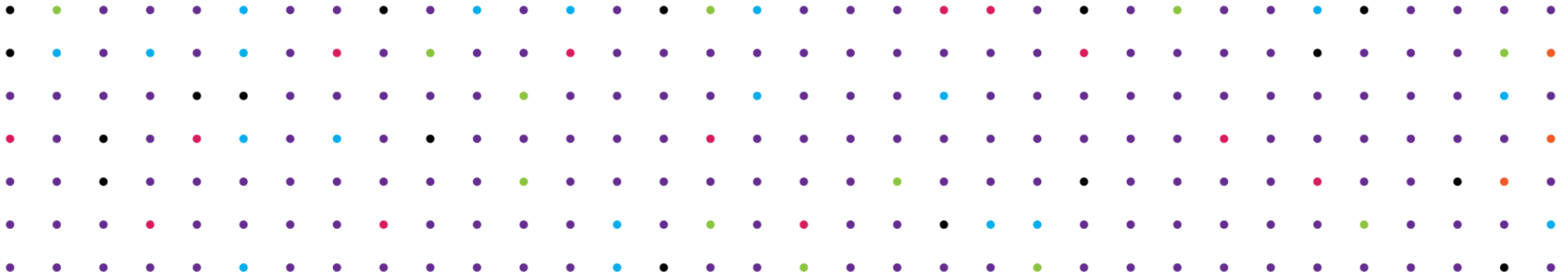
Prevailing Wage requirements are applicable to this contract. DEOD will monitor contractors' compliance with the State of California Department of Industrial Relations (DIR), California Labor Code, and, if federally funded, the U S Department of Labor (DOL) Davis Bacon and Related Acts (DBRA).

D. Project Labor Agreement/Construction Careers Policy

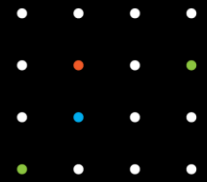
Project Labor Agreement/Construction Careers Policy is not applicable to this Contract. PLA/CCP is applicable only to construction contracts that have a construction related value in excess of \$2.5 million.

Metro B and D Lines Uninterruptible Power Supply (UPS) Batteries

March 20, 2025



Recommendation & Issue



Recommendation

Amend Contract No. OP44570-2000B with Skyler Electric Company, Inc., in the amount of \$1,403,491 for Task Order No. 9 to provide Uninterruptible Power Supply (UPS) Batteries for Metro B and D Lines, increasing the cumulative Not-to-Exceed (NTE) contract amount from \$3,468,400 to \$4,871,891

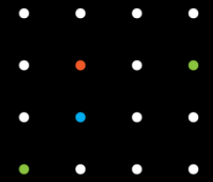
Issue

The batteries for the UPS systems at six Metro B and D Line subway stations are nearing the end of their useful life and require replacement. These batteries provide critical backup power, ensuring the uninterrupted operation of emergency lighting, communication, and Fire Life Safety (FLS) systems during utility power outages or fluctuations. To proceed with the replacements, an increase in funding is necessary to award a task order for the batteries.



Metro[®]

Background



Task Order Awardee

Skyler Electric Company

Number of Bids

One

DEOD Commitment

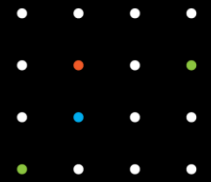
5% Small Business Enterprise (SBE) and 3% Disabled Veteran Business Enterprise (DVBE)

Background

In October 2018, the Board approved establishing a task order bench contract under Request for Information and Qualification (RFIQ) No. OP44570-2. The purpose of the contract was to supply and install UPS batteries at B and D Line stations to replace aging batteries nearing the end of their useful life. The contract award was made to two firms, M.C. Dean, Inc., and Skyler Electric Company, Inc. The issuance of Task Order No. 9 will be to Skyler Electric Company.



Discussion



Batteries for a total of 17 UPS units were replaced under the original contract scope. However, as the work progressed, an additional 6 UPS units were identified as needing battery replacement, leading to an expansion of the project scope. Further, battery costs have escalated since 2018 due to rising raw material prices for lithium, cobalt, and nickel partly caused by increased demand from renewable energy and electric vehicle production. The increase in prices and expansion of the project scope contributed to the additional amount needed for Contract No. OP44570-2000B.

In the event of a utility power loss, each station uses emergency backup battery banks capable of supplying up to four hours of power. This ensures the functionality of critical infrastructure and allows the safe evacuation of passengers and employees during emergencies on the subway system.



Board Report

File #: 2025-0045, File Type: Contract

Agenda Number: 21.

OPERATIONS, SAFETY, AND CUSTOMER EXPERIENCE COMMITTEE MARCH 20, 2025

SUBJECT: COUNTYWIDE TRANSIT SIGNAL PRIORITY (TSP) CLOUD SOLUTION

ACTION: AWARD CONTRACT

RECOMMENDATION

AUTHORIZE the Chief Executive Officer to award a 30-month, firm-fixed-price Contract No. PS125493000 to JMDiaz, Inc., for the design, development, and implementation of a cloud-based Transit Signal Priority (TSP) system on portions of the NextGen Tier One network in the County of Los Angeles in the amount of \$2,443,389, subject to the resolution of any properly submitted protest (s), if any.

ISSUE

The Countywide TSP Program, which was initiated in 1998, has deployed transit signal priority at 471 intersections along 13 high-ridership corridors in Los Angeles County that traverse through 24 jurisdictions. After more than 20 years, the originally deployed transit signal priority system and hardware along these corridors have reached the end of their useful life. Furthermore, in October 2020, the Board approved the NextGen Transit First Service Plan, necessitating the upgrade and expansion of the Countywide TSP Program and its supporting software and hardware solutions.

BACKGROUND

In 1998, Metro initiated the then Countywide Bus Signal Priority (BSP) Pilot Project as part of an effort to design, develop, implement, and evaluate a multi-jurisdictional bus signal priority system. The BSP Pilot Project was a collaborative effort bringing together multiple jurisdictions and transit operators to develop consensus on a unified signal priority technology approach for the County. In 2005 and 2008, the Board extended the Pilot Project to support the expansion of signal priority to enhance Metro bus operations. Since the inception of the program, a total of 471 signalized intersections along 13 corridors traversing through 24 jurisdictions have been equipped which now require upgrades through this contract.

In 2018, Metro began the process of redesigning the bus system to improve the service for current and future riders. The Plan was approved by the Board in October 2020 after extensive public outreach and review. The public communicated to Metro that improving bus speed and reliability is the single most important step Metro can take to retain and grow ridership by increasing the

throughput capacity of local roadways and shifting regional travel patterns toward more sustainable transportation modes.

The Plan proposed improvements that would speed up buses, double the number of frequent Metro bus lines, and provide over 80 percent of current bus riders with frequent service throughout the day. Implementation of the Plan includes capital investment in transportation infrastructure utilized in high-frequency bus corridors on the NextGen Tier One network, including the upgrade and expansion of transit signal priority.

In November 2022, the Board approved a contract for the NextGen Wireless Cloud-Based TSP System for Metro buses within the City of Los Angeles only. This project is currently underway and will provide a road map and lessons learned for upgrade and expansion work that will take place throughout the County. In addition, the underlying technical strategy for this project will be used as the approach for all subsequent transit signal priority projects, ensuring seamless operational performance throughout the system.

In July 2023, Metro applied for and was successfully awarded \$4,004,028 from the 2021 Southern California Association of Governments (SCAG) Regional Early Action Planning Grant (REAP 2.0) under the County Transportation Commission (CTC) Partnership Program to fund the Countywide TSP Cloud Solution for the LA County project.

DISCUSSION

Approval of this contract award will support the speed and reliability goals of the NextGen Transit First Service Plan and demonstrate Metro's commitment to the 2021 REAP and CTC Partnership Program for Metro-led and Metro-partnered transportation plans, programs, and infrastructure projects.

The Countywide TSP Cloud Solution project will upgrade existing hardware and software, leveraging Metro's existing on-board Global Positioning System (GPS) real-time data and cloud computing services. This technology enhancement will address the inherent technological deficiencies tied to the existing out-of-date TSP solution developed over 20 years ago. In addition, the project upgrades will provide a more customizable, flexible, and scalable solution that will support advanced transit signal priority capabilities beyond those currently supported by the original system.

With this project, all 471 TSP-equipped intersections along 13 Metro NextGen Tier One bus corridors will be fully integrated into the new system by Fall 2027, enabling greater performance, data analysis, more reliable signal priority operations, and lower overall maintenance and support costs.

Metro will continue to partner with all 24 municipalities currently participating in the existing Countywide TSP program. This includes the cities of Alhambra, Bell, Bell Gardens, Commerce, Compton, Cudahy, El Monte, Glendale, Hawthorne, Huntington Park, Inglewood, Lawndale, Lynwood, Maywood, Monterey Park, Pasadena, Pico Rivera, Rosemead, South El Monte, South Gate, South Pasadena, Vernon, West Hollywood and the Los Angeles County Department of Public works. Many of these agencies have existing agreements to support TSP that were executed in the

early 2000s. Metro is currently in the process of renewing or replacing the agreements by July 2025 to reflect new requirements and expand participation in the Regional Integration of Intelligent Transportation Systems partnership.

DETERMINATION OF SAFETY IMPACT

Board approval of this recommendation will not impact safety. Implementing transit signal priority will conform to the California Manual on Uniform Traffic Control Devices (CA MUTCD) standards for traffic signal timing.

FINANCIAL IMPACT

For FY25, \$300,000 has been set aside in Cost Center 4740, Countywide TSP Upgrade & Expansion project #203045, Task #01.001. The project has secured \$4,004,028 from the Southern California Association of Governments (SCAG)'s REAP 2.0 grant. Since this is a multi-year project, the project manager, cost center manager, and Deputy Chief Operations Officer, Shared Mobility will be accountable for budgeting the remaining costs for future fiscal years.

Impact to Budget

The source of fund for the Project is State REAP 2.0 grant fund. This fund is not eligible for bus/rail operating or capital expense.

EQUITY PLATFORM

The speed and reliability improvements with the upgraded TSP systems are part of the NextGen Transit First Service Plan, which directly addresses the critical needs of low-income residents and others who rely on public transit to serve the community-identified destinations with reliable and fast service. Many of our riders reside in the NextGen Tier One network, which primarily operates in the Equity Focus Communities. Wireless cloud-based TSP improves bus speed and reliability by reducing travel time, which translates into more time available for work, leisure, or other activities. These improvements increase the attractiveness of transit, potentially resulting in mode shift opportunities and increases in overall transit ridership.

Request for Proposals (RFP) No. PS125493 was advertised under the Small Business Prime (Set-Aside) program and was open only to Metro-certified Small Businesses. The project is funded with state funds and the recommended firm met the Small Business Prime requirements by committing to perform 30.65% of the work with its own workforce. Additional details on the small business commitment are available in Attachment B - DEOD Summary.

VEHICLES MILES TRAVELED OUTCOME

VMT and VMT per capita in Los Angeles 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.* Metro's Board-adopted VMT reduction targets align with California's statewide climate goals, including achieving carbon neutrality by 2045. To ensure continued progress, all Board items are assessed for their potential impact on

VMT.

As part of these ongoing efforts, this item is expected to contribute to further reductions in VMT. This Item supports Metro's systemwide strategy to reduce VMT through equipment and software purchase activities that will improve and further encourage transit ridership by increasing bus speed, reducing service intervals, and increasing the number of frequent Metro bus lines, thus enhancing customer experience. Metro's Board-adopted VMT reduction targets were designed to build on the success of existing investments, and this item aligns with those objectives.

