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

Metro

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

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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):** ☐ **IFB** ☒ **RFP** ☐ **RFP–A&E** ☐ **Non-Competitive** ☐ **Modification** ☐ **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.

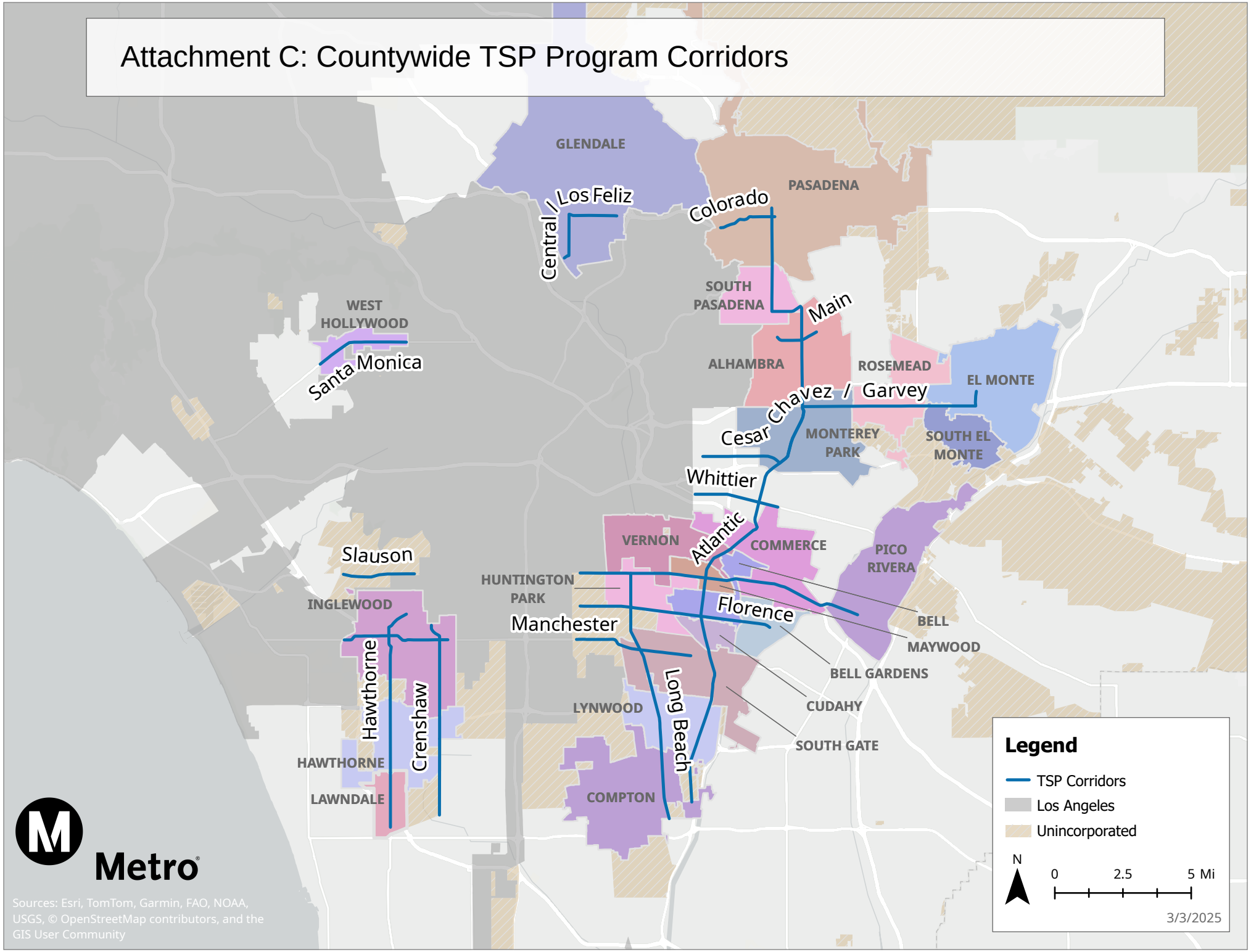
C. Prevailing Wage Applicability

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



Countywide Transit Signal Priority (TSP) Cloud Solution

March 20, 2025

Metro

Operations, Safety, & Customer Experience Committee Meeting

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.

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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.

