

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

Agenda - Final

Thursday, November 16, 2023

12:30 PM

Watch online: https://boardagendas.metro.net Listen by phone: Dial 888-251-2949 and enter Access Code: 8231160# (English) or 4544724# (Español)

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

# Operations, Safety, and Customer Experience Committee

Holly J. Mitchell, Chair James Butts, Vice Chair Kathryn Barger Jacquelyn Dupont-Walker\* Paul Krekorian Gloria Roberts, non-voting member

Stephanie Wiggins, Chief Executive Officer

\*Attending Virtually: Holiday Inn 2800 Presidential Drive Fairborn, OH 45324

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

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

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

**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 <u>https://www.metro.net</u> or on CD's and as MP3's for a nominal charge.

#### DISCLOSURE OF CONTRIBUTIONS

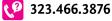
The State Political Reform Act (Government Code Section 84308) requires that a party to a proceeding before an agency involving a license, permit, or other entitlement for use, including all contracts (other than competitively bid, labor, or personal employment contracts), shall disclose on the record of the proceeding any contributions in an amount of more than \$250 made within the preceding 12 months by the party, or his or her agent, to any officer of the agency, additionally PUC Code Sec. 130051.20 requires that no member accept a contribution of over ten dollars (\$10) in value or amount from a construction company, engineering firm, consultant, legal firm, or any company, vendor, or business entity that has contracted with the authority in the preceding four years. Persons required to make this disclosure shall do so by filling out a "Disclosure of Contribution" form which is available at the LACMTA Board and Committee Meetings. 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. Requests can also be sent to boardclerk@metro.net.



x2 Español (Spanish) x3 中文 (Chinese) x4 한국어 (Korean) x5 Tiếng Việt (Vietnamese) x6 日本語 (Japanese) x7 русский (Russian) x8 Հայերቲն (Armenian)

#### HELPFUL PHONE NUMBERS AND EMAIL

Copies of Agendas/Record of Board Action/Recordings of Meetings - (213) 922-4880 (Records Management Department) - <u>https://records.metro.net</u> General Information/Rules of the Board - (213) 922-4600 Internet Access to Agendas - <u>https://www.metro.net</u> TDD line (800) 252-9040 Board Clerk Email - <u>boardclerk@metro.net</u>

#### 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 Committee Meeting begins at 12:30 PM Pacific Time on November 16, 2023; you may join the call 5 minutes prior to the start of the meeting.

Dial-in: 888-251-2949 and enter English Access Code: 8231160# Spanish Access Code: 4544724#

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 12:30 PM, hora del Pacifico, el 16 de Noviembre de 2023. Puedes unirte a la llamada 5 minutos antes del comienso de la junta.

Marque: 888-251-2949 y ingrese el codigo Codigo de acceso en ingles: 8231160# Codigo de acceso en espanol: 4544724#

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

#### Written Public Comment Instruction:

Written public comments must be received by 5PM the day before the meeting. Please include the Item # in your comment and your position of "FOR," "AGAINST," "GENERAL COMMENT," or "ITEM NEEDS MORE CONSIDERATION." Email: BoardClerk@metro.net Post Office Mail: Board Administration One Gateway Plaza MS: 99-3-1 Los Angeles, CA 90012

#### CALL TO ORDER

#### **ROLL CALL**

APPROVE Consent Calendar Items: 20, 21, 22, 23, and 24.

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

#### **CONSENT CALENDAR**

#### 20. SUBJECT: P2550 LIGHT RAIL VEHICLE MIDLIFE OFFSITE TESTING

2023-0528

#### RECOMMENDATION

AUTHORIZE the Chief Executive Officer to:

- A. EXECUTE Contract Modification No. 6 to Contract No. PS183832000P2550 Light Rail Vehicle (LRV) Midlife Modernization with Kinkisharyo International, L.L.C. for Offsite LRV Qualification Testing increasing the total Contract value by \$1,500,000 from \$159,119,493 to \$160,619,493 to enable LRV testing offsite LACMTA property; and
- B. EXECUTE Contract Modifications under this Contract for up to \$1,000,000 per Contract Modification.

<u>Attachments:</u>	Attachment A - Procurement Summary
	Attachment B - Contract Modification Log
	Attachment C - DEOD Summary

#### 21. SUBJECT: TRANSIT OPERATIONS ENGINEERING SUPPORT

2023-0606

#### RECOMMENDATION

AUTHORIZE the Chief Executive Officer to award and execute task order-based Contracts No. AE100331000 and AE100331001 to HNTB Corporation and Gannett Fleming, Inc., respectively, for transit operations engineering support services for a combined not-to-exceed (NTE) amount of \$116,000,000 for the four-year base period, and combined NTE of \$20,000,000 for each of the three one-year options; for a combined NTE total amount of \$176,000,000 subject to resolution of any properly submitted protest(s), if any.

Attachments:

Attachment A - Procurement Summary Attachment B - DEOD Summary Attachment C - List of Project Uses

2023-0620

#### 22. SUBJECT: ENGINEERING SUPPORT SERVICES FOR VERTICAL TRANSPORTATION SYSTEM AND RELATED SERVICES

#### RECOMMENDATION

AUTHORIZE the Chief Executive Officer to award a ten-year firm fixed unit rate Contract No. AE89754000 to Gannett Fleming, Inc. for engineering support services for vertical transportation system and related services, for a not-to-exceed amount (NTE) of \$36,324,570 for the six-year base term, and \$12,187,396 for each of the two, two-year option terms for a total combined NTE amount of \$60,699,362, effective January 1, 2024, subject to resolution of any properly submitted protest(s), if any.

 Attachments:
 Attachment A - Procurement Summary

 Attachment B - DEOD Summary

#### 23. SUBJECT: SPACE PLANNING - INSTALLATION SERVICES AND FURNITURE

#### RECOMMENDATION

AUTHORIZE the Chief Executive Officer to execute Modification No. 5 to Contract No. PS28069-2000 with M3 Office Inc. in the amount of \$1,500,000 to continue to provide space planning/installation services and furniture increasing the total not-to-exceed contract value from \$7,500,000 to \$9,000,000 and extend the period of performance through December 31, 2024.

Attachments:	Attachment A - Procurement Summary
	Attachment B - Contract Modification/Change Order Log
	Attachment C - DEOD Summary

#### 24. SUBJECT: A650 HEAVY RAIL VEHICLE ATC SYSTEM UPGRADE

2022-0822

2023-0632

#### RECOMMENDATION

CONSIDER:

- A. AUTHORIZING the Chief Executive Officer (CEO) to negotiate, award, and execute Contract No. OP116496 to Hitachi Rail for 36 months for an amount not to exceed \$29,312,410, to upgrade the onboard train control system on 70 of Metro's A650 option order Heavy Rail Vehicles (HRVs) and a contract option for upgrading an additional 4 A650 HRVs, to ensure compatibility with upcoming upgrades to Metro's wayside signaling and communication systems, subject to the resolution of any properly submitted protest(s), if any; and
- B. FINDING that there is only a single source of procurement for the materials and work set forth in Recommendation A above and it is for the sole

purpose of delivering, installing, and testing equipment compatible with the anticipated upgrades to Metro's wayside signaling/communication systems. Attachment A - Procurement Summary Attachments: Attachment B - DEOD Summary **Presentation NON-CONSENT OPERATIONS EMPLOYEES OF THE MONTH** 25. SUBJECT: 2023-0653 RECOMMENDATION RECOGNIZE Operations Employees of the Month. Attachments: Presentation 26. SUBJECT: CHIEF OPERATIONS OFFICER'S MONTHLY REPORT 2023-0652 RECOMMENDATION RECEIVE oral report on Operations. OSCE Cheung November COO Monthly Report PPT v5 Attachments: 27. SUBJECT: NEXTGEN RIDERSHIP UPDATE 2023-0132 **RECOMMENDATION** RECEIVE AND FILE the NextGen Bus Ridership Update. Attachments: Attachment A - NextGen Ridership Analysis Attachment B - Weekday Ridership Recovery Comparison Attachment C - Saturday Ridership Recovery Comparison Attachment D - Sunday Ridership Recovery Comparison Presentation 28. SUBJECT: **DECEMBER 2023 SERVICE CHANGE** 2023-0636 RECOMMENDATION RECEIVE AND FILE a status report on the December 2023 bus and rail service changes effective Sunday December 10, 2023. 29. SUBJECT: MONTHLY UPDATE ON PUBLIC SAFETY 2023-0661 RECOMMENDATION

RECEIVE AND FILE the Public Safety Report.

2023-0496

Experience committee	
Attachments:	Attachment A - Arrests Demographics September 2023
	Attachment B - Total Crime Summary September 2023
	Attachment C - Systemwide Law Enforcement Overview September 2023
	Attachment D - MTA Supporting Data September 2023
	Attachment E - Bus & Rail Operator Assaults September 2023
	Attachment F - Sexual Harassment Crimes September 2023

#### 30. SUBJECT: HR5000 HEAVY RAIL VEHICLE (HRV) PROCUREMENT

#### RECOMMENDATION

AUTHORIZE the Chief Executive Officer to:

- A. AWARD Contract No. HR5000-2023 to the Hyundai Rotem Company for the manufacturing and delivery of 182 heavy rail vehicles (HRVs), in the amount of \$663,688,303 for the base contract buy, exclusive of one (1) contract option for an additional 50 HRVs, totaling 232 HRVs, subject to the resolution of any properly submitted protest(s), if any;
- B. APPROVE a combined Life of Project (LOP) budget of \$730,057,133, which includes the cost of the vehicle contract of \$663,688,303 and Contract Modification Authority of \$66,368,830; and
- C. NEGOTIATE AND EXECUTE future contract modifications to the Contract up to \$1,000,000.
- Attachments:
   Attachment A Procurement Summary

   Attachment B DEOD Summary

   Attachment C Funding and Expenditure Plan

#### SUBJECT: GENERAL PUBLIC COMMENT

2023-0694

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 #: 2023-0528, File Type: Contract

Agenda Number: 20.

# OPERATIONS, SAFETY, AND CUSTOMER EXPERIENCE COMMITTEE NOVEMBER 16, 2023

# SUBJECT: P2550 LIGHT RAIL VEHICLE MIDLIFE OFFSITE TESTING

#### ACTION: APPROVE RECOMMENDATIONS

#### RECOMMENDATION

AUTHORIZE the Chief Executive Officer to:

- A. EXECUTE Contract Modification No. 6 to Contract No. PS183832000P2550 Light Rail Vehicle (LRV) Midlife Modernization with Kinkisharyo International, L.L.C. for Offsite LRV Qualification Testing increasing the total Contract value by \$1,500,000 from \$159,119,493 to \$160,619,493 to enable LRV testing offsite LACMTA property; and
- B. EXECUTE Contract Modifications under this Contract for up to \$1,000,000 per Contract Modification.

#### <u>ISSUE</u>

Metro is currently undergoing several projects to modernize existing LRVs to the current state of technology to ensure the LRV fleet remains in a State of Good Repair (SGR). After the initial LRV's (pilot LRVs) are modernized, they are usually shipped to Metro for design qualification tests on Metro's mainline. As Metro's priorities are passenger service and maintenance of its assets, supporting project tests on the mainline with test operators places tremendous strain on Metro's resources. In some cases, conflicts may result in an impact to service, delays to the test program, or both. Using Metro's mainline for test purposes adds further risk in the event of test failures. As an example, Metro's resources may be additionally strained if a revenue-ready LRV needs to be sent to retrieve a failed pilot LRV.

This contract modification will allow the contractor, Kinkisharyo (KI), to lease a test track where most of the planned mainline design conformance tests of the pilot vehicles may be performed, reducing impact to service and to Metro's operations. It is critical to note that the fleet will still need to undergo limited testing on Metro's mainline to verify that there are no production or quality issues that need to be addressed prior to acceptance.

#### BACKGROUND

In March 2021, the Board approved an award to issue Kinkisharyo Contract No. P2550-2019 a firmfixed unit rate contract in the amount of \$170,349,474 for the Midlife Modernization of the 50 existing P2550 LRVs, inclusive of Options. To date, only 2 out of 7 options have been exercised. The Project's primary objective is to deliver safe, reliable, high-quality overhauled LRVs that will be modernized to the current state of technology to ensure the LRV fleet remains in a State of Good Repair (SGR).

# DISCUSSION

The Project is currently in the design phase. Once this phase is complete, the LRV level qualification testing phase will commence. These tests are typically performed with the pilot LRVs on a transit agency's mainline and have a duration of 9 to 12 months. Supporting this approach places significant strain on an agency's resources including track allocation, test operators, shop space and personnel. The test track location needs to be determined early to facilitate coordinated planning amongst stakeholders.

Considerations were made to perform LRV qualification testing at Metro's site. However, Metro's planned and unplanned test track closures/maintenance, in addition to the increasing track needs to support revenue service, could further reduce test track availability for LRV design qualification testing.

This recommended Contract Modification is to facilitate the qualification testing at an offsite facility in Pueblo, CO. Metro initiated this Change request because of the limited availability to test the vehicles at LA Metro facilities due to limited operator availability, unplanned track closures and maintenance, and other factors related to track maintenance and rail operations.

Approval of this recommendation will minimize risk to Metro's service and operations. Simultaneously, it will benefit the test program by allowing it to proceed with few restrictions or interruptions.

Recommendation B allows Metro and the Contractor to negotiate future change orders in a timely manner to ensure that the maximum cost and schedule benefits can be realized. The P2550 Midlife Modernization Project's schedule is aggressive. The added delegation of authority allows staff to mitigate program schedule impacts that may arise from change orders. The request for an increase in CMA from \$500,000 to \$1,000,000 for individual changes is consistent with Board authorized Contract Modification Authority (CMA) for other Rolling Stock programs, such as Contracts for A650 Midlife Overhaul, P3010 LRV procurement, and the 45-foot CNG Composite Buses.

# DETERMINATION OF SAFETY IMPACT

The approval of this Contract Modification will ensure the Project's continuity to provide a direct and positive impact to system safety, service, quality, system reliability, maintainability, and overall customer satisfaction.

#### FINANCIAL IMPACT

The requested new NTE contract price of \$160,619,493 is within the overall Board approved project LOP budget of \$206,340,841, for project 214003.

Since this is a multi-year contract, the Chief Operations Officer, Project Manager, and cost center manager will be responsible for future fiscal year budgeting.

#### Impact to Budget

The current source of funds for this action is Proposition A 35%. This funding is eligible for rail capital and operating projects. Staff continues to pursue additional funding sources as they become available.

# EQUITY PLATFORM

Metro's existing light rail lines serve a majority of Equity Focus Communities (EFCs) who rely on public transit for their daily lives, including travel for work, school, and other activities. Rail ridership consists of 67% low-income and 82% passengers of color based on the Countywide Planning's 2022 customer satisfaction survey. EFC areas along the light rail alignments included areas in Downtown LA, Chinatown, in the vicinity of downtown Long Beach. Please refer to Attachment D for Metro's current rail line map showing areas of the EFCs that will benefit from this board decision. The P2550 fleet is currently experiencing low service reliability and availability due to age and obsolescence issues. This project and the approval of this recommendation will ensure a more reliable fleet for these light rail riders.

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

This recommendation supports strategic plan goal # 1) to provide high-quality mobility options that enable people to spend less time traveling and #5) to provide responsive, accountable, and trustworthy governance within the Metro organization.

#### ALTERNATIVES CONSIDERED

Staff considered using Metro resources to support the LRV qualification tests. However, this approach is not recommended as Metro has limited resources and bandwidth to adequately support this LRV testing that directly competes with revenue service. Further, Metro's first priorities are passenger service and maintenance of its assets.

The Board of Directors may choose not to authorize the Contract Modification; however, this alternative is not recommended by Metro staff because the LRV qualification tests in this midlife program are critical to maintaining an SGR on the fifty existing P2550 LRVs.

#### NEXT STEPS

Upon Board approval, staff will execute Contract Modification No. 6 with Kinkisharyo International, L.L.C.

# **ATTACHMENTS**

Attachment A - Procurement Summary Attachment B - Contract Modification Log Attachment C - DEOD Summary Attachment D - Metro EFC Map

Prepared by: Jason Yaw, Sr. Director, Rail Vehicle Acquisition (213) 922-3325 Annie Yang, DEO, Rail Vehicle Acquisition (213) 922-3254 Jesus Montes, Sr. Executive Officer, Rail Vehicle Engineering and Acquisition (213) 418-3277 Debra Avila, Deputy Chief Vendor/Contract Management Officer, (213) 418-3051

Reviewed by: Conan Cheung, Chief Operations Officer, (213) 418-3034

Chief Executive Officer

#### PROCUREMENT SUMMARY

#### P2550 MID-LIFE MODERNIZATION PROGRAM / PS183832000P2550

1.	Contract Number: PS183832000P2550			
2.	Contractor: Kinkisharyo International, LLC			
3.	Mod. Work Descripti	on: Offsite LRV Qua	dification Testing in Pueb	lo CO
4.	Work Description: M	id-life modernization	of Light Rail Vehicles	
5.	The following data is	s current as of: 10.1	2.23	
6.	Contract Completion	Status:	Financial Status:	
	Award Date:	04.12.2021	Contract Value	\$157,231,331
	Notice to Proceed	05.17.2021	Total Contract	\$17,034,947
	(NTP):		Modification	
			Authority (CMA):	
	Original	55 months	Value of Mods.	\$3,388,162
	Completion Date:	after NTP	Issued to Date	
			(including this	
		<b>D</b>	action):	<u> </u>
	Current Est.	December 2028	Remaining Board	\$13,646,785
	Complete Date:		Approved Amount:	<u> </u>
-		4 a m	Talankana Numban	
7.	Contract Administrator:		Telephone Number:	
_	Aniza Wan Nawang		(213)922-4677	
8.	Project Manager:		Telephone Number:	
	Jason Yaw		(213)922-3325	

#### A. <u>Contract Action Summary</u>

This Board Action is to approve Contract Modification No. 6 which is to be issued in support of the offsite LRV qualification testing in Pueblo, CO.

This Contract Modification will be processed in accordance with Metro's Acquisition Policy. The contract type is a firm fixed unit price.

On March 25, 2021, Metro's Board of Directors approved Board Agenda Item 2020-0055 to Kinkisharyo International, LLC. for the midlife modernization of the 50 AnsaldoBreda P2550 Light Rail Vehicles.

The intent of this midlife modernization program is to maintain the State of Good Repair and ensure the continued safety, reliability, availability, and maintainability of the fleet for revenue service any of the critical systems and components on the AnsaldoBreda P2550 LRV fleets.

On April 12, Contract P2550-2019 was issued in the amount of \$157,231,331. To date, five (5) Contract Modifications have been issued for the following: -

1. Contract Modification No. 1: Modify Milestone Payment Schedule for first 7 Milestones issued on June 10, 2021 at no cost.

- 2. Contract Modification No. 2: Exercise Option TS 4.10 Coupler self-wiping requirement, decreasing PF-2 cost issued on July 31, 2021 for (\$241,550)
- 3. Contract Modification No. 3: Incorporate Technical Spec Changes from TS Review meeting issued on August 2, 2021 at no cost.
- Contract Modification No. 4: Exercise Option 6.1. & 6.2 TS-13.10 Passenger Information Displays into each LRV, training & manuals issued on August 17, 2021 for \$2,129,712, and
- 5. Contract Modification No. 5: Unknown-Unknown Task Order Labor Rate (1 of 3) escalation increase equaling 7.3% issued on May 13, 2022 at no cost.

This recommended Contract Modification is to facilitate the qualification testing at an offsite facility in Pueblo, CO. Metro initiated this Change request because of the limited availability to test the vehicles at LA Metro facilities due to limited operator availability, unplanned track closures and maintenance and other factors related to track maintenance and rail operations.

# B. <u>Cost/Price Analysis</u>

The recommended price has been determined to be fair and reasonable based upon Metro Independent Cost Estimate (ICE), cost analysis, technical evaluation, fact finding, and negotiation.

Proposal Amount	Metro ICE	Negotiated Amount
\$1,573,487.88	\$1,350,714.89	\$1,500,000.00

KI's change proposal amount of \$1,573,487.88 is \$222,772.99 (16.5%) greater than the Metro developed ICE. Discussions were entered with KI to understand the significant elements that made up the differences in the proposal and the ICE. Negotiations were then conducted to arrive at a fair and reasonable amount. The negotiations resulted in a best-attainable amount of \$1,500,000.00 for the changed work, which is within \$149,285.11 or 11% of the ICE. There are three contributing factors that make up most of that difference:

- Travel the proposal from KI contained a higher travel cost component than the ICE. KI's rotation to regularly cycle offsite staff increased the travel costs but was proposed and accepted to maintain efficiency over the four-month testing period. KI's staff rotation over the duration of the offsite testing period was not considered in the ICE.
- Facility cost the Pueblo, CO test site is the closest testing facility to Metro. The facility cost rate that KI is passing through to Metro includes monthly escalation from the facility operator, which was not fully considered in the ICE.
- 3. Electricity cost KI proposed a rate range to cover the electricity consumed by the testing. The ICE estimated this amount significantly lower than the range proposed by KI. To address this difference, Metro negotiated the

electricity cost as a pass-through cost based on only the actual time the Metro vehicles are testing on the test track.

The proposed travel rotation for KI staff adds \$59,045.88 to the travel cost element. The additional facility cost per the escalation and electricity supported by actual cost data adds another \$26,376.32 and \$28,357.18 respectively. Supplementing the ICE with these three cost elements bridges the difference between the ICE and the negotiated amount to \$35,505.73 or around 2.63% which is a best attainable price based on the negotiations.

# **CONTRACT MODIFICATION LOG**

# P2550 MID-LIFE MODERNIZATION PROGRAM / PS183832000P2550

Mod. no.	Description	Status (approved	Date	Amount
1	Modify Milestone Payment Schedule for first 7 Milestones. No change to overall value or risk.	or pending) Approved	6.10.21	nil
2	Exercise Option TS 4.10 - Coupler self- wiping requirement, decreasing PF-2 cost	Approved	7.31.21	\$(241,550)
3	Incorporate Technical Spec Changes from TS Review meeting - No cost Change order	Approved	8.2.21	nil
4	Exercise Option 6.1. & 6.2 - TS-13.10 Passenger Information Displays into each LRV, training & manuals	Approved	8.17.21	\$2,129,712
5	Unknown-Unknown Task Order Labor Rate (1 of 3) escalation increase equaling 7.3%	Approved	5.13.22	nil
6	Offsite LRV Qualification Testing at TTC Pueblo	Pending	(tba)	\$1,500,000
	Modification Total:			\$3,388,162
	Original Contract:			\$157,231,331
	Total:			\$160,619,493

# DEOD SUMMARY

#### P2550, LIGHT RAIL VEHICLE (LRV) MIDLIFE OFFSITE TESTING/PS183832000P2550

#### A. Small Business Participation

Kinkisharyo International, LLC, a Transit Vehicle Manufacturer (TVM), is on the Federal Transit Administration's (FTA) list of eligible TVMs. Kinkisharyo International, LLC has submitted its overall Disadvantaged Business Enterprise (DBE) goal of 6% to FTA, in compliance with 49 Code of Federal Regulations (CFR) Section 26.49(a)(1). TVMs submit overall DBE goal methodology annually and report participation directly to FTA semi-annually.

#### 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 modification.

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

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

# P2550 LIGHT RAIL VEHICLE (LRV) MIDLIFE MODERNIZATION OFFSITE TESTING





# BACKGROUND

- The P2550 (Midlife) contractor is required to demonstrate the safe and reliable operation of trains. Design conformance tests are normally performed with pilot trains on the agency's mainline.
  - Tests normally require 9-12 months to complete.
  - Tests compete with revenue service and scheduled mainline maintenance.
  - Tests place a significant burden on Metro operation staff and equipment to support.



# FINDINGS

- Moving the majority of pilot train tests to an offsite location is anticipated to:
  - Significantly minimize the project's impact to revenue service and scheduled mainline maintenance.
  - Significantly minimize impact to Metro's operation staff and resources.
  - Significantly reduce delays due to scheduling conflicts; allowing test programs to proceed more efficiently and effectively.



# RECOMMENDATIONS

- Authorize Contract Modification to enable LRV testing offsite LACMTA's property.
- Increase the CEO's contract modification authority to \$1,000,000.



# Thank you



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



**Board Report** 

File #: 2023-0606, File Type: Contract

Agenda Number: 21.

# OPERATIONS, SAFETY, AND CUSTOMER EXPERIENCE COMMITTEE NOVEMBER 16, 2023

# SUBJECT: TRANSIT OPERATIONS ENGINEERING SUPPORT

# ACTION: AWARD CONTRACTS

#### RECOMMENDATION

AUTHORIZE the Chief Executive Officer to award and execute Indefinite Delivery/Indefinite Quantity (IDIQ) task order-based Contracts No. AE100331000 and AE100331001 to HNTB Corporation and Gannett Fleming, Inc., respectively, for transit operations engineering support services for a combined not-to-exceed (NTE) amount of \$116,000,000 for the four-year base period, and combined NTE of \$20,000,000 for each of the three one-year options; for a combined NTE total amount of \$176,000,000 subject to resolution of any properly submitted protest(s), if any.

#### <u>ISSUE</u>

The existing engineering support Contract No. PS46172000 for transit infrastructure maintenance expires on December 31, 2023. Therefore, the Operations Infrastructure Maintenance and Engineering (IM&E) Department is seeking assistance from engineering and technical resources to develop and execute capital improvement projects, support expansion projects, and meet the day-to-day engineering needs necessary to maintain Metro's transit infrastructure assets and systems. The transit operations engineering support services contracts will enable the IM&E Department to supplement the in-house resources needed to maintain the end-of-life infrastructure assets, deliver improvement projects on time and within budget, and support expansion projects.

#### BACKGROUND

The IM&E Department is responsible for maintaining Metro's system-wide infrastructure assets at Union Station Gateway (USG), bus facilities, rail facilities, and wayside systems in a State of Good Repair (SGR). In addition, the department oversees the delivery of capital projects within the Capital Improvement Program (CIP) and supports expansion projects, joint development projects, security projects, and zero-emission charging infrastructure projects.

Since May 2018, Contract No. PS46172000 with Gannett Fleming in the amount of \$31,000,000 has been providing a range of engineering services for train control, traction power, communications, track, mechanical, electrical, plumbing, and civil design. Also included were support services for project management, construction management, engineering design, and computer-aided design and

drafting (CADD). Over the course of the past three fiscal years, the capital improvement program has significantly grown from \$335 million to over \$1 billion in the life of capital (LOC) budgets.

# DISCUSSION

Metro has a growing Capital Improvement Program, and many transit expansion projects are being implemented at the same time. There continues to be a strong need to provide timely support for the large number of projects from these programs in accordance with the project schedules. This includes reviews of alternative technologies and deliveries coming from the progressive design build alternative delivery approach to the capital projects which will require substantially more reviews than traditional design deviations from the MRDC. This has created a challenge for in-house engineering resources to support the day-to-day maintenance of infrastructure assets and deliver infrastructure renewal SGR projects. IM&E staff reviewed the capital work program and calculated that a base cumulative contract value of \$116,000,000 is needed to augment and support in-house resources on a task order basis. The transit operations engineering support services contracts will provide the IM&E Department with sufficient gualified resources across a wide spectrum of disciplines in a timely manner to manage and support day-to-day engineering maintenance and project delivery. Work task orders will be competitively issued between the two firms and awarded based upon best value. Also, awarding work on a task order basis provides the IM&E Department with the flexibility to scale inhouse support up or down depending on Metro's USG, bus, rail, wayside, and other CIP needs. The competitive selection process for each task order will include transmitting to the firms a statement of work and evaluation criteria specific to the task order that describes the task description and implementation schedule. The proposals will be evaluated in accordance with the evaluation criteria for required items such as qualifications, work experience, key personnel, team availability, execution plan, cost estimate, (when applicable) schedule, and subcontractors including Disadvantaged Business Enterprise (DBE) participation. Attachment C provides a list of supported project uses.

#### DETERMINATION OF SAFETY IMPACT

The engineering services from these contracts will contribute to maintaining transit infrastructure assets in a State of Good Repair as recommended by Metro's Transit Asset Management (TAM) Plan, which is essential to providing a safe and reliable service for riders who use the Metro transit system daily.

#### FINANCIAL IMPACT

As work task orders become necessary, funding will be provided from the appropriate project requiring support. For FY24, funding of \$500,000 is included in the operating budget, and \$12,153,000 is included in the capital project budget under various cost centers and projects, account 50316 - Professional and Technical Services.

Since this is a multi-year contract, the Project Manager will ensure that the balance of funds is budgeted in future Fiscal Years.

#### Impact to Budget

The current sources of funds for this action are Federal, State, and Local. This funding is eligible for Capital and Operating Projects.

# EQUITY PLATFORM

The benefits of this action are to ensure that Metro transit infrastructure assets are maintained in a state of good repair, including assets in Equity Focus Communities (EFC). Metro is committed to keeping transit assets in good working order so that transit services are dependable and accessible. Transit infrastructure assets are progressively maintained in both EFCs and non-EFCs based on asset manufacturer life cycles. This allows Metro to deliver dependable transit services that connect marginalized groups with jobs, housing, education, food services, family, and health care.

#### ...Implementation\_Of\_Strategic\_Plan Goals IMPLEMENTATION OF STRATEGIC PLAN GOALS

Approval of this recommendation supports the following Metro Strategic Plan Goals:

Goal # 1 Provide high-quality mobility options that allow people to travel less.

Goal # 2 Deliver outstanding trip experiences for all users of the transportation system.

Goal # 3 Enhance communities and lives through mobility and access to opportunity.

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

These transit operations engineering support services contracts will help maintain safety, service, and reliability standards in an effort to provide a world-class transportation system that enhances the quality of life for all who live, work, and play within Los Angeles County.

#### ALTERNATIVES CONSIDERED

There were two alternatives considered for this, and one of them is to solicit open competitive proposals for each work order as it becomes required. This is not recommended as it would require extensive additional staff time to process each request, resulting in project delays due to the lead time required to complete each procurement cycle. Additionally, procuring these services on a per-assignment basis would impose an additional burden on the Vendor/Contract Management (V/CM) Department.

An additional alternative is to utilize existing in-house engineering staff to provide the required technical support. This is not feasible as the current budgeted IM&E Department capacity is fully utilized to maintain Metro's existing systems and oversee the acceptance of the new rail lines. Also, there would not be sufficient existing staff to re-assign to provide technical support to the various capital improvement projects concurrently.

# NEXT STEPS

Upon Board approval, staff will execute Contract No. AE100331000 to HNTB Corporation and AE100331001 to Gannett Fleming, Inc. to provide transit operations engineering support on a task-order basis.

#### **ATTACHMENTS**

Attachment A - Procurement Summary Attachment B - DEOD Summary Attachment C - List of Project Uses

Prepared by: 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 Officer, Vendor/Contract Management (213) 418-3051

Conan Cheung, Chief Operations Officer, (213) 418-3034

e N ief Executive Officer

#### PROCUREMENT SUMMARY

# TRANSIT OPERATIONS ENGINEERING SUPPORT/AE100331000 AND AE100331001

1.	Contract Number: AE100331000 and AE100331001			
2.	Recommended Vendor: HNTB Corporation and Gannett Fleming, Inc.			
3.	Type of Procurement (check one): 🗌 II	FB 🗌 RFP 🖾 RFP–A&E		
	Non-Competitive Modification	Task Order		
4.	Procurement Dates:			
	A. Issued: March 7, 2023			
	<b>B. Advertised/Publicized</b> : March 7 and	14, 2023		
	C. Pre-Proposal Conference: March 21,	, 2023		
	D. Proposals Due: April 20, 2023			
	E. Pre-Qualification Completed: July 25, 2023			
	F. Ethics Declaration Forms submitted to Ethics: April 20, 2023			
	G. Protest Period End Date: November 2	22, 2023		
5.	Solicitations Picked Bids/Proposals Received:			
	up/Downloaded:			
	103 2			
6.	Contract Administrator: Telephone Number:			
	Victor Zepeda	213.922.1458		
7.	Project Manager:	Telephone Number:		
	Kelvin Zan	213.617.6264		

#### A. <u>Procurement Background</u>

This Board Action is to approve Contract Nos. AE100331000 and AE100331001 issued in support of transit operations engineering support for the Operations Infrastructure Maintenance and Engineering (IM&E) Department. Board approval of contract awards are subject to resolution of any properly submitted protest.

The RFP was issued in accordance with Metro's Acquisition Policy and the contract type is a task order firm fixed unit price. The RFP was issued with a Disadvantaged Business Enterprise (DBE) goal of 36%.

Three amendments were issued during the solicitation phase of this RFP:

- Amendment No. 1, issued on March 15, 2023, clarified the period of performance, reiterated that resumes are not part of the proposal page limit, and revised Appendix B to include a listing of Metro's Mega Projects;
- Amendment No. 2, issued on March 20, 2023, clarified items that were excluded from the proposal page limit and replaced the requirement of a Dunn & Bradstreet number;
- Amendment No. 3, issued on March 27, 2023, added Exhibit 15 -Public Works Form and removed the availability section from the Statement of Work for the Project Manager position.