*Based on population estimates from the United States Census and VMT estimates from Caltrans' Highway Performance Monitoring System (HPMS) data between 2001-2019.

IMPLEMENTATION OF STRATEGIC PLAN GOALS

The Project supports the goals outlined in the Metro Vision 2028 Strategic Plan. The recommendation supports strategic plan Goal 1: Provide high quality mobility options that enable people to spend less time traveling and Goal 2: Deliver outstanding trip experience for all users of the transportation system. This project will improve the speed and reliability of Metro NextGen Tier One bus service that runs through the heart of some of the most congested areas in Los Angeles County, comprising equity focus communities. This project will enhance transit customer experience in those areas by reducing travel times and improving schedule adherence.

ALTERNATIVES CONSIDERED

The Board may elect not to award the contract as recommended by staff. However, this is not recommended since the SCAG Regional Council approved project funding on July 6, 2023. Subsequently, Metro executed a Memorandum of Understanding (MOU) with SCAG (MOU # M-008-24) for the \$4,004,028 in REAP grants. Without the implementation of a wireless cloud-based TSP in the County of Los Angeles, Metro will not be able to achieve the speed and reliability improvements outlined in the Next Gen Transit First Service Plan, and the existing system will become inoperable.

NEXT STEPS

Upon Board approval, staff will execute Contract No. PS125493000 with JMDiaz, Inc., and issue a Notice-to-Proceed (NTP) to begin the design, development, and implementation of the Countywide TSP Cloud Solution.

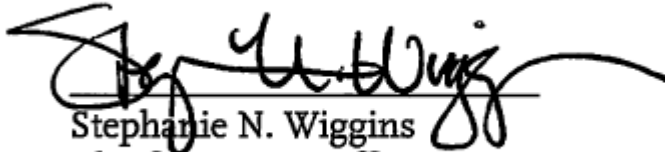
ATTACHMENTS

Attachment A - Procurement Summary
Attachment B - DEOD Summary
Attachment C - Countywide TSP Program Corridors

Prepared by: Eva Moon, Senior Manager, Shared Mobility, (213) 418-3285
James Shahamiri, Senior Director, Shared Mobility, (213) 922-4823
Steven Gota, Executive Officer, Shared Mobility, (213) 922-3043
Shahrzad Amiri, Deputy Chief Operations Officer, Shared Mobility, (213) 922-3061

Debra Avila, Deputy Chief Vendor/Contract Management Officer, (213) 418-3051

Reviewed by: Conan Cheung, Chief Operations Officer, (213) 922-2920



Stephanie N. Wiggins
Chief Executive Officer

PROCUREMENT SUMMARY

**COUNTYWIDE TRANSIT SIGNAL PRIORITY CLOUD SOLUTION
PS125493000**

1.	Contract Number: PS125493000	
2.	Recommended Vendor: JMDiaz, Inc.	
3.	Type of Procurement (check one): <input type="checkbox"/> IFB <input checked="" type="checkbox"/> RFP <input type="checkbox"/> RFP-A&E <input type="checkbox"/> Non-Competitive <input type="checkbox"/> Modification <input type="checkbox"/> Task Order	
4.	Procurement Dates:	
	A. Issued: August 6, 2024	
	B. Advertised/Publicized: August 8, 2024	
	C. Pre-Proposal Conference: August 20, 2024	
	D. Proposals Due: September 12, 2024	
	E. Pre-Qualification Completed: January 29, 2025	
	F. Ethics Declaration Forms Submitted to Ethics: September 13, 2024	
	G. Protest Period End Date: March 25, 2024	
5.	Solicitations Downloaded: 71	Bids/Proposals Received: 4
6.	Contract Administrator: Joshua Sierra	Telephone Number: 213-922-4539
7.	Project Manager: Eva Moon	Telephone Number: 213-418-3285

A. Procurement Background

This Board Action is to approve Contract No. PS125493000 issued in support of equipping and transitioning the entire footprint (except the Southeast Los Angeles area which will be covered under a separate contract) of Countywide Signal Priority (CSP) enabled intersections with an off-the-shelf cloud-based Transit Signal Priority (TSP) system. Board approval of contract award is subject to the resolution of any properly submitted protest(s), if any.

Request for Proposals (RFP) No. PS125493 was issued in accordance with Metro’s Acquisition Policy as a Small Business Prime Set-Aside, and the contract type is a firm fixed price.

Two amendments were issued during the solicitation phase of this RFP:

- Amendment No. 1, issued on August 15, 2024, provided updated SBE Set-Aside forms and updated information for the pre-proposal conference.
- Amendment No. 2, issued on August 22, 2024, provided a revision of Exhibit A, Scope of Services.

A total of 71 firms downloaded the RFP and were included on the planholders’ list. A virtual pre-proposal conference was held on August 20, 2024, and was attended by 13 participants representing six firms. There were 13 questions received for this RFP and responses were provided prior to the proposal due date.

A total of four proposals were received on the due date of September 12, 2024, and are listed below in alphabetical order:

1. Architectural Engineering Technology, Inc. (AET)
2. Connected Signals
3. Irvine Global Consultants (IGC)
4. JMDiaz, Inc. (JMD)

B. Evaluation of Proposals

A diverse Proposal Evaluation Team (PET) consisting of staff from the Intelligent Transportation Systems, Speed and Reliability Transit Engineering, and Alternative Delivery Construction Management Departments 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 percent |
| • Experience and Qualifications of the Personnel | 25 percent |
| • Effectiveness of Work Plan/Project Approach | 30 percent |
| • Cost Proposal | 20 percent |

The evaluation criteria are appropriate and consistent with criteria developed for other, similar procurements. Several factors were considered when developing these weights, giving the greatest importance to the effectiveness of work plan/project approach.

Of the four proposals received, two were determined to be within the competitive range.

The two firms within the competitive range are listed below in alphabetical order:

1. Architectural Engineering Technology, Inc. (AET)
2. JMDiaz, Inc. (JMD)

Two firms were determined to be outside the competitive range and were not included for further consideration.

In October, the Proposal Evaluation Team (PET) met with the firms in the competitive range. During this meeting, each firm's project managers and key team members presented their qualifications, work plan, approach, and responded to the PET's questions. The presentations generally covered the RFP requirements, the team's experience, and each firm's commitment to the project's success. The PET also had an opportunity to ask the firms questions regarding the technical risks and challenges of the project, how tasks and staff hours were to be allocated, what stakeholder deliverables and engagement would be necessary, what components they felt were most critical

during the O&M phase, what made their proposed TSP solution unique, would there be any customization expected for LA Metro, and finally what is their licensing structure.

Qualifications Summary of Firms within the Competitive Range:

JMD

JMDiaz, Inc. has been in business for 25 years. They specialize in the field of civil engineering services for transportation and land development projects and have worked on cloud-based systems projects, with communication infrastructure, traffic signal controller and firmware operations, and testing and configuration. The JMD team also includes Iteris, a company with a 15-year history developing traveler information systems, connected vehicle technologies, traffic performance measurement, and analytics software solutions. Iteris brings significant expertise in traffic signal operations and has successfully designed, configured, implemented and operated a multi-jurisdictional TSP project, spanning 13-corridors and 24 agencies across the Los Angeles County area.

AET

Architectural Engineering Technology, Inc. is a comprehensive transportation consulting firm offering a wide range of services to both public and private sector clients. Their expertise spans Transportation Planning, Traffic and Parking Studies, Signal Improvements, Intelligent Transportation Systems (ITS), Smart Mobility, Transportation Management, and Emerging Technologies. Clients include City of Torrance, City of Westminster, City of Costa Mesa, City of San Gabriel, Los Angeles County Metropolitan Transit Authority (LACMTA), and Virginia Department of Transportation.

1	Firm	Average Score	Factor Weight	Weighted Average Score	Rank
2	JMDiaz (JMD)				
3	Experience and Qualifications of the Contractor Team	85.00	25.00%	21.25	
4	Experience and Qualifications of the Proposed Personnel	88.33	25.00%	22.08	
5	Effectiveness of Work Plan/Project Approach	86.67	30.00%	26.00	
6	Cost Proposal	51.16	20.00%	10.23	
7	Total		100.00%	79.56	1
8	Architectural Engineering Technology (AET)				
9	Experience and Qualifications of the Contractor Team	83.33	25.00%	20.83	
10	Experience and Qualifications of the Proposed Personnel	73.33	25.00%	18.33	
11	Effectiveness of Work Plan/Project Approach	73.33	30.00%	22.00	
12	Cost Proposal	48.16	20.00%	9.63	
13	Total		100.00%	70.79	2

C. Cost/Price Analysis

The recommended price has been determined to be fair and reasonable based upon adequate price competition and price analysis. The negotiated amount of \$ \$2,443,389 is 39% below the Independent Cost Estimate (ICE). The ICE used a higher fully-burdened hourly rate and overestimated the hours on several tasks.

The change in the proposal amount from the original proposal to the accepted proposal amount is due to a clarification on the license agreement. The proposer had made an assumption that the license for this project would continue to be provided under the CSP Pilot Project and therefore noted in their proposal that the license was not included. Upon Metro's inquiry, the clarification was provided that the license would need to be provided under this agreement, and the contractor provided the revision to their proposal.

The revised proposal, inclusive of the license, is \$2,443,389.

	Proposer Name	Proposal Amount	Metro ICE	Negotiated or NTE amount
1.	JMD	\$1,473,768	\$4,003,949	\$2,443,389

D. Background on Recommended Contractor

The recommended firm, JMDiaz, located in City of Industry, has been in business for 25 years and is a leader in the field of civil engineering services for transportation and land development projects. Previous clients include City of Anaheim, County of Los Angeles Department of Public Works (LACDPW), City of Glendora, and Culver City. JMD has also previously provided services for Metro and their performance has been satisfactory.

DEOD SUMMARY

**COUNTYWIDE TRANSIT SIGNAL PRIORITY CLOUD SOLUTION
PS125493000**

A. Small Business Participation

This procurement was subject to the Small Business (SB) Prime (Set-Aside) policy and was open to SBE Certified Small Business Only. JMDiaz, Inc., an SBE Prime, is performing 30.65% of the work with its own workforce. JMDiaz listed (2) non-SBE subcontractors to perform on this contract.