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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**

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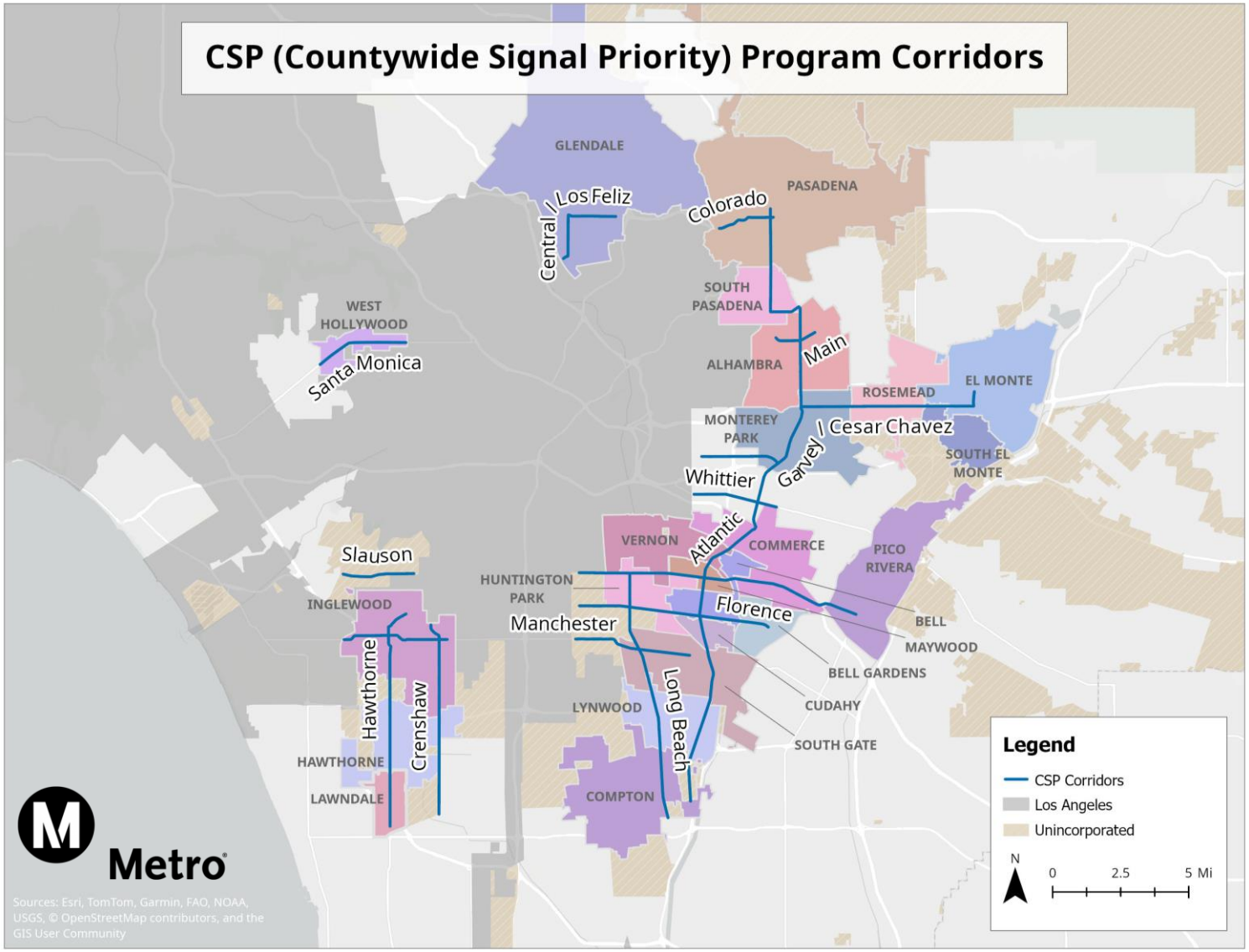
BACKGROUND


CSP (Countywide Signal Priority) Program Corridors
GLENDALE
PASADENA
Los Feliz
Central
Colorado
SOUTH PASADENA
WEST HOLLYWOOD
Santa Monica
ALHAMBRA
Main
ROSEMEAD
EL MONTE
MONTEREY PARK
Cesar Chavez
Garvey
SOUTH EL MONTE
Whittier
Atlantic
VERNON
COMMERCE
PICO RIVERA
Slauson
HUNTINGTON PARK
INGLEWOOD
Florence
Manchester
BELL
MAYWOOD
BELL GARDENS
Hawthorne
Crenshaw
Long Beach
LYNWOOD
CUDAHY
SOUTH GATE
HAWTHORNE
LAWNDALE
COMPTON
Metro
Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community
Legend
CSP Corridors
Los Angeles
Unincorporated
N
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2.5
5 Mi

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

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