A total of 103 firms downloaded the RFP and were included in the planholder's list. A virtual pre-proposal meeting was held on March 21, 2023, and was attended by 40 participants representing 20 firms. Firms were encouraged to form teams and Metro provided a roster of the meeting participants to facilitate partnering.

A total of two proposals were received on April 20, 2023, from the following firms listed below in alphabetical order:

- 1. Gannett Fleming, Inc.
- 2. HNTB Corporation

# B. Evaluation of Proposals

A Proposal Evaluation Team (PET) consisting of staff from Metro's IM&E, Rail Transportation, Project Management, and Wayside Systems was convened and conducted a comprehensive technical evaluation of the proposals received.

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

The evaluation criteria are appropriate and consistent with criteria developed for other similar Architectural and Engineering (A&E) procurements. Several factors were considered when developing these weights, giving the greatest importance to technical qualifications. The PET evaluated the proposals according to the pre-established evaluation criteria.

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

During the period of May 16, 2023 to July 19, 2023, the PET independently evaluated and scored the technical proposals. Both proposals received were determined to be within the competitive range.

On June 29, 2023, the firms were invited for interviews. The firms' project managers and key team members had an opportunity to present each team's qualifications and respond to the PET's questions. In general, each team's presentation addressed the requirements of the RFP, experience with all aspects of the required tasks, and stressed each firm's commitment to the success of the project.

Following the interviews, the PET finalized and submitted their technical scores based on both the written proposal and input received during the interview. On July 19, 2023, the PET completed their evaluation of the proposals.

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

# Gannett Fleming, Inc.

Gannett Fleming, Inc. has assembled a team with project management experience as well as experience in areas such as radio communications, transportation systems, train control, traction power, civil/facility design, and construction support.

Gannett Fleming, Inc. demonstrated its depth of resources through a variety of disciplines and is available for deployment when Metro needs arise. The firm's approach has been developed based on previous experience with on-call contracts with various transit agencies, including Metro.

Gannett Fleming, Inc. exhibited in its proposal its familiarity with Metro's policies and codes. The firm brings over 50 years of experience in California working with CPUC, Caltrans, and local agencies such as the City of Los Angeles, and Metro.

# **HNTB Corporation**

HNTB Corporation provided relevant experience including planning, design, and advanced conceptual engineering for similar Metro projects and has demonstrated an understanding of the work and approach.

HNTB Corporation has proposed individuals with experience in similar on-call transit projects with various transit agencies and are familiar with Metro's systems, policies, and procedures given that the proposed team has demonstrated experience on every Metro rail line beginning in 1990.

HNTB Corporation demonstrated an execution plan, approach, and depth of resources (through employees or subcontractor teams) to facilitate the delivery of the work that includes coordination, a regimented approach to quality, safety, and management of personnel designed to maintain consistent delivery of service.

1	Firm	Average Score	Factor Weight	Weighted Average Score	Rank
2	HNTB Corporation				
3	Firm's (Prime) Qualifications	96.30	5.00%	4.82	
4	Prime PM Qualifications	95.16	40.00%	38.06	
5	Prime Skills and Experience	96.88	20.00%	19.38	
6	Proposer's Team	97.92	15.00%	14.69	
7	Effectiveness of Execution Plan	96.56	20.00%	19.31	
8	Total		100.00%	96.26	1
9	Gannett Fleming, Inc.				
10	Firm's (Prime) Qualifications	94.40	5.00%	4.72	
11	Prime PM Qualifications	95.31	40.00%	38.12	
12	Prime Skills and Experience	95.63	20.00%	19.13	
13	Proposer's Team	97.50	15.00%	14.63	
14	Effectiveness of Execution Plan	92.50	20.00%	18.50	
15	Total		100.00%	95.10	2

# A summary of the PET scores is provided below:

# C. Cost Analysis

The recommended unit rates have been determined to be fair and reasonable based upon an independent cost estimate, cost analysis, fact finding, and negotiations.

Each future task order will contain a specific statement of work which will be competed with the recommended firms. Proposals submitted for each task order will be subjected to cost/price analysis, technical evaluation, fact finding, and negotiations to determine the price fairness and reasonableness.

# D. Background on Recommended Contractors

#### **GANNETT FLEMING, INC.**

Since 1993, Gannett Fleming, Inc., headquartered in Pennsylvania, with a local office in the city of Los Angeles, has provided engineering services with a specialty in rail-related operation control systems, signal, and communications. Gannett Fleming was established in 1915 and is the incumbent on the current Maintenance of Way engineering support task order contract and is performing satisfactorily.

# HNTB Corporation

HNTB Corporation was established in 1914, headquartered in Kansas, and has a local office in Los Angeles. The firm has project experience in highways, intelligent transportation, bridges, construction, and program management, as well as architecture. HNTB Corporation has over 500 employees dedicated to transit and has completed 600 rail/transit projects across the country. Furthermore, HNTB Corporation has experience working with similar transit projects with national and local transit agencies and is currently satisfactorily providing professional services to Metro on the ExpressLanes Projects.

#### **DEOD SUMMARY**

# TRANSIT OPERATIONS ENGINEERING SUPPORT / AE100331000 AND AE100331001

#### A1. Small Business Participation

The Diversity and Economic Opportunity Department (DEOD) established an overall 36% Disadvantaged Business Enterprise (DBE) goal for this Task Order Contract. Gannett Fleming, Inc. made a 36% DBE commitment.

In response to a specific Task Order request with a defined scope of work, Gannett Fleming, 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	36% DBE	Small Business	36% DBE
Goal		Commitment	

#### Prime: Gannett Fleming, Inc.

	DBE Subcontractors	Ethnicity	%
			Committed
1.	Acumen Building Enterprise, Inc.	African American	TBD
2.	Aeon Group LLC	Caucasian Female	TBD
3.	Auriga Corporation	Subcontinent Asian	TBD
		American	
4.	C2PM	Asian Pacific American	TBD
5.	CodeRed Business Solutions Inc.	African American	TBD
6.	Colmena Engineering	Hispanic American	TBD
7.	JMDiaz, Inc.	Hispanic American	TBD
8.	Mammoth Associates, LLC	Caucasian Female	TBD
9.	Martinez Engineering LLC	Hispanic American	TBD
10.	NBA Engineering, Inc.	Caucasian Female	TBD
11.	Pacific Railway Enterprises, Inc.	Caucasian Female	TBD
12.	PacRim Engineering, Inc.	Asian Pacific American	TBD
13.	PBS Engineers, Inc.	Subcontinent Asian	TBD
		American	
14.	Ramos Consulting Services, Inc.	Hispanic American	TBD
15.	Triunity, Inc.	African American	TBD
16.	VST Engineering, Inc.	Hispanic American	TBD
17.	Wagner Engineering & Survey, Inc.	Caucasian Female	TBD
		Total Commitment	36%

# A2. Small Business Participation

The Diversity and Economic Opportunity Department (DEOD) established an overall 36% Disadvantaged Business Enterprise (DBE) goal for this Task Order Contract. HNTB Corporation made a 36% DBE commitment.

In response to a specific Task Order request with a defined scope of work, HNTB Corporation 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	36% DBE	Small Business	36% DBE
Goal		Commitment	

Prim	e: HNIB Corporation	
DBE Subcontractors		

...

**.** .

	DBE Subcontractors	Ethnicity	% Committed
1.	Acumen Building Enterprise, Inc.	African American	TBD
2.	Anil Verma Associates, Inc.	Subcontinent Asian American	TBD
3.	Auriga Corporation	Subcontinent Asian American	TBD
4.	BA Inc.	African American	TBD
5.	Birdi Systems, Inc.	Subcontinent Asian American	TBD
6.	Colmena Engineering	Hispanic American	TBD
7.	Diaz Yourman & Associates	Hispanic American	TBD
8.	Earth Mechanics, Inc.	Subcontinent Asian American	TBD
9.	JMDiaz, Inc.	Hispanic American	TBD
10.	Lenax Construction Services, Inc.	Caucasian Female	TBD
11.	Pacific Railway Enterprises, Inc.	Caucasian Female	TBD
12.	PacRim Engineering, Inc.	Asian Pacific American	TBD
13.	PBS Engineers, Inc.	Subcontinent Asian American	TBD
14.	PEMCCO, Inc.	African American	TBD
15.	Ramos Consulting Services, Inc.	Hispanic American	TBD
16.	Raul V. Bravo + Associates, Inc.	Hispanic American	TBD
17.	RAW International, Inc.	African American	TBD
18.	Ted Tokio Tanaka Architects	Subcontinent Asian American	TBD
19.	Transit Safety & Security Solutions, Inc.	African American	TBD
20.	Triunity, Inc.	African American	TBD

21.	Virginkar & Associates, Inc.	Subcontinent Asian	TBD
		American	
22.	VST Engineering, Inc.	Hispanic American	TBD
23.	Wagner Engineering & Survey,	Caucasian Female	TBD
	Inc.		
		Total Commitment	36%

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

#### LIST OF SUPPORTED RAIL EXPANSION CAPITAL PROJECTS USES

#### Description

G (Orange) Line improvements, East San Fernando Valley, Division 20 Portal Widening Turnback, D (Purple) Line Extension Phase 1, D (Purple) Line Extension Phase 2, D (Purple) Line Extension Phase 3, Sepulveda Transit Corridor, Airport Metro Connector (AMC) Station, Foothill Extension Phase 2B, C (Green) Line Extension to Torrance, E Line Eastside Extension to Whittier, West Santa Ana Branch, I-105 Express Lanes, Metro Link Union Station, Rail to Rail Construction, Metro Center Street

# SAMPLE LIST OF SUPPORTED JOINT DEVELOPMENT PROJECTS USES

#### Description

1<sup>st</sup>/Lorena (A Community of Friends), 1<sup>st</sup>/Soto (Bridge Housing/ELACC), Vermont/Santa Monica (Little Tokyo Service Center), North Hollywood, Taylor Yard – Lot 9, Expo/Crenshaw, Duarte, Chavez/Fickett, Peabody Werden, Mariachi Plaza, Westlake/MacArthur Park, Little Tokyo/Arts District.

# SAMPLE LIST OF SUPPORTED MAJOR SGR CAPITAL PROJECTS USES

#### Description

System-wide Radio Communication System Replacement/upgrade

C Line Overhead Catenary System Replacement

C Line Traction Power Substation Replacement

C Line Mainline Track Fasteners Replacement

C Line Mainline Turnout Track Ties Replacement

C Line Harbor Hump Direct Fixation Replacement

New ROC/BOC

Metro Call Point Security Blue Light Call Boxes

Elevator and Escalator Replacement Project

B Line Fire Alarm System Replacement

B & D Lines Intrusion Detection System Enhancement for Stations Ancillary areas and Emergency Exit doors,

D Line Track and Tunnel Intrusion Detection System

B & D Lines Tunnel and Station Ventilation Fan Replacement

A & E lines Tunnel Lighting Replacement

System-wide Fiber Optic Cable/Communication System Replacement

B & D Lines Traction Power Substations

B & D Lines Station Power (Aux. System)

B & D Lines UPS Replacement

System-wide Corrosion Protection System Replacement

Gold Line (A Line) OCS Weight Poles Spring Tension Units Replacement

B & D Lines Train Control Vital Processor and Track Module Upgrade

Train Control System Refurbishments and Upgrades (switch machines, signals, gate mechanisms, track circuits, and vital relays)

Bus and Rail O&M Facility Renovations and Improvements (shop equipment, vehicle hoists, cranes, wheel truing machines, wheel press, turntable, blow-down equipment, car washing systems, roof replacements, property fencing, yard pavements, etc.)

Union Station Gateway (USG) building renovations and improvements (heating, ventilation and air conditioning, plumbing, ITS data center, lighting, electrical distribution, and grounding)

Bus and USG Facility Fire Alarm / Fire Suppression / Fire-Life Systems

Emergency Generators and UPS Battery Replacements for critical wayside systems (fire-life / com systems / train control / grade crossings)

Replacements of railroad tracks, turnouts, and fasteners

Upgrade of various SCADA systems

Grade Crossing Refurbishments

Service-wide CCTV Upgrades and Additions

Light Rail Speed Improvements

System Security and Law Enforcement projects

Electric Vehicle Charging Infrastructure Additions

Customer Experience - Passenger Station Improvements

Refer to FY24 Budget Book Capital Improvement Program Project Lists under the Bus Facilities Improvements, Rail Facilities Improvements and Wayside Systems Sections

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



**Board Report** 

File #: 2023-0620, File Type: Contract

Agenda Number: 22.

#### OPERATIONS, SAFETY, AND CUSTOMER EXPERIENCE COMMITTEE NOVEMBER 16, 2023

#### SUBJECT: ENGINEERING SUPPORT SERVICES FOR VERTICAL TRANSPORTATION SYSTEM AND RELATED SERVICES

ACTION: APPROVE CONTRACT AWARD

#### RECOMMENDATION

AUTHORIZE the Chief Executive Officer to award a ten-year firm fixed unit rate Contract No. AE89754000 to Gannett Fleming, Inc. for engineering support services for vertical transportation system and related services, for a not-to-exceed amount (NTE) of \$36,324,570 for the six-year base term, and \$12,187,396 for each of the two, two-year option terms for a total combined NTE amount of \$60,699,362, effective January 1, 2024, subject to resolution of any properly submitted protest(s), if any.

#### <u>ISSUE</u>

Engineering services are needed to support the Operations Infrastructure Maintenance and Engineering (IM&E) Department with the modernization of system-wide vertical transportation systems. The IM&E Department seeks to augment the engineering capacity with technical resources to develop and manage a long-term comprehensive vertical transportation capital improvement project.

#### BACKGROUND

Metro has 231 elevators and 173 escalators systemwide that are heavily used. Many of the elevators and escalators are among the oldest in the entire Metro system and are reaching the end of their useful lives. For FY23, the elevator and escalator availability key performance indicator (KPI) goals were set at 98.95% and 99.04% respectively. Final FY23 elevator and escalator availability was 98.85% and 98.75% with elevators being 0.10% short and escalators being 0.29% short of their respective KPI goals. Over 4,000 hours of downtime was due to repair and remanufacturing of obsolete parts and equipment. In addition, elevators and escalators must be improved to accommodate the higher ridership capacity in preparation for the Olympic and Paralympic Games in 2028. Elevators and escalators are critical to Metro's operations and must sustain high levels of equipment reliability. They play a vital role in customer access to transit services, especially for mobility-impaired customers, such as people with disabilities or parents with young children in strollers. Developing and managing a comprehensive vertical transportation modernization program

is critical to ensuring elevators and escalators are kept in a state of good repair and continue to be available and reliable for customers.

#### **DISCUSSION**

Metro operates and maintains a robust vertical transportation system at transit stations and facilities that must provide efficient and reliable passenger circulation to move passengers and provide accessibility. Metro's vertical transportation systems include aging elevators and escalators that will become more costly to repair and require longer downtimes to return to service should they require repair. Metro is seeking to modernize the aging elevators and escalators through its Capital Improvement Program (CIP). The Life of Project (LOP) budget for the Elevator and Escalator Modernization capital project is \$126,700,000 with an estimated duration of 10 years. Engineering services under this contract would include engineering design, project management, cost estimates, project schedules, and architectural elements. Modernization of elevators and escalators involves the enhancement of systems using state-of-the-art design techniques and equipment for the purpose of improving capacity, accessibility, and ridership experience.

An assessment was conducted to review the conditions of elevators and escalators. Based on the assessment, staff calculated that a contract value up to \$60,699,362 is needed to provide dedicated engineering support services to modernize elevators and escalators.

#### DETERMINATION OF SAFETY IMPACT

The engineering support services for vertical transportation modernization will contribute to maintaining and improving the vertical transportation system in a State of Good Repair (SGR) as recommended by Metro's Transit Asset Management (TAM) Plan, which is essential to providing a safe and reliable service for riders who use the Metro transit system.

#### FINANCIAL IMPACT

Funding for this contract will come from capital project 204805 - Elevator Modernization and Escalator Replacement. The Board approved a Life-of-Project (LOP) budget of \$126,692,000. For FY24, the amount of \$2,000,000 will be funded by the annual budget of project 204805, cost center 3960, account 50316 - professional and technical services.

Since this is a multi-year contract, 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 are Federal, State, and Local funding that is eligible for use on Capital and Operating Projects.

#### EQUITY PLATFORM

Elevators and escalators are located at Metro facilities throughout Los Angeles County, including in Equity Focus Communities. Modernizing vertical transportation systems adds the capability for maintaining the operation of elevators and escalators in a state of good repair. Also, the engineering services supported by this contract will provide modernization enhancements to expand accessibility and user-friendliness for all Metro transit passengers.

A Disadvantaged Business Enterprise (DBE) participation goal of 30% was established as part of the Request for Proposal (RFP). The recommended firm, Gannett Fleming, made a 30% DBE commitment.

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

Approval of this recommendation supports the following Metro Strategic Plan Goals:

- 1. Provide high-quality mobility options that enable people to spend less time traveling.
- 2. Deliver outstanding trip experiences for all users of the transportation system.

This contract will help maintain safety, service, and reliability standards in an effort to provide a worldclass transportation system that enhances the quality of life for all who live, work, and play within Los Angeles County.

#### ALTERNATIVES CONSIDERED

Staff could solicit competitive bids for each task order as it becomes required. This is not recommended as it would require extensive additional staff time to process each request, resulting in project delays due to the lead time required to complete each procurement cycle.

#### NEXT STEPS

Upon Board approval, staff will execute Contract No. AE89754000 with Gannett Fleming, Inc. to provide engineering support services for vertical transportation system and related services.

#### **ATTACHMENTS**

Attachment A - Procurement Summary Attachment B - DEOD Summary

Prepared by: Rudy Loera, Senior Director, Systems Engineering, (213) 617-6225 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 Officer, Vendor/Contract Management (213) 418-3051

Reviewed by:

Conan Cheung, Chief Operations Officer, (213) 418-3034

ie N. W ief Executive Officer

#### PROCUREMENT SUMMARY

#### ENGINEERING SUPPORT SERVICES FOR VERTICAL TRANSPORTATION SYSTEM AND RELATED SERVICES / AE89754000

1.	Contract Number: AE89754000		
2.	Recommended Vendor: Gannett Fleming, Inc.		
3.	Type of Procurement (check one): 🗌 I	FB 🗌 RFP 🛛 RFP–A&E	
	Non-Competitive Modification	Task Order	
4.	Procurement Dates:		
	A. Issued: October 11, 2022		
	B. Advertised/Publicized: October 11, 2	022	
	C. Pre-Proposal Conference: October 2	0, 2022	
	D. Proposals Due: November 14, 2022		
	E. Pre-Qualification Completed: September 13, 2023		
	F. Ethics Declaration Forms submitted to Ethics: September 6, 2023		
	G. Protest Period End Date: November 21, 2023		
5.	Solicitations Picked	Proposals Received:	
	up/Downloaded:		
	60	1	
6.	Contract Administrator:	Telephone Number:	
	Marc Margoni	<b>(</b> 213) 922-1304	
7.	Project Manager:	Telephone Number:	
	Rudy Loera	<b>(</b> 213) 617-6225	

#### A. Procurement Background

This Board Action is to approve the award of Contract No. AE89754000 to provide engineering support services for elevators, escalators, canopies, and various other aspects of vertical transportation throughout the Metro transit system on an as-needed basis. Board approval of contract award is subject to resolution of any properly submitted protest.

On October 11, 2022, Request for Proposal (RFP) No. AE89754 was issued as a competitively negotiated procurement in accordance with Metro's Acquisition Policy and the contract type is task order based, firm fixed unit price. The RFP was issued with a Disadvantaged Business Enterprise (DBE) goal of 30%.

Two amendments were issued during the solicitation phase of this RFP. Amendment No. 1 was issued on October 12, 2022 to clarify the Pre-Proposal Conference Access code. Amendment No. 2 was issued on November 10, 2022 to add an administrative DBE form.

The solicitation was available for download from Metro's website and advertised to notify potential proposers of this solicitation. Further, Metro notified potential proposers

identified by the applicable North American Industry Classification System (NAICS) codes.

A total of 60 firms downloaded the RFP and were included on the planholders list. A virtual pre-proposal conference was held on October 20, 2022, with five participants representing five firms in attendance. No questions were asked during the pre-proposal conference.

On November 14, 2022, the proposal due date, a single proposal was received from Gannett Fleming, Inc.

Since only one proposal was received, staff conducted a market survey of the Planholders to determine why they did not submit a proposal. Staff received responses from 7 firms that fell into three general categories:

- 1. Respondents plan to pursue other open solicitations that aligned more with their company goals;
- Respondents chose not to pursue this solicitation for their own business reasons (insufficient resources or insufficient subcontractors; deciding this was not the right scope for the firms);
- 3. Respondent downloaded the RFP only for general information on the overall project in preparation to submit a proposal; but ultimately, elected not to participate.

The market survey revealed that the decisions not to propose were based on individual business considerations. Therefore, the solicitation can be awarded as a competitive award.

#### B. Evaluation of Proposals

A Proposal Evaluation Team (PET) consisting of staff from Operations Engineering and Facilities Contracted Maintenance Services was convened and conducted a comprehensive technical evaluation of the proposal received.

The proposal was evaluated based on the following evaluation criteria:

Phase I - Evaluation of Minimum Qualification Requirements: This is a pass/fail criteria. To be responsive to the RFP minimum qualification requirements, the proposer must be ISO 9001:2015 certified, have the required experience in the design, construction, and maintenance of vertical transportation systems and serve as a third-party agent for elevators and escalators governed by Authorities Having Jurisdiction (AHJ), key team members must have an active and valid American Society of Mechanical Engineers (ASME) certification and Professional Engineer license.

Phase II – Weighted Evaluation: Proposers that meet the Phase I Minimum Qualification requirements were evaluated based on the following evaluation criteria and weights:

•	Degree of Prime's Skill and Experience	50 percent
•	Proposer's Team	20 percent

Management Plan/Approach 30 percent

The evaluation criteria are appropriate and consistent with criteria developed for other, similar Architecture and Engineering (A&E) procurements. Several factors were considered when developing these weights, giving the greatest importance to the degree of Prime's skill and experience.

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

The evaluation was conducted from December 15, 2022 to January 17, 2023.

The PET independently evaluated and scored the technical proposal and determined that Gannett Fleming, Inc. met the requirements of the RFP and is technically qualified to perform the services as outlined in the scope of services. Staff conducted an audit of the proposed indirect and direct rates, as well as other cost elements, and engaged the firm in fact finding discussions and negotiations.

1	Firm Gannett Fleming, Inc.	Average Score	Factor Weight	Weighted Average Score	Rank
2	Degree of Prime's Skill and				
3	Experience.	96.00	50.00%	48.00	
4	Proposer's Team	95.00	20.00%	19.00	
5	Management Plan/Approach	95.57	30.00%	28.67	
6	Total		100.00%	95.67	1

The following is a summary of the PET scores:

#### C. Cost Analysis

The recommended unit rates have been determined to be fair and reasonable based upon MAS audit findings, an independent cost estimate, cost analysis, fact finding, and negotiations.

Work for this contract shall be authorized through issuance of individual task orders. Each task order will contain a specific scope of services and will be subjected to cost/price analysis, technical evaluation, fact finding, and negotiations to determine price fairness and reasonableness.

#### D. Background on Recommended Contractor

#### Gannett Fleming, Inc.

Gannett Fleming, Inc. (GFI) is an engineering consulting firm established in 1915 and headquartered in Camp Hill, Pennsylvania. It specializes in architectural design, engineering, procurement and construction, geospatial analytics, and resilient and sustainable transportation solutions. Existing vertical transportation clients include Amtrak, Freeport McMoran, Inc., Delaware River Port Authority, TK Elevator Corporation, and Harrah's Casino.

GFI has been providing service to Metro since 1996. It currently provides Maintenance of Way engineering support to Metro and performance has been satisfactory.

The GFI team is composed of vertical transportation subject matter experts, transit specialists and facilities specialists with experience working together for numerous public transportation projects, as well as the personnel management and oversight for such services. GFI has teamed up with 11 subcontractors, ten of which are DBE certified.

#### **DEOD SUMMARY**

#### ENGINEERING SUPPORT SERVICES FOR VERTICAL TRANSPORTATION SYSTEM AND RELATED SERVICES / AE89754000

#### A. <u>Small Business Participation</u>

The Diversity and Economic Opportunity Department (DEOD) established an overall 30% Disadvantaged Business Enterprise (DBE) goal for this Task Order Contract. Gannett Fleming, Inc. made a 30% DBE commitment.

In response to a specific Task Order request with a defined scope of work, Gannett Fleming, 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	30% DBE	Small Business Commitment	30% DBE
Goal		Communent	

	DBE Subcontractors	Ethnicity	% Committed
1.	Anil Verma Associates, Inc.	Subcontinent Asian American	TBD
2.	C2PM	Asian Pacific American	TBD
3.	JM Diaz, Inc.	Hispanic American	TBD
4.	Lenax Construction Services, Inc.	Caucasian Female	TBD
5.	Mammoth Associates, LLC	Caucasian Female	TBD
6.	PacRim Engineering, Inc.	Asian Pacific American	TBD
7.	PBS Engineers, Inc.	Subcontinent Asian American	TBD
8.	Sommer Engineering	Caucasian Female	TBD
9.	Triunity, Inc.	African American	TBD
10.	Wagner Engineering & Survey, Inc.	Caucasian Female	TBD
		otal Commitment	30%

#### 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. <u>Prevailing Wage Applicability</u> 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. Project Labor Agreement/Construction Careers Policy is applicable only to construction contracts that have a construction contract value in excess of \$2.5 million.



**Board Report** 

File #: 2023-0632, File Type: Contract

Agenda Number: 23.

#### OPERATIONS, SAFETY, AND CUSTOMER EXPERIENCE COMMITTEE NOVEMBER 16, 2023

#### SUBJECT: SPACE PLANNING - INSTALLATION SERVICES AND FURNITURE

#### ACTION: APPROVE RECOMMENDATION

#### RECOMMENDATION

AUTHORIZE the Chief Executive Officer to execute Modification No. 5 to Contract No. PS28069-2000 with M3 Office Inc. in the amount of \$1,500,000 to continue to provide space planning/installation services and furniture increasing the total not-to-exceed contract value from \$7,500,000 to \$9,000,000 and extend the period of performance through December 31, 2024.

#### <u>ISSUE</u>

Contract PS28069-2000 with M3 Office Inc. is set to expire on December 31, 2023. A contract extension through December 31, 2024, is required to continue to provide furniture planning and installation services.

On April 21, 2023, RFP No. PS100212 for space planning installation services and furniture, was issued as a competitive solicitation to replace the existing contract. However, the solicitation was canceled due to the failure of the single proposer to meet the established Disadvantaged Business Goal (DBE) goal. Efforts to reprocure this contract are ongoing. Building Maintenance Services, DEOD and Procurement are working together to identify necessary changes to the DBE goal setting. Changes to the scope of work are also being evaluated to include additional services that could possibly help attract DBE participation.

The requested contract modification will allow for sufficient time to procure these services through a competitive procurement process.

#### BACKGROUND

On March 23, 2017, the Metro Board of Directors awarded a five-year, indefinite delivery/indefinite quantity contract for space planning/installation services and furniture.

Under the existing contract, the contractor provides space planning services, furniture, and furniture installation services for all Metro facilities, including new operating facilities and the Gateway Headquarters building.

#### **DISCUSSION**

Facilities Maintenance reconfigures cubicles and offices in the Gateway Headquarters building and all Divisions to meet ever-changing business needs. This 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 continue to be utilized to buy new and replacement furniture components to support the requirements throughout the agency. It will also provide furniture to meet the staff's ergonomic needs as determined by Corporate Safety for all Metro locations, including items such as ergonomic chairs, tables, and desktop risers.

A one-year contract extension is requested to ensure sufficient time to advertise a new solicitation and award a new contract as well as reduce impacts related to furniture and space planning for upcoming projects. This Contract will also provide space planning services and furniture for the buildings and projects outside the Gateway building. For example,

1. Airport Metro Connector (AMC) 96th Street Station

#### DETERMINATION OF SAFETY IMPACT

This Contract will have a positive impact on safety as ergonomic furniture is provided for Metro employees as determined by Corporate Safety.

#### FINANCIAL IMPACT

The funding of \$200,000 for the Gateway Headquarters building is included in the FY24 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 management for all departments that make use of this contract will be responsible for budgeting in future years.

#### 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 that distributes costs agency-wide. The remaining funding for this project will come from specific funding sources that are allocated to direct projects.

#### EQUITY PLATFORM

Given that this contracted service will be applied to all Metro facilities, and all Metro staff will have an opportunity for acquiring new furniture on an as-needed basis, there is no anticipated equity impact.

M3 made a 4.12% Disadvantaged Business Enterprise commitment for this contract.

#### IMPLEMENTATION OF STRATEGIC PLAN GOALS

This Board action supports Strategic Goal 5: Provide responsive, accountable, and trustworthy governance within the Metro organization. Providing quality furniture for Metro employees contributes to a work environment that fosters safety, aesthetics, comfort, and morale.

#### ALTERNATIVES CONSIDERED

The Board may elect not to approve this recommendation. That is not recommended because, each department and expansion capital project would be required to purchase furniture and space planning/installation services directly with multiple vendors through multiple procurement actions such as P-Cards and one-time procurements. This alternative is more costly to Metro and is not desired since it doesn't take advantage of volume discount and causes quality issues, problems with maintenance and repairs, as well as aesthetic inconsistency.

#### NEXT STEPS

Upon Board approval, staff will execute Modification No. 5 to Contract No. PS28069-2000 with M3 Office Inc. to continue to provide space planning and installation services and furniture. In addition, we will continue with the process to reprocure a new five-year contract.

#### **ATTACHMENTS**

Attachment A - Procurement Summary Attachment B - Contract Modification/Change Order Log Attachment C - DEOD Summary

Prepared by: Errol Taylor, DCOO Infrastructure Maintenance & Engineering, (213) 922-3227 Christopher Limon, Deputy Executive Officer, (213) 922-6637 Eladio Salas, Sr. Director, Facilities Maintenance, (213) 418-3232 Merrilu Alfaro, Director, General Services, (213) 922-2154 Debra Avila, Deputy Chief Vendor/Contract Management Officer (213) 418-3051

Reviewed by: Conan Cheung

Conan Cheung, Chief Operations Officer, (213) 418-3034

Chief Executive Officer

#### PROCUREMENT SUMMARY

#### SPACE PLANNING-INSTALLATION SERVICES AND FURNITURE/PS28069-2000

furniture
furniture
furniture
\$5,000,000
\$2,500,000
\$1,500,000
\$9,000,000

#### A. Procurement Background

This Board Action is to approve Contract Modification No. 5 to continue to provide space planning/installation services and furniture and extend the period of performance from January 1, 2024, to December 31, 2024.

This contract modification will be processed in accordance with Metro's Acquisition Policy and the contract type is an indefinite delivery/indefinite quantity.

In March 2017, the Board awarded a five-year (inclusive of two, one-year options) contract to M3 Office, Inc. to provide space planning/installation services and furniture.

A total of four modifications have 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 firms' fixed unit rates that were established and evaluated as part of the competitive contract awarded in March 2017.

Proposal Amount	Metro ICE	Recommended Amount
\$1,500,000	\$1,500,000	\$1,500,000

#### CONTRACT MODIFICATION/CHANGE ORDER LOG

#### SPACE PLANNING-INSTALLATION SERVICES AND FURNITURE/ PS28069-2000

Mod.		Status (Approved		
No.	Description	or Pending)	Date	Amount
1	Exercise the two, one-year option terms and extend the period of performance			000 000 C \$
	(POP) through March 31 2022 Continuation of existing services and	Approved	10/08/2019	\$ 2,000,000
2	extend POP through December 31, 2022	Approved	03/07/2022	\$ 500,000
3	Continue existing services and extend POP through June 30, 2023	Approved	07/06/2022	\$ 0
4	Continue existing services and extend POP through December 31, 2023	Approved	03/01/2023	\$ 0
5	Continue existing services and extend POP through December 31, 2024	Pending	Pending	\$ 1,500,000
	Modification Total:			\$ 4,000,000
	Original Contract:		3/23/17	\$ 5,000,000
	Total:			\$ 9,000,000

#### **DEOD SUMMARY**

#### SPACE PLANNING/INSTALLATION SERVICES AND FURNITURE/PS28069-2000

#### A. <u>Small Business Participation</u>

M3 Office, Inc. (M3) made a 4.12% Disadvantaged Business Enterprise (DBE) commitment. Based on payments made to date, the project is 78% complete and the current DBE participation is 3.43%, representing a 0.69% commitment shortfall.