SMALL BUSINESS SET-ASIDE

	SBE Prime Contractor	SBE % Committed
1.	JMDiaz, Inc (Prime)	30.65%
Total SBE Commitment		30.65%

B. Living Wage and Service Contract Worker Retention Policy Applicability

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

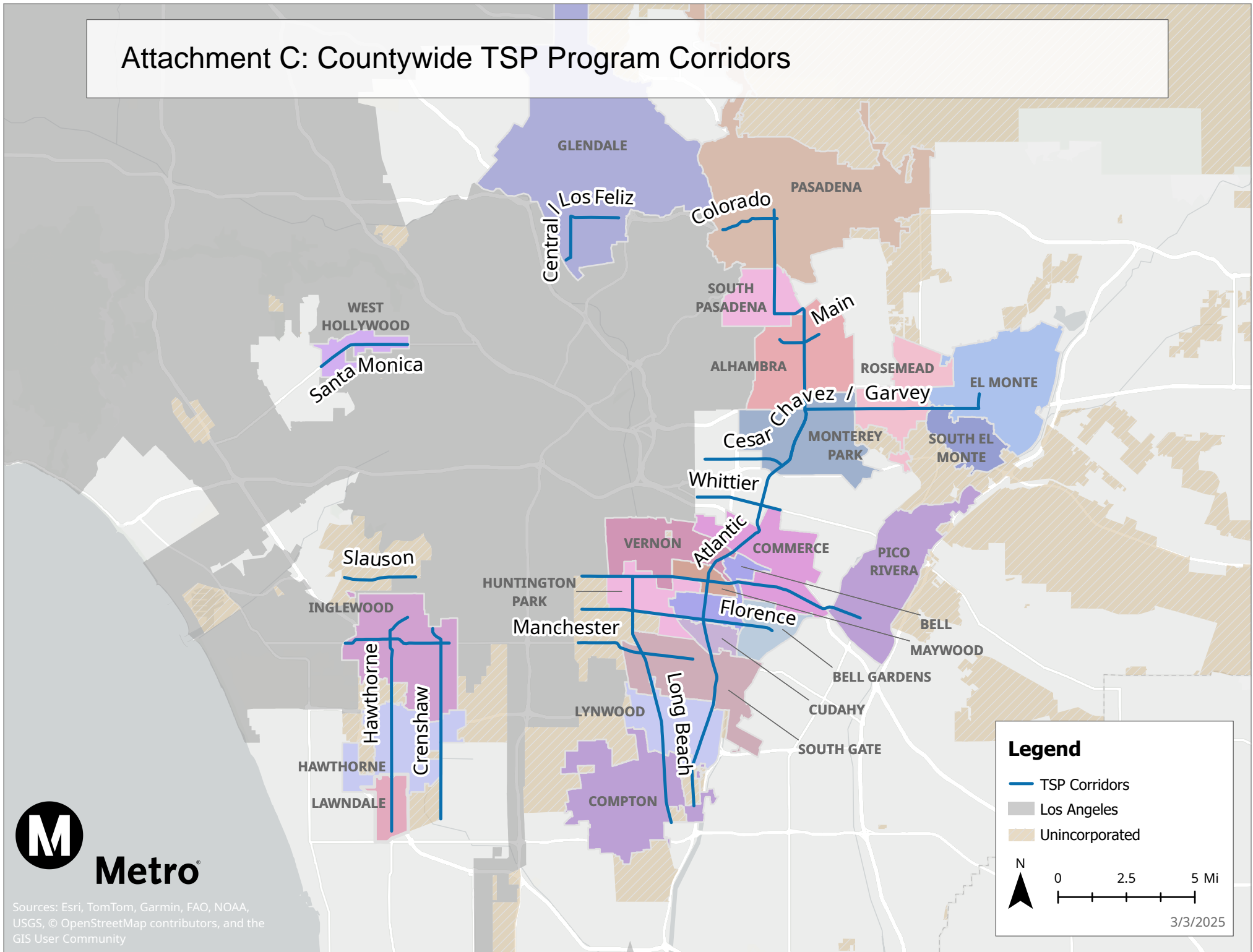
C. Prevailing Wage Applicability

Prevailing Wage is not applicable to this contract.

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.

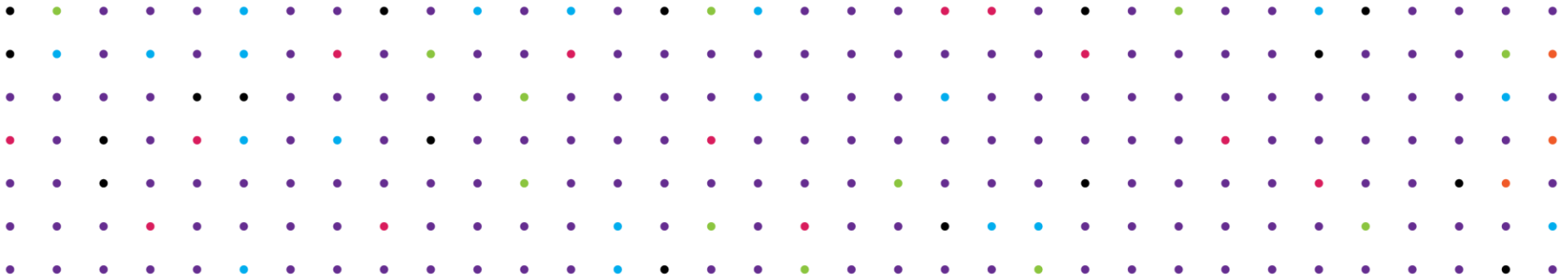
Attachment C: Countywide TSP Program Corridors



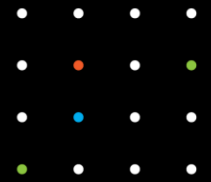
Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community

Countywide Transit Signal Priority (TSP) Cloud Solution

March 20, 2025

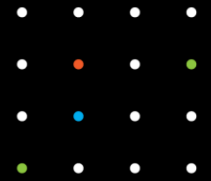


RECOMMENDATION



AUTHORIZE the Chief Executive Officer to award a 30-month, firm-fixed-price Contract No., PS125493000 to JMDiaz, Inc., for the design, development, and implementation of a cloud-based Transit Signal Priority (TSP) system on portions of the NextGen Tier One network in the County of Los Angeles in the amount of \$2,443,389, subject to the resolution of any properly submitted protest(s), if any.

ISSUE



AWARDEE

JMDiaz, Inc.

NUMBER OF PROPOSERS

4 TOTAL (2 are outside the competitive range)

- JMDiaz
- AET
- Connected Signals
- IGC

DEOD COMMITMENT

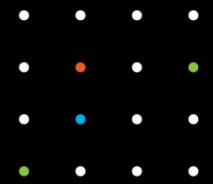
30.65% Small Business Enterprise

ISSUE

This contract will transition Metro's 20-year-old transit signal priority hardware and software solution to a cloud-based system supporting 471 intersections along 13 high ridership bus corridors in 24 jurisdictions within Los Angeles County.

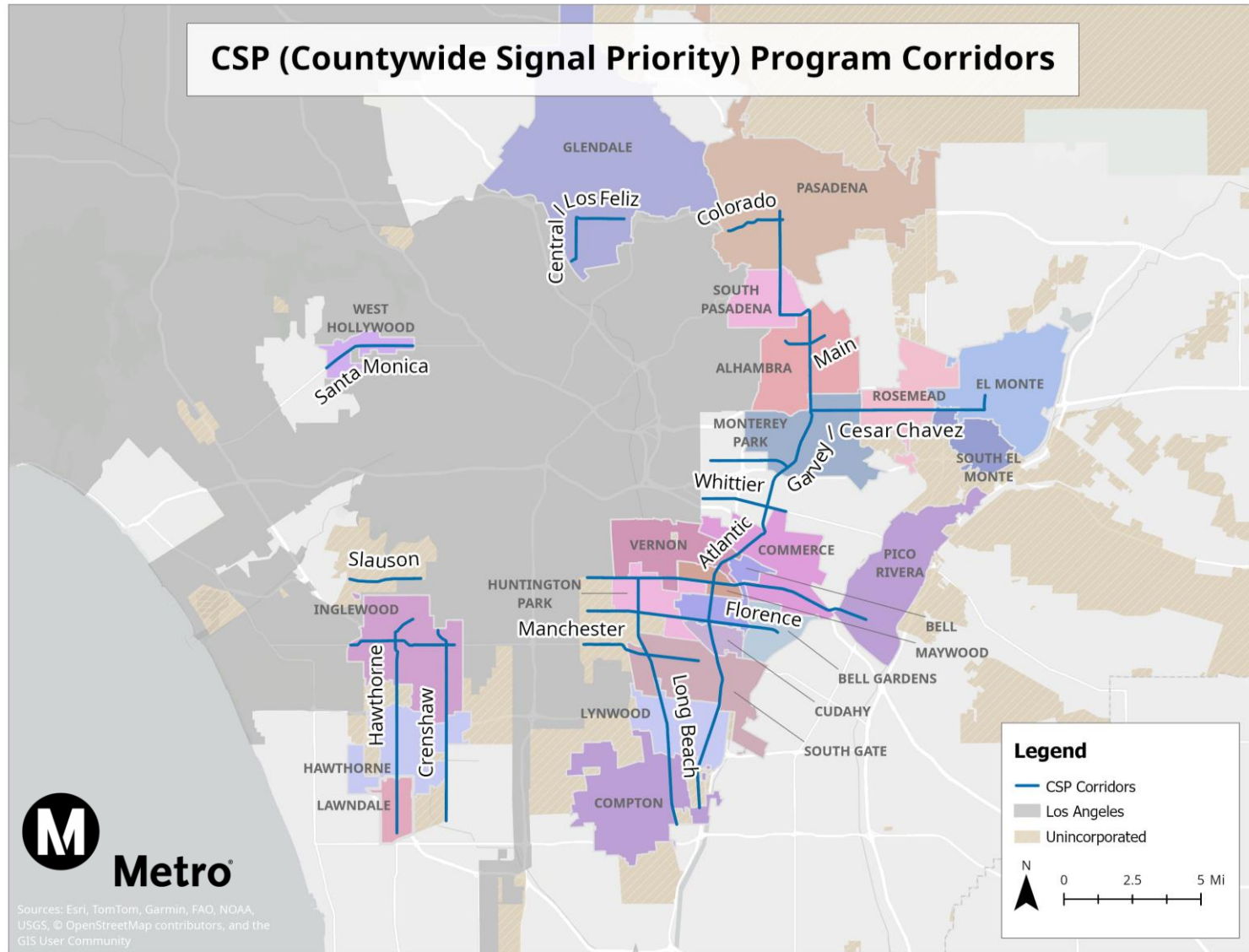
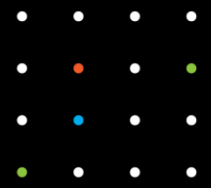


PROCUREMENT EVALUATION

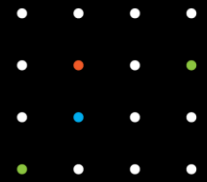


	Max. Points	JMDiaz	AET	Connected Signals	IGC
Experience and Qualifications of the Contractor Team	25	21.25	20.83	15.83	17.50
Experience and Qualifications of the Proposed Personnel	25	22.08	18.33	12.50	15.83
Effectiveness of Work Plan/Project Approach	30	26.00	22.00	12.00	16.00
Cost Proposal	20	10.23	9.63	20.00	5.61
Total Score	100	79.56	70.80	60.33	59.94

BACKGROUND



DISCUSSION



- Project is 100% funded through a Southern California Association of Governments Regional Early Action Planning Grant (REAP 2.0).
- Project will upgrade transit signal priority at all 471 signalized intersections along 13 Metro NextGen Tier 1 bus corridors .
- Contract will:
 - Implement new cloud-based technology solution to replace obsolete system
 - Elevate system reliability, flexibility, and scalability
 - Implement advanced transit signal priority capabilities beyond those currently supported by the original system



Board Report

File #: 2025-0160, File Type: Contract

Agenda Number: 22.

OPERATIONS, SAFETY, AND CUSTOMER EXPERIENCE COMMITTEE MARCH 20, 2025

SUBJECT: PEST AND BIRD CONTROL SERVICES

ACTION: AWARD CONTRACT

RECOMMENDATION

AUTHORIZE the Chief Executive Officer (CEO) to award a firm fixed unit rate Contract No. OP48505 (2)0008370 to CDS Services, Inc. DBA Legion Pest Management, for pest and bird control services throughout Metro's bus and rail facilities, rail cars, and non-revenue vehicles, in the Not-To-Exceed (NTE) amount of \$2,887,332 for the three-year base period and \$1,925,728 for the two-year option, for a combined NTE amount of \$4,813,060, effective May 5, 2025; subject to the resolution of any properly submitted protest(s), if any.

ISSUE

The existing contract for pest and bird control services throughout Metro's bus and rail facilities, rail cars, and non-revenue vehicles, excluding buses, expires on May 4, 2025. A new contract award is required to avoid a lapse in service and continue performing pest and bird control services, effective May 5, 2025.