M3 explained that the shortfall is due to the good cause termination of its listed DBE subcontractor. M3 is required to demonstrate good faith efforts and affirm continued steps to find a replacement DBE firm to meet its commitment. DEOD will continue to monitor M3's efforts to meet their commitment.

Small Business Commitment	4.12% DBE	Small Business Participation	3.43% DBE
		-	

	DBE Subcontractors	Ethnicity	% Committed	Current Participation <sup>1</sup>
1.	Décor Interior Design, Inc.	African American	4.12%	3.43%
		Total	4.12%	3.43%

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

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

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

#### C. <u>Prevailing Wage Applicability</u>

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. Project Labor Agreement/Construction Careers Policy is applicable only to construction contracts that have a construction contract value in excess of \$2.5 million.

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



**Board Report** 

File #: 2022-0822, File Type: Contract

Agenda Number: 24.

#### OPERATIONS, SAFETY, AND CUSTOMER EXPERIENCE COMMITTEE NOVEMBER 16, 2023

#### SUBJECT: A650 HEAVY RAIL VEHICLE ATC SYSTEM UPGRADE

#### ACTION: APPROVE RECOMMENDATIONS

#### RECOMMENDATION

#### CONSIDER:

- A. AUTHORIZING the Chief Executive Officer (CEO) to negotiate, award, and execute Contract No. OP116496 to Hitachi Rail for 36 months for an amount not to exceed \$29,312,410, to upgrade the onboard train control system on 70 of Metro's A650 option order Heavy Rail Vehicles (HRVs) and a contract option for upgrading an additional 4 A650 HRVs, to ensure compatibility with upcoming upgrades to Metro's wayside signaling and communication systems, subject to the resolution of any properly submitted protest(s), if any; and
- B. FINDING that there is only a single source of procurement for the materials and work set forth in Recommendation A above and it is for the sole purpose of delivering, installing, and testing equipment compatible with the anticipated upgrades to Metro's wayside signaling/communication systems.

#### <u>ISSUE</u>

Staff has determined that the existing A650 HRVs will be incompatible with the upcoming upgrades to the wayside signaling and communication systems, meaning the HRVs cannot be used in service. Upgrading the A650 HRVs to be compatible with the upcoming wayside signaling system will require the purchase and installation of specialized rail transit equipment, as the signaling system throughout all of Metro's rail systems is produced by Hitachi Rail (previously known as Ansaldo STS). Due to this equipment being produced by only one company it is appropriate that the work to upgrade the Automatic Train Control (ATC) system on the A650 Option HRVs be procured through a sole source contract.

#### BACKGROUND

Hitachi Rail Inc. has been the single ATC system supplier of Metro's rail system for the past fifteen (15) years and is fully knowledgeable of Metro's current rail and wayside signaling systems. The Heavy Rail signaling system is comprised of wayside equipment on the tracks and onboard ATC

equipment that must communicate together to ensure safe operations, including speed restrictions and track occupancy detection. The onboard ATC equipment is safety critical equipment that protects the train and riders against collisions as well as speed overruns.

Hitachi Rail's onboard ATC equipment is already installed or being installed on all Metro's Heavy Rail and Light Rail Vehicle fleets, including the P3010, upcoming HR4000, P2000 modernization, and P2550 modernization vehicles. By installing Hitachi Rail's solution, the A650's ATC system will be aligned with all of Metro's other rail vehicle fleets.

All other existing heavy rail ATC systems must be replaced because it will be incompatible with upcoming wayside signaling system changes that will be included in the Division 20 Portal Widening and the D (Purple) Line Extension projects. The ATC system upgrade is therefore being split out from the re-bid of the A650 refurbishment, since refurbished vehicles are not expected to be completed until after the D (Purple) Line Extension is completed.

#### DISCUSSION

Staff recommends a sole source procurement for this specialized, safety-critical system. The need for compatibility with the wayside systems dictates that only one company is currently able to provide the onboard equipment, making a competitive negotiation per PCC § 20217 impossible.

The wayside signaling equipment installed on Metro's Heavy Rail system is Hitachi Rail equipment, and no other vendor currently manufactures onboard equipment that can be installed on the A650 vehicles that are compatible.

Evaluation of other competing systems would therefore entail either replacing the entire heavy rail signaling system, including both wayside and onboard equipment for all Heavy Rail fleets, or replacing the onboard system of the A650 fleet with unproven new equipment.

Replacement of the entire signaling system is not a viable option, as multiple Heavy Rail Vehicle fleets would then need their equipment replaced along with all wayside equipment, vastly increasing the scope of this project. The entire system would also be disrupted while this changeover is being made, since the new equipment would not be able to communicate with the Hitachi equipment.

Replacing only the A650's onboard equipment would require the development of a brand-new system by a third party that is compatible with Hitachi's wayside equipment. This is prohibited by our standard contract terms, requiring 3 years of service proven history in the U.S. Eliminating this clause for a safety critical system like the ATC is not advisable, as an ATC system failure can result in catastrophic accidents. Creating a brand-new system would also require significantly higher costs and time, as it would require development of the system from the ground up and additional safety certifications.

The ATC system is a safety critical system, making it imperative to use a service proven system. Hitachi Rail has developed the onboard ATC system for all recent Metro rail projects, including the HR4000 HRV Procurement, P3010 LRV Procurement, P2000 Midlife Modernization and the P2550 Midlife Modernization. No other company produces a product that is compatible with Metro's wayside systems, and the development of a new system would pose significant safety, cost, and schedule

Printed on 12/1/2023

powered by Legistar™

impact. Hitachi Rail is uniquely qualified as both the manufacturer of the ATC equipment and a Transit Vehicle Manufacturer (TVM) that is capable of performing the vehicle level work required for the installation and testing of the equipment.

The ATC system upgrade was previously included in the midlife overhaul of the A650 Option HRVs. Due to the cancellation of that contract, the ATC system upgrade must be accelerated to allow the A650 Option HRVs to be used after the opening of PLE.

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

The approval of this capital project will have a direct and positive impact to safety, service quality, system reliability, performance, and overall customer satisfaction. A properly functioning ATC system protects the HRVs from collisions and is required for safe operation of Metro's rail service. Upgrading the train system on 74 HRVs will ensure the safety of these vehicles for Metro's passengers and staff.

#### FINANCIAL IMPACT

Upon Board Approval, the contract will be executed and will not exceed the LOP 206038 A650 OCCRP, for the ATC Upgrade on the 74 A650 Option Vehicles. The project LOP not only covers the cost for the ATC Upgrade, it also includes Professional Services, Project Administration and Metro Labor. Since this project will occur over a multi-year period, the Cost Center Manager, Project Manager and Chief Operations Officer will be responsible for future fiscal year budgeting.

#### Impact to Budget

Upon approval, the recommendation shall be funded with a combination of Federal, State and Local funds, primarily consisting of Proposition A 35% and Federal State of Good Repair Section 5337 funds. Use of these funding sources maximizes funding allocations given the currently approved funding provisions and guidelines. This recommendation supports Operations State of Good Repair efforts. Current fiscal year funding may be required to enact this project and shall be funded via a net zero budget transfer from approved FY24 funded projects.

#### EQUITY PLATFORM

The existing A650 option order HRVs are operating on Metro's B and D Lines and will be used on D (Purple) Line Extensions 1, 2 & 3. Approving these recommendations will ensure that safe, reliable HRVs are available to support the planned line and service expansions.

The modernized A650 fleet will operate on lines that are currently serving passengers living in predominately Equity Focus Communities (EFCs) who rely on public transportation for their daily jobs.

Based on the 2019 Customer Survey, the B and D heavy rail lines serve the following ridership:

• 27.7% below the poverty line

• 56.4% had no car available

Ethnicity:

- Latino 38.9%;
- Black 13.1%;
- White 25.8%;
- Asian/Pacific Islander 15.2%;
- Other 6.5%

The Diversity and Economic Opportunity Department (DEOD) did not recommend a Disadvantaged Business Enterprise (DBE) goal for this procurement as it is not applicable. This procurement falls under the Federal Transit Administration's (FTA) Transit Vehicle Manufacturer (TVM) goal in accordance with 49 Code of Federal Regulations (CFR) Part 26.49.

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

These recommendations support Metro Strategic Plan Goal No. 5) to "provide responsive, accountable, and trustworthy governance within the Metro organization". This goal strives to position Metro to deliver the best possible mobility outcomes and improve business practices so that Metro can perform more effectively and adapt more nimbly to the changing needs of our customers.

#### ALTERNATIVES CONSIDERED

The Board of Directors may choose to pursue a competitive bid, but this methodology is not recommended. There is no competition currently in the market and pursuing a competitive bid will cost time and money for the bidding process and will likely result in a single bid. Any alternate bidder would either need to procure the equipment from Hitachi Rail or reverse engineer and develop an alternate system. Both scenarios would result in additional overhead costs and schedule delays. For these reasons, staff does not recommend this alternative. The sole source procurement process will provide the safest, most expedient, and lowest cost implementation of the ATC system upgrade.

#### NEXT STEPS

If these recommendations are approved, staff will proceed with a sole source contract award for the ATC system upgrade of 70 of the A650 option order HRV fleet with a contract option for an additional 4 A650 HRVs.

#### **ATTACHMENTS**

Attachment A - Procurement Summary Attachment B - DEOD Summary

Prepared by: Annie Yang, Deputy Executive Officer, Vehicle Engineering & Acquisition, (213) 922-3254

Jesus Montes, Sr. Executive Officer, Vehicle Engineering & Acquisition, (213) 418-3277

File #: 2022-0822, File Type: Contract

#### Agenda Number: 24.

Matthew Dake, Deputy Chief Operations Officer, 213-922-4061 Debra Avila, Deputy Chief Vendor/Contract Management Officer, (213) 418-3051

Reviewed by: Conan Cheung, Chief Operations Officer, (213) 418-3034

ef Executive Officer

#### ATTACHMENT A PROCUREMENT SUMMARY

#### A650 HEAVY RAIL VEHICLE AUTOMATIC TRAIN CONTROL UPGRADE

1.	Contract Number: OP116496		
2.	Recommended Vendor: HITACHI RAIL STS USA, INC.		
3.	Type of Procurement (check one):		
	Non-Competitive D Modification	Task Order	
4.	Procurement Dates:		
	A. Issued: October 23, 2023		
	B. Advertised/Publicized: N/A		
	C. Pre-Proposal Conference: N/A		
	D. Proposals Due: October 27, 2023		
	E. Pre-Qualification Completed:		
	F. Ethics Declaration Forms submitted to Ethics: October 31, 2023		
	G. Protest Period End Date: December 15, 2023		
5.	Solicitations Picked	Bids/Proposals Received: One (1)	
	up/Downloaded: One (1)		
6.	Contract Administrator:	Telephone Number:	
	Jessica Omohundro	213-922-4790	
7.	Project Manager:	Telephone Number:	
	Ray Saito	213-922-3141	

#### A. <u>Procurement Background</u>

This Board Action is to approve Contract No. OP116496 issued in support of Metro's A650 Heavy Rail Vehicle (HRV) to procure services required to upgrade the onboard train control system to ensure compatibility with upcoming upgrades to Metro's wayside signaling and communication systems. It was determined by Metro's Engineering and Operations team that the design, manufacturing, installation, testing, and warranty be provided by the Original Equipment Manufacturer (OEM), Hitachi Rail.

The non-competitive Request for Proposal (RFP) was issued on October 23, 2023, in accordance with Metro's Acquisition Policy and the contract type is Firm-Fixed-Price.

#### B. Evaluation of Proposal

This single source procurement is consistent with Public Utility Code § 130237 for the duplication or replacement of existing equipment already in use. The proposal was evaluated in compliance with Metro's Acquisition Policy and Procedures.

Metro's Project Manager conducted an evaluation of the technical proposal submitted by Hitachi. The technical evaluation consisted of reviews of the Proposer's key personnel, management, and quality assurance plans. Metro Staff and Proposer are still negotiating price, terms, and schedule. The recommendation for award to Hitachi Rail is made subject to resolution of any properly submitted protests.

#### C. Cost/Price Analysis

A cost analysis of the elements of cost including labor rates, indirect rates and other direct costs will be completed in accordance with Metro's Procurement Policies and Procedures, including fact-finding, clarification, and negotiations to establish a fair and reasonable price.

#### D. Background on Recommended Contractor

The recommended firm, Hitachi Rail STS USA, Inc., has been the single ATC system supplier of Metro's rail system for the past fifteen (15) years and conducts all its design and production operations at two major facilities in the United States: The Pittsburgh Technology Center (PTC) in Pittsburgh, PA and the Batesburg Manufacturing & Customer Service Center in Batesburg, SC. The company also has design and project management offices in Baltimore, Boston, and Los Angeles. Hitachi is directed by CEO and a separate President. The former is focused on business development and project delivery, while the latter is focused on daily functions such as administration, staffing and finance. However, both officers play extensive roles in decision-making across the entire organizational spectrum. Hitachi serves as a full-line supplier of signaling and automation systems, equipment, and services for all types of railway and guideway operations around the world.

#### **DEOD SUMMARY**

#### A650 HEAVY RAIL VEHICLE ATC SYSTEM UPGRADE

#### A. Small Business Participation

Hitachi Rail, a Transit Vehicle Manufacturer (TVM), is on the Federal Transit Administration's (FTA) list of eligible TVMs. Hitachi Rail, has submitted its overall Disadvantaged Business Enterprise (DBE) goal of 4.00% to FTA, in compliance with 49 Code of Federal Regulations (CFR) Section 26.49(a)(1). TVMs submits overall DBE goal methodology and semi-annual reports directly to FTA.

#### 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.

## A650 Heavy Rail Vehicle Signaling System (ATC) Upgrade

*Operations , Safety , and Customer Experience Committee November 16, 2023* 



### Background

- Division 20 Portal Widening and Purple (D) Line Extensions (PLE) require upgrades to heavy rail wayside signaling.
- All HRVs require on-board signaling system upgrade for compatibility.
- Upgrade to A650 Option HRVs originally scheduled as part of mid-life contract. However, contract was canceled due to contractor's failure to perform.
- Upgrade to A650 Option HRV signaling system must be expedited to support planned services expansions.



### Recommendation

Award sole source contract to Hitachi Rail STS (HSTS) to upgrade A650 Option HRV signaling system.

- HSTS has necessary experience to expedite work:
  - Sole signaling system supplier for Metro's rail systems and rail cars for past fifteen years.
  - Wayside equipment supplier for D20 Portal Widening and PLE, as well as carborne equipment for the HR4000.
  - Signaling system supplier for terminated A650 midlife contract, thus, familiar with A650 Option fleet.
- HSTS is a registered Transit Vehicle Manufacturer (TVM) with required expertise for system integration and vehicle level testing.





- Base contract: 70 A650 Option Vehicles
- Option order: 4 A650 Option Vehicles
  - Option order is for 4 vehicles in various states of disassembly from terminated mid-life contract. Must be executed if the corresponding Refurbishment contract option order is executed for these 4 vehicles.



## Thank you



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



**Board Report** 

File #: 2023-0653, File Type: Oral Report / Presentation

Agenda Number: 25.

### OPERATIONS, SAFETY, AND CUSTOMER EXPERIENCE COMMITTEE NOVEMBER 16, 2023

#### SUBJECT: OPERATIONS EMPLOYEES OF THE MONTH

#### RECOMMENDATION

RECOGNIZE Operations Employees of the Month.

#### Equity Platform

Employee of the Month (EOM) nominations to the Chief Operations Officer must be for frontline employees or field supervisors serving in a customer-facing role. Operations management is encouraged to nominate employees that have achieved excellence and/or gone above and beyond their assigned job role/functions and are diverse in both gender and ethnicity. In addition, a review of the location, job responsibilities, and seniority is considered when making final selections to ensure there is diverse representation among the various groups within the department. Operations also work with Logistics, Maintenance, and System Security & Law Enforcement who nominate employees who work at our various Metro locations.

Prepared by: Diane Corral-Lopez, Executive Officer, Operations Admin (213) 922-7676

Reviewed by: Conan Cheung, Chief Operations Officer (213) 418-3034

ief Executive Officer

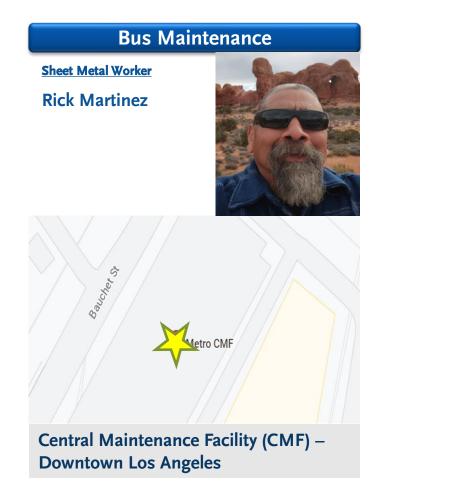
## November 2023 Bus Maintenance & SSLE Employees of the Month



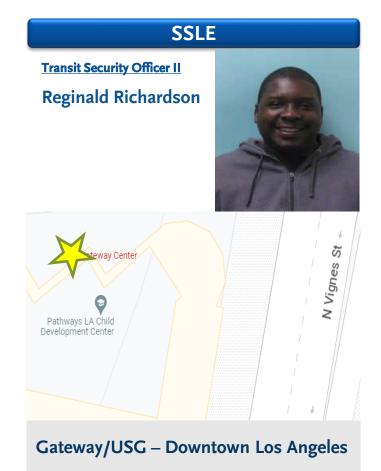
Operations, Safety, and Customer Experience Committee November 16, 2023

### **Employees of the Month**











**Board Report** 

File #: 2023-0652, File Type: Oral Report / Presentation

Agenda Number: 26.

#### OPERATIONS, SAFETY, AND CUSTOMER EXPERIENCE COMMITTEE NOVEMBER 16, 2023

#### SUBJECT: CHIEF OPERATIONS OFFICER'S MONTHLY REPORT

ACTION: ORAL REPORT

#### RECOMMENDATION

RECEIVE oral report on Operations.

#### EQUITY PLATFORM

Operations collaborates with the Office of Equity and Race to identify and mitigate any concerns to ensure equitable outcomes relative to service.

Prepared by: Diane Corral-Lopez, Executive Officer, Operations Admin, (213) 922-7676

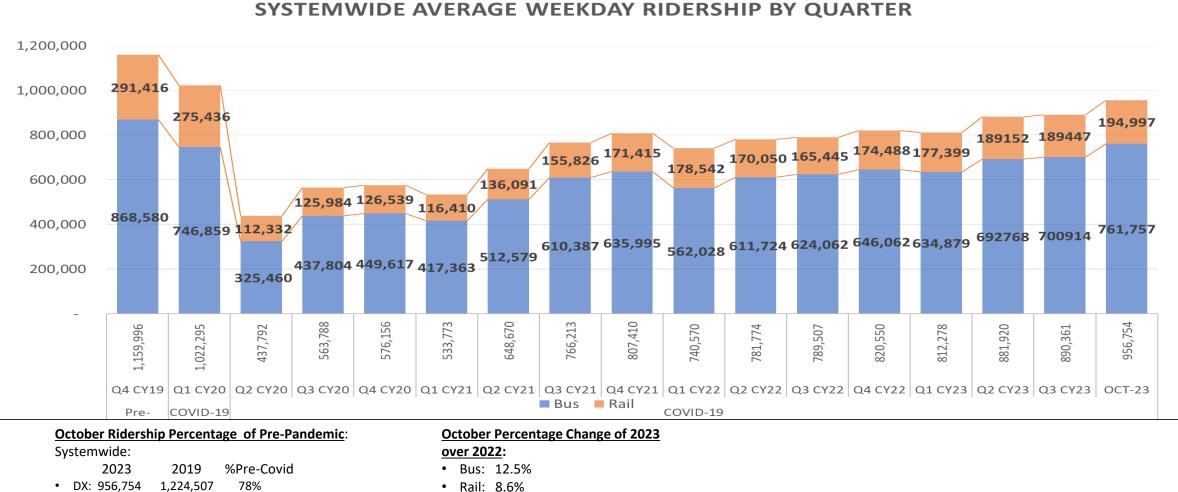
Reviewed by: Conan Cheung, Chief Operations Officer, (213) 418-3034

Chief Executive Officer

# **COO Monthly Report**

Operations, Safety & Customer Experience Committee Meeting November 16, 2023

### **Ridership Update**



Ridership Analysis Relative to Equity Focus Communities (Metro 2022 EFC Map):

89%

95%

• SA: 667,506

• SU: 562,017

751,546

588.849

Bus – Percent of all weekday bus activity within Equity Focus Communities increased from 73% in Oct 2019 to 78.6% in October 2023 (bus stop data available month to month)

Rail – Percent of all weekday rail activity within Equity Focus Communities increased from 51.7% to 71.2% from FY19 to FY22 (rail station data available Fiscal Year level) ٠

# **Cancelled Service**

- Metro fully restored scheduled bus service to 7 million revenue service hours (annualized), effective December 11, 2022. This will help our riders receive more frequent and reliable service
- Cancellation rates are now below pre-service change and from one year ago
- There are no lines with a cancellation rate above 3%
- Line 233 Van Nuys BI Local had the highest cancellation rate for October 2023:
  - 2.5% in October 2023 vs 4.2% in October 2022

% Cancelled Service	Weekday	Saturday	Sunday
Pre- Dec 2022 Service Change 4 week			
Average	3.2%	3.9%	7.4%
One Year Ago WE 11/5/22	4.3%	4.3%	8.3%
Week Ending 11/4/23	1.9%	1.1%	2.0%
Week Ending 10/28/23	0.5%	0.7%	1.1%
Week Ending 10/21/23	0.9%	1.3%	3.9%
Week Ending 10/14/23	0.4%	0.5%	1.8%
Week Ending 10/07/23	0.7%	0.7%	3.2%
Week Ending 9/30/23	0.5%	0.4%	1.7%
Week Ending 9/23/23	0.7%	0.8%	2.9%
Week Ending 9/16/23	0.8%	0.3%	1.5%
Week Ending 9/9/23	0.5%	0.4%	0.2%
Week Ending 9/2/23	0.5%	0.7%	2.2%
Week Ending 8/26/23	1.1%	0.7%	3.4%
Week Ending 8/19/23	0.5%	1.4%	1.2%
Week Ending 8/12/23	1.1%	0.9%	3.0%
Week Ending 8/5/23	0.6%	0.4%	2.6%
July 2023	0.7%	0.7%	2.4%
June 2023	0.9%	1.0%	2.9%
May 2023	1.4%	1.9%	5.0%
April 2023	1.9%	1.9%	5.8%
March 2023	2.0%	1.3%	4.5%
February 2023	3.2%	3.1%	5.0%
January 2023	3.8%	3.2%	6.7%
December 2022 (from 12/11 service change)	4.2%	3.4%	11.4%

# I-10 Closure Operations Overview

#### **Bus Operations**

- Heavy spillover traffic and delays
- No service detours, however, there were moderate (10-15 mins) to significant (60-90 mins) delays on some lines
  - Mitigations
  - o End-of-line reliefs using a pullout bus
  - $\circ~$  Added stand-by buses to fill in significant gaps
  - $\circ~$  Added Ambassadors at busier stops along delayed routes, i.e. Olympic & Soto
  - $\circ~$  Added special monitoring from BOC and coordination with LADOT & Caltrans

#### **Rail Operations**

- Coordinate with LADOT to improve E Line travel time by 5-10% in City of LA west of downtown LA
- Increased parking utilization observed at Norwalk, Lakewood, Azusa, and east LA

#### **EOC/Agency Coordination**

- EOC activated to Level 3 for monitoring and coordinating with City and County departments
- Metro staffing at LADOT ATSAC
- Metro staffing at TMC for coordination with Caltrans and CHP for 511 info
- Weather forecast potential storm Wed-Fri

#### Media/Public Info

•Overall positive from media, many referencing Metro as a solution for commuters •Media coverage at various stations and interviewing customers

- TV and radio interviews
- $\circ~$  Source Posts
- •Map of transit alternatives is available in both English and Spanish

•Daily press conferences this week hosted by Mayor's Office to provide transportation updates •Working with Caltrans to improve messaging on freeway TPIS for alternative transportation and weather concerns

•511

- $\,\circ\,$  I-10 closure message promoted to top/front
- $\circ~$  Website and mobile apps include alternate routes

### Avoid Traffic by Taking Transit





Face Painting Photo Ops BBQ Cookout Balloon Animals Board Games Food Fun!!





# Bus Roadeo Winners:

## **Bus Competition:**

1<sup>st</sup>: Juan Navarro (Div 3)
2<sup>nd</sup>: Herman Gavia (Div 3)
3<sup>rd</sup>: Cesar Murillo (Div 15)

## Mechanic Competition:

1<sup>st</sup>: Division 13
Alan Gomez
Octavio Ortega Ramirez
Edward Hinojosa

2<sup>nd</sup>: Division 5 Mauricio Banuelos Jorge Garcia Stanford Velasquez

**3<sup>rd</sup>: Division 15** Grigor Barmaksyan Rafael Urquieta Alexandro Soltero

## **Service Attendants:**

1<sup>st</sup>: Eric Segura (Div 2)
2<sup>nd</sup>: Rachel Herzog (Div 15)
3<sup>rd</sup>: Carlos Aguirre (Div 15)



# Rail Roadeo Activities

- Virtual Reality
- Collectibles
- Chalk Drawing
- Music

7

- Games
- Food
- Fun!





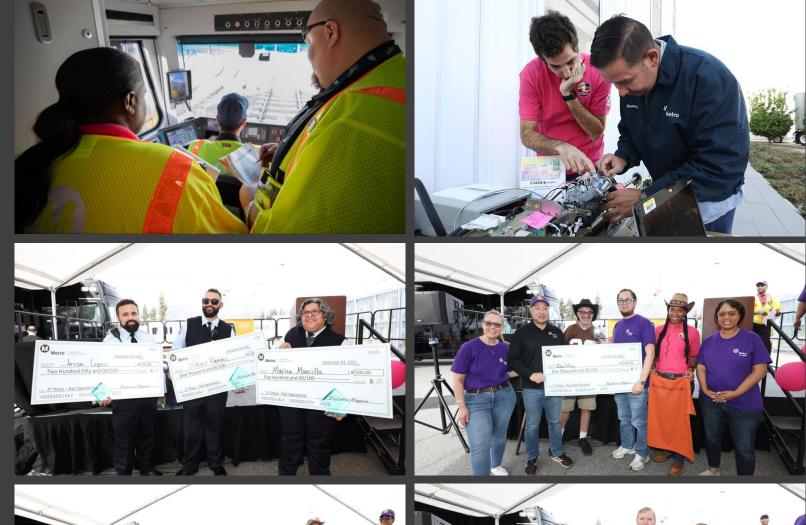
# Rail Roadeo Winners

# **Transportation Winners**

1<sup>st</sup>: Steven Ramirez (Div 11)
2<sup>nd</sup>: Marina Mancilla (Div 20)
3<sup>rd</sup>: Jesse Lopez (Div 14)

# **Maintenance Winners**

1<sup>st</sup>: Calvin Wong (Div 14)
2<sup>nd</sup>: Parker Rounds (Div 24)
3<sup>rd</sup>: Marcos Martinez (Div 24)





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



**Board Report** 

File #: 2023-0132, File Type: Informational Report

Agenda Number: 27.

#### OPERATIONS, SAFETY, AND CUSTOMER EXPERIENCE COMMITTEE NOVEMBER 16, 2023

#### SUBJECT: NEXTGEN RIDERSHIP UPDATE

ACTION: RECEIVE AND FILE

#### RECOMMENDATION

RECEIVE AND FILE the NextGen Bus Ridership Update.

#### <u>ISSUE</u>

This report provides an assessment of Metro bus system ridership as of September 2023 by comparing ridership from 2019 (pre-pandemic/pre-NextGen Bus Plan) through mid-2023. Ridership changes are examined by the day of the week, area, Equity Focus Communities (EFCs)/non-EFCs, time period, line/line group, and changes in average passenger trip length.

The NextGen Bus Plan was approved by Metro's five Regional Service Councils in September 2020 and adopted by the Metro Board in October 2020. The Plan was implemented in three phases between December 2020 and December 2021 to create a network of high-frequency bus lines.

The national operator shortage required Metro to temporarily reduce service by 10% in February 2022 to stabilize service reliability. However, full restoration of NextGen Bus Plan service levels was completed in phases by December 2022. Metro continues to operate the full NextGen bus service levels, improving reliability, and full bus operator staffing was achieved by August 2023, making this an appropriate time to review ridership.

#### BACKGROUND

The NextGen Bus Study began in 2018 as a reimagining of the Metro bus system to make it more competitive in the overall travel market and reverse the bus ridership decline that occurred over the previous decade. The study identified the need to create a fast, frequent, reliable bus system to take people where and when they need to go. The resulting NextGen Bus Plan was developed based on both robust data analysis and public engagement.

The NextGen Bus Plan was scheduled to be rolled out in two phases; an initial phase (Reconnect) to restructure the existing network, with an additional phase (Transit First) maximizing the Plan's effectiveness through strategic, quick-build capital investments to improve bus speeds with a goal of directing saved revenue service hours to bus frequency improvements. These two NextGen Bus Plan

phases are outlined below:

**Reconnect** - Routes and schedules were redesigned in the Reconnect phase to attract trips where and when there is the greatest market potential. Lessons learned through the NextGen Bus Plan analysis and outreach presented a path forward for reinventing the bus network, including:

- Maintaining coverage as much as possible by minimizing discontinued segments, coordinating with municipal operators, and introducing MicroTransit, all while more efficiently linking people to where they want to go.
- Creating a competitive transit network that reduces overall travel time by optimizing all components of the trip, including time spent accessing the bus stop, waiting, and riding.
- Building a competitive and attractive network by investing in fast, frequent, and reliable service, especially during the midday, evenings, and weekends when the greatest opportunity to grow ridership exists.
- Integrating Metro's Equity Framework as reflected in the service changes that focus resources in Metro's EFCs where the need for high-quality transit service is greatest.

When fully implemented, the Reconnect Scenario was expected to achieve a 5-10% increase in ridership. The majority of planned route changes in this phase were implemented in three phases between December 2020 and December 2021.

**Transit First** - This phase builds onto Reconnect by adding capital infrastructure to support the new service plan, including:

- Bus Speed and Reliability: Implementing speed and reliability improvements such as bus lanes where appropriate, signal priority, optimizing bus stop spacing, and implementing all-door boarding. By speeding up the bus system, more service can be provided within the same number of service hours while making bus service more competitive.
- Customer Experience: Investing in improving the comfort and safety of the wait environment, especially at major transfer points. This addresses a major barrier to attracting more potential customers to transit.

When fully implemented, the Transit First scenario is expected to achieve a 15-20% increase in ridership. As of October 2023, 51 miles of bus priority lanes are in operation with 100+ total miles planned as part of the NextGen Bus Plan, together with other speed and reliability improvements such as transit signal priority coverage along the routes of Metro's most frequent bus lines, and bus stop and terminal optimization.

The implementation of the NextGen Bus Plan Reconnect phase established a set of service frequency tiers for Metro's 120 bus lines, summarized in Table 1. Tiers 1 and 2 lines are all-day, high-frequency services designed to support ridership growth across the NextGen network and to help ridership recover after the drop caused by the pandemic. Tier 3 and 4 lines ensure neighborhood connectivity and coverage throughout the service area. The NextGen Bus Plan as implemented in

December 2021 (and restored by December 2022) represents the completion of the Reconnect phase of the plan.

Service Type	Peak Weekday	Midday Weekday	Evening	Weekend	Number of Lines
Core Network (Tier 1)	5-10	5-10	10-15	7.5-15	31
Convenience Network (Tier 2)	12-15	12-15	20-30	15-d30	24
Connectivity Network (Tier 3)	20-30	20-30	30-60	30-60	26
Community Network (Tier 4)	40-60	40-60	60	60	39

#### Table 1: NextGen Frequency Tiers as of Dec 2022

As part of the Transit First scenario, bus priority measures such as new bus lanes to reduce travel times and improve reliability continue to be implemented. Progress updates on the NextGen Bus Plan Speed and Reliability Program are provided to the Metro Board at key milestones. To date, 51.7 miles of new bus priority lanes have been implemented. These include 5<sup>th</sup>, 6<sup>th</sup>, Grand, Olive, Figueroa, Flower, Spring, Cesar/Chavez/Sunset, two Aliso/Alameda Streets in downtown Los Angeles, as well as portions of Alvarado St, Venice BI, Wilshire BI, La Brea Av, Sepulveda BI, and Ventura BI, with two additional corridors (Florence Av and Roscoe BI - 31.2 lane miles) due to be delivered before the end of FY24, and 15 additional miles in planning (Vermont Av, Santa Monica BI). Transit signal priority and all door boarding are other speed and reliability initiatives that should begin implementation in late 2024, with ongoing optimization of bus stops and terminals. These initiatives, together with Customer Experience improvements, are designed to further enhance the service frequency improvements.

The modeled results of the NextGen Bus Plan, compared to the pre-NextGen network (baseline), forecasted significant benefits. In particular, convenient access to the most frequent bus services increased substantially, with an overall increase of 112.4% for population and 106.8% for households within 0.25 miles of the most frequent service (NextGen Tier 1 lines with 10-minute or better service) weekdays. Especially significant increases were achieved for midday weekdays with +600-700% increases in households and population (including EFCs) with easy access to a higher frequency (10-minute or better) weekday bus service. Access to jobs showed a +350% increase. Off-peak travel was a key market segment identified as having significant ridership growth potential in the NextGen Bus Study. Even peak periods showed a 50-65% increase in access for households and populations and a 30-40% increase in access to jobs with 10-minute or better bus services.

Forecasted competitiveness based on all trips made (not just transit) that could now be made on the Reconnect network as implemented in December 2021 also improved. Competitive trips were defined as those in which transit travel times were no more than 2.5 times the travel times for private autos. This analysis showed the share of all transit-competitive trips increasing by 2.4% from 22.1% to 24.5%. The share of transit competitive trips increased more for trips for EFCs (+3.1%) than for non-EFCs (+2.1%). The gains were even higher (+4.7%) for trips already being made on transit that were no more than 2.5 times the private auto travel time, which should allow more existing transit trips to be retained by the Metro bus system. This market segment increased more for trips for EFCs

(+5.1%) versus non-EFCs (+4.1%), suggesting a large portion of the Plan's benefits are occurring in EFCs where more people are reliant on transit for their mobility. Travel times for all trips (not just transit trips) that could be completed on transit in 30 minutes or less increased by 13% with the NextGen Reconnect network. Existing transit trips that could now be completed in 30 minutes or less increased by 20%. All of these results should increase with the implementation of additional bus speed and reliability improvements as part of NextGen Bus Plan's Transit First scenario.

The NextGen Bus Plan as implemented in December 2021, was also estimated to increase the number of key destinations within 0.25-mile access to the 10-minute or better lines compared to the pre-NextGen network. Increased access to facilities for health care (+10%), education (+16%), and grocery stores (+19%) on the 10-minute or better frequency Metro bus lines shows the NextGen Bus Network improves access to many key destinations.

#### DISCUSSION

Comparing travel using the baseline pre-NextGen network to how those trips could be made using the NextGen Reconnect network shows the potential of the NextGen Bus Plan as implemented to increase ridership. This section of the report discusses actual ridership changes as a result of NextGen. In examining ridership results to date, it is important to note the impact of the COVID-19 pandemic beginning in March 2020, with the significant impacts to both Metro bus service levels and ridership, but also to societal changes such as increased telecommuting coming out of the pandemic.

The attachments to this report provide detailed data on systemwide and line level ridership for a typical weekday, Saturday, and Sunday observed between 2019 (pre-pandemic and pre-NextGen) and 2023. With full operator staffing and reliable service delivery being achieved in 2023, September 2023 is an ideal time to review ridership. For this report, bus ridership changes are examined by the day of the week, area, EFCs/non-EFCs, time-period, and line/line group, as well as changes in average passenger trip length. The time period of this analysis tracks the large drop in ridership at the beginning of the COVID pandemic in early 2020 and the subsequent recovery in ridership and service restoration in 2021 based on the implementation of the NextGen Bus Plan. A more detailed analysis is provided in Attachment A, which this report summarizes.

#### Ridership Trend from 2020 to 2023

During the pandemic's Stay-at-Home orders, ridership declined sharply in 2020, with trip lengths shortening because many people were not commuting as much and traveling close to home. Non-peak ridership was more resilient as those trips were largely composed of essential workers and/or essential trips. As people adjusted to the pandemic, ridership grew quickly in 2021, as did overall travel (as measured from cell phone location data).

While transit and travel demand as a whole grew less significantly in 2022, it spiked above 2019 levels during the 3 PM hour in 2022 though overall travel demand in 2022 was still below 2019 levels. This may have been caused by people making more short distance trips to run errands during the middle of the day vs. their typical longer commutes home during the PM peaks. Despite the reintroduction of fares in January 2022 and the temporary bus service reduction in February 2022,

ridership growth did not seem to slow during the first half of 2022. A big push to enroll low-income riders in the LIFE (Low Income Fare is Easy) program for discounted fares at the time fare collection was reinstated on buses may have helped to maintain the growth in ridership. Ridership recovery was slower in the second half of 2022, which may have been a result of the temporary service reductions implemented in February 2022.

The full restoration of bus service by December 2022, combined with more reliable service delivery and new pilot programs such as GoPass for students, have contributed to much stronger ridership recovery in 2023. This reinforces the importance of frequent and reliable service delivery in being able to attract and retain ridership. As of September 2023, weekday bus system ridership recovery is at 78.6% overall, Saturday ridership is 86.0% recovered, and Sunday ridership is at 92.4% of pre-COVID bus average daily ridership levels. September 2023 average weekday bus ridership exceeded 750,000 for the first time since the pandemic.

### Ridership by Service Area

Ridership recovery was examined for each of the five Metro Service Council areas. The San Fernando Valley shows the most weekday ridership recovery, exceeding 84% in 2023. This recovery rate in part shows a strong response to NextGen Bus Plan improvements that created a network of ten local lines and the Metro G Line BRT with 10-15 minute frequencies all day weekday across the San Fernando Valley. The NextGen changes improved these lines especially off-peak, where many of these lines had frequencies ranging from 20 to 30 minutes. There was also restructuring of several lines in the east Valley to better match travel patterns focused on North Hollywood. The four other Service Council areas varied between 77.6% for the South Bay Cities and 75.2% for the San Gabriel Valley. Similar patterns were seen for average Saturday (San Fernando Valley 96.9%, other areas 76.8 - 82.1%) and Sunday ridership (San Fernando Valley 106.9%, other areas 81.8 - 89.7%), with higher overall recovery on these days, as was seen for the bus system ridership overall.

### Ridership by Time Period

As of September 2023, the midday share of weekday ridership remains around 2% higher than it was pre-pandemic. By contrast, AM peak period ridership remains 3% below 2019 levels, but the PM peak is 1% higher. This suggests less commute trips made on transit to office jobs in the AM peak. The increase in midday share of weekday ridership is consistent with the intent of the NextGen Bus Plan to grow ridership in off-peak weekdays. Weekend ridership by time of day tended to have remained relatively stable.

### Ridership by Equity Focused Communities (EFC)

Boardings in EFCs where transit usage is expected to be higher, increased by up to 2% weekdays and weekends during early years of COVID compared to pre-COVID. In 2023, the boardings in EFCs was up to 1% higher than pre-COVID weekday and somewhat less increased on weekends. The essential trips made in the early part of COVID are more likely to have been made by people who relied on transit to access essential jobs and services. The NextGen Bus Plan prioritized investing in EFCs and that has likely also contributed to the 1% increase in the share of boardings that continues to be seen in EFCs in 2023.

#### Average Trip Length

Average passenger (unlinked) trip length dropped from 4.2 miles to just below 3.0 miles in the early pandemic 2020-2021 for the Metro bus system. This trend was likely due to a significant reduction in long-distance commute trips. As ridership recovered in 2022, average passenger trip lengths have increased to around 3.5 miles, remaining well below pre-COVID lengths. This type of change was expected as COVID has transitioned trip-making overall to shorter trips, which was a market identified through the NextGen Bus study as a significant opportunity to grow ridership with more frequent local bus lines serving shorter distance trips. This change in average passenger trip length is seen for weekdays as well as weekends.

#### Ridership by Service Tiers and Lines

Ridership was assessed based on individual lines, or in some cases by groups of lines where a NextGen Bus Plan change involved a restructuring of a group of lines, for a fair comparison of the changes in ridership. The comparison was based on average September 2023 versus September 2019 ridership for each day type (weekday, Saturday, Sunday). While there are 120 Metro bus lines, ridership recovery rates were based for 82 weekday, 75 Saturday, and 75 on Sunday line/line groups. Detailed data is included in Attachments B, C, and D respectively.

The overall system ridership recovery rate in September 2023 was 78.6% for weekdays, 86.0% for Saturday, and 92.4% for Sunday when compared to September 2019 as a pre-COVID baseline. There were 6 weekday, 14 Saturday, and 24 Sunday lines/line groups exceeding their pre-COVID September 2019 ridership numbers in September 2023. The review focused on lines showing above and below system average ridership recovery. The review also looked at lines/line groups for each of the four NextGen Bus Plan Tiers.

The high number of Tier 1 (10-minute or better weekday service) and Tier 2 (15-minute or better weekday service) lines/line groups (which make up 46% of overall lines) with above average recovery suggests that the improved frequencies implemented through the NextGen Bus Plan are a key component of stronger ridership recovery:

- Weekday: 20-Tier 1 and 14-Tier 2 lines/line groups compared to only 4-Tier 3, 7-Tier 4 lines/line groups.
- Saturday: 14-Tier 1 and 12-Tier 2 lines/line groups compared to only 6-Tier 3, 5-Tier 4 lines/line groups
- Sunday: 14-Tier 1, 12-Tier 2, compared to only 5-Tier 3, 9-Tier 4 lines/line groups.

The Tier 1 and Tier 2 higher frequencies appear to be showing stronger recovery; some of these lines also include route changes to better connect riders to key destinations.

Common to some of the Tier 1 and Tier 2 lines with less ridership recovery was that they serve downtown LA, a location that has seen reduced daily trip making for work due to factors such as

increased telecommuting. Some of these lines were also restructured in ways that moved some of their riders to other lines. An opportunity exists to further promote downtown LA travel on the Metro bus network for work, but more so leisure and event activities.

This same pattern was noted for the G and J Line BRT services that had notably lower ridership recovery, especially on weekdays. Prior to COVID, these lines had higher usage by discretionary riders who appear now in 2023 to not be traveling as much for work in downtown LA or other locations such as Van Nuys or Warner Center. Also notable were ridership changes in the Vermont corridor, where both frequent Local and Rapid bus lines have continued to operate. The ridership recovery rate for the corridor overall was 77.4% weekdays, with the Local bus line 204 having a recovery rate of 95.2%. By comparison, the Vermont Rapid Line 754, serving the same a very high EFC corridor with the same frequency as the local line, but on a limited stop format, had a ridership recovery rate of 59.0%. The Line 754 saw notably high cancellation rates in 2022, which may have seen people divert to using the local bus. The same patterns were seen for Saturday (Local 104.4%; Rapid 56.1%) and Sunday (Local 99.4%; Rapid 65.9%).

As mentioned, the performance of the largely Tier 2 network of lines in the San Fernando Valley is notable for their strong ridership recovery as a group, though there were other Tier 2 lines across the Metro service area with high ridership recovery rates.

There were a number of Tier 3 lines that had frequency improvements that generated high ridership recovery. By comparison, many Tier 4 lines with low ridership recovery were commonly low frequency (40-60 minute frequency), in most cases with no NextGen route change and a lower percentage of route miles serving EFCs. It will be important to test the best performers among these lines to upgrade to 30 minute service to see what impact that might have on their ridership recovery.

#### Speed and Reliability

As part of the NextGen Bus Plan, over 50 miles of bus priority lanes have been implemented across Metro's service area. In 2020-2021, the primary focus was on new bus lanes in downtown LA on key streets serving multiple Metro bus lines. This was followed by Alvarado St, and most recently in 2023 by Venice BI, La Brea Av, and Sepulveda BI. Data shows speed improvements as well as the positive perception of such speed improvements by riders in post-implementation surveys. These lanes will support ridership recovery by increasing service reliability and decreasing bus travel times. They will also be complemented by additional bus priority lanes such as on Florence Av plus expanded transit signal priority and all door boarding programs during 2024.

More details for line-level ridership can be found in a report (Attachment A) and data tables (Attachments B, C, D). In general, this analysis shows the NextGen Bus Plan's focus on a fast, frequent, and reliable network is supporting higher ridership recovery. These ridership recovery results will continue to be tracked and reported on as further investment in NextGen bus speed and reliability improvements occur, including new bus lanes and expanded transit signal priority and all door boarding. Staff will next review ridership up to Thanksgiving 2023 as the basis for the next report to be presented in March 2024.

#### EQUITY PLATFORM

The NextGen Bus Plan was developed with an equity methodology, placing more service in Equity Focus Communities where transit was more likely to provide key mobility options for residents. This analysis shows a greater proportion of ridership occurring in EFC residents after the NextGen changes.

A central goal of the intent of the NextGen Bus Plan is to provide improved transit service frequencies, travel times, and reliability improvements to Metro system riders of which 8 in 10 are Black, Indigenous, and/or other People of Color (BIPOC), nearly 9 in 10 live in households with total annual earnings below \$50,000, and nearly 6 in 10 are below the poverty line. The NextGen Bus Plan system provides the highest service levels on Metro bus lines that serve Metro's EFCs. This includes improved off-peak frequencies that have helped essential workers and essential trips with an increased share of off-peak ridership noted during the height of the pandemic. Staff will continue to monitor ridership in EFC and Non-EFC areas to ensure the benefits of NextGen are benefiting marginalized groups.

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

Recommendations support strategic plans:

Goal #1: Provide high quality mobility options that enable people to spend less time traveling. Improving the speed and reliability of the bus network will reduce transit travel times, as well as improve competitiveness with other transportation options.

Goal #2: Deliver outstanding trip experiences for all users of the transportation system. These initiatives help to move more people within the same street capacity, where currently transit users suffer service delays and reliability issues because of single occupant drivers.

Goal #3: Enhance communities and lives through mobility and access to opportunity. With faster transit service and improved reliability, residents have increased access to education and employment, with greater confidence that they will reach their destination on time.

#### NEXT STEPS

The NextGen Bus Plan network ridership will continue to be monitored through the remainder of 2023 as Metro continues to deliver full service. The agency will continue to hire new bus operators to remain fully staffed and to reliably deliver full service daily. Metro will continue to implement new bus speed and reliability improvements, such as new bus lanes. Another update is planned for the Board in March 2024, tracking the detailed progress on ridership recovery during the period from October through December 2023. Monthly bus and rail system overall ridership is reported.

#### **ATTACHMENTS**

Attachment A - NextGen Ridership Analysis

#### Agenda Number: 27.

Attachment B - Weekday Ridership Recovery Comparison by Line and Line Group, September 2023 to September May 2019

- Attachment C Saturday Ridership Recovery Comparison by Line and Line Group, May 2023 to May 2019
- Attachment D Sunday Ridership Recovery Comparison by Line and Line Group, May 2023 to May 2019

Prepared by: Joe Forgiarini, Senior Executive Officer, Service Development, (213) 418-3400

Reviewed by: Conan Cheung, Chief Operations Officer, (213) 418-3034

ef Executive Officer

#### **NextGen Ridership Analysis**

In reviewing Metro ridership, it is important to look at the overall changes occurring over the last five years (2019 through 2023). The period reviewed includes two significant events: 1) changes implementing the NextGen Bus Plan (implemented between December 2020 to December 2021) and 2) changes to the overall travel market and transit service resulting from the COVID-19 pandemic and its impacts on the community, beginning in March 2020.

Analysis and discussion are provided regarding how these changes may relate to actual Metro bus ridership trends in terms of average weekday, Saturday, and Sunday ridership between 2019 to 2023 (when ridership last peaked), as well as ridership by area, EFC/non-EFC, time of day, and line/line group level. Data is also presented on changes to average passenger trip lengths.

#### Metro Bus Service Levels:

A significant emergency reduction in annual bus revenue service hours (RSH) from 7 million to 5 million with the onset of the pandemic in April 2020. NextGen Bus Plan implementation began in December 2020. A small ramp-up of service occurred in June 2020 to increase RSH to 5.5 million as an initial step towards the restoration of service levels. The most significant increase to restore service levels occurred in June 2021, with a jump from 5.6 million to 6.5 million annual RSH with the second phase of NextGen Bus Plan changes. Full recovery to the pre-COVID 7 million RSH was implemented in September 2021, and the third phase of NextGen Bus Plan changes was implemented in December 2021.

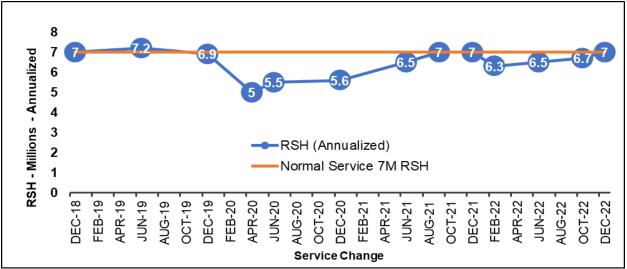
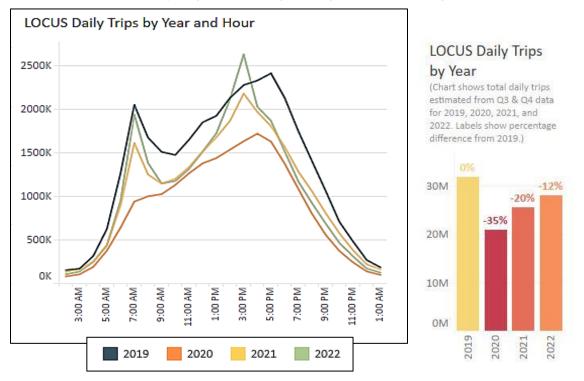


Chart 1: Metro Bus Service – Annual Revenue Service Hour Levels 2019 – 2022

However, the national shortage of bus operators led to high service cancellation levels, necessitating a reduction of service in February 2022 from 7 million to 6.3 million RSH. Successive cycles of service restoration occurred in June, October, and December 2022, at which time the 7 million RSH was again restored. Hiring of new bus operators

continues during 2023 to ensure full service is delivered as Metro remains committed to the reliable delivery of full service levels in 2023 and beyond. The history of changes in Metro bus system annual revenue service hours is shown in Chart 1.



Charts 2 and 3: Total Trips By Time of Day and By Year, LA County 2019-2022

Overall travel demand calculated from Location Based Services (LBS) cell phone data as shown in Charts 2 and 3 suggests travel continues to recover but remains below pre-COVID levels. After an initial 35% drop in 2020 with the pandemic, travel demand rebounded strongly 2020 to 2021 recovery (+15%) with a smaller recovery between 2021 and 2022 (+8%), with total travel demand remaining overall about 12% below pre-COVID levels. However, patterns by time of day are mixed. AM peak travel volumes returned to pre-COVID levels in 2022, with a new afternoon peak exceeding pre-COVID levels in the 3 PM hour, though other time periods such as midday, 5 PM "commuter peak", and evenings changed very little between 2021 and 2022... Some of this lack of recovery may also relate to more online services and commerce (midday) as well as more telecommuting (5 PM peak). These trends will continue to be monitored to help understand bus ridership patterns in 2023. Recent research by UCLA suggests changes in not just work commutes but also other travel segments.

Chart 4 provides a reference to the periods when COVID was most active in our community which may have resulted in impacts to ridership that occurred at these times. COVID cases spiked most notably at the end of 2020 (Delta) and at the end of 2021 (Omicron), with much smaller spikes in new cases during the middle and end of 2022. Case numbers have remained very low in 2023.

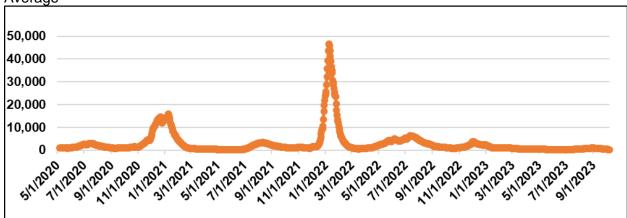


Chart 4: LA County (excluding Long Beach, Pasadena) New Daily COVID Cases 7-Day Average

#### Weekday Bus System Ridership

After the initial 70% drop in ridership in March/April 2020 with the onset of the COVID-19 pandemic, weekday ridership recovered steadily beginning in the second half of 2020 and continued throughout 2021 and the first half of 2022. This growth was similar to that illustrated in Charts 2 and 3 of overall travel in LA County in terms of the initial large increase in travel and bus ridership in 2021 with more gradual growth in 2022.

The usual seasonal summer dip in bus ridership was not seen in 2020 and 2021; ridership recovery was more continual coming out of the depths of the ridership decline of 2020. The smaller summer spikes in COVID during mid-2020 and mid-2021 do not appear to have impacted weekday ridership recovery. However, the typical holiday season bus ridership decrease in December/January was seen in 2020, 2021, and 2022, though some of it may relate to COVID spikes, especially at the end of 2021 (Omicron).

Ridership growth continued steadily even with minimal increases in bus service between June 2020 and June 2021 as available spare capacity was utilized to accommodate growth. The significant service restoration in the second half of 2021 (see Chart 1) added valuable extra capacity to accommodate and incentivize the return of ridership.

The reintroduction of fares in January 2022 and the bus service reduction in February 2022 did not seem to slow ridership growth in the first half of 2022. There was a big push to enroll low-income riders in the LIFE (Low Income Fare is Easy) program for discounted fares prior to the reinstatement of fare collection on buses which may have helped avoid the loss of some ridership from this change. There were also concerted efforts to enroll strong school districts into the GoPass programs for their students. Mid-2022 showed some seasonal summer dip in ridership, but this may also reflect the COVID case increases in the community at that time.

The second half of 2022 saw weekday bus ridership similar to 2021 levels, suggesting ridership may have leveled off similar to travel demand changes between 2021 and

2022 (see Charts 2 and 3). This period also saw a temporary reduction in Metro bus service (-10%) and high levels of canceled service due to the bus operator shortage.

Restoration of full scheduled NextGen bus service levels was completed in December 2022. Continued new bus operator hiring has resulted in improvements in reliability (lower service cancellation levels) through 2023. At the time of writing this report (October 2023), operator staffing levels are fully restored. Chart 5 shows the progress made since December 2022 in reducing canceled bus service levels. The reliable delivery of all daily bus service is critical so that the NextGen commitment to Metro bus riders of fast, frequent, and reliable service can be fully realized.

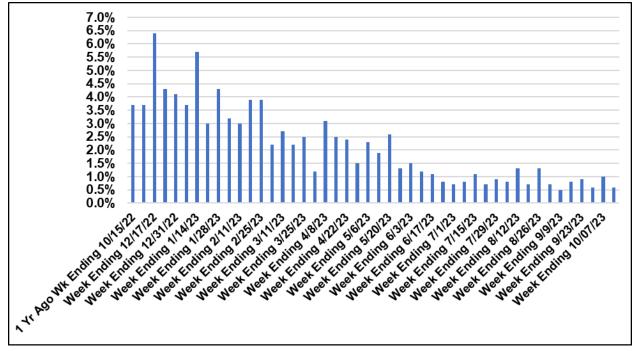
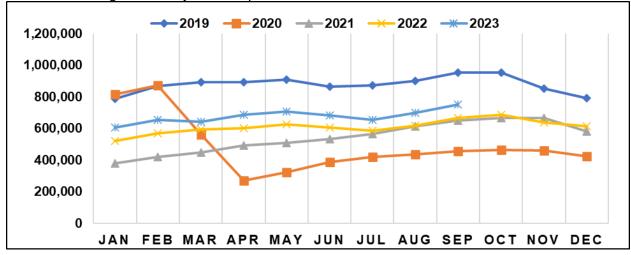


Chart 5: Percentage Cancelled Service By Week

Chart 6 – Average Weekday Ridership 2019 – 2023



As Chart 6 shows, after a slight dip in ridership during the rainy December 2022 period, weekday ridership has shown strong growth through September 2023, with September 2023 Weekday ridership at 78.6% of pre-COVID 2019 levels. May 2023 weekday ridership exceeded 700,000 for the first time since COVID impacts were felt and September 2023 average weekday ridership exceeded 750,000 for the first time since the pandemic.

#### Saturday Bus System Ridership

Similar to weekdays, average Saturday ridership showed a steady recovery through mid-2022, with the recovery slowing in the second half of 2022, matching 2021 results, as shown in Chart 7.

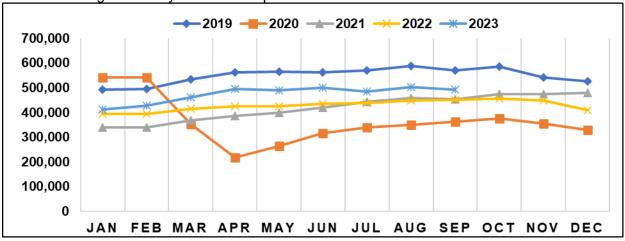


Chart 7: Average Saturday Bus Ridership 2019–2023

As was seen with weekdays, service reliability was a problem in 2022 due to the operator shortage and resulting service cancellations, with reduced service levels implemented in February 2022 to help stabilize service reliability. Full Saturday service was restored in December 2022 which, together with more operators hiring, has improved service in 2023 with gains in ridership seen.

Interestingly, there was no seasonal dip in Saturday ridership at the end of 2021, though the dip was observed at the end of 2020. After a dip in the rainy 2022 holiday season, ridership recovery resumed in the first half of 2023. As of September 2023, Saturday ridership was 86% of pre-COVID levels.

#### Sunday Ridership

Similar to weekdays and Saturdays, average Sunday ridership recovered steadily through mid-2022, with an early peak in recovery in July 2020. A holiday season dip was seen at the end of each year.

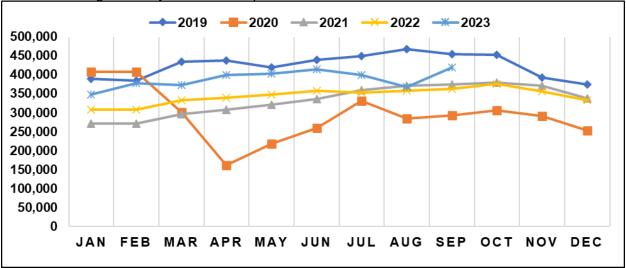


Chart 8: Average Sunday Bus Ridership 2019-2023

By mid-2022, average Sunday bus ridership remained similar to the 2021 levels, with Sunday bus service seeing the highest levels of cancelations due to the bus operator shortage in 2022. For the first half of 2023, growth continued, with February 2023 almost matching pre-COVID February 2019, and June 2023 showing a 94% recovery rate. As of September 2023, the recovery rate was 92.4%.

#### Current Ridership

September average daily ridership between 2019 and 2023 shown in Chart 9 is provided as the most recent available at the time of preparation of this board report.

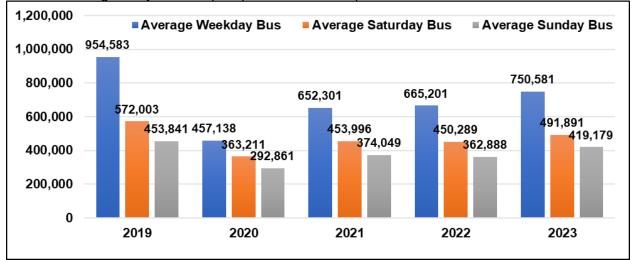


Chart 9: Average Daily Ridership September 2019-September 2023

After an initial large increase in September 2021 over September 2020 from the low point of pandemic ridership in 2020, weekday ridership recovery continued to incrementally increase between September 2021 and September 2022. This slower rate of growth may be expected after the large surge in ridership in 2021 and is similar to the

slower growth in travel demand as shown in Charts 2 and 3 as well as to bus service reliability problems at that time.

Metro reduced bus service by 10% in February 2022 in response to significant service cancellations caused by a shortage of bus operators. Bus service levels were fully restored by December 2022 and service reliability improved significantly in 2023 as the bus operator shortage was resolved. Full service restoration and improved reliability together with the LIFE and GoPass fare programs have likely supported the stronger ridership recovery seen in 2023. There have been much more substantial ridership gains in 2023 over the previous September, for both weekdays and weekends.

#### Bus System Ridership by Service Area

This section examines ridership recovery by service area, based on the five Metro Regional Service Council boundaries. As shown in Chart 10, weekday ridership recovery has occurred in each of the five Metro Council areas after the large decline in 2020 that was slightly less in the South Bay Cities (SBC) and Westside Central (WSC) areas compared to the other three regions - San Fernando Valley (SFV), San Gabriel Valley (SGV) and Gateway Cities (GWC). All areas show ridership recovery, with the San Fernando Valley showing the most weekday ridership recovery, exceeding 84% in 2023. This recovery rate was significantly higher than the recovery rates in the four other areas, which varied between 77.6% for the South Bay Cities and 75.2% for the San Gabriel Valley.

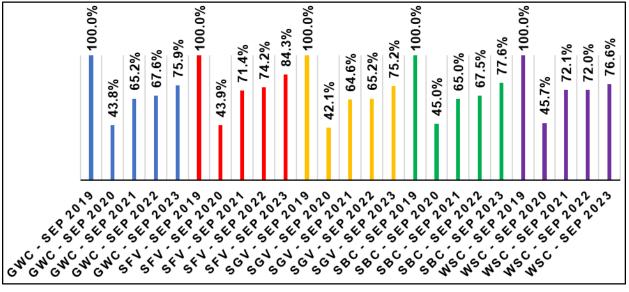


Chart 10:Average Weekday Ridership Recovery by Service Area, September 2019-September 2023

Historically, the San Fernando Valley transit lines had less frequent off-peak service. With the NextGen service improvements, local lines in the San Fernando Valley improved frequency in the midday weekdays as follows:

• Tier 1: three local lines increased from every 14 to 33 minutes to every 10 minutes (Lines 233, 234, 240)

- Tier 2: seven local lines increased from every 19 to 30 minutes to every 15 minutes (Lines 94, 152, 162, 164, 165, 166, 224)
- Tier 3: four local lines increased from every 25 to 49 minutes to every 20 minutes (Lines 90, 92, 150, 230) and three lines increased from every 49 to 61 minutes to every 30 minutes (Lines 235/236, 244, 690)
- Tier 4: two lines increased from every 60 to every 40 minutes (Lines 242, 243)

A total of 19 San Fernando Valley lines have improved weekday midday frequencies. Several key route restructurings focused on more direct connections to North Hollywood (Lines 90 and 94) are also likely contributing positively to the ridership recovery.

Highlights from NextGen frequency changes weekdays in the Westside Central service area include:

- Tier 1: Nine local lines had frequencies improved:
  - Line 2 increased from every 10 to every 7.5 minutes peak periods and from every 12-15 to every 10 minutes midday (Sunset - Alvarado)
  - Line 4 increased from every 15 to every 7.5 minutes peak and midday periods (Santa Monica BI)
  - Line 18 increased from every 10 to 7.5 minutes weekday midday (6<sup>th</sup> Whittier)
  - Line 20 increased from every 15 to every 12 minutes peak periods (Wilshire – 6<sup>th</sup> St)
  - Line 28 increased from every 18 to every 7.5-10 minutes peak periods and from every 27 to every 10 minutes midday (Olympic BI)
  - Line 30 increased from every 12 to 10 minutes midday (Pico BI)
  - Line 33 increased from every 17-18 to 7.5 minutes peak hours and midday (Venice BI)
  - Line 66 increased from every 12-15 to every 10 minutes peak periods and from every 18 to every 10 minutes midday (Olympic BI)
  - Line 217 increased from every 12-15 to every 10 minutes peak and midday periods
- Tier 2:
  - Line 10 increased from every 20 to 15 minutes midday
  - Line 603 increased from every 15 to every 12 minutes weekday peak periods and from every 20 to every 12 minutes weekday midday
  - Line 605 increased from every 23 to every 15 minutes midday
- Tier 4: Line 617 (formerly Line 17) increased from every 60 to every 45 minutes peak and midday

Highlights from NextGen frequency changes weekdays in the South Bay Cities service

area include:

- Tier 1: Eight local lines had frequency improved:
  - Line 40 increased from every 15 to every 7.5-10 minutes peak and from every 20 to every 10 minutes midday periods
  - Line 45 increased from every 15 to every 10 minutes midday
  - Line 51 increased from every 12 to 7.5 minutes midday
  - Line 111 increased from every 12-15 minutes to every 10 minutes peak and midday periods
  - Line 204 increased from every 12-15 to every 7.5 minutes weekday peak and midday
  - Line 207 increased from every 15 to every 6-7.5 minutes peak and from every 18 to every 7.5 minutes midday periods
  - Line 210 increased from every 20 to every 10 minutes peak and midday periods
  - Line 212 increased from every 12-15 to every 10 minutes peak and midday periods
  - Express service J Line increased from every 15 minutes to every 10 minutes during midday periods
- Tier 2: three local lines had improved frequencies
  - Line 110 increased from every 24 to every 15 minutes midday
  - Line 117 increased from every 18-20 to every 15 minutes peak and midday periods
  - Line 206 increased from every 20 to 15 minutes midday
- Tier 3: three local lines had improved frequencies:
  - Line 125 increased from every 25-35 to every 20 minutes peak and midday periods
  - Line 232 increased from every 22 to every 15 minutes peak periods
  - Line 246 increased from every 60 to every 30 minutes midday
- Tier 4: had two changes
  - Line 202 added new 60-minute midday service
  - Line 130 west of Artesia A Line Station was transferred to Torrance Transit.