BACKGROUND

On October 26, 2017, the approved the award of Contract No. OP852420003367 to Pestmaster Services Inc. for the combined amount of \$6,634,069.20 to provide regularly scheduled and as-needed pest and bird control services throughout Metro's bus and rail facilities, rail cars, and non-revenue vehicles, excluding buses.

During the term of the existing contract, pest and bird control services were expanded to include Union Station West Portal, the K-Line (C/LAX), and the Regional Connector expansion projects, reflecting sufficient existing contract authority through October 31, 2023.

On May 5, 2023, a new pest and bird control services solicitation was issued, and on June 12, 2023, three bids were received. On September 21, 2023, the Board awarded Contract No. OP485050008370 to CDS Services, Inc. DBA Legion Pest Management to provide regularly scheduled and as-needed pest and bird control services systemwide, pending the resolution of any property submitted protest. Concurrently, Metro received a timely protest on the same day as the contract

award.

In September of 2023, it became necessary to execute short-term agreements to extend the services provided by the incumbent contractor to avoid a lapse in service and continue providing pest and bird control services systemwide while allowing sufficient time for protest resolution and re-solicitation.

On May 21, 2024, Metro canceled IFB No. OP48505 due to bidders not meeting small business program requirements. All bidders were notified of the cancellation and that the services would be re-solicited.

DISCUSSION

Under the new contract recommended for the award, the contractor is required to provide regularly scheduled and as-needed pest and bird control services throughout Metro's bus and rail facilities, rail cars, and non-revenue vehicles, excluding buses serviced under a separate service maintenance contract. Metro bus and rail facilities consist of 254 locations and 451 rail cars. Services include treatment of pest infestations, pest and bird waste clean-up, installation of pest and bird deterrent applications, animal trapping, and dead animal removal.

During the new contract term, the scope of services will increase to include the addition of the Rail to Rail, Airport Metro Connector (AMC), D line (Purple) Westside Extensions, and A Line (Blue) Foothill Extension Phase 2B system expansion projects as they become operational.

DETERMINATION OF SAFETY IMPACT

The approval of this item will ensure that Metro's maintenance standards are met and the necessary regularly scheduled and as-needed pest and bird control services are provided with prompt response time to deliver safe, quality, on-time, and reliable services.

FINANCIAL IMPACT

The current funding for this action is \$378,464, which is included within the FY25 budget under cost center 8370-Facilities Contracted Maintenance Services, account 50308, Service Contract Maintenance, under various projects.

Since this is a multi-year contract, the cost center manager and Deputy Chief Operations Officer of Shared Mobility will be accountable for budgeting costs in future years.

Impact to Budget

The funding source for this action includes bus and rail operating-eligible funds, which include Propositions A and C, Measure R and M sales taxes, State Transit Assistance (STA), and Transportation Development Act (TDA) funds. Use of these funding sources maximizes the intent of project usage given approved guidelines and provisions,

EQUITY PLATFORM

Scheduled and as-needed pest and bird control services improve bus and rail station cleanliness and provide a safe environment for Metro's patrons. This will ensure safe working conditions for employees and provide reliable service to all patrons. This is especially critical in Equity Focus Communities, where individuals often depend on public transportation as their primary means of travel.

Metro patrons, employees, and Transit Ambassadors can report cleanliness and maintenance issues through the Customer Relations phone numbers posted throughout the rail and bus system. Customers can communicate with Metro in nine different languages using our translation service. Metro also ensures that translated signage is posted for those reporting cleanliness and maintenance issues on the Metro system. For the 12 months ending on December 19, 2024, 131 incidents were reported through the Transit Watch App, indicating that 29% of the 453 incidents related to pest and bird control services were reported through Metro's M3 Incident Reporting System.

As part of this solicitation, a Systemwide Metro Connect Industry Forum Outreach event was conducted on March 27, 2023. During this outreach event, staff provided detailed information regarding SBE Programs to encourage small business participation.

DEOD established a 10% SBE and 3% DVBE goal for this solicitation. CDS Services, Inc. DBA Legion Pest Management made a 60% SBE and 40% DVBE commitment.

VEHICLE MILES TRAVELED OUTCOME

VMT and VMT per capita in Los Angeles 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.* Metro's Board-adopted VMT reduction targets align with California's statewide climate goals, including achieving carbon neutrality by 2045. To ensure continued progress, all Board items are assessed for their potential impact on VMT.

As part of these ongoing efforts, this item is expected to contribute to further reductions in VMT. This item supports Metro's systemwide strategy to reduce VMT through these maintenance activities that will improve bus and rail station cleanliness and further encourage transit ridership. Metro's Board-adopted VMT reduction targets were designed to build on the success of existing investments, and this item aligns with those objectives.

*Based on population estimates from the United States Census and VMT estimates from Caltrans' Highway Performance Monitoring System (HPMS) data between 2001-2019.

IMPLEMENTATION OF STRATEGIC PLAN GOALS

This Board action supports Strategic Goal 2: Deliver outstanding trip experiences for all users of the transportation system within the Metro organization. Performing ongoing, regularly scheduled, and as-needed pest and bird control services will prolong the lifespan of bus and rail facilities, rail cars, and non-revenue vehicles by keeping Metro's assets free of intrusions from birds and pests. These services will ensure safe and clean conditions while enhancing Metro's customer experience and providing reliable operations systemwide.

ALTERNATIVES CONSIDERED

The Board may elect not to approve this recommendation. This option is not recommended as it would result in a gap in service, impacting Metro's system safety, cleanliness, and customer experience.

With the completion of a financial-based insourcing/outsourcing study based on a quantitative and qualitative assessment, staff has analyzed insourcing/outsourcing options for pest and bird control services, among other services. Based on initial findings, pest and bird control services were not recommended for insourcing as they would require Metro to obtain specialty licenses to purchase pesticides, hire and train licensed personnel to apply pesticides, and purchase additional equipment, vehicles, and supplies to support bird and pest control service delivery.

NEXT STEPS

Upon Board approval, staff will execute Contract No. OP48505(2)0008370 with CDS Services, Inc. DBA Legion Pest Management effective May 5, 2025, to provide necessary regularly scheduled and as-needed pest and bird control services throughout Metro's bus and rail facilities, rail cars, and non-revenue vehicles.

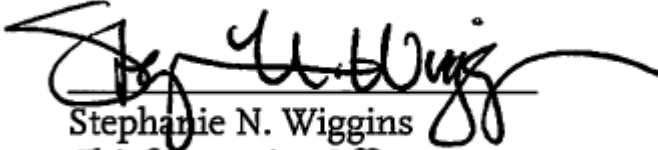
ATTACHMENTS

Attachment A - Procurement Summary

Attachment B - DEOD Summary

Prepared by: Lena Babayan, Executive Officer, Operations Administration,
(213) 922-6765
Ruben Cardenas, Senior Manager, Facilities Contracted Maintenance Services,
(213) 922-5932
Shahzad Amiri, Deputy Chief Operations Officer, Shared Mobility,
(213) 922-3061
Debra Avila, Deputy Chief Vendor/Contract Management Officer,
(213) 418-3051

Reviewed by: Conan Cheung, Chief Operations Officer, Transit Operations,
(213) 418-3034


Stephanie N. Wiggins
Chief Executive Officer

PROCUREMENT SUMMARY

PEST AND BIRD CONTROL SERVICES / OP48505(2)0008370

1.	Contract Number: OP48505(2)0008370	
2.	Recommended Vendor: CDS Services, Inc. DBA, Legion Pest	
3.	Type of Procurement (check one) : <input checked="" type="checkbox"/> IFB <input type="checkbox"/> RFIQ <input type="checkbox"/> RFP-A&E <input type="checkbox"/> Non-Competitive <input type="checkbox"/> Modification <input type="checkbox"/> Task Order	
4.	Procurement Dates:	
	A. Issued: July 26, 2024	
	B. Advertised/Publicized: July 26, 2024	
	C. Pre-Bid Conference: August 6, 2024	
	D. Bids Due: September 4, 2024	
	E. Pre-Qualification Completed: January 24, 2025	
	F. Ethics Declaration Forms submitted to Ethics: August 13, 2024	
	G. Protest Period End Date: March 6, 2025	
5.	Solicitations Picked up/Downloaded: 16	Bids Received: 3
6.	Contract Administrator: Ana Rodriguez	Telephone Number: (213) 922-2790
7.	Project Manager: Ruben Cardenas	Telephone Number: (213) 922- 5932

A. Procurement Background

This Board Action is to approve the award of Contract No. OP48505(2)0008370 to support pest and bird control services throughout Los Angeles County. Board approval of contract award is subject to the resolution of any properly submitted protest(s), if any.

On May 5, 2023, Invitation for Bids (IFB) No. OP48505 was issued as a competitive sealed bid procurement in accordance with Metro's Acquisition Policy and the contract type is firm fixed unit rate. This IFB was issued under the Medium Sized Business Enterprise I Program (MSZ-I Program) which requires that bidders must be MSZ-I firms, Metro Certified Small Business Enterprises (SBE), Disadvantaged Business Enterprises (DBE), or Disabled Veterans Business Enterprises (DVBE) to be eligible to participate in this solicitation. Bidders were also required to meet or exceed the recommended SBE goal of 10% and a DVBE goal of 3%. On May 21, 2024, Metro rejected all bids and informed bidders that IFB No. OP48505 was cancelled and would be resolicited.

On July 26, 2024, the solicitation was re-issued as IFB No. OP48505(2) and was issued as a competitive sealed bid procurement in accordance with Metro's Acquisition Policy and the contract type is firm fixed unit rate. This IFB was issued under the Medium Sized Business Enterprise I Program (MSZ-I Program) which requires that bidders must be MSZ-I firms, Metro Certified Small Business Enterprises (SBE), Disadvantaged Business Enterprises (DBE), or Disabled Veterans Business Enterprises (DVBE) to be eligible to participate in this solicitation. Bidders

were also required to meet or exceed the recommended SBE goal of 10% and a DVBE goal of 3%.

Two (2) amendments were issued during the solicitation phase of this IFB:

- Amendment No. 1, issued on August 20, 2024, amended DEOD Instructions to Bidders/Proposers and updated amended section SP-18 Living Wage/Service Contract Worker Retention Policy of the sample contract
- Amendment No. 2, issued on August 26, 2024, amended Exhibit 2, Schedule of Quantities and Prices and extended the bid due date to September 4, 2024.

A virtual pre-bid conference was held on August 6, 2024, with five firms in attendance and ten attendees.

Sixteen firms downloaded the IFB and were included on Metro's planholders' list. Four questions were received, and responses were released prior to the bid due date.

A total of three bids were received by the due date of September 4, 2024, and are listed below in alphabetical order:

1. CDS Services, Inc.
2. Loisun, Inc. DBA A1 Watkins Pest and Termite Control (Loisun Inc.)
3. Stafford Environmental Services, Inc.

B. Evaluation of bids

On September 4, 2024, the bids received were forwarded to the Pre-Qualification Office to determine eligibility to MSZ-I program requirements. All three bidders were deemed responsive to the MSZ-I requirement.

Stafford Environmental Services, Inc., was determined to be non-responsive to the SBE/DVBE goal.

The recommended firm, CDS Services Inc., was the apparent lowest bidder, and its bid was evaluated to determine responsiveness to the solicitation requirements. Areas of responsiveness included meeting the minimum qualifications, such as years of experience providing pest and bird control services, possession of required licenses to perform the services, and having access to the necessary equipment required to perform the services.