Highlights from NextGen frequency changes weekdays in the Gateway Cities service area include:

• Tier 1: five local lines had frequency improvements:

- Line 53 increased from every 15 to every 10 minutes midday
- Line 60 increased from every 18 to every 10 minutes midday
- Line 105 increased from every 18-20 to every 10 minutes peak and midday periods
- Line 108 increased from every 10 to every 7.5 minutes peak periods and from every 15 to every 10 minutes midday
- Line 251 increased from every 22 to every 10 minutes midday
- Tier 2: Line 55 increased from every 15 to every 12 minutes peak periods and from every 20 to every 15 minutes midday
- Tier 4: changes consisted of:
  - Line 127 added new 60-minutes peak and midday periods
  - Line 130 east of Artesia A Line Station was transferred to Long Beach Transit.

Highlights from NextGen frequency changes weekdays in the San Gabriel Valley service area include:

- Tier 1: three local lines had frequency improvements:
  - Line 70 increased from every 15 to every 7.5 minutes peak and midday periods
  - Line 78 increased from every 20 to every 10 minutes midday
  - Line 180 increased from every 12 to every 10 minutes midday
- Tier 2: Line 260 increased from every 12-15 to every 12 minutes peak periods and from every 20 to every 15 minutes midday
- Tier 3: Line 266 increased from every 24 to every 20 minutes peak and from every 33 to every 20 minutes midday
- Tier 4: part of Line 256 (CSULA Commerce) transferred to Commerce Municipal Bus Lines.

Saturday ridership recovery has occurred across all regions between September 2020 and September 2023. As with weekdays, the highest ridership recovery on Saturdays was in the San Fernando Valley (96.9%). The other four areas show recovery rates between 76.8% on the lower end (Gateway Cities) and 82.1% (South Bay Cities) South Bay, San Gabriel, and Westside Central all had recovery rates of over 80%. San Fernando Valley Saturday service frequency increases were not as widespread as the weekday ones but were still significant:

- Tier 1: two local lines increased from every 16 to 30 minutes to every 12 to 15 minutes (Lines 234, 240)
- Tier 2: three local lines increased from every 24 to 30 minutes to every 20 minutes (Lines 152, 162, 224)

- Tier 3: two local lines increased from every 50 to every 30 minutes (Lines 230 and 690)
- Tier 4: Lines 242 and 243 increased from every 60 to every 40 minutes

Three lines gained Saturday service (Oxnard/Burbank, Saticoy, White Oak) that previously had no weekend service, The same refocus of two lines on North Hollywood weekdays was made on Saturday (Lines 90, 94).

The percentage of Saturday ridership recovery by area is shown in Chart 11.

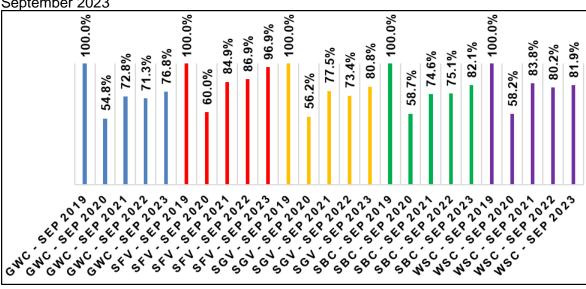


Chart 11: Average Saturday Ridership Recovered by Service Area, September 2019 - September 2023

Sunday ridership recovery by area displayed in Chart 12 shows consistent recovery across all areas between September 2020 and September 2023. As with weekdays and Saturdays, the San Fernando Valley leads in ridership recovery and has exceeded the pre-COVID 2019 ridership for that area (106.5% recovered). The Westside Central, San Gabriel Valley, and South Bay Cities all show recovery rates approaching or at 90%. The GWC area again shows the least recovery (81.8% recovery), well below other areas' recovery rates that are above 87%.

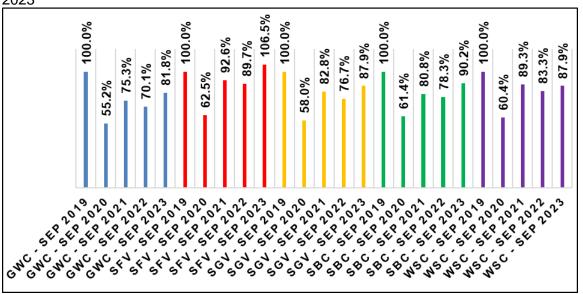


Chart 12: Average Sunday Ridership Recovered by Service Area, September 2019 - September 2023

The San Fernando Valley Sunday service frequency increases were not as widespread as the weekday or even Saturday ones but were still significant:

- Tier 1: two local lines increased from every 19 to 30 minutes to every 12 to 15 minutes (Lines 234 and 240)
- Tier 2: one local line increased from every 32 to every 20 minutes (Line 152)
- Tier 3: two local lines increased from every 50 to every 30 minutes (Lines 230 and 690)

Five lines in the San Fernando Valley gained Sunday service (Oxnard/Burbank, Saticoy, Tampa, Winnetka, White Oak) that previously had no weekend service, The same refocus of two lines on North Hollywood weekdays was made on Sunday (Lines 90, 94).

The changes made in frequency, days of operation, and routing likely have all combined to provide a more customer-friendly network for travel across the San Fernando Valley, helping achieve higher ridership recovery in this area.

Highlights from NextGen frequency changes weekends in the Westside Central service area include:

- Tier 1: nine local lines had improvements made:
  - Line 2 increased from every 12-15 to every 10 minutes Saturday and from every 15-20 to every 10 minutes Sunday
  - Line 4 increased from every 15 to every 10 minutes Saturday and Sunday
  - Line 18 increased from every 10 to 7.5 minutes Saturday and from every 15 to every 7.5 minutes Sunday

- Line 20 increased from every 15 to every 12 minutes Saturday and from every 20 to every 12 minutes Sunday
- Line 28 increased from every 15 to every 12 minutes Saturday and from every 18 to every 12 minutes Sunday
- Line 30 increased from every 12 to 10 minutes Saturday and Sunday
- Line 33 increased from every 20 to 10 minutes peak hours and midday
- Line 66 increased from every 20 to every 15 minutes Sunday
- Line 217increased from every 15 to every 12 minutes Saturday and from every 20 to every 12 minutes Sunday
- Tier 2:
  - Line 14-37 increased from every 20 to 15 minutes Saturday and Sunday
  - Line 603 increased from every 18 to every 12 minutes Saturday and from every 18 to every 15 minutes Sunday
  - Line 605 increased from every 35 to every 20 minutes midday

0

• Tier 4: Line 617 (formerly Line 17)had new 60 minute Saturday and Sunday service added

Highlights from NextGen frequency changes weekends in the South Bay Cities service area include:

- Tier 1: Seven local lines had frequency improvemetns
  - Line 40 increased from every 20 to every 12 minutes Sunday and from every 20 to every 15 minutes Sunday
  - Line 45 increased from every 15 to every 10 minutes Sunday
  - Line 51 increased from every 10 to every 7.5 minutes Saturday and from every 12 to every 10 minutes Sunday
  - Line 204 increased from every 20 to every 12 minutes Saturday and Sunday
  - Line 207 increased from every 15 to every 10 minutes Saturday and Sunday
  - Line 210 increased from every 20 to every 10 minutes Saturday and Sunday
  - Line 212 increased from every 18 to every 15 minutes Saturday and from every 23 to 15 minutes Sunday
- Tier 3: two local lines had frequency improvements made:
  - Line 125 increased from every 40 to every 30 minutes Sunday
  - Line 246 increased from every 40 to every 30 minutes Saturday and from

every 60 to every 30 minutes Sunday

• Tier 4: Line 130 west of Artesia A Line Station was transferred to Torrance Transit.

Highlights of NextGen weekends frequency changes in the Gateway Cities service area include:

- Tier 1:
  - Line 53 increased from every 20 to every 15 minutes Sunday
  - Line 60 increased from every 12-15 to every 10 minutes Saturday and Sunday
  - Lines 105 and 108 increased from every 20 to every 15 minutes Sunday
- Tier 4:
  - Line 127 added new 30-60 minute Saturday and Sunday service
  - Lines 128 and 258 added new 60-minute Sunday service
  - Line 130 east of Artesia A Line Station was transferred to Long Beach Transit

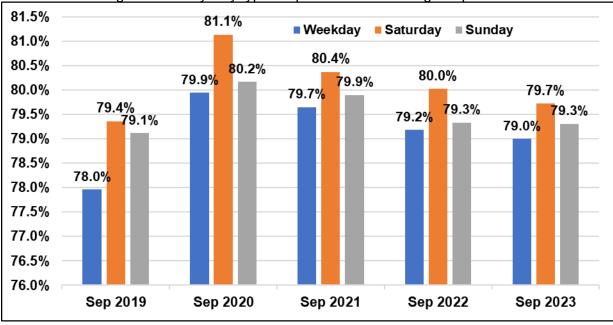
Highlights of NextGen weekends frequency changes in the San Gabriel Valley service area include:

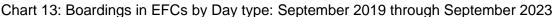
- Tier 1: Line 70 increased from every 15-20 to every 10 minutes Saturday and Sunday midday periods
- Tier 3: Line 266 increased from every 45 to every 30 minutes Saturday and Sunday
- Tier 4: part of Line 256 (CSULA Commerce) transferred to Commerce Municipal Bus Lines.

#### Bus System Ridership of Equity Focus Communities (EFC)

Bus system boardings in EFCs were reviewed to see if the recovery was stronger in EFCs than the network overall. Chart 13 shows changes in the proportion of boardings occurring in EFCs by day of the week between 2019 (pre-NextGen and pandemic) through 2023.

The proportion of boardings occurring in Metro's 2023 EFCs increased by 1-2% in 2020 as was expected with the pandemic and those with limited other options travelling as needed. This increased share of boardings was smaller in 2022 and 2023 with around 1% higher for weekdays and around 0.5% weekends, suggesting that the NextGen changes have benefitted EFCs where transit is critical to access to jobs, services, and opportunities, more than other areas.



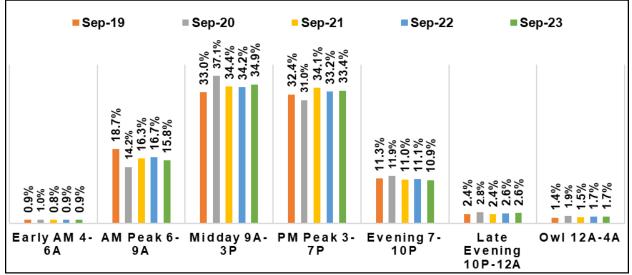


This higher proportion of trips in EFCs reflects the efforts of the NextGen Bus Plan to ensure many service improvements were made to lines serving EFCs where the need for good transit is highest, even during the early months of the COVID-19 pandemic, and just as important now. The gains for EFC residents should continue as bus speed and reliability improvements increase the competitiveness of the NextGen Bus Plan.

#### Average Ridership by Time of Day

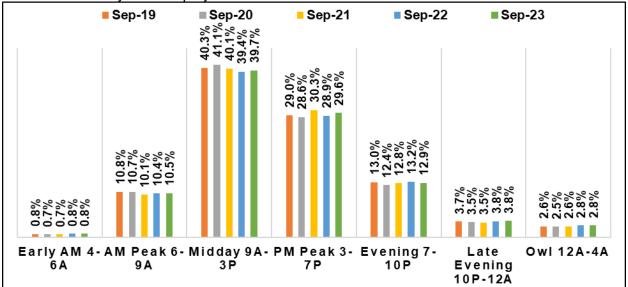
Consistent with the decrease in peak period travel due to the impacts of the COVID pandemic, the AM and PM peak shares of average weekday ridership dropped by 4% and 1% respectively with many people traveling less in 2020 compared to 2019. Midday ridership took up a larger share (+4%) of average weekday ridership in 2020. By 2022 and 2023, the share by time period had returned to about 1% higher than 2019 levels for the PM peak, though the AM peak share remained around 3% below the 2019 level. There is a 2% increase in 2023 for midday travel compared to 2019, and that comes at the expense particularly of weekday AM peak travel. This may suggest the improved midday weekday service frequencies for many transit lines implemented as part of the NextGen Bus Plan have been successful in gaining a larger share of ridership. Late evening and Owl periods are also up slightly in 2023 compared to their share of 2019 ridership, though evening is down slightly. Weekday ridership by time period is depicted in Chart 14.



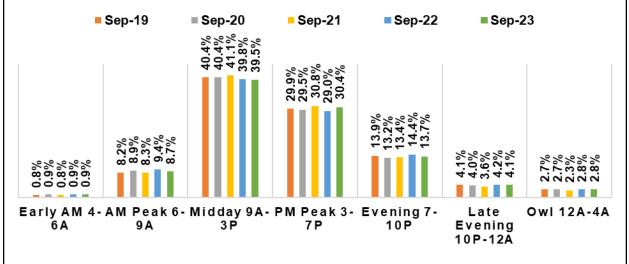


As shown in Charts 15 and 16, Saturday and Sunday midday shares of ridership peaked in 2020 and 2021 respectively, but by 2023 they dropped below 2019 levels. Saturday and Sunday AM peak shares returned to above 2019 levels on Sundays, remained below 2019 levels on Saturdays, and dropped in 2020 and 2021. PM Peak, evening, late evening, and overnight Owl ridership shares remained generally around 2019 levels, other than PM peak dropping in 2020. The NextGen Bus Plan service level changes on weekends were not as large as those on weekdays so changes between time periods were not as large.









#### Average Passenger Trip Length

Trip length dropped from over 4 miles to 3 miles between 2019 and 2020 and remained lower in 2021. It then increased to around 3.5 miles in 2022 and remains around that level in 2023. The initial changes can likely be attributed to the COVID-19 pandemic which resulted in people staying closer to home. As people adapted to living with the pandemic, by 2022 and 2023, average trip lengths had increased, though not back to 2019 levels. The NextGen Bus Plan was also designed to capture a larger share of shorter-distance travel and this data suggests that goal is being achieved. Chart 17 shows the average passenger trip length for two points in each year from 2019 through 2023.

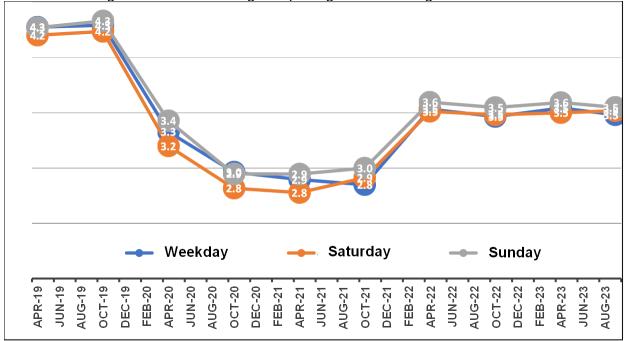


Chart 17: Average Metro Bus Passenger Trip Length: 2019 through 2023

#### Ridership by Line and Line Group

Ridership was assessed based on individual lines, or in some cases by groups of lines where a NextGen Bus Plan change involved a restructuring of a group of lines, for a fair comparison of the changes in ridership. Ridership recovery rates for 82 weekday, 75 Saturday, and 75 on Sunday line/line groups are included in Attachments A, B, and C respectively.

Average % Ridership Recovery Sept 2023 versus Sept 2019	Number of Weekday Lines/ Line Groups	Number of Saturday Lines/ Line Groups	Number of Sunday Lines/ Line Groups
>= 140.0%	0	0	1
130.0 – 139.9%	0	2	1
120.0 – 129.9%	0	3	5
110.0 – 119.9%	1	1	6
100.0 - 109.9%	5	8	11
90.0 - 99.9%	20	13	21
80.0 - 89.9%	15	25	13
70.0 - 79.9%	18	15	13
60.0 - 69.9%	13	3	3
50.0 - 59.9%	7	4	0
40.0 - 49.0%	1	0	0
30.0 - 39.9%	2	1	1
Total Lines/Line Groups	82	75	75

Table 2: Ridership Recovery Distribution, September 2023 versus September 2019

Table 2 shows the number of lines/line groups for weekday, Saturday, and Sunday at various levels of ridership recovery as of September 2023 compared to September 2019 (Pre-COVID/Pre-NextGen Bus Plan).

The overall system ridership recovery rate in September 2023 was 78.6% for weekdays, 86.0% for Saturday, and 92.4% for Sunday when compared to May 2019 as a pre-COVID baseline. There were 6 weekday, 14 Saturday, and 24 Sunday lines/line groups exceeding their pre-COVID September 2019 ridership numbers in September 2023.

The ridership recovery results reflect both the general return of ridership after the COVID impacts since 2020, but also reflect the impacts of the NextGen Bus Plan with its focus on fast, frequent, and reliable service, The following review of results focuses on analysis of NextGen Bus Plan impacts to ridership.

#### Service Reliability

September 2023 saw full NextGen Bus Plan service levels provided with low cancellation rates, comparable to pre-COVID levels of cancellations in September 2019. This was the result of a significant number of new bus operators hired in 2022 and 2023 to address the bus operator shortage. Service cancellations therefore should not be a

major factor in explaining ridership recovery, though the opportunity exists for Metro to message about the now-reliable service to riders and those who may be hesitant to return to the system due to past unreliable service experiences.

#### Service Frequency:

The NextGen Bus Plan created high frequency bus services with weekday service every 15 minutes or better (Tiers 1 and 2). When looking overall at weekday line by line ridership recovery compared to the system average ridership recovery weekdays of 78.6% recovered, 20-Tier 1, 14-Tier 2, 4-Tier 3, and 7-Tier 4 lines/line groups had above average ridership recovery.

- The high number of Tier 1 and Tier 2 lines with above average recovery suggests that the improved frequencies implemented through the NextGen Bus Plan are a key component of stronger ridership recovery.
- The above-average pattern existed for Saturday lines that were over 86% recovered with a mix of 14-Tier 1, 12-Tier 2, 6-Tier 3, and 5-Tier 4 lines/line groups.
- Sunday lines that were over 92.4% recovered were a mix of 14-Tier 1, 12-Tier 2, 5-Tier 3, and 9-Tier 4 lines/line groups.

#### Tier 1 Highest Frequency Lines:

NextGen Tier 1 lines provide at least 10 minute or better service frequency weekday peak and midday periods on Metro's busiest ridership corridors, with typically 10 to 15-minute weekend service frequency.

The weekday ridership recovery for Tier 1 NextGen service included a high of 111.7% for Line 66 serving E Olympic/W 8<sup>th</sup> St (this line also had a strong in its Saturday 101.0%, and Sunday 113.3% ridership). Six other Tier 1 lines/line groups exceeded 90% recovery weekdays:

- Vermont Local Line 204: 95.2% weekday, 104.4% Saturday, 99.4% Sunday.
- Sepulveda/Van Nuys group based on Lines 233, 234, 761: 94.4% weekday, 109.4% Saturday, 118.0% Sunday.
- Florence Av Line 111: 93.8% weekday, 89.2% Saturday, 89.9% Sunday
- Slauson Av Line 108: 92.5% weekday, 90.8% Saturday, 108.0% Sunday
- 3rd St Line 16 90.6% weekday, 92.5% Saturday, 100.4% Sunday
- Soto St Line 251: 90.3% weekday, 85.8% Saturday, 99.2% Sunday.

These higher recovery Tier 1 lines serve the most transit-dependent EFCs through areas such as South LA, the inner Westside, East LA, and the San Fernando Valley. Besides the high frequencies offered on both peak and midday weekdays that are assisting the recovery of some of these lines is improved access, such as:

• Line 66 trips serve Commerce Center and are one of the closest services

available in place of Line 51 no longer operating on 7th St west of Westlake/MacArthur Park.

- Line 761 now provides all-day, all-week Rapid service on Van Nuys Bl in addition to frequent Local Line 233.
- Soto St Line 251 now extends many trips each day to Eagle Rock (replaced other bus lines there)

An additional 12 NextGen Tier 1 lines exceeded system average ridership recovery weekdays. Among these was Line 53 with 89.3% recovery weekdays (92.1% Saturday, 109.6% Sunday), which benefitted from both high frequency and a reroute to Willowbrook/Rosa Parks Station, thus providing access to more transit connections and local retail, medical, and educational facilities.

Half of the Tier 1 lines focus on downtown LA, such as Lines 4 (Santa Monica BI), 18/20/720 (Whittier BI/Wilshire BI), 33 (Venice), 40 (MLK/Hawthorne BI), 70 (Garvey/Cesar Chavez), and 78 (Huntington/Las Tunas); less travel to office jobs in downtown may be impacting these lines. In some cases, these lines exceeded the system average ridership recovery on Saturdays and Sundays. This group represents an opportunity to promote downtown LA travel for both work and leisure.

There were nine Tier 1 lines with below system average ridership recovery. Most notable among this group are the two BRT services, with G Line (Orange) at 62.0% and J Line (Silver) at 74.7% on weekdays. The J Line received an increased midday weekday frequency of 10-minute instead of the 15-minute prior frequency while the G Line service did not change, which may explain the higher weekday ridership recovery of the J Line. Again, former markets of weekday discretionary riders may be significantly impacting the recovery of these BRT lines that had higher levels of discretionary riders pre-COVID, though this again opens the opportunity for promotion to build new markets.

- The J Line had 91.1% recovery on Saturdays, and 91.2% recovery on Sundays, suggesting people are using this service actively for events such as games at Expo Park. G Line Saturday recovery was 73.8%, with Sundays at 81.3%, which are better than the weekday rate but still falls below the J Line recovery.
- Vermont Rapid Line 754 had only a 59.0% recovery on weekdays. It experienced very high cancellations in 2022, so it may take some time to rebuild the market now that riders can depend on it. Line 754 operates the same route and service levels as Local 204 but with fewer stops. In contrast, Line 204 had a recovery of 95.2%. The same low ridership recovery pattern for Line 754 held for Saturdays with 56.1% recovery and Sundays 65.9%, compared to Line 204 recovery rates of 104.4% Saturdays and 99.4% Sundays. These patterns require more investigation; if this trend continues, there may need to redistribute service between the Vermont Av Local and Rapid lines.
- Other Tier 1 lines that had significant NextGen route changes include Line 28 (W Olympic BI 65.5% recovered weekday, 74.0% Saturday, 70.9% Sunday) and Line 30 (Pico BI 72.7% recovered weekday, 70.9% Saturday, 73.5% Sunday), which both now end in downtown LA and do not travel to northeast LA or East LA

respectively. Line 251 was extended to Eagle Rock to replace Line 28, and hence has much higher ridership recovery, while Line 30 in East LA was replaced by the new E Line light rail through the Regional Connector as well as other bus service. Similarly, the north and south ends of Line 45 on Broadway moved to other lines which helps explain its lower recovery (70.6% weekday, 71.7% Saturday, 85.5% Sunday), though it may also partially relate to loss of Rapid service from this corridor.

- Line 210 on Crenshaw with 77.1% recovery weekday (87.0% Saturday, 99,8% Sunday) likely has some former riders now using the K Line light rail, though that number is likely low based on K Line ridership. This recovery rate may also relate to the loss of Rapid service on this corridor.
- Line 66 likely gained ridership from Line 51 in the area west of Westlake/MacArthur Park, with Line 51 recovery at a low 73.3% weekday (73.0% Saturday, 78.6% Sunday).
- Line 2 on Sunset merged with Line 200 on Alvarado, with an overall 75.7% recovery weekday (77.5% Saturday, 90.7% Sunday), with Line 4 (88.2% recovered weekday, 90.2% Saturday, 95.3% Sunday) gaining more ridership as a result of the Line 2 change between downtown LA and Echo Park since Line 2 no longer continues into downtown LA. The recovery of both these lines is likely being impacted by post-pandemic downtown LA economic recovery.

A key component of the Tier 1 lines was the creation of a single high-frequency line in place of separate, less frequent Rapid and Local services. On weekdays, this change occurred on 17 lines, with a range of performance across these lines from a high of 90.3% on Soto to a low of 65.5% on W Olympic. The Crenshaw, W Olympic, and Broadway corridors where Rapid lines were replaced by high frequency local bus had below average ridership recovery rates on weekdays, but these results are likely mostly attributable to the restructuring of these lines discussed above. The overall transition away from Rapid lines will need to be further examined through approaches such as rider surveys.

#### NextGen Tier 2 Lines

The NextGen Tier 2 lines operate 12-15 minute daytime weekday service on some of Metro's next busiest corridors after the Tier 1 corridors discussed above. On Saturdays and Sundays, Tier 2 lines generally range from 20-minute to 30-minute daytime frequencies.

Most notable is the strong performance of the Tier 2 east-west lines in the San Fernando Valley which have responded well to their improved frequencies of weekday all-day 15-minutes under NextGen. During midday weekdays, these lines previously provided service only every 20-30 minutes. Weekend service on these lines with more limited frequency improvements still performed strongly, suggesting the weekday improvements have also had the benefit of attracting more weekend ridership. These San Fernando Valley lines include:

- Sherman Way Line 162 (104.4% weekday, 130.9% Saturday, 127.6% Sunday)
- Vanowen St Line 165 (98.5% weekday, 107.5% Saturday, 123.0% Sunday)
- Nordhoff St Line 166 (96.0% weekday, 112.3% Saturday, 128.9% Sunday)
- Victory BI Line 164 (95.5% weekday, 87.6% Saturday, 97.3% Sunday).
- Roscoe BI (86.3% weekday, 100.0% Saturday, 115.8% Sunday)

The Roscoe BI recovery weekdays was notably lower, though still well above the system average, primarily due to route segments moved to other lines including Sherman Way.

Other notably high ridership recovery NextGen Tier 2 lines are discussed here with frequency improvements a common theme among them:

- Line 605 (LAC USC Medical Center Shuttle 96.6% recovery weekdays, 127.2% Saturday, 123.7% Sunday) linking Boyle Heights high EFC area to key medical centers benefitted from 15-minute all day service (previously 23-minute midday frequency) and weekend 20-minute service improved over previous 35 minute service).
- Line 55 (Compton Av 93.9% recovery weekdays, 95.3% Saturday, 104.2% Sunday) between Willowbrook and downtown LA, through high EFC communities, with 12-minute weekday peak and 15-minute weekday midday service replacing previous 15-minute peak and 20-minute midday service. Weekends did not see a significant frequency increase but still saw a strong recovery.
- Lines 110 (Gage Av 93.0% recovery weekdays, 89.6% Saturday, 104.6% Sunday) and 117 (Century BI – 92.3% recovery weekdays, 89.5% Saturday, 99.2% Sunday), which both serve EFC communities through South LA and the Gateway Cities. These lines now have consistent 15-minute all-day service in place of their previous 19-24 minute midday weekday frequencies. They recovered strongly on weekends even without significant frequency improvements.
- Line 603 on Hoover St links Glendale and the USC/Expo Park area every 12 minutes (pre-NextGen every 15-20 minutes). This line has a 91.2% recovery on weekdays, even after accounting for the ridership of the nearby Glendale/Silver Lake Line 201 that was discontinued as part of the NextGen Bus Plan. Saturday was 92.4% recovery with 12-minute frequency in place of the previous 18minute, though Sunday was lower at 84.6% recovery with 15-minute in place of the previous 18-minute service. This line has recovered strongly overall.
- Three other Tier 2 lines, Line 94 (San Fernando Rd North Hollywood), Line 206 (Normandie Av), and Line 260 (Atlantic Bl) had weekday recovery rates of slightly above average at 79.0%, 79.2%, and 80.4% respectively. Lines 94 and 260 were both significantly restructured, which may in part impact their lower overall recovery:

- Line 94 offers 15-minute service (about twice as often as it previously ran) between Downtown LA, Glendale, Burbank, and North Hollywood, with service now operating through the heart of downtown Glendale, and the extension to North Hollywood replacing a former lower frequency line. The Line 94 group had stronger weekend recovery, with 104.0% Saturday and 112.9% Sunday. Other lines such as Line 92 discussed in the NextGen Tier 3 and 4 Lines section\_are likely gaining from the Line 94 changes.
- Line 260 also offers 12-minute peak and 15-minute midday service, an increase over its previous 17-minute peak and 21-minute midday weekday service. Its weekend recovery was also below average, with 85.1% Saturday and 87.5% Sunday in response to continued 20-minute service frequency. The northern portion of this line was set up as a separate Line 660 linking Pasadena and Altadena, and this is taken into account in the ridership recovery rate.
- Line 206 in contrast to Lines 94 and 260 above did not have any change of routing. It now offers consistent 15-minute service all day weekdays, improving on the 20-minute weekday midday service previously offered. Line 206 weekend recovery was below average, with 84.2% Saturday and 88.0% Sunday, with a smaller frequency improvement (22 minute to 20 minute).
- Two other Tier 2 lines were just below the system average: Lines 224 (Lankershim) and 115 (Manchester-Firestone).
- Line 224 was part of an overall line group that saw significant restructuring to focus on the North Hollywood and Sylmar areas. It had a stronger weekend recovery at 99.1% Saturday and 109.7% Sunday. Line 224 received weekday 15-minute midday service and 20-minute weekend service, improved over the 19-minute and 24-minute frequencies previously provided.
- Compared to Line 224 above, Line 115 did not have significant route changes but did receive a 12-minute weekday peak frequency, a slight increase over the previous 14-minute service (off-peak frequencies did not change). Line 115 weekend recovery was also slightly below average with 85.6% Saturday and 90.6% Sunday.

Five other lines/line groups in NextGen frequency Tier 2 had below system average ridership recovery:

- Performance ranged from a high of 73.9% recovery for Line 81 (Figueroa St Saturday 82.9%, Sunday 92.4%) to a low of 61% for Line 10/48 (Melrose Av/Main-San Pedro, Saturday 59.5%, Sunday 70.9%).
- Other lines in this group included
  - o Line 76 on Valley BI (68.9% weekday, 68.0% Saturday, 71.7% Sunday),
  - Line 14/37 on Beverly BI/W. Adams (65.6% weekday, 78.8% Saturday, 79.8% Sunday) and

 Line 35/38 Washington Bl/W. Jefferson (62.1% weekday, 63.9% Saturday, 72.6% Sunday).

The common aspect of these lines is that they focus on downtown LA as their key destination, with its recovery helping determine the success of these lines, even on weekends. There may be marketing opportunities. Unlikely the other lines in this group, Line 81 also was part of a significant and complex line restructuring in Northeast LA, an area served by the A Line which now utilizes the new Regional Connector through downtown LA. This change included a new direct link from Highland Park to East Hollywood (Line 182). This area may benefit from the marketing of both A Line light rail and the NextGen Bus Plan's new Line 81 and 182 services.

#### NextGen Tier 3 and 4 Lines

These services operate every 20-30 minutes (Tier 3) or 40-60 minutes (Tier 4), providing coverage for communities and on corridors with generally lower ridership levels.

There were a few high performers in terms of ridership recovery. Strongest in this group was Line 235/236 serving Balboa BI (107.3% recovery weekdays, 107.6% Saturday, 101.8% Sunday) which appears to have responded well to the 30-minute combined service now offered compared to the previous 40-60 minute service weekdays, though weekend recovery was also strong with just 60-minute service. Line 236 also now offers a more direct connection to Sylmar, and Line 235 service was retained weekdays in Granada Hills which is also contributing to the recovery. Other examples include:

- Rosemead BI Line 266 service between Lakewood and Pasadena (103.8% recovery weekdays, 108.7% Saturday, 119.0% Sunday) recovery is likely due to improvement to 20-minute weekday frequency from the former 24-33-minute service, and 30-minute weekend service instead of the previous 43-48 minutes.
- Line 344 Rancho Palos Verdes service (103.2% recovery weekday, 92.9% Saturday, 103.6% Sunday) is likely a more general recovery as the service levels and route were unchanged for this line from pre-NextGen.
- Line 125 on Rosecrans Av between the South Bay and Norwalk (100.9% recovery weekdays, 86.9% Saturday, 107.0% Sunday), similar to Line 266 above, is likely benefiting from the all-day 20-minute service improved from the former 27-33-minute frequency. The pre-NextGen Sunday 40-minute service was also improved to every 30 minutes with a strong ridership recovery.
- Express Line 577 between El Monte Station and Long Beach VA (95.9% recovery, weekday-only service) may be benefitting from recent high gas prices as well as the improved 30-minute peak service (previously 48 minutes on average).
- Line 202 serving Willowbrook Av in the high EFC Compton area saw 95.98% recovery (service only runs weekdays), a result of shortening the line away from low usage industrial areas and transferring the savings to offer weekday off-peak service (this line previously only ran weekday peak periods). However, even with the strong ridership recovery, this line has low overall ridership and productivity.