C. Price Analysis

The award amount has been determined to be fair and reasonable based on an award to the lowest responsive, responsible bidder, adequate competition, price analysis, and technical analysis. The recommended award amount of \$4,813,060 is 42.09% lower than the Independent Cost Estimate (ICE) due to differences in the method of calculation for pest control services for rail cars and Union Station Headquarters and the competitiveness of the solicitation leading to lower-than-expected service rates. The recommended bidder proposed to absorb the additional monthly costs for each rail car location within the overall systemwide monthly cost. Conversely, the ICE assumed a firm fixed unit rate per rail car, per location, as is the case with the existing contract. Additionally, the service rates for pest and bird control are between 14% and 20% lower than the ones used by the ICE that were based on existing contract rates.

	Bidder Name	Bid Amount	Metro ICE	Award Amount
1.	CDS Services, Inc.	\$4,813,060	\$8,311,668	\$4,813,060
2.	Loisun, Inc.	\$5,900,899		
3.	Stafford Environmental Services	\$8,669,464		

D. Background on Recommended Contractor

The recommended firm, CDS Services Inc., established in 2013 is located in Murrieta, California. It specializes in developing custom Integrated Pest Management (IPM) and Bird Management Plans. IPM is a specialized pest control program that is an effective and environmentally responsible approach to pest management services. CDS Services has accounts in the Greater Los Angeles, Orlando, New York, Fresno, Rocky Mountain Veterans Affairs Medical Centers, and military bases.

DEOD SUMMARY

PEST AND BIRD CONTROL SERVICES / OP4850520008370

A. Small Business Participation

The Diversity and Economic Opportunity Department (DEOD) established a 10% Small Business Enterprise (SBE) and 3% Disabled Veteran Business Enterprise (DVBE) goal for this Medium Size Business Enterprise (MSZ-I) solicitation. CDS Services Inc., DBA Legion Pest Management, an SBE and DVBE firm, exceeded the goal by making a 60% SBE and 40% DVBE commitment.

Small Business Goal	10% SBE 3% DVBE	Small Business Commitment	60% SBE 40% DVBE
----------------------------	----------------------------	----------------------------------	-----------------------------

	SBE Subcontractor	% Committed	LSBE	Non-LSBE
1.	CDS Services Inc., DBA Legion Pest Management (Prime)	60%		X
	Total Commitment	60%		

	DVBE Subcontractor	% Committed	LSBE	Non-LSBE
1.	CDS Services Inc., DBA Legion Pest Management (Prime)	40%		X
	Total Commitment	40%		

B. Medium Size Business Enterprise Program (MSZ-I)

CDS Services Inc., DBA Legion Pest Management is an MSZ-I firm.

C. Local Small Business Enterprise (LSBE) Preference Program

CDS Services Inc., DBA Legion Pest Management, a non-LSBE Prime, did not meet the LSBE Preference Program requirements and is not eligible for LSBE preference.

D. Living Wage and Service Contract Worker Retention Policy Applicability

The Living Wage and Service Contract Worker Retention Policy (LW/SCWRP) will be applicable on this Contract. Metro staff will monitor and enforce the policy guidelines to ensure that workers are paid, at minimum, the current Living Wage rate of \$25.23 per hour (\$19.28 base + \$5.95 health benefits), including yearly increases. In addition, Contractors will be responsible for submitting the required reports for the

LW/SCWRP and other related documentation to staff to determine overall compliance with the policy.

LW/SCWRP is applicable on Professional Service Contracts listed below that are \$25,000.00 or greater and have a contract term of three (3) months or more. The LW/SCWRP will apply to professional service contracts for Asphalt and Concrete Repair, Facility and Building Maintenance, Food Services, Janitorial and Custodial, Landscaping, Laundry Services, Moving Services, Office and Clerical (copier maintenance, facsimile maintenance, courier mailing, photographic, printing, collections), Parking Lot Management, Pest Control, Security, Street Sweeping, Towing, Trash Collection, Tree Trimming, Weed Abatement and Debris Removal; and any other Service or labor determined by Metro's Board of Director, Executive Management and DEOD, to meet the intent of this Policy.

DEOD Staff will input current Living Wage hourly rates during the development of the Board Report. The policy guidelines are applicable from conception to completion of the service contracts, including change order and modification work.

E. Prevailing Wage Applicability

Prevailing Wage is not applicable to this contract.

F. 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.

Pest and Bird Control Services for Metro Transit Facilities

Contract No. OP4850520008370



Metro

ISSUE & DISCUSSION

AWARDEE - CDS Services, Inc., DBA, Legion Pest Management

NUMBER OF BIDS - 3

- Loison, Inc., dba, A1 Watkins Pest and Termite Control - \$5,852,252.52
- CDS Services, Inc. DBA Legion Pest Management - \$4,813,060.00
- Stafford Environmental Services, Inc. – Non Responsive

DEOD COMMITMENT - 10% Small Business Enterprise (SBE) & 3% Disadvantaged Veteran Business Enterprise (DVBE) goal established, with 60% SBE and 40% DVBE commitment made.

ISSUE - The existing contract for pest and bird control services expires May 4, 2025. A new contract award is required to avoid a lapse in service and continue performing pest and bird control services, effective May 5, 2025.

ISSUE & DISCUSSION

DISCUSSION

- Under the new contract recommended for award, the contractor is required to provide regularly scheduled and as-needed pest and bird control services throughout Metro's 451 bus and rail locations and 451 rail cars
- Services include treatment of pest infestations, pest and bird waste clean-up, installation of pest and bird deterrent applications, animal trapping, and dead animal removal.
- During the new contract term, the scope of services will increase to include the addition of the Rail to Rail, Airport Metro Connector (AMC), D line (Purple) Westside Extensions, and A Line (Blue) Foothill Extension Phase 2B system expansion projects as they become operational.

RECOMMENDATION

AUTHORIZE the Chief Executive Officer (CEO) to award a firm fixed unit rate Contract No. OP4850520008370 to CDS Services, Inc. DBA Legion Pest Management for pest and bird control services throughout Metro's bus and rail facilities, rail cars, and non-revenue vehicles, in the Not-To-Exceed (NTE) amount of \$2,887,332 for the three-year base period and \$1,925,728 for the two-year option, for a combined NTE amount of \$4,813,060, effective May 5, 2025; subject to resolution of any properly submitted protest(s), if any.



Board Report

File #: 2025-0071, File Type: Contract

Agenda Number: 23.

OPERATIONS, SAFETY, AND CUSTOMER EXPERIENCE COMMITTEE MARCH 20, 2025

SUBJECT: METRO AGENCYWIDE FURNITURE AND MOVING SERVICES

ACTION: AWARD CONTRACT

RECOMMENDATION

AUTHORIZE the Chief Executive Officer to award a five-year, Indefinite Delivery/Indefinite Quantity (IDIQ) Contract No. PS125302000, for furniture, space planning, and installation services, to M3 Office, Inc., for a Not-to-Exceed (NTE) amount of \$3,475,000.00 for the three-year base period and \$1,075,000.00 for each of the two, one-year options, for a combined total of \$5,625,000.00 effective April 1, 2025, subject to the resolution of any properly submitted protest(s), if any.

ISSUE

This Contract is for a full-service Herman Miller furniture dealer to provide furniture, space planning, and installation services for all Metro facilities, including new operating facilities and the Gateway Headquarters building. The current Metro furniture, space planning, and installation services contract will expire on March 31, 2025.

BACKGROUND

The initiation of a Herman Miller furniture contract was for the original opening of the Gateway building in 1994. Since that time there have been numerous furniture procurements to continue to provide furnishings for the ebb and flow of growth at Metro.

The previous contract was awarded to M3 Office Inc by the Board at its meeting in May 2017 for a three-year contract in the amount of \$5,000,000 with two one-year options of \$1,000,000 each. Both options one and two were modified in 2019. Contract Modification Authority was granted for \$500,000 in March of 2022. Due to a failed procurement there was an extension and an additional \$1,500,000 was authorized to allow for the continued furniture needs while a new procurement could be initiated. Then in November 2024 the most current non-monetary extension was granted which extended the life of the contract to expire March 31, 2025.

DISCUSSION

Herman Miller systems furniture for cubicles and offices form the core of this procurement. Facilities

Maintenance continually reconfigures cubicles and offices in Metro buildings and divisions to meet ever-changing business needs. For example, the existing contract was used to furnish Bus Division 9, the Metro Transit Training and Innovation Center, and the New Emergency Security Operation Center (ESOC).

The new contract includes the implementation of new space standards to accommodate additional staff required for service expansion. These reconfigurations require various furniture components that must work seamlessly with our existing inventory of furniture and are readily available. This Contract will be utilized to buy new and replacement Herman Miller furniture components to support the requirements.

This procurement also includes space planning and move services. This is to augment the in-house capabilities if the need arises to restack the Gateway building as staff re-populate the building due to office space needs. These services have been included in the contract to be able to plan for large scale staffing changes, for instance the TCPSD group. Ambassadors and others. Also, these changes will allow Metro to quickly respond to any changes in the workforce due to upcoming large events.

DETERMINATION OF SAFETY IMPACT

This Contract will positively impact safety as new ergonomic furniture is introduced in response to employee-specific health and safety concerns. A workspace designed with safety in mind helps prevent common workplace injuries <<https://www.who.int/tools/occupational-hazards-in-health-sector/occupational-injuries>> such as repetitive strain, slips, falls, or ergonomic-related issues. Additionally, an ergonomically designed workspace directly impacts productivity.

FINANCIAL IMPACT

The funding of \$300,000 for the Gateway Headquarters building is included in the FY25 budget in cost center number 6430 (Building Services) under project number 100090 (Gateway Building Costs). Since this is a multi-year contract, the cost center manager and Deputy Chief Operations Officer will be accountable for budgeting costs in future years. Please note that funding for furniture is also budgeted in various cost centers and operating and capital projects through Metro, as other departments that make use of this Contract will be responsible for the budgeting of these costs for their respective cost center(s).

Impact to Budget

Partial funding for this project is allocated through General Overhead funding, which is based on Metro's federally approved indirect-cost allocation plan, which distributes costs agency-wide. The remaining funding for this project will come from the Enterprise Fund, as Departments using this Contract will use their budgeted funds. No other funds were considered, as these fund sources are an appropriate use for these activities.

EQUITY PLATFORM

The Diversity and Economic Opportunity Department (DEOD) established an overall 8% Disadvantaged Business Enterprise (DBE) goal for this procurement. M3, Inc., a DBE firm, met the goal by making an overall 8% DBE commitment.

Securing the furniture contract will help create a more inclusive and accessible workspace for employees of diverse backgrounds and abilities. The contract will also enable the provision of new ergonomic furniture, potentially enhancing employee comfort and productivity across all demographics at all facilities. This improvement could lead to greater job satisfaction and retention of diverse talent, supporting Metro's commitment to diversity and equal opportunities across departments.

VEHICLE MILES TRAVELED OUTCOME

VMT and VMT per capita in Los Angeles 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.* Metro's Board-adopted VMT reduction targets align with California's statewide climate goals, including achieving carbon neutrality by 2045. To ensure continued progress, all Board items are assessed for their potential impact on VMT.

As part of these ongoing efforts, this item is expected to contribute to further reductions in VMT. While this item does not directly encourage taking transit, sharing a ride, or using active transportation, it is a vital part of Metro operations, as it will increase accessibility, comfort, and productivity in workspaces across LA Metro. Because the Metro Board has adopted an agency-wide VMT Reduction Target, and this item supports the overall function of the agency, this item is consistent with the goals of reducing VMT.

*Based on population estimates from the United States Census and VMT estimates from Caltrans' Highway Performance Monitoring System (HPMS) data between 2001-2019.

IMPLEMENTATION OF STRATEGIC PLAN GOALS

This Board action also supports Strategic Goal 5, which is to provide responsive, accountable, and trustworthy governance within the Metro organization. Ensuring that all employees have a more inclusive and accessible workspace, including a provision of new ergonomic furniture for all Metro facilities.

ALTERNATIVES CONSIDERED

Staff have considered the following alternatives; however, they are not recommended.

- A. Purchase furniture on a yearly basis. This alternative is more costly to Metro and is not recommended.
- B. Require each department and project to purchase furniture and space planning/installation services directly with multiple vendors through multiple procurement actions. This alternative is more costly to Metro and is not recommended.

NEXT STEPS

Upon Board approval, staff will execute Contract No. PS125302000 with M3 Office, Inc. for furniture, space planning, and installation services and facilitate the transition to the new contractor.

ATTACHMENTS

Attachment A - Procurement Summary

Attachment B - DEOD Summary

Prepared by: Merrilu Alfaro, Director, General Services, (213) 922-2154

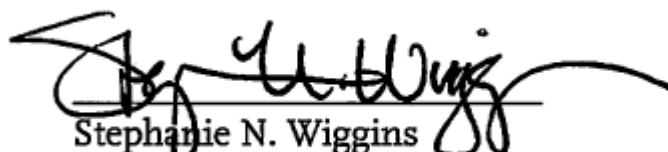
Eladio (Lalo) Salas, Senior Director, Facilities Maintenance, (213) 418-3232

Christopher Limon, Executive Officer, Operations Administration, (213) 922-6637

Errol Taylor, Deputy Chief Operations Officer, (213) 922-3227

Debra Avila, Deputy Chief Vendor/Contract Management Officer, (213) 418-3051

Reviewed By: Conan Cheung, Chief Operations Officer (213) 418-3034



Stephanie N. Wiggins
Chief Executive Officer

PROCUREMENT SUMMARY

METRO AGENCYWIDE FURNITURE AND MOVING SERVICES/PS125302000

1.	Contract Number: PS125302000	
2.	Recommended Vendor: M3 Office Inc.	
3.	Type of Procurement (check one): <input type="checkbox"/> IFB <input checked="" type="checkbox"/> RFP <input type="checkbox"/> RFP-A&E <input type="checkbox"/> Non-Competitive <input type="checkbox"/> Modification <input type="checkbox"/> Task Order	
4.	Procurement Dates:	
	A. Issued: 09/06/2024	
	B. Advertised/Publicized: 09/06/2024	
	C. Pre-Proposal Conference: 09/17/2024	
	D. Proposals Due: 10/10/2024	
	E. Pre-Qualification Completed: 02/03/2025	
	F. Ethics Declaration Forms submitted to Ethics: 10/15/2024	
	G. Protest Period End Date: 03/25/2025	
5.	Solicitations Downloaded: 15	Bids/Proposals Received: 2
6.	Contract Administrator: Tina Hoffstetter	Telephone Number: 213-922-2775
7.	Project Manager: Merrilu Alfaro	Telephone Number: 213-922-2154

A. Procurement Background

This Board Action is to approve Contract No. PS125302000 issued to provide office furniture, workspace components, interior space planning, and move coordination services. Board approval of contract awards is subject to the resolution of any properly submitted protest(s), if any.

Request for Proposals (RFP) No. PS125302 was issued in accordance with Metro’s Acquisition Policy and the contract type is an Indefinite Delivery/Indefinite Quantity (IDIQ). The Diversity & Economic Opportunity Department recommended a Disadvantaged Business Enterprise (DBE) goal of 8%.

Two amendments were issued during the solicitation phase of this RFP:

- Amendment No. 1, issued on September 12, 2024 clarified the Pre-proposal Conference date
- Amendment No. 2 issued September 16, 2024 amended the Insurance Requirements, Evaluation Criteria, Schedule of Quantities and Prices, and Task Order sections

A total of 14 firms downloaded the RFP and were included in the planholders’ list. A virtual pre-proposal conference was held on September 17, 2024 and was attended by 14 participants representing three firms. There was one question received for this RFP and the response was provided prior to the proposal due date.

A total of two proposals were received on the due date of October 10, 2024, from the following firms listed below in alphabetical order:

1. M3 Office, Inc.
2. The Sheridan Group

Staff conducted a market survey to request information from prospective proposers to determine why no additional proposals were submitted. Inquiries were made of all firms that downloaded the solicitation. One firm responded that the RFP document was quite extensive and they didn't have time to propose; another firm responded that they did not qualify as a small business and the margins were too low, and another firm responded that they currently only had interim staff. The results of the market survey indicated that factors beyond Metro's control caused the potential sources not to submit bids and that there were no restrictive elements in the solicitation documents that prevented competition.

B. Evaluation of Proposals

A diverse Proposal Evaluation Team (PET) consisting of staff from the Building Services Department, Corporate Safety Department, and Operations Administration Department was convened and conducted a comprehensive technical evaluation of the proposals received.

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

- | | |
|--|------------|
| • Minimum Qualifications | Pass/Fail |
| • Qualification of the Firm/Team | 20 percent |
| • Qualifications of Key Personnel | 20 percent |
| • Understanding of the Scope of Services and Proposed Approach | 30 percent |
| • Price | 30 percent |

The evaluation criteria are appropriate and consistent with criteria developed for other, similar furniture and space planning type procurements. Several factors were considered when developing these weights, giving the greatest importance to Understanding of the Scope of Services and Proposed Approach and Price.

The Sheridan Group was determined to be non-responsive to the technical, certification, and DEOD requirements of the solicitation and was eliminated from further consideration.

The evaluation committee conducted an evaluation of the proposal submitted by M3 Office, Inc. The PET reviewed the proposer's qualifications, capabilities, key personnel, understanding of the scope of services and proposed approach. Upon conclusion of the evaluation, it was determined that the proposer was qualified to provide the services.

Qualifications Summary of Firms within the Competitive Range:

M3 Office Inc.

M3 Office Inc. has been in business since 1997 and is a certified DBE. The firm shows strengths in the relevant experience of its team members, longevity in the industry, and detailed response to space planning and installation process. The firm has two Project Managers with a combined 30 years of experience working with installation and reconfiguration projects.

1	Firm	Average Score	Factor Weight	Weighted Average Score	Rank
2	M3 Office Inc.				
3	Qualifications of the Firm	90.05	20.00%	18.01	
4	Qualification of Key Personnel	83.40	20.00%	16.68	
5	Understanding of the SOS and Proposed Approach	68.90	30.00%	20.67	
6	Price Proposal	100.00	30.00%	30.00	
7	Total		100.00%	85.36	1

C. Cost/Price Analysis

The recommended proposal from M3 Office, Inc. has been determined to be fair and reasonable based upon the expectation of adequate price competition, and previous contracts for similar services. The difference between Metro’s Independent Cost Estimate (ICE) and the proposal is due to methods of calculation. The ICE was developed as the Not-to-Exceed amount that would be used as a ceiling price for the contract and is based on the projected furniture and space planning needs of the Agency over the life of the contract. The RFP requested firm fixed unit rate pricing for space planning and installation services and fixed discounts for high-volume pieces of furniture that are expected to be frequently purchased. The Proposers were provided hypothetical orders that they would have to price in accordance with their proposed rates and discounts. This was done in order to permit the evaluation of proposals, however, the proposal amount is not indicative of the work that will be conducted as all work will be issued through individual task orders, as needs arise.

	Proposer Name	Proposal Amount	Metro ICE	Negotiated or NTE amount
--	---------------	-----------------	-----------	--------------------------

1.	M3 Office Inc.	\$48,809.00	\$5,625,000.00	\$5,625,000.00
----	----------------	-------------	-----------------------	-----------------------

D. Background on Recommended Contractor

The recommended firm, M3 Office Inc., located in the City of Pasadena, CA, has been in business for 28 years and is a leader in the Office Furniture space including Space Planning and Design. M3 Office Inc has been a Herman Miller dealer for 19 years. M3 has completed projects for other agencies such as the Los Angeles Registrar, and the Los Angeles Sheriff's Department. M3 Office, Inc. has is also the incumbent contractor providing services to Metro and has performed satisfactorily.

DEOD SUMMARY

METRO AGENCYWIDE FURNITURE AND MOVING SERVICES/PS125302000

A. Small Business Participation

The Diversity and Economic Opportunity Department (DEOD) established an overall 8% Disadvantaged Business Enterprise (DBE) goal for this Task Order Contract. M3 Office Inc., a DBE firm, met the goal by making an overall 8% DBE commitment.

In response to a specific Task Order request with a defined scope of work, M3 Office Inc. will be required to identify DBE subcontractor activity and actual dollar value commitments for that Task Order. Overall DBE achievement in meeting the commitments will be determined based on cumulative DBE participation of all Task Orders awarded.

Small Business Goal	8% DBE	Small Business Commitment	8% DBE
----------------------------	---------------	----------------------------------	---------------

	DBE Subcontractor	% Committed
1.	M3 Office Inc. (DBE Prime)	8%
	Total DBE Commitment	8%

B. Living Wage and Service Contract Worker Retention Policy Applicability

Metro included moving service in the subject contract for large-scale moves. When these moving services are used, the Living Wage and Service Contract Worker policy will apply.

The Living Wage and Service Contract Worker Retention Policy (LW/SCWRP) will be applicable on this Contract. Metro staff will monitor and enforce the policy guidelines to ensure that workers are paid at minimum, the current Living Wage rate of \$25.23 per hour (\$19.28 base + \$5.95 health benefits), including yearly increases. In addition, Contractors will be responsible for submitting the required reports for the LW/SCWRP and other related documentation to staff to determine overall compliance with the policy.

LW/SCWRP is applicable on Professional Service Contracts listed below that are \$25,000.00 or greater and have a contract term of three (3) months or more. The LW/SCWRP will apply to professional service contracts for Asphalt and Concrete Repair, Facility and Building Maintenance, Food Services, Janitorial and Custodial, Landscaping, Laundry Services, Moving Services, Office and Clerical (copier maintenance, facsimile maintenance, courier mailing, photographic, printing, collections), Parking Lot Management, Pest Control, Security, Street Sweeping,

Towing, Trash Collection, Tree Trimming, Weed Abatement and Debris Removal; and any other Service or labor determined by Metro's Board of Director, Executive Management and DEOD, to meet the intent of this Policy.

DEOD Staff will input current Living Wage hourly rates during the development of the Board Report. The policy guidelines are applicable from conception to completion of the service contracts, including change order and modification work.

C. Prevailing Wage Applicability

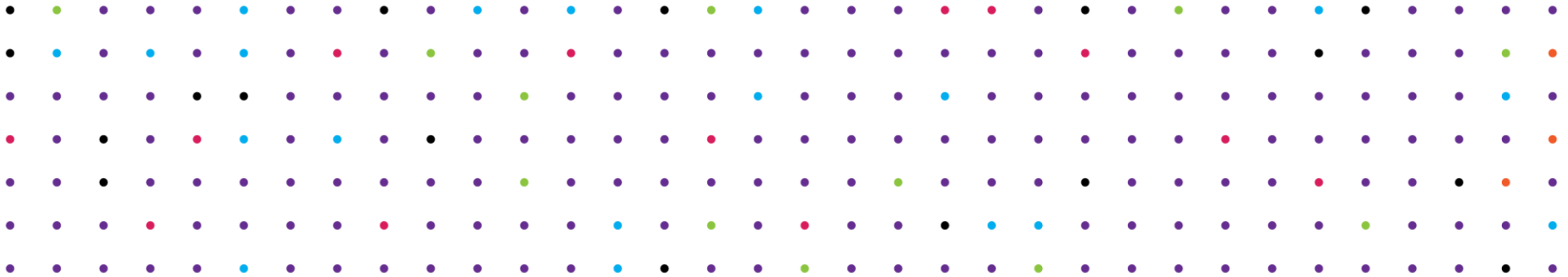
Prevailing Wage requirements are applicable to this project. DEOD will continue to monitor contractors' compliance with the State of California Department of Industrial Relations (DIR), California Labor Code, and, if federally funded, the U S Department of Labor (DOL) Davis Bacon and Related Acts (DBRA).