- Line 92 between downtown LA and Sylmar via Glenoaks BI (95.6% recovery weekday, 86.6% Saturday, 100.0% Sunday) is likely benefitting from now being the primary line between downtown LA and Sylmar, as Line 94 which offered a similar link was redirected to North Hollywood to better match regional travel patterns. Line 92 now offers consistent 20-minute service on daytime weekdays and 30-minute weekends, with most trips operating the full line beyond downtown Burbank to Sylmar. This is an improvement on the previous service that was closer to every 30 minutes weekdays and Saturdays, and every 42 minutes Sundays.
- Lines 242/243 (Tampa/Winnetka) in the northwest San Fernando Valley had 93.2% recovery weekdays and 121.2% Saturdays (service was newly added Sundays). These lines now operate every 40 minutes all day weekday and weekend (previously every 48-60 minutes weekday and 60-minute Saturday). This result is even more interesting when taking into account the north end of these lines above Devonshire St to Porter Ranch was replaced by Metro Micro service.
- Line 611 Huntington Park Shuttle (91.6% recovery weekdays, 95.9% Saturday, 99.1% Sunday) continues to run hourly, so appears to be general ridership recovery not attributable to a NextGen change.
- The Line 232 route between LAX and Long Beach via Sepulveda BI and Pacific Coast Highway (90.3% recovery weekdays, 84.3% Saturday, 91.9% Sunday) was not changed but was improved to 15-minute peak service in place of the previous 22-minute peak service weekday.

Three other Tier 4 services exceeded the system average ridership recovery, with rates between 83-84%, without any significant route or frequency changes. There are a notable number of Tier 4 lines with hourly frequency and low ridership recovery rates below 60% weekdays. These include:

- Line 601 Warner Center Shuttle (30.0% recovery weekdays, 31.5% Saturday, 37.9% Sunday) operates in a western San Fernando Valley office park with a largely closed retail mall. This service will need further review due to its very low productivity. This office park has been significantly impacted by post-COVID telecommute work patterns.
- Line 177 between Pasadena and the Jet Propulsion Lab has also seen a low ridership recovery (56.8%, only runs weekdays) likely for the same work pattern changes associated with more telecommuting.

Key aspects of other Tier 4 lines with low ridership recovery include low frequency (mostly 40-60 minute), in most cases no route change, and a lower percentage of route miles serving EFCs. Examples include:

- Line 161 (Canoga Station Thousand Oaks) with 66.1% recovery weekdays, 74.1% Saturday, but a high 112.8% Sunday recovery rate).
- Line 602 (Westwood/UCLA Pacific Palisades) with 58.9% recovery weekdays, but higher weekend recovery at 96.4% Saturday, 103.3% Sunday.

- Line 134 (Santa Monica Malibu) with 63.3% recovery weekdays, 78.1% Saturday, 93.3% Sunday, so much higher recovery on weekends.
- Lines 96 (Riverside Dr) with 48.9% recovery weekdays, 51.2% Saturday, 71.2% Sunday, consistently low. This line was cut back to the north end of downtown LA near Union Station.
- Line 158 (Plummer/Woodman) with 61.6% recovery weekdays, 78.0% Saturday, 74.4% Sunday.
- Line 167 (Devonshire-Coldwater Canyon) with 62.4% recovery weekdays, 65.9% Saturday, 72.1% Sunday).
- Line 218 (Studio City Beverly Hills) with 56.0% recovery weekday, 71.6% Saturday, 61.3% Sunday.
- Line 265 (Paramount BI) with 66.6% recovery weekdays, 75.1% Saturday, 75.7% Sunday.

A small number of Tier 4 low frequency lines with a higher percentage of route miles serving EFCs areas show some of the lowest ridership recovery, suggesting their low frequency is the main limitation for ridership recovery among the above lines and the examples below:

- Line 62 (Telegraph Rd) with 71.6% recovery weekday, 70.3% Saturday, and 76.9% Sunday was not changed significantly in route or frequency other than the straightening of the line in downtown Norwalk. This line serves downtown LA and is likely reduced due to less activity there.
- Line 102 (La Tijera-Exposition BI) with 53.0% recovery weekdays, 59.6% Saturday, 61.7% Sunday, is low likely due to the hourly service level now offered, though over 50% of line miles are in EFCs.
- Line 209 (Van Ness Av) with 38.1% recovery, only runs weekdays and has hourly frequency and was significantly shortened. It was originally proposed for elimination. Over 50% of its line miles in EFCs.
- Lines 211/215 (Inglewood Av/Prairie Av 55.3% recovery) only offers peak hour weekday service. Other than some well-used trips of school student ridership, these lines have low productivity.
- Line 665 (City Terrace CSULA Shuttle) in a higher EFC area had a low 67.6% recovery weekdays, likely related to worker and student travel to CSULA. It had 133.7% recovery Saturday, and 183.9% Sunday, with weekend ridership results due to the expanded span of service.

There may be value in testing 30-minute service on the most productive of the above Tier 4 lines to determine the value of such investment in terms of ridership growth.

There are a small number of freeway express bus lines that warrant comment:

• Line 460 Disneyland – Norwalk – Downtown LA Express had ridership recovery

of 74.4% weekdays, 78.7% Saturday, 81.8% Sunday with no major changes in service levels or routing. This line may require more promotion coming out of the pandemic, especially with recent increases in gas prices.

 Line 501 Freeway Express between Pasadena, Glendale, Burbank, and North Hollywood has ridership recovery of 68.1% weekday, but 128.0% Saturday, and 139.8% Sunday. This line was modified to better serve the heart of downtown Glendale as part of NextGen Bus Plan but may be hampered in recovery by more telecommuting weekdays. Line 501 appears to have attracted significant new weekend ridership for retail and entertainment trips to places like downtown Glendale.

### Pasadena/Altadena and Metro Micro

The Tier 3 and 4 lines in the Pasadena/Altadena area went through a significant restructuring. The area also now has one of Metro's busiest Micro Transit zones which replaced some fixed route service such as lines through Sierra Madre. The recovery rate here is a low 56.5% overall weekdays, but a higher 90.3% Saturday, and 97.2% for Sunday. This area requires more review in conjunction with the review of Metro Micro. It includes a mix of lines such as 487/489 freeway express lines to downtown LA which are impacted, especially weekdays, by downtown LA economic recovery, and the truncation of part of Line 487 through Sierra Madre in conjunction with the Metro Micro launch. Weekday ridership recovery may also be impacted by economic recovery and changes in office and other jobs in Pasadena, similar to downtown LA.

### **Bus Speed and Reliability:**

As part of the NextGen Bus Plan, over 40 miles of bus priority lanes have been implemented across Metro's service area. In 2020-2021, the primary focus was on new bus lanes in downtown LA on key streets serving multiple Metro bus lines such as Flower, Figueroa, 5tgh, 6th, Grand, Olive, and Aliso Sts. This was followed by Alvarado St (Line 2) and most recently in 2023 by Venice Bl, La Brea Av, and Sepulveda Bl. Data shows speed improvements as well as the perception of such speed improvements by riders in post-implementation surveys. These lanes will help support ridership recovery through increasing service reliability and decreasing bus travel times. They will also be complemented by additional bus priority lanes such as on Florence Av plus expanded transit signal priority and all door boarding programs during 2024.

### ATTACHMENT B

### Weekday Ridership Recovery Comparison by Line/Line Group - September 2019 to September 2023

		Sept 2019 Average Weekday		Sept 2023 Average Weekday	Weekday Ridership Recovery
Description	Line	Boardings	Line		2023 Versus 2019
E Olympic Bl/W 8th St	066	11,276	066	12,593	111.7%
Balboa Bl	236	1,826	235/236	1,959	107.3%
Sherman Way	163	9,393	162	9,803	104.4%
Rosemead BI	266	5,096	266	5,288	103.8%
Hawthorne BI, Rancho Palos Verdes	344	1,484	344	1,531	103.2%
Rosecrans Av	125	5,012	125	5,057	100.9%
Vanowen St	165	8,254	165	8,127	98.5%
LAC USC Medical Center Shuttle	605	2,410	605	2,329	96.6%
Nordhoff St	166	6,492	166	6,231	96.0%
El Monte - Long Beach VA Express	577	1,169	577	1,121	95.9%
Willowbrook Av	202	278	202	266	95.8%
Downtown LA - Glenoaks BI - Sylmar	092	5,942	092	5,681	95.6%
Victory BI	164	6,501	164	6,206	95.5%
Vermont Av Local	204	22,262	204	21,184	95.2%
Van Nuys Bl Local	233	11,791	233	12,808	
Van Nuys BI - Westside Rapid (788); new Van Nuys BI Westside Rapid (761)	788	2,063	761	7,089	
Sepulveda BI Local	234	5,775	234	8,810	94.4%
Sepulveda BI - Westside Rapid (734)	734	6,229			
Reseda/Ventura/Van Nuys Rapid	744	4,560			
Compton Av	055	8,406	055	7,892	93.9%
Florence Av	111	15,682	111	14,707	93.8%
Tampa Av & Winnetka Av	243	1,830	242	1,706	93.2%
Gage Av	110	8,411	110	7,822	93.0%
Slauson Av	108	15,831	108	14,638	92.5%
Century Bl	117	9,271	117	8,554	92.3%
Huntington Park Shuttle	611	1,592	611	1,458	91.6%
Hoover St	603	7,826	603	8,050	
Silver Lake	201	1,005			91.2%

		Sept 2019 Average Weekday		Sept 2023 Average Weekday	Weekday Ridership Recovery
Description	Line	Boardings	Line	-	2023 Versus 2019
3rd St	016	22,284	016	19,450	90.6%
Robertson BI - Beverwil Dr			617	738	
Soto St	251	9,123	251	14,403	/
Soto St - Griffin Av	252	2,438			90.3%
Soto St Rapid	751	4,385			
LAX - Long Beach via Sepulveda BI, Pacific Coast Hwy	232	5,039	232	4,546	90.2%
Central Av	053	12,968	053	11,577	89.3%
MLK - Hawthorne BI	040	14,408	040	14,748	88.5%
Hawthorne BI Rapid	740	2,256			001070
Santa Monica BI Local	004	15,923	004	23,953	88.2%
Santa Monica BI Rapid	704	11,247			00.270
Vernon Av, La Cienega Bl	105	11,276	105	15,498	88.1%
Vernon Av, La Cienega Bl Rapid	705	6,325			00.170
Roscoe Bl	152	11,216	152	9,681	86.3%
Imperial Hwy	120	4,049	120	3,401	84.0%
Ventura BI Local	150	8,810	150	3,066	
Reseda BI/Ventura BI Local			240	10,832	
Topanga Canyon BI (245); De Soto Av (244)	245	2,863	244	1,768	84.0%
Reseda/Ventura/Van Nuys Rapid	744	4,560			
Ventura BI Rapid	750	2,422			
Alondra Bl	128	1,290	128	1,082	83.8%
Saticoy St	169	2,444	169	2,045	83.7%
Downtown LA - South Arcadia via Huntington Dr/Las Tunas Dr	078	9,230	078	6,800	00.5%
Rose Hill - Arcadia via Huntington Dr			179	907	83.5%
Western Av Local	207	17,048	207	24,722	00.00/
Western Av Rapid	757	12,720			83.0%
Venice BI Local	033	11,445	033	16,395	00.5%
Venice BI Rapid	733	8,434		Í	82.5%
Montebello - Downtown LA via Cesar Chavez Av	068	5,976			81.4%
El Monte - Downtown LA via Garvey Av and Cesar Chavez Av Local	070	9,767			
Downtown LA - City Terrace - CSULA	071	1,808	070	15,777	

Attachment B – Weekday Ridership Recovery Comparison by Line and Line Group

Description	Line	Sept 2019 Average Weekday Boardings	Line	Sept 2023 Average Weekday Boardings	Weekday Ridership Recovery 2023 Versus 2019
Montebello - Downtown LA - Monterey Park via Cesar Chavez Av & City					
Terrace	106	532	106	4,162	
El Monte - Downtown LA via Garvey Av and Cesar Chavez Av Rapid	770	6,403			
Whitter BI W 6th St	018	18,558	018	21,049	
Wilshire BI Local	020	13,960	020	8,852	80.5%
Wilshire BI Rapid	720	29,376	720	19,946	
Artesia - Pasadena via Atlantic BI and Fair Oaks Av	260	10,115	260	10,658	80.4%
Atlantic BI Rapid (762)/Altadena - Pasadena (660)	762	4,167	660	820	00.4 /0
La Brea Av	212	12,281	212	9,756	79.4%
Normandie Av	206	11,664	206	9,238	79.2%
Downtown LA - San Fernando Rd - North Hollywood	094	4,399	094	6,977	
San Fernando Rd Rapid (794)/Burbank - Sylmar San Fernando Rd (294)	794	3,977	294	1,339	
Magnolia Bl North Hollywood - Burbank - Glendale	183	1,803			79.0%
Burbank BI Oxnard St	154	872	154	552	
Riverside Dr	155	1,453	155	1,010	
Hollywood - Pasadena	180	8,725	180	9,245	
Hollywood BI Fairfax BI	217	7,076	217	8,862	79.0%
Hollywood/Fairfax - Pasadena Rapid	780	7,105			
Downtown LA - Foothill Bl	090	7,778	090	6,011	
Hollywood Way	222	1,428	222	1,184	
Lankershim Bl	224	7,633	224	6,449	78.5%
Whiteoak Av, Woodley Av	237	2,249	237	1,700	10.3%
Whiteoak Av	239	1,123			
Foothill BI			690	1,017	
Manchester Av - Firestone Bl	115	15,159	115	11,904	78.5%
Crenshaw BI Local	210	10,785	210	13,521	77.1%
Crenshaw BI Rapid	710	6,755			11.170
San Pedro - Willowbrook via Vermont Av, Wilmington Av	205	3,965	205	2,907	76.9%
San Pedro - Harbor Gateway Transit Center - USC	550	1,529	550	330	
San Pedro - Harbor Gateway Transit Center via Avalon Bl	246	2,608	246	2,993	
Sunset BI (became Sunset BI - Alvarado St)	002	12,630	002	18,420	75.7%

Attachment B – Weekday Ridership Recovery Comparison by Line and Line Group

		Sept 2019 Average Weekday		Sept 2023 Average Weekday	Weekday Ridership Recovery
Description	Line	Boardings	Line	Boardings	2023 Versus 2019
Alvarado St	200 910/950	11,717	040/050	45.054	74.70/
J Line BRT - El Monte - Downtown LA - Harbor Transitway - San Pedro		21,358	910/950	15,951	74.7%
Downtown LA - Norwalk - Disneyland	460	5,343	460	3,973	74.4%
Downtown LA - Artesia via Long Beach Bl	060	15,086	060	15,082	74.0%
Long Beach BI Rapid	760	5,294			
Figueroa St	081	14,381	081	10,454	
Downtown LA - Eagle Rock via York Bl	083	2,560			73.9%
Silver Lake - East Hollywood	175	769	182	2,631	
Avalon BI, W 7th St	051	24,732	051	18,136	73.3%
Pico Bl	030	12,437	030	9,043	72.7%
Laurel Canyon Bl	230	4,553	230	3,287	72.2%
Telegraph Rd	062	4,342	062	3,108	71.6%
Broadway Local	045	14,652	045	13,722	-
Broadway Rapid	745	6,751			70.6%
Compton BI, Somerset BI	127	912	127	2,032	
Valley Bl	076	8,687	076	5,988	68.9%
North Hollywood - Pasadena Express	501	1,634	501	1,112	68.1%
CSULA - City Terrace Shuttle	665	848	665	573	67.6%
Paramount Bl	265	1,580	265	1,051	66.6%
Canoga Station - Thousand Oaks	161	1,182	161	781	66.1%
Beverly BI - W Adams BI	014/037	18,443	014/037	12,106	65.6%
Olympic BI Local	028	9,092	028	9,972	65.5%
Olympic BI Rapid	728	6,127			00.0%
Santa Monica - Malibu via Pacific Coast Hwy	534	1,882	134	1,192	63.3%
Coldwater Canyon Av - Devonshire St	167	2,558	167	1,597	62.4%
Washington BI/W Jefferson BI	035/038	8,666	035/038	5,384	62.1%
G Line BRT - North Hollywood - Canoga Park - Chatsworth	901	23,233	901	14,414	62.0%
Plummer St, Woodman Av	158	2,239	158	1,379	61.6%
Melrose Av/Main St/San Pedro St	010/048	12,846	010/048	7,833	61.0%
Vermont Av Rapid	754	21,568	754	12,733	59.0%
Westwood - Pacific Palisades	602	2,142	602	1,262	58.9%

Attachment B – Weekday Ridership Recovery Comparison by Line and Line Group

Description	Line	Sept 2019 Average Weekday Boardings	Line	Sept 2023 Average Weekday Boardings	Weekday Ridership Recovery 2023 Versus 2019	
Caltech - Pasadena - Jet Propulsion Laboratory	177	393	177	223	56.8%	
Pasadena - Highland Park - Eastern Av	256	1,774	256	509		
Fremont Av - Eastern Av - Garfield Av	258	3,110	258	2,223		
El Monte - Pasadena via Temple City Bl and Del Mar Bl	267	3,245	267	1,478		
El Monte - Pasadena via Baldwin Av	268	1,864	268	643		
Mission Dr (176)/Arcadia - Santa Anita Av - El Monte (287)	176	1,584	287	934		
Pasadena - Altadena via Lake Av, Lincoln Av			662	2,087		
Los Robles Av (687); Allen Av (686)	687	1,317	686	266		
Downtown LA - San Gabriel BI (487) - Rosemead BI (489)	487/489	3,845	487/489	1,323	56.5%	
Studio City - Beverly Hills	218	997	218	558	56.0%	
Prairie Av/Inglewood Av	211/215	683	211/215	378	55.3%	
La Tijera BI, Exposition BI	102	2,729	102	1,446	53.0%	
Riverside Dr	096	1,403	096	686	48.9%	
Van Ness Av/Arlington Av	209	964	209	367	38.1%	
Warner Center Shuttle	601	1,152	601	352	30.6%	
Manhattan Beach Bl	126	218		Disconti	nued	
Artesia Bl	130	2,807	Trans	sferred to Mu	nicipal Agencies	
Boyle Av	254	814		Disconti	nued	
Manchester Av Express	442	173		Disconti	nued	
Windsor Hills - Inglewood	607	67		Disconti	nued	
South Gate Shuttle	612	1,205		Replaced with Micro		
LAX C Line Shuttle	625	355		Replaced w	ith Micro	
Glassell Park - Glendale College	685	628		Replaced w	ith Micro	

### ATTACHMENT C

### Saturday Ridership Recovery Comparison by Line/Line Group - September 2019 to September 2023

Description	Sept 2019 Line/ Group	Average Saturday Boardings 09-2019	Sept 2023 Line/ Group	Average Saturday Boardings 09-2023	Saturday Ridership Recovery 2023 Versus 2019
CSULA - City Terrace Shuttle	665	228	665	305	133.7%
Sherman Way	163	4,902	162	6,416	130.9%
North Hollywood - Pasadena Express	501	544	501	696	128.0%
LAC USC Medical Center Shuttle	605	857	605	1,090	127.2%
Tampa Av & Winnetka Av	243	715	242	867	121.2%
Nordhoff St	166	2,620	166	2,942	112.3%
Van Nuys Bl Local	233	8,671	233	9,104	
Sepulveda BI Local	234	6,521	234	5,273	109.4%
Sepulveda BI - Westside Rapid (734); Van Nuys BI Westside Rapid (761)	744	1,455	761	3,826	
Rosemead Bl	266	3,272	266	3,555	108.7%
Balboa Bl	236	607	236	653	107.6%
Vanowen St	165	3,821	165	4,107	107.5%
Vermont Av Local	204	15,107	204	15,775	104.4%
Downtown LA - San Fernando Rd - North Hollywood	094	5,460	094	5,121	
Riverside Dr	155	828	155	798	
Burbank BI Oxnard St			154	376	104.0%
Magnolia Bl North Hollywood - Burbank - Glendale	183	717			
Burbank - Sylmar San Fernando Rd			294	992	
E Olympic BI/W 8th St	066	8,696	066	8,785	101.0%
Roscoe Bl	152	6,206	152	6,207	100.0%
Downtown LA - Foothill Bl	090	3,931	090	3,827	
Hollywood Way	222	874	222	658	
Lankershim Bl	224	4,307	224	3,920	99.1%
Whiteoak Av, Woodley Av	237	966	237	1,041	
Foothill BI			690	539	]
Westwood - Pacific Palisades	602	618	602	596	96.4%
Huntington Park Shuttle	611	957	611	918	95.9%
Compton Av	055	4,615	055	4,397	95.3%

Description	Sept 2019 Line/ Group	Average Saturday Boardings 09-2019	Sept 2023 Line/ Group	Average Saturday Boardings 09-2023	Saturday Ridership Recovery 2023 Versus 2019
MLK - Hawthorne Bl	040	9,282	040	10.065	2023 Versus 2019
Hawthorne BI Rapid	740	1,287	0+0	10,003	95.2%
Hawthorne Bl, Rancho Palos Verdes	344	990	344	920	92.9%
3rd St	016	15,139	016	13,659	
Robertson BI - Beverwil Dr	010	10,100	617	339	92.5%
Hoover St	603	6,080	603	6,198	
Silver Lake	201	627		0,100	92.4%
Central Av	053	7,813	053	7,198	92.1%
J Line BRT - El Monte - Downtown LA - Harbor Transitway - San Pedro	910/950	8,683	910/950	7,906	91.1%
Slauson Av	108	9,131	108	8,291	90.8%
Pasadena - Highland Park - Eastern Av	256	777	256	416	
Fremont Av - Eastern Av - Garfield Av			258	807	
El Monte - Pasadena via Temple City Bl and Del Mar Bl	267	1,291	267	496	
El Monte - Pasadena via Baldwin Av	268	1,010	268	431	00.00/
Arcadia - Santa Anita Av - El Monte			287	277	90.3%
Downtown LA - San Gabriel Bl	487	1,069	487	450	
Pasadena - Altadena via Lake Av, Lincoln Av			662	1,292	
Los Robles Av (687); Allen Av (686)	687	655	686	165	
Santa Monica BI Local	004	12,836	004	18,378	90.2%
Santa Monica BI Rapid	704	7,540			90.27
Western Av Local	207	19,344	207	17,344	89.7%
Gage Av	110	4,377	110	3,923	89.6%
Florence Av	111	10,966	111	9,780	89.2%
Whitter BI W 6th St	018	12,409	018	15,408	
Wilshire BI Local	020	7,219	020	5,774	89.2%
Wilshire BI Rapid	720	19,149	720	13,424	
Vernon Av, La Cienega Bl	105	11,053	105	9,845	89.1%
Century Bl	117	5,893	117	5,277	89.5%
Victory Bl	164	3,674	164	3,219	87.6%
Crenshaw BI Local	210	7,456	210	9,670	87.0%
Crenshaw BI Rapid	710	3,655			07.070

Description	Sept 2019 Line/ Group	Average Saturday Boardings 09-2019	Sept 2023 Line/ Group	Average Saturday Boardings 09-2023	Saturday Ridership Recovery 2023 Versus 2019
Rosecrans Av	125	2,824	125	2,453	86.9%
Downtown LA - Glenoaks Bl - Sylmar	092	4,029	092	3,491	86.6%
Venice BI Local	033	7,769	033	12,379	85.8%
Venice BI Rapid	733	6,658			00.0%
Soto St	251	8,059	251	7,722	95 90/
Soto St - Griffin Av	252	946			85.8%
Manchester Av - Firestone Bl	115	8,744	115	7,487	85.6%
Montebello - Downtown LA via Cesar Chavez Av	068	3,736	070	10,057	
El Monte - Downtown LA via Garvey Av and Cesar Chavez Av Local	070	6,601			
Downtown LA - City Terrace - CSULA	071	490			85.6%
Montebello - Downtown LA - Monterey Park via Cesar Chavez Av & City Terrace			106	1,933	03.076
El Monte - Downtown LA via Garvey Av and Cesar Chavez Av Rapid	770	3,183			
San Pedro - Willowbrook via Vermont Av, Wilmington Av	205	1,699	205	1,270	
San Pedro - Harbor Gateway Transit Center via Avalon Bl	246	1,787	246	2,124	85.3%
San Pedro - Harbor Gateway Transit Center	550	491			
Artesia - Pasadena via Atlantic BI and Fair Oaks Av	260	7,944	260	6,013	85.1%
Pasadena - Altadena via Fair Oaks Av			660	750	00.170
LAX - Long Beach via Sepulveda BI, Pacific Coast Hwy	232	3,585	232	3,023	84.3%
Normandie Av	206	6,818	206	5,741	84.2%
Ventura Bl	150	8,221	150	1,688	
Topanga Canyon BI (245); Reseda/Ventura (240)	245	853	240	6,417	83.5%
Reseda BI - Ventura BI - Van Nuys BI Rapid (744)/De Soto Av (244)	744	1,455	244	686	
Laurel Canyon Bl	230	1,978	230	1,648	83.3%
Figueroa St	081	9,036	081	7,372	82.9%
Downtown LA - Eagle Rock via York Bl	083	1,746	182	1,567	02.370
Hollywood - Pasadena	180	10,032	180	6,720	82.8%
Hollywood BI Fairfax BI	217	5,380	217	6,043	02.070
Downtown LA - South Arcadia via Huntington Dr/Las Tunas Dr	078	5,687	078	3,975	82.5%
Rose Hill - Arcadia via Huntington Dr			179	720	02.070
Imperial Hwy	120	2,132	120	1,749	82.0%

Description	Sept 2019 Line/	Average Saturday Boardings	Sept 2023 Line/	Average Saturday Boardings	Saturday Ridership Recovery
La Brea Av	Group	09-2019	<b>Group</b> 212	09-2023	<b>2023 Versus 2019</b> 80.3%
	212 014/037	7,818	014/037	6,278	
Beverly BI - W Adams BI		8,741	460	6,884	78.8%
Downtown LA - Norwalk - Disneyland	460	3,816	460 134	3,002	78.7%
Santa Monica - Malibu via Pacific Coast Hwy	534	1,242		971	78.1%
Plummer St, Woodman Av	158	1,085	158	846	78.0%
Sunset BI (became Sunset BI - Alvarado St)	002	8,251	002	13,266	77.5%
Alvarado St	200	8,873			
Paramount Bl	265	786	265	590	75.1%
Canoga Station - Thousand Oaks	161	740	161	548	74.1%
Olympic Bl Local	028	8,800	028	6,515	74.0%
G Line BRT - North Hollywood - Canoga Park - Chatsworth	901	12,101	901	8,926	73.8%
Avalon Bl, W 7th St	051	18,452	051	13,466	73.0%
Broadway Local	045	11,540	045	9,613	
Broadway Rapid	745	3,094			71.7%
Compton BI, Somerset BI			127	873	
Studio City - Beverly Hills	218	568	218	407	71.6%
Downtown LA - Artesia via Long Beach Bl	060	11,056	060	9,424	71.4%
Long Beach BI Rapid	760	2,151			/ 1.4 /0
Pico Bl	030	9,356	030	6,637	70.9%
Telegraph Rd	062	2,752	062	1,935	70.3%
Valley Bl	076	6,163	076	4,190	68.0%
Coldwater Canyon Av - Devonshire St	167	1,338	167	882	65.9%
Washington BI/W Jefferson BI	035/038	4,505	035/038	2,881	63.9%
La Tijera Bl, Exposition Bl	102	1,767	102	1,053	59.6%
Melrose Av/Main St/San Pedro St	010/048	6,478	010/048	3,856	59.5%
Vermont Av Rapid	754	14,126	754	7,921	56.1%
Riverside Dr	096	822	096	421	51.2%
Warner Center Shuttle	601	717	601	226	31.5%
Alondra Bl	-		128	564	New Saturday service
Artesia Bl	130	1,363	Trans	sferred to Mu	nicipal Agencies

Description	Sept 2019 Line/ Group	Average Saturday Boardings 09-2019	Sept 2023 Line/ Group	Average Saturday Boardings 09-2023	Saturday Ridership Recovery 2023 Versus 2019
Saticoy St			169	991	New Saturday service
Boyle Av	254	417	Discontinued		
South Gate Shuttle	612	962	Replaced with Micro		

### ATTACHMENT D

### Sunday Ridership Recovery Comparison by Line/Line Group - September 2019 to September 2023

Description	Sept 2019 Line/ Group	Average Sunday Boardings 09-2019	Sept 2023 Line/ Group	Average Sunday Boardings 09-2023	Sunday Ridership Recovery 2023 Versus 2019
CSULA - City Terrace Shuttle	665	140	665	257	183.9%
North Hollywood - Pasadena Express	501	424	501	593	139.8%
Nordhoff St	166	1,977	166	2,549	128.9%
Sherman Way	163	3,910	162	4,990	127.6%
LAC USC Medical Center Shuttle	605	729	605	902	123.7%
Vanowen St	165	2,857	165	3,514	123.0%
Rosemead Bl	266	2,582	266	3,073	119.0%
Van Nuys Bl Local	233	7,054	233	8,315	
Sepulveda Bl	234	5,112	234	4,643	118.0%
Sepulveda BI - Westside Rapid	744	1,369	761	3,016	
Roscoe Bl	152	4,646	152	5,381	115.8%
E. Olympic BI/W 8th St	066	5,630	066	6,380	113.3%
Downtown LA - San Fernando Rd - North Hollywood	094	4,352	094	4,250	
Burbank BI Oxnard St			154	311	
Riverside Dr	155	534	155	665	112.9%
Magnolia BI North Hollywood - Burbank - Glendale	183	548			
Burbank - Sylmar San Fernando Rd			294	909	
Canoga Station - Thousand Oaks	161	414	161	467	112.8%
Downtown LA - Foothill BI	090	2,545	090	3,186	
Hollywood Way	222	795	222	576	
Lankershim Bl	224	3,629	224	3,465	109.7%
Whiteoak Av, Woodley Av	237	814	237	870	
Foothill BI			690	440	
Central Av	053	5,522	053	6,049	109.6%
Slauson Av	108	6,411	108	6,922	108.0%
Rosecrans Av	125	2,033	125	2,174	107.0%
Gage Av	110	2,993	110	3,131	104.6%
Compton Av	055	3,440	055	3,585	104.2%

Description	Sept 2019 Line/ Group	Average Sunday Boardings 09-2019	Sept 2023 Line/ Group	Average Sunday Boardings 09-2023	Sunday Ridership Recovery 2023 Versus 2019
Hawthorne BI, Rancho Palos Verdes	344	720	344	746	103.6%
Westwood - Pacific Palisades	602	402	602	416	103.3%
Balboa Bl	236	504	236	513	101.8%
3rd St	016	12,144	016	11,872	100 40/
Robertson BI - Beverwil Dr			617	321	100.4%
Downtown LA - Glenoaks BI - Sylmar	092	3,183	092	3,182	100.0%
Crenshaw Bl	210	8,439	210	8,423	99.8%
Vermont Av Local	204	14,057	204	13,975	99.4%
Century Bl	117	4,709	117	4,673	99.2%
Soto St	251	5,570	251	6,329	99.2%
Soto St - Griffin Av	252	808			99.2%
Huntington Park Shuttle	611	870	611	863	99.1%
Imperial Hwy	120	1,742	120	1,709	98.1%
Vernon Av, La Cienega Bl	105	8,778	105	8,545	97.3%
Victory BI	164	2,679	164	2,607	97.3%
Pasadena - Highland Park - Eastern Av	256	582	256	361	
Fremont Av - Eastern Av - Garfield Av			258	746	
El Monte - Pasadena via Temple City Bl and Del Mar Bl	267	1,021	267	426	
El Monte - Pasadena via Baldwin Av	268	844	268	334	07.00/
Arcadia - Santa Anita Av - El Monte			287	207	97.2%
Downtown LA - San Gabriel Bl	487	886	487	352	
Pasadena - Altadena via Lake Av, Lincoln Av			662	1,200	
Los Robles Av (687); Allen Av (686)	687	553	686	154	
Montebello - Downtown LA via Cesar Chavez Av	068	3,839			
El Monte - Downtown LA via Garvey Av and Cesar Chavez Av	070	6,827	070	8,989	
Downtown LA - City Terrace - CSULA	071	432			96.3%
Montebello - Downtown LA - Monterey Park via Cesar Chavez Av & City Terrace			106	1,703	1
Whitter BI W 6th St	018	9,681	018	13,203	95.8%
Wilshire BI Local	020	5,748	020	5,197	
Wilshire BI Rapid	720	15,924	720	11,624	

Description	Sept 2019 Line/ Group	Average Sunday Boardings 09-2019	Sept 2023 Line/ Group	Average Sunday Boardings 09-2023	Sunday Ridership Recovery 2023 Versus 2019	
Western Av Local	207	15,777	207	15,081	95.6%	
Santa Monica BI Local	004	10,591	004	16,750	05.00/	
Santa Monica BI Rapid	704	6,980			95.3%	
Ventura Bl	150	6,566	150	1,575		
Topanga Canyon Bl	245	309	244	588	95.2%	
Reseda BI - Ventura BI - Van Nuys BI Rapid	744	1,369	240	5,688		
San Pedro - Willowbrook via Vermont Av, Wilmington Av	205	1,411	205	1,140		
San Pedro - Harbor Gateway Transit Center via Avalon Bl	246	1,377	246	1,923	95.1%	
San Pedro - Harbor Gateway Transit Center	550	433				
Santa Monica - Malibu via Pacific Coast Hwy	534	920	134	858	93.3%	
Figueroa St	081	6,715	081	6,337		
Downtown LA - Eagle Rock via York Bl	083	1,470			92.4%	
East Hollywood - Highland Park - Rose Hill			182	1,222		
LAX - Long Beach via Sepulveda BI, Pacific Coast Hwy	232	2,977	232	2,736	91.9%	
J Line BRT - El Monte - Downtown LA - Harbor Transitway - San Pedro	910/950	7,126	910/950	6,500	91.2%	
Sunset BI (became Sunset BI - Alvarado St)	002	6,609	002	12,134	00 70/	
Alvarado St	200	6,768			90.7%	
Manchester Av - Firestone Bl	115	6,879	115	6,236	90.6%	
Florence Av	111	9,227	111	8,295	89.9%	
MLK - Hawthorne Bl	040	8,997	040	8,049	89.5%	
La Brea Av	212	6,237	212	5,567	89.3%	
Normandie Av	206	5,954	206	5,240	88.0%	
Artesia - Pasadena via Atlantic BI and Fair Oaks Av	260	6,472	260	4,875	07.50/	
Pasadena - Altadena via Fair Oaks Av			660	788	87.5%	
Venice BI Local	033	6,146	033	11,033	07 10/	
Venice BI Rapid	733	6,525			87.1%	
Hollywood - Pasadena	180	8,335	180	5,710	95.00/	
Hollywood BI Fairfax BI	217	4,624	217	5,420	85.9%	
Broadway Local	045	8,769	045	8,335		
Compton BI, Somerset BI			127	826	85.5%	
Broadway Rapid	745	1,940				

Attachment D – Sunday Ridership Recovery by Line and Line Group

Description	Sept 2019 Line/ Group	Average Sunday Boardings 09-2019	Sept 2023 Line/ Group	Average Sunday Boardings 09-2023	Sunday Ridership Recovery 2023 Versus 2019	
Laurel Canyon Bl	230	1,609	230	1,376	85.5%	
Hoover St	603	5,203	603	4,837	84.6%	
Silver Lake	201	517			04.0%	
Downtown LA - South Arcadia via Huntington Dr/Las Tunas Dr	078	4,920	078	3,472	84.4%	
Rose Hill - Arcadia via Huntington Dr			179	679	04.4%	
Downtown LA - Norwalk - Disneyland	460	3,197	460	2,614	81.8%	
G Line BRT - North Hollywood - Canoga Park - Chatsworth	901	9,754	901	7,929	81.3%	
Beverly BI - W Adams BI	014/037	7,468	014/037	5,959	79.8%	
Avalon BI, W 7th St	051	13,673	051	10,748	78.6%	
Downtown LA - Artesia via Long Beach Bl	060	10,104	060	7,842	77.6%	
Telegraph Rd	062	2,294	062	1,765	76.9%	
Paramount Bl	265	650	265	492	75.7%	
Plummer St, Woodman Av	158	848	158	631	74.4%	
Pico Bl	030	8,163	030	6,000	73.5%	
Washington BI/W Jefferson BI	035/038	3,054	035/038	2,219	72.6%	
Coldwater Canyon Av - Devonshire St	167	1,143	167	824	72.1%	
Valley Bl	076	4,946	076	3,545	71.7%	
Riverside Dr	096	568	096	405	71.2%	
Melrose Av/Main St/San Pedro St	010/048	4,863	010/048	3,446	70.9%	
Olympic Bl Local	028	7,463	028	5,292	70.9%	
Vermont Av Rapid	754	9,674	754	6,371	65.9%	
La Tijera BI, Exposition BI	102	1,552	102	958	61.7%	
Studio City - Beverly Hills	218	443	218	271	61.3%	
Warner Center Shuttle	601	630	601	239	37.9%	
Alondra Bl			128	482	New Sunday Service	
Tampa Av & Winnetka Av			242/243	759	New Sunday Service	
Artesia Bl	130	1,006	Transferred to Municipal Agencies			
Saticoy St			169	744	New Sunday Service	
South Gate Shuttle	612	834		Replaced w	vith Micro	

Attachment D – Sunday Ridership Recovery by Line and Line Group



# NextGen Bus Plan Ridership Update

This report provides an assessment of Metro bus system ridership. Ridership is analyzed by:

- Day type (Weekday, Saturday, Sunday)
- Service area
- Equity Focus Communities (EFCs)/non-EFCs
- Time period
- Line/line group, and

The national operator shortage required Metro to reduce service by 10% in February 2022 to stabilize service reliability. Full restoration of service was completed in phases by December 2022. Metro now has full bus operator staffing as of August 2023.

The report compares the ridership from 2019 (pre-pandemic) through September 2023 when service was both fully restored and fully staffed. Another update will be provided in early 2024 on bus ridership through second half of 2023.

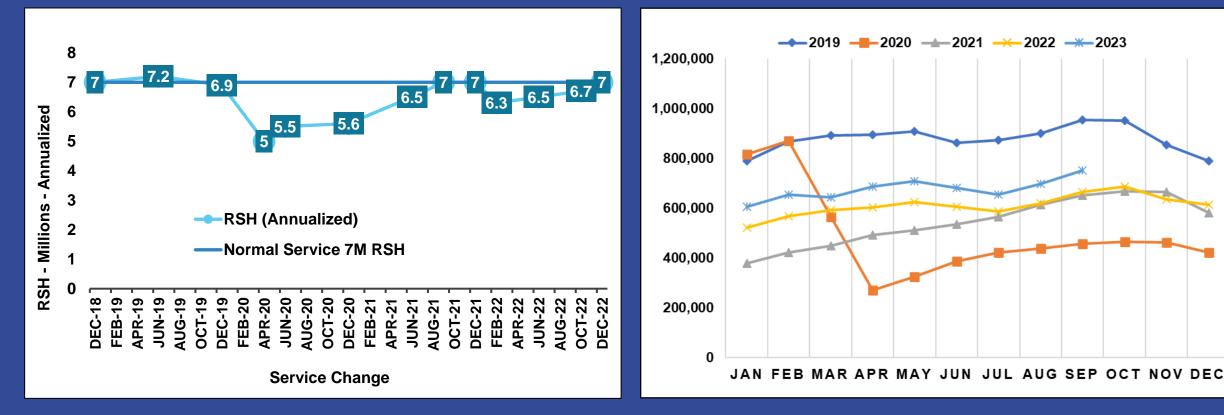


# **Service Levels and Weekday Ridership**

Metro Bus Service Annual Revenue Service Hour Levels 2019 – 2022

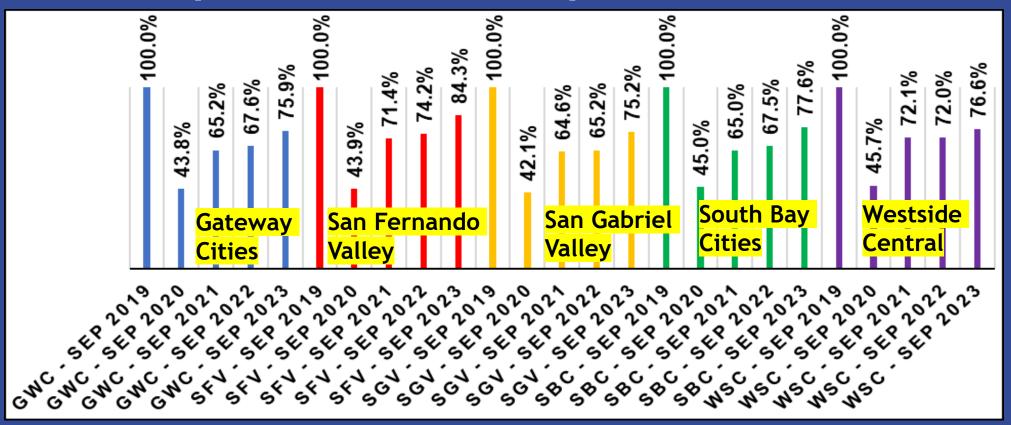
Metro

Average Weekday Ridership 2019 – 2023



After the pandemic low point in 2020, weekday ridership recovered strongly in 2021 into 2022, together with service restoration, NextGen Bus Plan, LIFE and GoPass implementations. Growth was slower in the second half of 2022 but grew strongly in 2023 after full service was restored.

### Average Weekday Ridership Recovery by Service Area September 2019 – September 2023



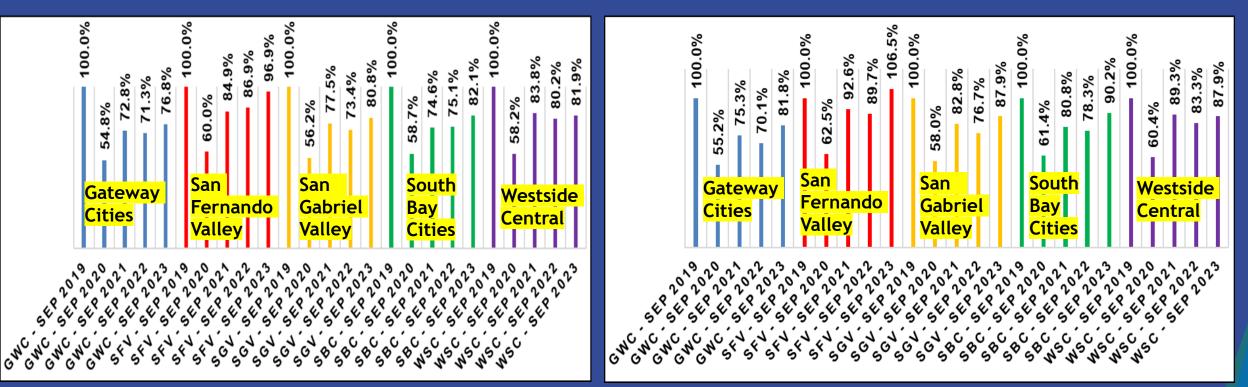
Weekday bus ridership has grown year over year in each of Metro's regions, with a notably strong recovery in the San Fernando Valley, and big growth in all areas between September 2022 and 2023 when NextGen service was fully implemented, and service was most reliable. Similar patterns of growth regionally were also seen on weekends, again led by the San Fernando Valley.



### Saturday Sunday Ridership Recovery by Service Area

### **Average Saturday Bus Ridership 2019–2023**

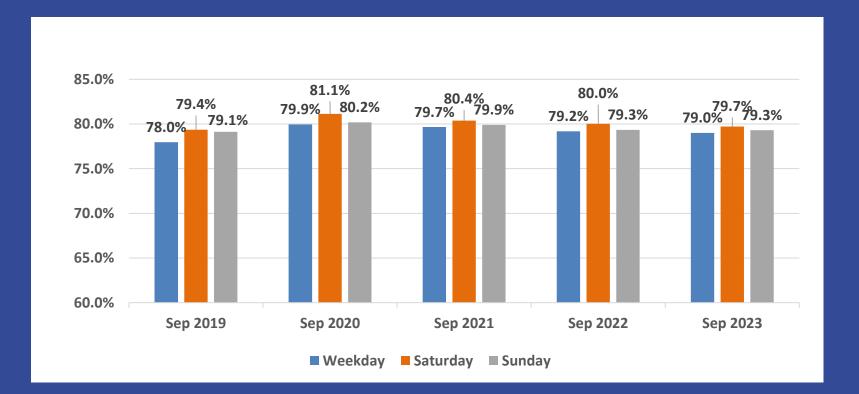
### **Average Sunday Bus Ridership 2019-2023**



After the pandemic low point in 2020, ridership recovered strongly in 2021 into 2022 with service recovery, NextGen Bus Plan, and LIFE and GoPass programs. By the second half of 2022, weekend bus ridership growth had slowed, but grew more strongly in 2023. Sunday ridership is closest to achieving pre-pandemic levels.



### Ridership Percentage in Equity Focus Communities September 2019 – September 2023

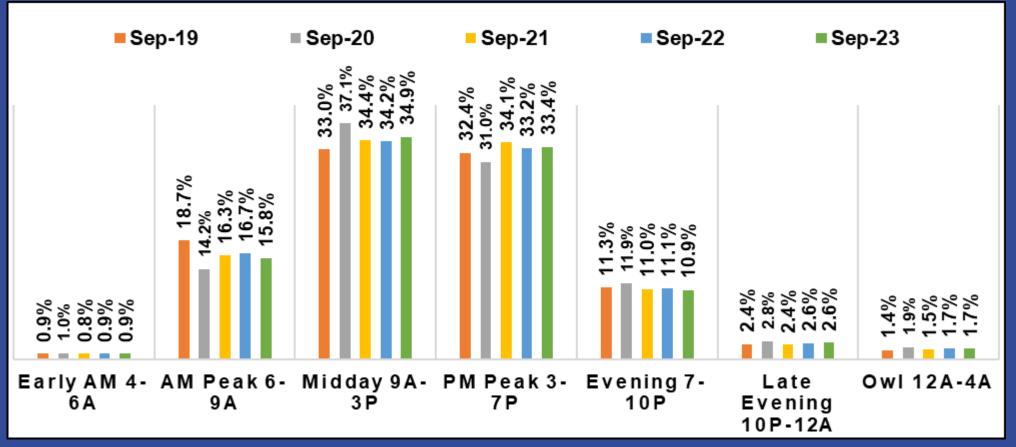


Equity-Focus Community share of bus ridership (boardings) grew most in 2020 when people travelled for essential jobs and services. The EFC share remains above pre-pandemic levels suggesting the NextGen Bus Plan has been beneficial to these communities.

M

Metro

### Weekday Ridership by Time Period – 2019 to 2023



Midday share of ridership grew during the pandemic and has remained higher than pre-pandemic, likely in response to NextGen Bus Plan's increased off-peak service frequencies. AM peak remains subdued compared to pre-pandemic. People have changed their transit usage due to telecommuting and more off-peak travel to service jobs. In contrast, PM Peak slightly increased.

### Average Weekday Line/Group Ridership Recovery

Average % Ridership Recovery Sept 2023 versus Sept 2019	Number of Weekday Lines/ Line Groups	Number of Saturday Lines/ Line Groups	Number of Sunday Lines/ Line Groups
> = 140.0%	0	0	1
130.0 – 139.9%	0	2	1
120.0 – 129.9%	0	3	5
110.0 – 119.9%	1	1	6
100.0 – 109.9%	5	8	11
90.0 - 99.9%	20	13	21
80.0 - 89.9%	15	25	13
70.0 – 79.9%	18	15	13
60.0 - 69.9%	13	3	3
50.0 - 59.9%	7	4	0
40.0 - 49.0%	1	0	0
30.0 – 39.9%	2	1	1
Total Lines/Line Groups	82	75	75

- In September 2023, ridership recovered to above prepandemic levels on 6 weekday, 14 Saturday, and 24 Sunday lines.
- Weekday system overall had 78.6% ridership recovery:
  - Above average recovery was most common for the NextGen higher frequency with Tier 1 & 2 lines:
    - 31 out of 49 Tier 1 & 2 lines/line groups with 15 minute or better frequency
    - 13 out of 33 Tier 3 & 4 lines/line groups with 20-60 minute frequency
- Saturday/Sunday system overall ridership recovery 86.0%/92.4%, with above average recovery also common for the higher frequency NextGen Tier 1 & 2 lines/line groups :
  - Saturday: Tiers 1 & :2 26 out of 49 lines/line groups; Tiers 3 & 4: 11 out of 26 lines/line groups
  - Sunday: Tiers 1 & 2: 26 out of 49 lines/line groups; Tiers 3 & 4: 13 of 26 lines/line groups
- The NextGen lines with improved frequencies appear to be most supportive of ridership recovery.

8

## Conclusions

During the pandemic with Stay-at-Home orders, ridership declined sharply and trips were shorter-distance because people were not commuting as much and traveling closer to home. Non-peak ridership was more resilient as those trips were largely composed of essential workers and/or essential trips.

As ridership has recovered, off-peak and EFC shares of ridership have remained larger than pre-pandemic, and the average trip length has remained shorter. These outcomes are consistent with the intent of the NextGen Bus Plan to grow ridership in off-peak and shorter-distance travel markets.

As at September 2023, weekday ridership is around 76%, Saturday 86%, and Sunday ridership is 92% of pre-COVID ridership. Year over year ridership growth returned in the first half of 2023 after full service was restored, following slower growth in the second half of 2022 when service levels were reduced and the numbers of cancellations were high.

Metro is now fully staffed with bus operators, allowing for more reliable service. 2023 has presented an opportunity for the full benefits of improved frequency and accessibility under the NextGen Bus Plan to be enjoyed by riders.

Ridership recovery has been strongest where service frequencies and accessibility have been improved. These benefits of NextGen should be promoted together with continued promotion of programs such as fare capping, LIFE, and GoPass to accelerate ridership recovery and achieve the growth intended from NextGen. Metro

# Questions? Thank You





**Board Report** 

File #: 2023-0636, File Type: Informational Report

Agenda Number: 28.

### OPERATIONS, SAFETY, AND CUSTOMER EXPERIENCE COMMITTEE NOVEMBER 16, 2023

### SUBJECT: DECEMBER 2023 SERVICE CHANGE

ACTION: RECEIVE AND FILE

#### RECOMMENDATION

RECEIVE AND FILE a status report on the December 2023 bus and rail service changes effective Sunday December 10, 2023.

#### <u>ISSUE</u>

Metro annually makes service changes each June and December to improve service for our riders. These service changes are also coordinated with bus and rail operator assignment changes required by the labor contract. December 2023 service change will focus on enhancements to routes and schedules to help customers more conveniently and reliably travel where and when they need.

#### BACKGROUND

Metro full bus service levels have been restored as of December 2022 and are being delivered reliably. Metro has therefore resumed the usual practice of twice-annual (June and December) service changes to improve the customer experience through revised transit routes and schedules.

The previous service change was implemented in June 2023. There were no issues encountered with implementation. Ridership continues to increase, with latest data from September 2023 showing year over year growth of 12.8 percent for bus weekday and 6.9 percent for rail weekday, with similar growth weekends. Average weekly bus on time performance has also improved from 70.7 percent (June -October 2022) to 72.8 (June to October 2023), likely in response to the many revised bus schedules for improved reliability that were implemented in June 2023 service change.

### **DISCUSSION**

#### Rail Service:

Rail service ridership continues to recover, with September 2023 average weekday rail ridership at 69.5 percent, average Saturday rail ridership at 87.6 percent, and average Sunday rail ridership at 91 percent of pre-COVID levels, compared with 60.0 percent weekday 79.3 percent Saturday, and 85.0 percent Sunday ridership recovery in September 2022. In order to continue to support rail ridership

recovery and reduce average wait times for customers, rail service frequencies will be improved as follows:

- A Line (Long Beach Downtown LA Azusa) and E Line (Santa Monica Downtown LA East LA) service will increase from every 10 minutes to every 8 minutes weekday morning and afternoon peak hours (6-9 am, 3-6 pm) and from every 12 minutes to every 10 minutes midday weekday and daytime weekends.
- C Line (Norwalk Redondo Beach) will maintain 10-minute peak service weekday but will increase from 15 minutes to every 10 minutes midday weekday and daytime weekends
- K Line (Expo/Crenshaw Westchester/Veterans) will maintain 10-minute peak service weekday but will increase from 12 minutes to every 10 minutes midday weekday. Weekend service will operate every 20 minutes to allow work to continue in preparation for the linking of the C Line and K Line and the opening of the LAX/Metro Transit Center by the end of 2024

Two additional late-night trips in each direction will be added to the end of the day for the A and E Lines to respond to customer requests for later last trips on rail.

The B and D Line subway services between North Hollywood, Wilshire/Western, and Union Station will continue to operate every 12-minutes daytime weekdays and weekends, which was implemented in September 2023.

### Bus Service:

The December 2023 bus service changes will include a range of customer experience improvements, with enhancements to routes and schedules to help people more conveniently and reliably travel where and when they need to.

Operator and customer feedback and system data reports on ridership and on-time performance are reviewed to identify lines with ongoing low on-time performance or crowding. On time performance has averaged 72.0 percent in 2023, below the goal of 78.5 percent. Of Metro's total of 120 bus lines, 37 weekday, 29 Saturday, and 24 Sunday bus schedules have been reviewed and adjusted to better match current traffic levels and travel times in support of improved on time performance and to ensure operators have enough time to take rest breaks at the end of each trip.

Trips will be added or extended on ten bus lines (Lines 14 (Beverly BI), 28 (W. Olympic BI), 33 (Venice BI), 45 (Broadway), 48 (Main/San Pedro), 55 (Compton Av), 251 (Soto St), 460 (Downtown LA-Norwalk-Disneyland), 487 and 489 (Downtown LA-San Gabriel/Temple City) to provide enough weekday service to accommodate all riders without crowding.

The following late evening service improvements will be made:

- Improve Line 240 (Universal City Station Northridge via Ventura BI and Reseda BI) frequency from every 30 to every 20 minutes to match B Line subway service to improve passenger connections between these two lines.
- Adding one extra late-night trip for Line 910 leaving El Monte Station 10:49 p.m. to Downtown LA and Harbor Gateway Transit Center weekdays to extend the period of 20-minute service evenings to help customers travelling after special events.

Improved Connectivity:

To improve regional connectivity, the Slauson Av Line 108 bus service will be extended further east into the City of Pico Rivera to make a much-requested connection with Rosemead Bl Line 266 bus service, as well as creating a branch of the Slauson Av Line 108 bus service to Eastern Av for improved access to the Richard L Slawson Occupational Center of Los Angeles Unified School District at Rickenbacker Rd.

Other bus route or stop changes in response to customer requests or operational issues include:

- Line 51 (Avalon BI CSU Dominguez Hills): add bus stop at Central Av at Victoria St Carson for improved local access.
- Line 53 (Central Av CSU Dominguez Hills): at Willowbrook modify the route to travel via Imperial Highway and 120<sup>th</sup> St to/from Willowbrook/Rosa Parks Station rather than using the often congested I-105 freeway, to ensure more reliable service for customers.
- Line 66 (E. Olympic BI/8<sup>th</sup> St): add new stop on Whittier BI for more convenient access to Commerce Center.

Line 90 (Foothill BI): reroute to terminate at the Historic Broadway A/E Line light rail station in downtown LA

- Line 152 (West Hills to North Hollywood via Roscoe BI): reroute eastbound via Roscoe BI to Lankershim BI to match the westbound route to simplify service and improve local access for customers.
- Line 167 (Chatsworth Studio City): will not deviate into Sepulveda VA Clinic after 7 pm nightly due to low ridership evenings when the clinic is closed, to avoid delaying other riders.
- Line 180 (Hollywood- Glendale-Pasadena): reroute via Central Av rather than Brand Bl in downtown Glendale to improve customer access to key destinations.
- Line 602 (Sunset BI Pacific Palisades): alter to travel via Kinross Av/Veteran Av at Westwood instead of Westwood BI/Wilshire BI due to Purple Line Extension construction.
- LAC-USC Medical Center I-10 Busway Station: rename to "LA General Hospital" station, reflecting the recent renaming of the LA County Medical Center.

### Customer Information:

As is the practice for all service changes, printed materials on the changes will be distributed starting two weeks ahead of the service change (summary brochure, service change notices, and updated schedules for each impacted line) on buses, a dedicated service change section on Metro.net, social media and Source posts, and on signage installed at all impacted bus stops informing riders of the changes. In addition, implementation will be supported by staff assigned to stops with more significant changes as well as Metro Ambassadors throughout the system during the week leading up to the change to inform riders of route changes.

### EQUITY PLATFORM

The December 2023 service change focuses on improving customer experience with revised bus

### File #: 2023-0636, File Type: Informational Report

schedules to improve service reliability (on-time performance), extra bus trips for added capacity, and rerouted bus services for improved connectivity for our riders. The Metro light rail network will also see increased peak and off peak/weekend service frequencies to reduce customer wait times.

Of the 37 weekday, 29 Saturday, and 24 Sunday bus lines with revised schedules for improved reliability, 17 weekday, 16 Saturday, and 10 Sunday lines have over 50% of their route miles operating in Equity Focus Communities (EFCs). Overall service cancellations are low and should continue to remain very low (< 1.0 percent) as additional new bus operators are hired to achieve and maintain full operator staffing levels. Four of the nine lines with extra trips added for more capacity are lines with over 50 percent of their line located in EFCs.

The continued operation of the full 7 million revenue hours of service based on the NextGen Bus Plan allocates the highest service levels to EFCs where high-quality transit is a key to enhanced mobility for residents. Metro will continue to receive feedback on the changes directly from riders at bus stops, from Metro Ambassadors, through the Metro Customer Service call center, the Metro website, social media blog (The Source), and at the five Metro Regional Service Council meetings each month.

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

These service changes support strategic plan goal #1: Provide high quality mobility options that enable people to spend less time traveling. The service changes also respond to the sub-goal of investing in a world class bus system that is reliable, convenient, safe, and attractive to more users for more trips.

### NEXT STEPS

Staff will implement the December 2023 service change on Sunday, December 10, 2023. with the marketing of the changes occurring beginning Monday November 27, and continuing up to and beyond the implementation date.

Prepared by: Joseph Forgiarini, Senior Executive Officer, Service Development (213) 418-3400

Reviewed by: Conan Cheung, Chief Operations Officer, (213) 418-3034

ie N. Wiggins Chief Executive Officer



December 2023 Bus and Rail Service Improvements Effective Sunday 12/10/23

> Operations, Safety, and Customer Experience November 16, 2023

# **December 2023 Service Change Themes**

Service Quality	Valuing Our Employees	NextGen
<ul> <li>Improved Rail Service Frequencies</li> <li>Continued operation of full NextGen Bus Plan Service Level (7M Revenue Service Hours)</li> <li>Adjust services for improved reliability (on time performance)</li> </ul>	<ul> <li>Match schedules to increased traffic conditions</li> <li>Extra trips to spread out loads</li> </ul>	<ul> <li>Small number of route changes to improve local access and connections for our riders</li> <li>Improved frequencies and added trips for shorter wait times</li> <li>Other minor changes due to construction impacts</li> </ul>
Metro		

# **Rail Service Frequency Improvements**

A Line (Long Beach – Azusa) and E Line (Santa Monica – East LA) frequency and span improvements:

- Weekday peak hour trains every 8 minutes instead of 10 minutes.
- Weekday midday & Saturday/Sunday 9am-7pm trains every 10 minutes instead of 12 minutes.
- Two additional trains will be added at the end of the nightly schedule each direction, extending service by an extra 40 minutes each night, weekdays and weekends.

C Line (Norwalk – Redondo Beach) frequency improvements:

- Weekday midday, Saturday/Sunday 9am-7pm trains every 10 minutes instead of 15 minutes.
- Weekday peak hour frequency remains at every 10 minutes.

K Line (Expo/Crenshaw – Westchester/Veterans) frequency improvements:

- Weekday midday trains every 10 minutes instead of 12 minutes.
- Weekday peak hour frequency remains at every 10 minutes.
- Note: K Line trains every 20 minutes all day Saturday & Sunday due to construction/testing to connect the C & K Lines and open new LAX/Metro Transit Center Station by end of 2024.



# **Bus Service Reliability**

- The December 2023 service change will continue the operation of the full NextGen Bus Plan frequencies with 7.0 million revenue service hours
- Service is being delivered more reliably thanks to bus operator numbers reaching full requirements since August
- Revised schedules for 37 weekday, 29 Saturday, 24 Sunday bus lines to ensure times are realistic and improve reliability (on time performance)
- Extra or extended trips on eleven lines to accommodate more riders/avoid crowding, and help riders make connections more reliably



# **Bus Route Changes**

- Line 53 (Central Av) reroute on 120<sup>th</sup> St, Imperial Hwy at Willowbrook to avoid delays for riders on I-105 freeway
- Line 90 (Foothill BI) modified in Downtown LA to help riders connect with Regional Connector light rail services
- Extend Slauson Av Line 108 east to Rosemead Bl at Pico Rivera and north to Commerce for improved local access and connections to other bus lines for riders
- Line 180 (Hollywood Pasadena) rerouted back to Central Av through downtown Glendale to help riders access key destinations
- Line 602 (Westwood Pacific Palisades) rerouted in Westwood to avoid delays for riders due to Purple Line Extension construction at Westwood BI/Wilshire BI



# Implementation

- Internal coordination through implementation team
- Staff will support customers in areas with significant changes
- Informational signs will be installed at all bus stops impacted by route changes.
- Updated bus stop blades will be installed by service change date
- Customer information released beginning 11/27, including digital alert signs, brochures on buses & at customer service centers.
- Updates to online "MyBus" information portal
- Social media, blog post, email blasts beginning 11/27
- Printed schedules will be available on buses and at usual outlets





# Thank You!





**Board Report** 

File #: 2023-0661, File Type: Informational Report

Agenda Number: 29.

# OPERATIONS, SAFETY, AND CUSTOMER EXPERIENCE COMMITTEE NOVEMBER 16, 2023

# SUBJECT: MONTHLY UPDATE ON PUBLIC SAFETY

ACTION: RECEIVE AND FILE

# RECOMMENDATION

RECEIVE AND FILE the Public Safety Report.

# <u>ISSUE</u>

Metro is committed to providing outstanding trip experiences for all users of the transportation system. In furtherance of the Vision 2028 Plan, Metro implemented a multi-faceted plan to improve safety and the perceptions of safety for both riders and employees. The following summarizes current initiatives aimed at accomplishing this objective and recent public safety trends.

# BACKGROUND

At its February 2022 meeting, the Board received and filed a Reimagining Public Safety Framework (Framework), which outlines a human-centered approach to public safety guided by the principle that everyone is entitled to a safe, dignified, and human experience. This Framework reflects Metro's Public Safety Mission and Values statements, which were adopted by the Board in December 2021. In March 2023, the Board adopted a revised Code of Conduct, a Bias-Free Policing Policy, and a Public

Safety Analytics Policy.

These actions align with numerous initiatives to improve safety and the perception of safety on the system, including the increased, strategic, and layered deployment of personnel (comprised of customer-centered ambassadors and community intervention specialists, as well as transit security and law enforcement officers) and the piloting of safety and security interventions to address specific concerns (e.g., drug use and crime) on the system.

# **DISCUSSION**

System Security & Law Enforcement (SSLE) is responsible for overseeing safety initiatives on the Metro system and works in coordination with other departments, including Operations and Customer Experience, to implement strategies to advance this objective. The following is a snapshot of activities, as well as performance and outcome-related data for the month of September which is the

Printed on 11/9/2023 powered by Legistar™ most recent month for which systemwide law enforcement data is available.

# **DEPLOYMENTS AND TRENDS**

# Multi-Layered Deployment

On July 10, Metro established a multi-layered deployment utilizing all resources from the public safety ecosystem with applied lessons learned from the Drug-Free Campaign and Supplement Deployment, both of which were rolled out earlier this year. This strategic, proactive security model has had significant impact across the entire rail system, including end-of-line stations and mid-point (Focus) stations by decreasing the number of non-destination travelers who are required to leave the rail system at the end of the night when the system closes. The deployment was created by representatives and executives from all the Metro safety layers including Metro Transit Security, Metro Ambassadors, Social Service Outreach Teams, Contract Security and Law Enforcement, as well as deployment consultants, with equity, customer experience, and accountability in mind.

The following reflects the results of the deployment through the end of September and impacts on curtailing crime on the system.

# Systemwide Crime Continues to Trend Downward

Systemwide ridership for the month of September reached a post-pandemic high of 24,671,730. Overall systemwide Part 1 crimes (violent or major crime classification) declined by 17% (117 vs 141) when comparing August to September. The decline was associated to a drop of 41.8% (32 vs 55) in aggravated assaults and 21.6% (29 vs 37) in robberies. By mode, this correlates to a decrease of 6.4% (88 vs 94) on the rail system with specific declines in aggravated assaults of 37.1% and robberies of 15.4%. In addition, bus systemwide Part 1 crimes experienced a significant decrease of 38.3% (29 vs 47). This relates to a decrease of aggravated assaults by 50%, robberies by 36.4%, and operator aggravated assaults by 66.7%. This was attributed to the systemwide multi-layered public safety deployment that ensures only individuals for the purpose of transit are on the system. Furthermore, the decrease is attributed to the Metro Transit Security Bus Riding Teams riding the top 10 bus lines with the highest number of operator assaults.

Part 2 crimes (less serious crime classification) systemwide increased by 47.5% (295 vs 200) in comparison from August to September. The increase was a direct result of a significant rise of 145% (98 vs 40) in trespassing arrests, 26.2% (106 vs 84) in battery incidents, and 22% in narcotic arrests. The rail system Part 2 crimes triggered the significant increase in overall rail crime by 60.1% (229 vs 143). This increase was based on trespassing arrests of 151% (98 vs 39), narcotics arrests of 37% (40 vs 29), and batteries of 34% (74 vs 55).