D. Project Labor Agreement/Construction Careers Policy

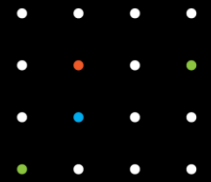
Project Labor Agreement/Construction Careers Policy is not applicable to this Contract. PLA/CCP is applicable only to construction contracts that have a construction related value in excess of \$2.5 million.

METRO AGENCYWIDE FURNITURE AND MOVING SERVICES ITEM 2025-0071

Date: MARCH 20, 2025

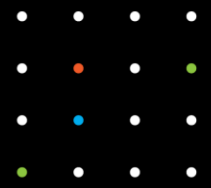


RECOMMENDATION



AUTHORIZE the Chief Executive Officer to award a five-year, Indefinite Delivery/Indefinite Quantity (IDIQ) Contract No. PS125302000, for furniture, space planning, and installation services, to M3 Office Inc., for a Not-to-Exceed (NTE) amount of \$3,475,000.00 for the three-year base period, and \$1,075,000.00 for each of the two, one-year options, for a combined total of \$5,625,000.00 effective April 1, 2025, subject to the resolution of any properly submitted protest(s), if any.

AWARD/PROPOSALS



AWARDEE

M3 Office Inc.

NUMBER OF PROPOSALS

2 Total; 1 Non-Responsive

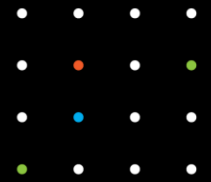
1	Firm	Average Score	Factor Weight	Weighted Average Score	Rank
2	M3 Office Inc.				
3	Qualifications of the Firm	90.05	20.00%	18.01	
4	Qualification of Key Personnel	83.40	20.00%	16.68	
5	Understanding of the SOS and Proposed Approach	68.90	30.00%	20.67	
6	Price Proposal	100.00	30.00%	30.00	
7	Total		100.00%	85.36	1

DEOD COMMITMENT

8% DBE Commitment



ISSUE AND DISCUSSION



ISSUE

The current Metro furniture, space planning and installation services contract will expire on March 31, 2025.

DISCUSSION

This will provide systems furniture for cubicles and offices throughout Metro facilities including USG Headquarters to accommodate new staff for service expansion as well as seamless replacement of existing components. This is an as-needed task-order based contract.



Board Report

File #: 2025-0096, File Type: Contract

Agenda Number: 24.

OPERATIONS, SAFETY, AND CUSTOMER EXPERIENCE COMMITTEE MARCH 20, 2025

SUBJECT: METRO BIKE SHARE
ACTION: APPROVE RECOMMENDATION

RECOMMENDATION

AUTHORIZE the Chief Executive Officer (CEO) to:

- A. EXECUTE Modification No. 18 to Contract No. PS272680011357 with Bicycle Transit Systems, Inc. (BTS) in the amount of \$8,357,384 to continue Metro Bike Share (MBS) program services increasing the total contract value from \$116,292,084 to \$124,649,468 and extend the period of performance by a total of 7 months from April 30, 2025 through November 30, 2025, inclusive of a base period of four months and three, one-month options; and
- B. EXECUTE individual contract modifications within the Board approved contract modification authority.

ISSUE

The Board approved Motion Item No. 41 by Directors Krekorian, Garcetti, Kuehl and Sandoval at its December 2021 meeting (Attachment A). Directive C of the motion requires that staff ensure uninterrupted bike share service as the next iteration of the MBS program is determined and executed. The current MBS contract with BTS is set to expire on April 30, 2025, and this extension is needed to ensure uninterrupted service until the award of the new multi-year contract, which is currently an active procurement.

BACKGROUND

The MBS program was launched in July 2016 in partnership with the City of Los Angeles. It continues to provide service to Los Angeles County residents with 225 stations located in the Downtown Los Angeles, Central Los Angeles, Hollywood, Westside, and North Hollywood areas. To date, over 2.6 million trips have been taken, 9.1 million miles have been traveled, and 8.6 million pounds of CO₂ have been averted through the use of MBS.

The program continues to see improvements overall. More than 519,000 rides were recorded in 2024, the highest annual ridership to date. This represents a 17% increase from the previous 12

months. The number of pass holders continues to increase as well. During 2024, 30-Day and 365-Day passholders increased by 14%. During the last year, the number of pass holders with reduced fare passes increased by 39%. Reduced fare passes are offered to low-income individuals through EBT verification, and Metro's Low Income Fare is Easy (LIFE) program. They are also offered to seniors (62 years and over), students (16 years and over), and individuals with disabilities. Trips taken by reduced fare pass holders increased by more than 70,000 trips, or 77%, in the last 12 months. The number of trips taken per bike each day, an industry metric used to measure the effectiveness of bikeshare, also continues to increase, especially for pedal-assisted electric bikes (e-bikes). In December 2024, human-powered "classic" bikes reported 0.31 trips/bike/day, while e-bikes reported 3.79 trips/bike/day.

The MBS motion passed by the Board in December 2021 directed staff to take a series of actions focused on stabilizing the current program and preparing for the next iteration of bike share in Los Angeles County. In October 2022, the Board approved a new "privately owned - publicly managed (contracted)" bike share model.

..Discussion

DISCUSSION

Based on the Board approved MBS model, staff conducted a procurement action to secure a new contract. The initial procurement was cancelled, and a new solicitation was prepared and issued on July 23, 2024. The new procurement is currently underway and subject to a communications blackout. Staff is requesting an extension of the current contract to allow for the completion of the procurement process, award of the new contract, and the transition of services. The current contract expires on April 30, 2025. If the Board approves the extension, the contract will end November 30, 2025, inclusive of three, one-month options.

Per the MOU with the City of Los Angeles, the City will provide 65% of the funds in support of ongoing operation and maintenance of MBS. Staff reviewed this item with the City of Los Angeles and has received their concurrence to proceed with the extension.

DETERMINATION OF SAFETY IMPACT

Metro's safety standards will be improved through the approval of this recommendation by ensuring the continued operation of a safe and secure bike share program.

FINANCIAL IMPACT

The cost of the extended contract is included in the FY25 Budget and FY26 Proposed Budget in Account 50316, Project 308010, and Cost Center 4540.

Impact to Budget

The funding sources for this expense consist of the City of Los Angeles subsidy, advertising/sponsorship, system user fees, and general funds. The general fund is eligible for bus

and rail operating projects and capital projects.

EQUITY PLATFORM

The approval of this contract modification and extension will ensure Metro's ability to continue to operate and maintain a regional bike share program that is accessible to Los Angeles County residents. This contract extension will allow Metro to continue to provide current service to those who live and work within Equity Focus Communities (EFCs) in Downtown/Central Los Angeles, Westside, and North Hollywood. Currently, 47% of MBS stations are located in EFCs, and 40% of all trips are initiated from these stations. In addition, maintaining low bike share fares and ensuring that participants of the LIFE and Reduced Fare programs continue to have uninterrupted access to service with continued discounted fare media are critical components of this program. As mentioned, the number of pass holders with Reduced Fare passes increased in 2024 and now represents 39% of 30-Day and 365-Day pass holders. Participants with eligibility through California EBT represent 54% of all Reduced Fare passes, while students (16 years and over) represent 30%.

As part of the annual survey conducted by MBS, demographic data is collected. In 2024, and consistent with previous surveys, respondents to the survey were mostly male (61%) and Caucasian (44%), and most were younger than 50 years old (79%). However, one change observed was that just over half (52%) had incomes less than \$75K. This is an increase in individuals with lower incomes and is consistent with the growth observed in reduced fare passes.

This contract has a DBE commitment of 22.37% and is currently operating at a participation rate of 26.70%, exceeding the commitment by 4.33%

VEHICLE MILES TRAVELED OUTCOME

VMT and VMT per capita in Los Angeles 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.* Metro's Board-adopted VMT reduction targets align with California's statewide climate goals, including achieving carbon neutrality by 2045. To ensure continued progress, all Board items are assessed for their potential impact on VMT.

As part of these ongoing efforts, this item is expected to contribute to further reductions in VMT. Metro conducted a preliminary analysis to show that the net effect of this item is to decrease VMT through operational activities that will improve and further encourage transit ridership, ridesharing, and active transportation. To date, more than 9.1 million miles have been traveled by MBS users, which represents a minimum reduction of approximately 1.9 million Vehicle Miles Traveled since the 2024 MBS survey results show that 22% of users would have driven their personal vehicles or used a taxi or equivalent vehicle to complete their travel if not for Metro Bike Share.

*Based on population estimates from the United States Census and VMT estimates from Caltrans' Highway Performance Monitoring System (HPMS) data between 2001-2019.

IMPLEMENTATION OF STRATEGIC PLAN GOALS

MBS program supports the following Vision 2028 Strategic Plan Goals:

1. Provide a high-quality mobility option that enables people to spend less time traveling.
2. Deliver an outstanding trip experience for all users of the transportation system.
3. Enhance communities and lives through mobility and access to opportunity.
4. Transform LA County through regional collaboration and national leadership.
5. Provide responsive, accountable, and trustworthy governance within the organization.

ALTERNATIVES CONSIDERED

The Board may choose not to authorize the requested action. This alternative is not recommended as this would not support the Board motion, would impact the stability of the program, and Metro's ability to provide uninterrupted MBS service. If the current contract is not extended, Metro Bike Share operations will end on April 30, 2025.

NEXT STEPS

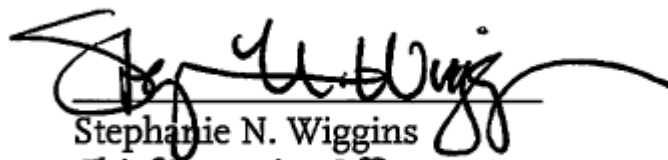
Upon Board approval, staff will execute Modification No. 18 to Contract No. PS272680011357 with BTS to continue MBS program services and extend the period of performance from April 30, 2025, through November 30, 2025, inclusive of three, one-month options.

ATTACHMENTS

- Attachment A - Board Motion Item No. 41
- Attachment B - Procurement Summary
- Attachment C - Contract Modification/Change Order Log
- Attachment D - DEOD Summary

Prepared by: Paula Carvajal-Paez, Senior Director, Shared Mobility, (213) 922-4258
Ken Coleman, Executive Officer, Shared Mobility, (213) 922-2951
Shahrazad Amiri, Deputy Chief Operations Officer - Shared Mobility, (213) 922-3061
Carolina Coppolo, Deputy Chief Vendor/Contract Management Officer, (213) 922-4471

Reviewed by: Conan Cheung, Chief Operations Officer, (213) 418-3034


Stephanie N. Wiggins
Chief Executive Officer



Board Report

File #: 2021-0743, **File Type:** Motion / Motion Response

Agenda Number: 41.

EXECUTIVE MANAGEMENT COMMITTEE NOVEMBER 18, 2021

Motion by:

DIRECTORS KREKORIAN, GARCETTI, KUEHL, AND SANDOVAL

Improving the Effectiveness and Sustainability of Metro Bike Share

Metro Bike Share, a county-wide bike share program, launched in 2016. Since then, Metro has had over 3,300 bicycles in the system, consisting of a mix of Classic, Smart, and E-bikes.

Currently, Metro only has 38% of the total original fleet remaining in operation. Metro Bikes have been targets of theft, and rates of fleet loss ebb and flow as new methods of theft are discovered and addressed. The Metro Bike Share team has increased efforts to recover lost and stolen bicycles but this is not sustaining the fleet and the program does not have an established fleet replenishment strategy. As a result, fewer Metro Bikes are available for use, which degrades the quality of service available to the public.

Affordable, accessible public transportation and active transportation options such as Metro Bike Share are a cornerstone of meeting our region's climate goals. As local jurisdictions in the County continue expanding bicycle infrastructure and mobility options to meet climate goals and improve the quality of life for residents, a successful and sustainable Metro Bike Share program is more important than ever.

SUBJECT: IMPROVING THE EFFECTIVENESS AND SUSTAINABILITY OF METRO BIKE SHARE

RECOMMENDATION

APPROVE Motion by Directors Krekorian, Garcetti, Kuehl, and Sandoval that the Board direct the Chief Executive Officer to report back in 90 days on:

- A. An action plan to stabilize the current fleet size including actions for how to identify, prioritize, and address new mechanisms of theft as they arise.
- B. An action plan to address equitable access in the current program and in any future form of the program. This plan shall include recommendations on issues such as serving people who may be unbanked, addressing the digital divide, and keeping fare cost low.

- C. A plan to provide uninterrupted service as the next iteration of the program is determined and executed.
- D. A plan to convene an industry forum (as was performed for Metro Micro) to bring together academics, cities with existing bike share programs, community stakeholders, and industry experts to provide recommendations on advancing Metro Bike Share beyond the current contract in one of several forms including but not limited to:
1. Continuing Metro Bike Share as a contracted service,
 2. Operating the program In-house with Metro employees,
 3. A private-sector model with financial subsidy provided by Metro.
- E. Performing a market survey to identify best practices and business models among existing bike-share systems in the US, and comparable global systems (e.g., Paris, London, Barcelona, Madrid, and Mexico City), and to develop comparative data on subsidy cost per ride, total ridership, size of fleet, vehicle technology, theft and damage loss and prevention, and alternative financing sources like sponsorship and advertising.
- F. Recommendations for continuing and evolving the Metro Bike Share program to meet the goals of the agency, with countywide stakeholder engagement and consideration of cost-sharing, with the goal of expanding service area and local participation to all subregions in the County. These recommendations should include eligible local, state, and federal funding sources for capital and operations budgets, as well as legislative opportunities to expand such funding eligibility.

PROCUREMENT SUMMARY

METRO BIKE SHARE/PS272680011357

1.	Contract Number: PS272680011357		
2.	Contractor: Bicycle Transit Systems, Inc.		
3.	Mod. Work Description: Continuation of services for the Metro Bike Share Program through November 30, 2025.		
4.	Contract Work Description: Metro Bike Share Program		
5.	The following data is current as of: 1/31/25		
6.	Contract Completion Status		Financial Status
	Contract Awarded:	06/25/15	Contract Award Amount: \$11,065,673
	Notice to Proceed (NTP):	07/31/15	Total of Modifications Approved: \$105,226,411
	Original Complete Date:	07/29/22	Pending Modifications (including this action): \$8,357,384
	Current Est. Complete Date:	11/30/25	Current Contract Value (with this action): \$124,649,468
7.	Contract Administrator: Lily Lopez		Telephone Number: (213) 922-4639
8.	Project Manager: Paula Carvajal		Telephone Number: (213) 922-4258

A. Procurement Background

This Board Action is to approve Contract Modification No. 18 issued in support of the Metro Countywide Bike Share program to ensure uninterrupted service until the award of the new contract. This modification will extend the period of performance from April 30, 2025 through November 30, 2025, for a total of seven months, inclusive of three, one-month options.

This contract modification will be processed in accordance with Metro's Acquisition Policy and the contract type is a firm fixed price.

On June 25, 2015, the Board approved firm fixed price Contract No. PS272680011357 to Bicycle Transit Systems, Inc. for the equipment, installation and operations of the Metro Bike Share Phase I Pilot in the amount of \$11,065,673 for a two-year period.

Seventeen modifications have been issued to date.

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

B. Cost Analysis

The recommended amount has been determined to be fair and reasonable based on an Independent Cost Estimate (ICE), cost analysis validating the level of effort, existing overhead rate, other operational costs based on market conditions, a reduction in profit, and technical analysis.

Proposal Amount	Metro ICE	Modification Amount
\$8,357,384	\$8,608,106	\$8,357,384

The variance between the ICE and recommended amount is due to Metro not accounting for a reduction in profit.

CONTRACT MODIFICATION/CHANGE ORDER LOG

METRO BIKE SHARE/PS272680011357

Mod. No.	Description	Status (approved or pending)	Date	Amount
1	Addition of Sponsorship Broker Agreement	Approved	12/30/15	\$0
2	Additional Support for Phase I – Downtown Los Angeles	Approved	06/06/16	\$108,656
3	Addition of 2 Subcontractors	Approved	07/07/16	\$0
4	Extend Phase I (Downtown Los Angeles Pilot), expand and accelerate Phase II (Pasadena) and Phase III (Venice and Port of Los Angeles)	Approved	11/07/16	\$42,618,583
5	Update Exhibit A-1 Milestone Payment Schedule	Approved	03/22/17	\$0
6	Addition of TAP Integration Step 3	Approved	05/31/17	\$610,076
7	Extend and activate Phase III and Phase IV	Approved	10/08/18	\$34,598,747
8	Added Metro Countywide Bike Share Greenhouse Gas Reduction Fund (GGRF) Grant	Approved	12/06/18	\$6,342,126
9	Revised SOW and Milestones	Approved	12/14/18	\$0
10	Reallocation of bikes and update milestones	Approved	08/21/21	\$0
11	Extended period of performance (POP) through 7/29/23, purchase new bicycles to replenish and stabilize the on-street bicycle fleet, purchase and install GPS equipment, and maintain a 10% inventory.	Approved	05/03/22	\$15,250,213
12	Extended POP through 12/31/23.	Approved	05/25/23	\$5,698,010

13	Extended POP through 4/30/24.	Approved	11/02/23	\$0
14	Extended POP through 6/30/24.	Approved	12/21/23	\$0
15	Extended POP through 8/30/24.	Approved	03/07/24	\$0
16	Extended POP through 3/31/25.	Approved	07/23/24	\$0
17	Extended POP through 4/30/25.	Approved	12/11/24	\$0
18	Extend POP through 11/30/25 for a total of seven months (inclusive of three, one-month options).	Pending	Pending	\$8,357,384
	Modification Total:			\$113,583,795
	Original Contract:		06/25/15	\$11,065,673
	Total:			\$124,649,468

DEOD SUMMARY

METRO BIKE SHARE/PS272680011357

A. Small Business Participation

Bicycle Transit Systems, Inc. (BTS) made a 22.37% Disadvantaged Business Enterprise (DBE) commitment. Based on payments, the project is 95% complete and the current DBE participation is 26.70%, exceeding the commitment by 4.33%.

Small Business Commitment	22.37% DBE	Small Business Participation	26.70% DBE
----------------------------------	-------------------	-------------------------------------	-------------------

	DBE Subcontractors	Ethnicity	% Committed	Current Participation¹
1.	Accel Employment Services	Asian-Pacific American	15.28%	11.27%
2.	Bike Hub	Asian-Pacific American	5.48%	14.40%
3.	Say Cargo Express	Hispanic American	0.68%	0.23%
4.	Toole Design Group, LLC	Non-Minority Female	0.93%	0.80%
	Total		22.37%	26.70%

¹Current 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

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

C. Prevailing Wage Applicability

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

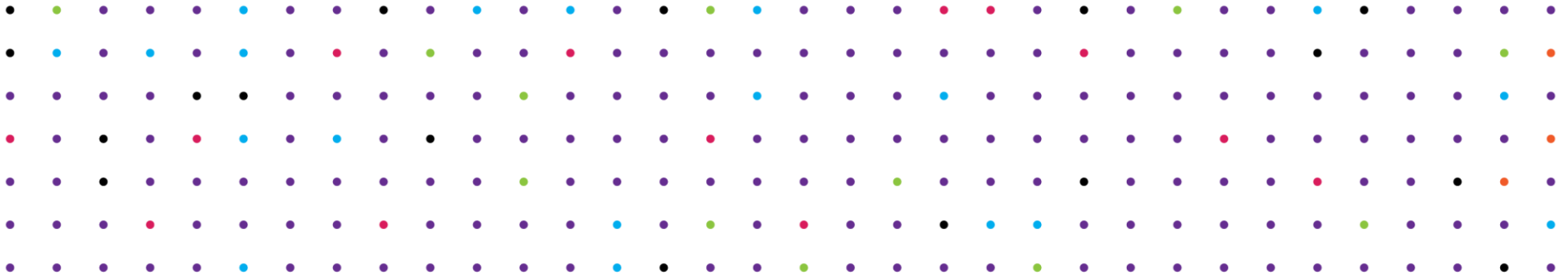
Relations (DIR), California Labor Code, and, if federally funded, the U S Department of Labor (DOL) Davis Bacon and Related Acts (DBRA).

D. Project Labor Agreement/Construction Careers Policy

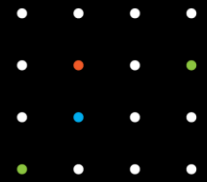
Project Labor Agreement/Construction Careers Policy is not applicable to this Contract. PLA/CCP is applicable only to construction contracts that have a construction related value in excess of \$2.5 million.

METRO BIKE SHARE

March 20, 2025



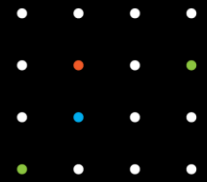
RECOMMENDATION



AUTHORIZE the Chief Executive Officer (CEO) to:

- a. EXECUTE Modification No. 18 to Contract No. PS272680011357 with Bicycle Transit Systems, Inc. (BTS) in the amount of \$8,357,384 to continue Metro Bike Share (MBS) program services increasing the total contract value from \$116,292,084 to \$124,649,468 and extend the period of performance by a total of 7 months from April 30, 2025 through November 30, 2025, inclusive of a base period of four months and three one-month options; and
- b. EXECUTE individual contract modifications within the Board approved contract modification authority.

ISSUE & DISCUSSION



AWARDEE

Bicycle Transit Systems, Inc.

NUMBER OF BIDS

One (1) bid received – This is a modification to an existing contract

DEOD COMMITMENT

DBE commitment – 22.37%

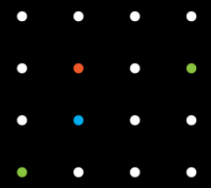
ISSUE

The current contract expires April 30, 2025, and this extension ensures uninterrupted service until the award of the new multi-year contract, which is in procurement.

DISCUSSION

The modification will extend the contract term 7 months, inclusive of a base period of four months and three one-month options. The new term ends November 30,

PROGRAM OVERVIEW



- Program launched July 2016
- Three service areas:
Downtown/Central LA (including Hollywood), Westside and North Hollywood
- Inventory: 225 stations; 1,800 bikes (approximately 15% Electric)
- To date:
 - 2.6 million trips
 - 9.1 million miles traveled
 - 364 thousand passes sold
 - 8.6 million lbs. emissions reduced



RIDERSHIP OVERVIEW

- Approximately 520,000 trips taken in 2024, the highest annual ridership to date, and 17% increase from last year.
- 30-Day & 365-Day passholders grew 14%.
- Reduced fare (RF) passes increased by 39%
 - RF passes include: EBT verification, Metro's LIFE program, seniors (62+), students (16+), and individuals with disabilities.
 - Trips taken by RF passholders grew 70,000.