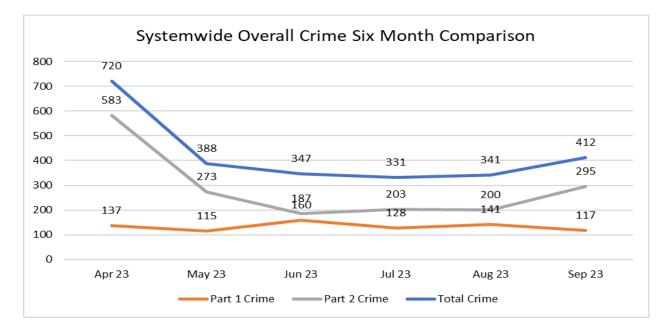
The substantial increase in the number of trespassing arrests is directly attributed to our increased focus on addressing trespassers both in our ancillary areas and on our system. For the ancillary areas, Contract Security began conducting sweeps a minimum of three times a day and contacting the Security Operations Center to coordinate law enforcement support for arrests and performed 22 ancillary trespasser removals for September. Another contributing factor to the increase in

## File #: 2023-0661, File Type: Informational Report

trespassing arrests includes the multi-layered roving teams comprised of law enforcement and Metro Transit Security conducting trespassing investigations on the system, inclusive of those found riding our system with no proof of fare. SSLE will continue to monitor trespassing crimes as we transition to a new Contract Security contract with proactive accountability at below grade coverage areas. SSLE will also deploy an additional 87 contract security officers in support of the enhanced ancillary sweeps during the 10 p.m. - 6 a.m. shift for 24/7 coverage. This may likely result in an initial increase in trespassing incidents and/or arrests as individuals attempt to shelter on the system, especially during the winter months. SSLE's goal is to deter and work toward a 0% trespasser rate in all ancillary areas.

Bus systemwide Part 2 crimes increased by 15.8%, which was associated with vandalism (7 vs 2), battery (32 vs 29), and battery on operator (11 vs 7) compared to August.

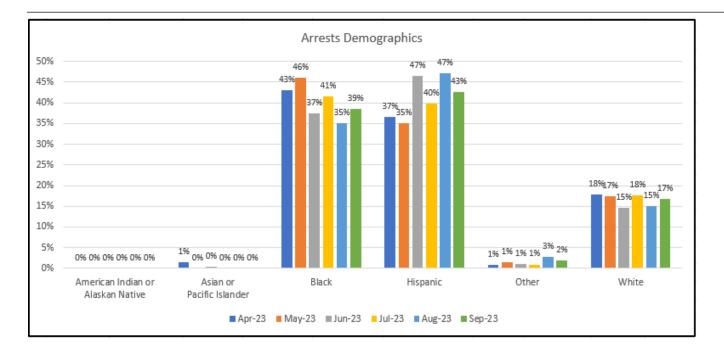
Since our increased enforcement efforts began in April, overall crime is still sharply down across the system by 42.7%. This is despite September's temporary increase in trespasser arrests over those in August (412 vs 341), which led to 20.8% month over month systemwide crime increase All numbers are headed where we anticipated them going based on our deployment and enforcement strategies.



Arrest demographics have been steady over the last six months. For September, arrests fell into the following demographic categories: 39% Black, 43% Hispanic, 2% Other, and 17% White.

File #: 2023-0661, File Type: Informational Report

## Agenda Number: 29.



# Law Enforcement

LAPD, LASD, and LBPD enforce the penal code on the system, including conducting trespass investigations. Ejections represent law enforcement engagements during trespass investigations in which an individual is removed after it's determined they did not possess a Tap Card or pay fare to access the rail or bus system. The below charts depict the totality of law enforcement efforts in support of the multi-layered deployment, including homeless outreach.

Multi-Layered Deployment: Law Enforcement Efforts	Totals
Arrests	347
Citations	558
Warnings	2597

\*Law enforcement citations and warnings are not related to fare, but for trespassing, loitering, and moving violations.

# Agenda Number: 29.

Law Enforcement Homeless Outreach	Total Stats
LAPD HOPE Team Outreach Services Offered and	Offered: 293
Accepted*	Accepted: 16
LASD MET Team Outreach Services Contacts and	Contacts: 1631
Accepted*	Accepted: 14
Long Beach Quality of Life Team (QOL)	Contacts: 134
	Accepted: 41

\*LAPD's HOPE team defines accepting services as when the individual agrees to accept, or requests assistance. This includes placing them in direct contact with a service provider, physically transporting an individual to a shelter that has services available, obtaining emergency medical services, or placing the individual on a mental health hold.

\*LASD MET team defines accepted services when a person accepts referrals to shelters, rehabs, or is connected to LAHSA or PATH.

\*Long Beach Quality of Life (QOL) leads a "Shelter the Unsheltered" initiative with PATH assisting in the morning hours. QOL works with PATH to coordinate services for those experiencing homelessness.

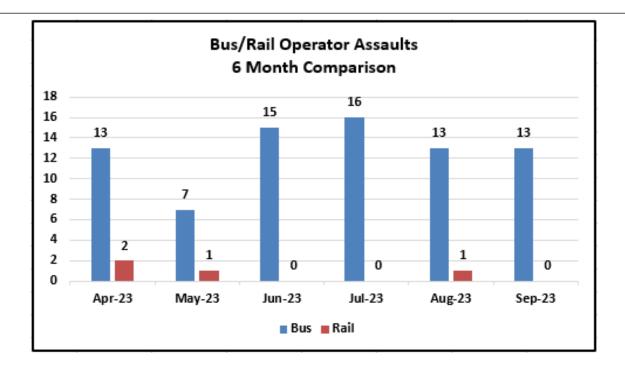
# Transit Security

The primary role of Metro Transit Security's (MTS) in the multi-layered deployment is code of conduct enforcement. The month of September saw a gradual decrease in citations and written warnings when compared to the month of August. From September 1 to September 30, MTS officers issued 207 citations and written warnings. Of those, 204 (99%) were due to individuals failing to provide proof of fare. The remaining citations and written warnings issued in September were for the following code of conduct violations: Disruptive Activities, Smoking/Vaping or Use of Alcohol, and the Six-Feet Length limit (Bicycles or other wheeled riding devices over six (6) feet long are prohibited). MTS also issued 1,901 verbal warnings during the month of September.

# **Operator Safety**

In September 2023, operator assaults decreased by 7% compared to August 2023 (13 vs 14). Spitting on the operator and using hands (punch/slap) were the top two methods of assault. Of the 13 assaults, 8 were reported to have a bus barrier in use 62%). Two of the assaults occurred outside of the bus, one assault occurred as the bus operator was walking back into the bus, and two were reported as unknown if a bus barrier was used. No patterns or trends were identified.

The rate of assaults in September is consistent with the monthly averages in 2023, although higher than historical averages over the past six years as shown in Figure A. The type of assaults that occurred in September are summarized in Figure B.



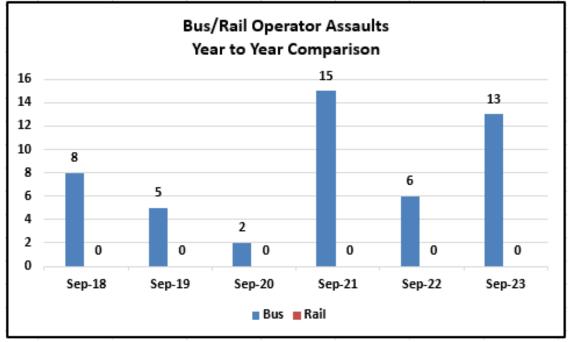


Figure A: Bus/Rail Operator Assaults Year to Year Comparison



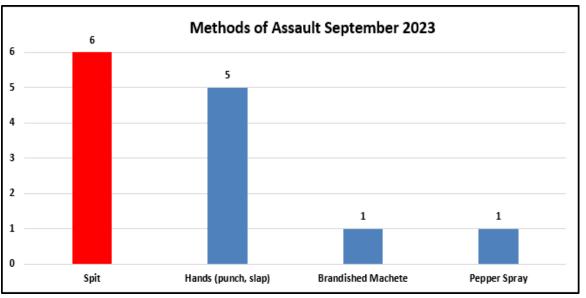


Figure B: Methods of Assault

# Bus Riding Teams

SSLE continues to rotate its Transit Security Bus Riding Teams across the top 10 bus lines with reported incidents of operator assaults, to enforce Code of Conduct violations. In September, there were three (3) Transit Security Bus Riding Teams, with one team deployed at each of the three (3) shifts, across the five service areas of Metro's bus system. The following table illustrates their deployment for September and number of trips.

TRANSIT SECURITY BUS RIDING TEAMS - SEPTEMBER 2023								
DEPLOYMENT PERIOD	LINES COVERED	TRIPS						
09/04/23 - 09/08/23	234	98						
09/11/23 - 09/15/23	115, 233	101						
09/18/23 - 09/22/23	207, 224	105						
09/25/23 - 09/29/23	2	96						

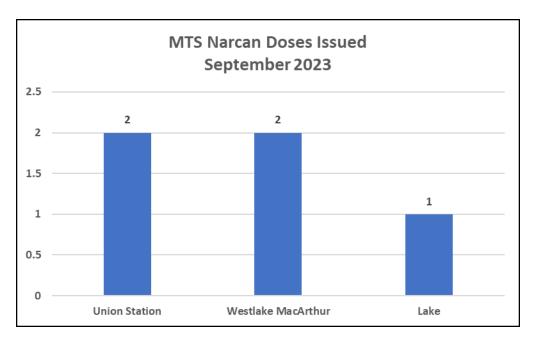
An additional four teams will be deployed in October and the remaining two teams by Spring 2024, with a grand total of 9 teams. The MTS teams are augmented with the support of law enforcement. For September, there were 9,612 bus boardings by LAPD officers and 9,180 bus boardings by LASD deputies.

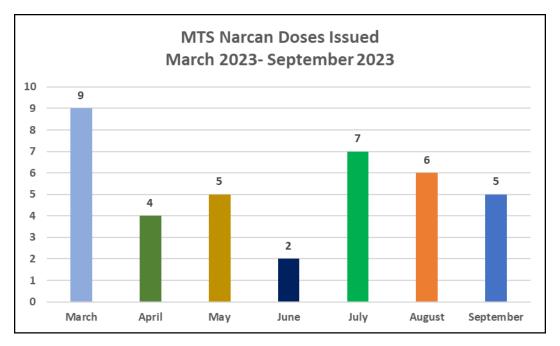
Staff continuously reviews crime stats to identify potential trends and patterns to inform deployment strategies to reduce crime on the bus system and help decrease and prevent bus operator assaults. In addition, staff engages with bus operators from all 10 bus divisions at monthly RAP sessions to obtain feedback on lines and geographical areas where bus operators have safety concerns.

# ACTIVITIES

# Narcan Deployment

In March, Transit Security Officers were trained on how to administer Narcan. Between March and September 2023, Metro Transit Security Officers have deployed Narcan a total of 38 times.





# Public Facing Dashboard Update

As reported last month, SSLE is in the final development stages of its public facing dashboard that will house public safety data. On October 17, the CEO's Office and Customer Experience (CX) reviewed a draft of the dashboard and provided feedback. The SSLE Analytics Unit and ITS are currently incorporating all feedback received to ensure data is displayed in a clear and concise format to be easily understood by the public. Additionally, ITS is utilizing web developer services to support delivery of the dashboard. SSLE will present the updated dashboard to the CEO's Office and CX for final review and approval by mid-November.

# **Emergency Management Update**

In September, the Emergency Management Department (EMD) facilitated Metro's observance of National Preparedness Month, providing resources and tools for Metro Employees to better prepare for natural and human-made disasters. In support of this observance, Metro's Employee Personal Preparedness Guide was disseminated to all Metro employees. In collaboration with Communications weekly emails, specific preparedness themes were distributed to all personnel to inspire and encourage development of their home and family emergency plans.

During the month of September, EMD was invited to present on Metro's emergency preparedness and response to two Advisory Committees. Information was shared about emergency evacuations and system accessibility during emergencies with Metro's Accessibility Advisory Committee on September 14. On September 27, an overview of Metro's planning, preparedness and response for large-scale special events was presented to Metro's Community Advisory Committee.

On September 26, EMD conducted a Full-scale Exercise (FSE) on the E-Line West at the Downtown Santa Monica Station. The Exercise scenario was a "Fire on the train at the station". There were 60 participants including personnel from several Metro departments: EMD, Rail Operations, and Corporate Safety along with external agency partners; LA Sherrif's Department, Santa Monica's Fire and Police Departments, and McCormick Ambulance. All 20 volunteers were successfully evacuated and treated. There was excellent communication and coordination between the responding agencies. This was the first exercise in Santa Monica since 2018 and received great feedback from all participating stakeholders and the Santa Monica Daily Press on September 27.

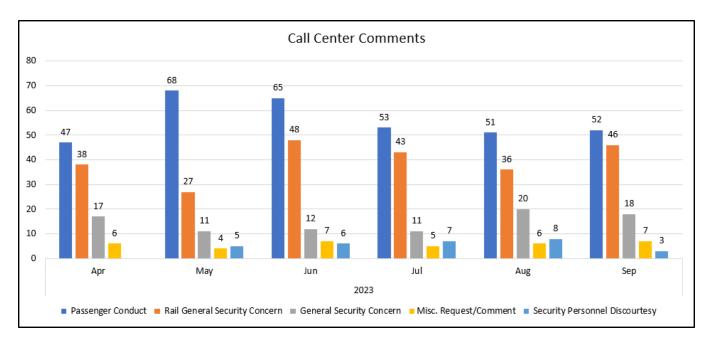




COMMENTS

# **Call Center Comments**

Customer comments related to *Passenger Conduct* remain the highest public safety category across April through September. This is followed by *Rail General Security Concern* and *General Security Concern* comments with 46 and 18, respectively, in September. SSLE will highlight top themes from comments submitted to the Call Center and collaborate with its public safety partners to address as part of the multi-layered deployment.



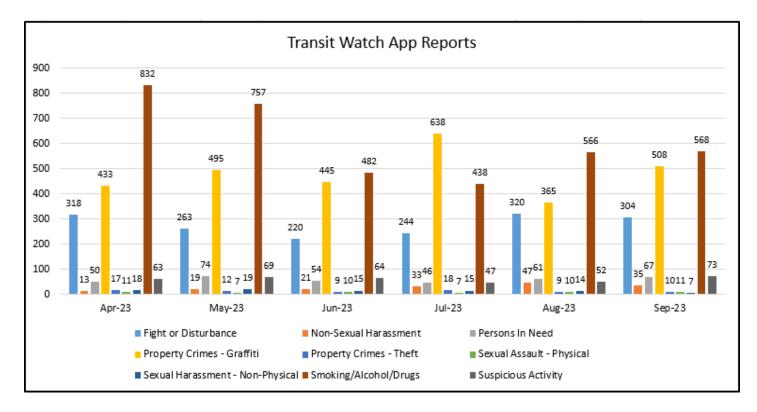
# Transit Watch (TW) App

Transit Watch app reports related to safety and/or criminal elements for the month of September totaled 1,583, which is an increase of 6.5% compared to August. In September, SSLE encouraged its law enforcement partners and contract security to utilize the TW application for reporting. This resulted in a 2.7% (87) increase in TW reports. The Security Operations Center's Security Control Specialists response times decreased by 20% from August (5.45 minutes) to September (4.39 minutes).

The top 3 areas of increased reporting were 40% in suspicious activity, 39% in graffiti, and 9.8% in persons in need, while the smoking/alcohol/drug category maintained the highest report for consecutive months with September totaling 568 reports. Of the 508 graffiti incidents captured, Ambassadors reported 73% (371) of these occurrences which were subsequently provided to law enforcement through SSLE.

The top 3 locations reporting graffiti were Willowbrook/Rosa Parks station (24), Lincoln Height/Cypress Park station (22), and Pico station (20). For suspicious activity, the top 3 locations were Westlake/MacArthur Park (11), Union Station (7), and Wilshire/Vermont (7).

SSLE will coordinate with the multi-layered public safety resources to develop strategies in identifying and addressing repeat offenders. Additionally, there was a 10% decline in customer reports of fights/disturbances, non-sexual harassment, and sexual harassment nonphysical.



# METRO AMBASSADOR PROGRAM UPDATE

A Metro Ambassador's job is to support our riders, connect riders to resources, and report incidents or maintenance needs. Metro Ambassadors were deployed on the A Line, B Line, C Line, D Line, K Line, J Line, as well as bus lines 210, 40, 20, and 720.

Ambassadors were certified and equipped to carry and administer Narcan in April 2023. For the month of September 2023, Metro Ambassadors reported 11 Narcan incidents:

- (4) incidents at WLMP
- (2) incidents at Union Station
- (1) incident at Wilshire/Vermont Station
- (1) incident at Historic Broadway Station
- (1) incident at 7th Street/Metro Center Station
- (1) incident at Civic Center/Grand Park Station
- (1) incident at Irwindale Station

# By the numbers

For the month of September 2023, Metro Ambassadors conducted 53,694 customer interactions and

reported the following:

- 881 Cleanliness Issues
- 278 Graffiti Incidents
- 262 Elevator and Escalator Problems
- 209 Safety Issues

# EQUITY PLATFORM

Metro continues to implement a multi-layered public safety model that takes a cross-disciplinary approach to address the various safety needs of the system, such as providing personnel with the proper equipment to address the social issues seen in the system. Providing Transit Security Officers and Ambassadors with Narcan has been impactful in addressing drug use on the system, particularly on the B (Red) Line and in Equity Focus Communities. Staff will continue to train front-line personnel to address the diverse safety needs of the system. Lastly, Metro Transit Security continues to deploy bus riding teams on bus lines to support operators, help curtail operator assaults and enhance the customer experience.

# NEXT STEPS

SSLE continues to monitor our law enforcement partners, private security, and Transit Security Officer performance, monitor crime stats, and consider information from surveys, customer complaints, and physical security assessments, amongst other sources, to analyze safety-related issues, adjust deployment strategies, and formulate new interventions.

# ATTACHMENTS

Attachment A - Arrests Demographics September 2023

- Attachment B Total Crime Summary September 2023
- Attachment C Systemwide Law Enforcement Overview September 2023
- Attachment D MTA Supporting Data September 2023
- Attachment E Bus & Rail Operator Assaults September 2023
- Attachment F Sexual Harassment Crimes September 2023

Prepared by: Vanessa Smith, Executive Officer, Customer Experience, (213) 922-7009

Robert Gummer, Deputy Executive Officer, Administration, (213) 922-4513

Imelda Hernandez, Senior Manager, Transportation Planning, (213) 922-4848

Reviewed by: Gina Osborn, Chief Safety Officer, Chief Safety Office, (213) 922-3055

Jennifer Vides, Chief Customer Experience Officer, Customer Experience Office, (213)

940-4060

ie N. Wi ns Chief Executive Officer



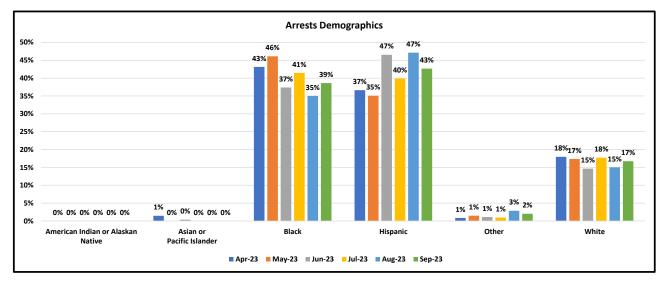
# SYSTEM SECURITY & LAW ENFORCEMENT

#### Attachment A

Arrests September 2023	America or Alaska		Asiar Pacific Is		Blac	ck	Hispa	inic	Oth	er	Whi	te	Total
	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	
Systemwide - Arrests	0	0	0	0	14	120	14	134	2	5	17	41	347
Total	(	)	0		13	4	14	8	7		58	}	347
% Share	0.0	0%	0.00	)%	38.6	2%	42.6	5%	2.02	.%	16.7	1%	100.00%

Arrests September 2023	America or Alaska	n Indian In Native	Asiar Pacific Is		Bla	ck	Hispa	inic	Oth	er	Whi	te	Total
	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	
Bus Systemwide (includes G & J Lines)	0	0	0	0	4	23	4	42	1	1	3	3	81
Rail Systemwide	0	0	0	0	7	90	10	91	1	4	13	36	252
Union Station	0	0	0	0	3	7	0	1	0	0	1	2	14
Total	(	ט	0		13	4	14	8	7		58		347
% Share	0.0	0%	0.00	)%	38.6	2%	42.6	5%	2.02	:%	16.7	1%	100.00%

Arrests (by Line, Bus, and Union Station) September 2023		n Indian In Native	Asiar Pacific Is		Bla	ck	Hispa	nic	Oth	er	Whi	te	Total
	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	
A Line (Blue)	0	0	0	0	2	25	1	25	0	2	2	14	71
B Line (Red)	0	0	0	0	4	56	6	55	1	1	11	22	156
C Line (Green)	0	0	0	0	1	7	2	3	0	1	0	0	14
D Line (Purple)	0	0	0	0	0	0	0	1	0	0	0	0	1
E Line (Expo)	0	0	0	0	0	1	1	5	0	0	0	0	7
Bus - G Line (Orange)	0	0	0	0	1	5	0	2	1	1	0	0	10
Bus - J Line (Silver)	0	0	0	0	0	0	0	2	0	0	0	0	2
K Line	0	0	0	0	0	1	0	2	0	0	0	0	3
Union Station	0	0	0	0	3	7	0	1	0	0	1	2	14
Bus Systemwide (excludes G & J Lines)	0	0	0	0	3	18	4	38	0	0	3	3	69
Total		0	0		13	4	14	8	7		58	3	347
% Share	0.0	0%	0.00	)%	38.6	2%	42.6	5%	2.02	2%	16.7	1%	100.00%





# SYSTEM SECURITY & LAW ENFORCEMENT

#### Attachment B

#### **Total Crime Summary - September 2023**

Part 1 Crimes 5-Year Trend - Systemwide

January - September	2019	2020	2021	2022	2023
Part 1 Crimes					
Agg Assault	207	191	293	360	416
Arson	1	5	7	5	0
Bike Theft	58	40	34	37	21
Burglary	6	4	14	11	12
Homicide	1	2	3	4	4
Larceny	592	312	282	395	381
Motor Vehicle Theft	18	12	10	12	36
Rape	6	5	13	9	11
Robbery	218	177	166	260	293
Totals	1,107	748	822	1,093	1,174

#### Part 1 Crimes 5-Year Trend - Rail

January - September	2019	2020	2021	2022	2023
Part 1 Crimes					
Agg Assault	122	125	192	232	278
Arson	1	5	7	4	0
Bike Theft	37	28	19	23	9
Burglary	6	4	14	9	11
Homicide	0	2	3	3	4
Larceny	366	235	215	278	284
Motor Vehicle Theft	17	10	6	6	33
Rape	6	5	12	8	11
Robbery	126	135	118	197	206
Totals	681	549	586	760	836

#### Part 1 Crimes 5-Year Trend - Bus

January - September	2019	2020	2021	2022	2023
Part 1 Crimes					
Agg Assault	85	66	101	128	138
Arson	0	0	0	1	0
Bike Theft	21	12	15	14	12
Burglary	0	0	0	2	1
Homicide	1	0	0	1	0
Larceny	226	77	67	117	97
Motor Vehicle Theft	1	2	4	6	3
Rape	0	0	1	1	0
Robbery	92	42	48	63	87
Totals	426	199	236	333	338

#### Part 2 Crimes 5-Year Trend - Systemwide

January - September	2019	2020	2021	2022	2023
Part 2 Crimes					
Battery	700	563	581	756	858
Narcotics	143	48	123	119	389
Sex Offenses	95	64	76	78	89
Trespassing	77	68	65	73	848
Vandalism	113	160	222	240	130
Weapons	35	23	34	41	85
Totals	1,163	926	1.101	1.307	2.399

Part 2 Crimes 5-Year Trend - Rail

January - September	2019	2020	2021	2022	2023
Part 2 Crimes					
Battery	399	337	331	424	542
Narcotics	92	25	42	59	295
Sex Offenses	59	45	53	55	52
Trespassing	71	64	58	65	836
Vandalism	65	91	133	167	70
Weapons	29	16	18	25	63
Totals	715	578	635	795	1.858

#### Part 2 Crimes 5-Year Trend - Bus

January - September	2019	2020	2021	2022	2023
Part 2 Crimes					
Battery	301	226	250	332	316
Narcotics	51	23	81	60	94
Sex Offenses	36	19	23	23	37
Trespassing	6	4	7	8	12
Vandalism	48	69	89	73	60
Weapons	6	7	16	16	22
Totals	448	348	466	512	541

Dout	Veen Trees	d Sontomhor	and Creat	

	Sep-19	Sep-20	Sep-21	Sep-22	Sep-23
Part 1 Crimes					
Agg Assault	20	18	39	34	34
Arson	0	0	0	0	0
Bike Theft	7	4	4	1	3
Burglary	2	0	2	1	1
Homicide	0	0	1	0	1
Larceny	47	22	42	35	44
Motor Vehicle Theft	2	1	1	1	2
Rape	0	0	2	0	3
Robbery	16	24	19	32	29
Totals	94	69	110	104	117

#### Part 1 Crimes 5-Year Trend September only - Rail

	Sep-19	Sep-20	Sep-21	Sep-22	Sep-23
Part 1 Crimes					
Agg Assault	7	13	27	20	22
Arson	0	0	0	0	0
Bike Theft	5	3	2	1	1
Burglary	2	0	2	1	1
Homicide	0	0	1	0	1
Larceny	31	18	34	28	36
Motor Vehicle Theft	2	1	1	1	2
Rape	0	0	2	0	3
Robbery	10	20	15	24	22
Totals	57	55	84	75	88

#### Part 1 Crimes 5-Year Trend September only - Bus

	Sep-19	Sep-20	Sep-21	Sep-22	Sep-23
Part 1 Crimes					
Agg Assault	13	5	12	14	12
Arson	0	0	0	0	0
Bike Theft	2	1	2	0	2
Burglary	0	0	0	0	0
Homicide	0	0	0	0	0
Larceny	16	4	8	7	8
Motor Vehicle Theft	0	0	0	0	0
Rape	0	0	0	0	0
Robbery	6	4	4	8	7
Totals	37	14	26	29	29

#### Part 2 Crimes 5-Year Trend September only - Systemwide Sep-19 Sep-20 Sep-21 Sep-22 Sep-23

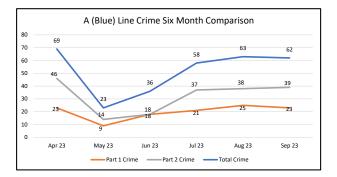
	3CP 13	3CP 20	3CP 21	3CP 22	3CP 23
Part 2 Crimes					
Battery	79	53	58	61	117
Narcotics	16	12	10	18	50
Sex Offenses	8	10	10	6	7
Trespassing	9	3	4	1	98
Vandalism	10	20	29	18	14
Weapons	5	4	4	5	9
Totals	127	102	115	109	295

#### Part 2 Crimes 5-Year Trend September only - Rail

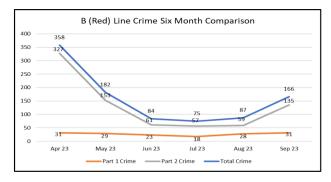
	Sep-19	Sep-20	Sep-21	Sep-22	Sep-23
Part 2 Crimes					
Battery	49	31	28	32	74
Narcotics	8	5	3	7	40
Sex Offenses	8	5	10	4	3
Trespassing	8	2	3	1	98
Vandalism	5	10	19	11	7
Weapons	4	2	3	2	7
Totals	82	55	66	57	229

#### Part 2 Crimes 5-Year Trend September only - Bus

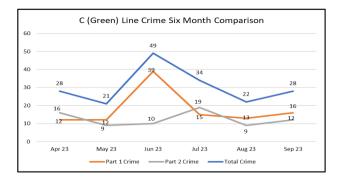
	Sep-19	Sep-20	Sep-21	Sep-22	Sep-23
Part 2 Crimes					
Battery	30	22	30	29	43
Narcotics	8	7	7	11	10
Sex Offenses	0	5	0	2	4
Trespassing	1	1	1	0	0
Vandalism	5	10	10	7	7
Weapons	1	2	1	3	2
Totals	45	47	49	52	66



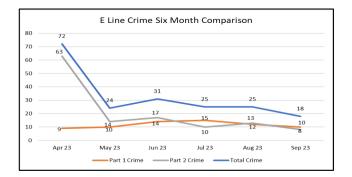
In September 2023, the A (Blue) Line saw a 1.6% decrease (62 vs 63) in total crime compared to the previous month. Part 1 crimes decreased by 8% (23 vs 25), which was a result of decreases in larceny and robbery incidents. Part 2 crimes increased overall by one. There were increases in sex offenses and trespassing, as well as decreases in weapons arrests.



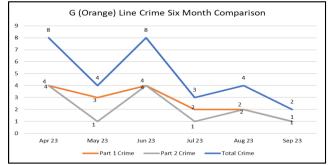
In September 2023, the B (Red) Line saw a 91% increase (166 vs 87) in total crime compared to the previous month. Part 1 crimes increased by 11% (31 vs 28). This was a result of one homicide, an increase in larceny incidents (12 vs 6), and an increase in robbery incidents (9 vs 5). In addition, there was a decrease in aggravated assault incidents (9 vs 17). Part 2 crimes increased by 129% in September compared to the previous month (135 vs 59). The increase was related to an increase in battery incidents (31 vs 23), an increase in narcotics arrests (25 vs 13), an increase in trespassing arrests (71 vs 17), an increase in vandalisms (3 vs 1), and an increase in weapons arrests (5 vs 3). There were no sex offenses reported which was a decrease from August (0 vs 2).



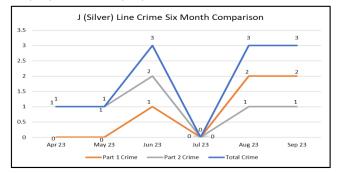
In September 2023, the C (Green) Line saw a 27% increase (28 vs 22) in total crime compared to the previous month. Part 1 crimes increased by 23% (16 vs 13). This was a result of an increase in larceny incidents as well as a rape incident that was reported for the month. Part 2 crimes increased by 33% (12 vs 9). This was a result of increases in battery and vandalism incidents, although there was a decrease in narcotics arrests.



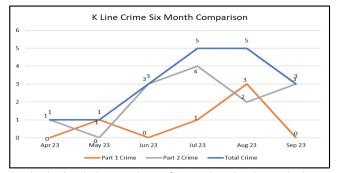
In September, the E Line saw a 28% decrease (18 vs 25) in total crime compared to the previous month. Part 1 crimes decreased by 17% (10 vs 12). This was a result of a decrease in aggravated assaults (2 vs 5) and a decrease in robbery incidents (3 vs 5), in addition to increases in burglary (1 vs 0) and larceny incidents (4 vs 2). Part 2 crimes decreased by 39% (8 vs 13), as a result of a decrease in battery (4 vs 6), trespassing (3 vs 4), sex offenses (0 vs 1), and weapons incidents (0 vs 1). There was also one narcotics arrest just as in the previous month (1 vs 1).



In September, the G (Orange) Line saw a decrease of 2 crimes (2 vs 4) compared to the previous month. Part 1 crimes decreased by one (1 vs 2), with one larceny incident as the only Part 1 crime for the month. Part 2 crimes also decreased by one (1 vs 2), which consisted of a single occurrence of vandalism (1 vs 0). and decreases in battery incidents (0 vs 1) and narcotics arrests (0 vs 1).



In September, crime on the J (Silver) Line remained unchanged from the previous month (3 vs 3). Part 1 crimes remained unchanged (2 vs 2), with an increase in larceny of one incident (1 vs 0) and a decrease in aggravated assault incidents of one (0 vs 1). Robbery incidents remained unchanged from the prior month with one incident reported. Part 2 crimes remained unchanged (1 vs 1) with one battery incident reported (1 vs 0) in addition to a decrease in trespassing (0 vs 1).



In September, the K (Crenshaw) Line saw a decrease of 40% in total crime (3 vs 5) compared to the previous month. Part 1 crimes decreased by 3 from the prior month (0 vs 3). This was attributed to a decrease in aggravated assaults (0 vs 2) and larceny incidents (0 vs 1). Part 2 crimes increased by 50% (3 vs 2) due to one battery incident (1 vs 0) and narcotics arrests (2 vs 0). In addition, there were decreases in trespassing (0 vs 1) and weapons arrests (0 vs 1).

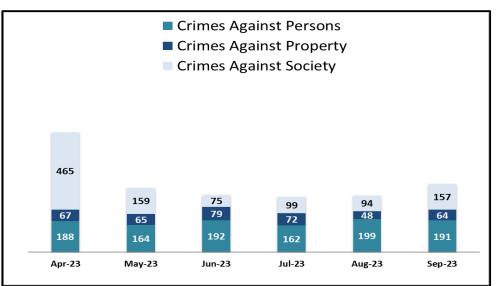


# SYSTEM SECURITY & LAW ENFORCEMENT

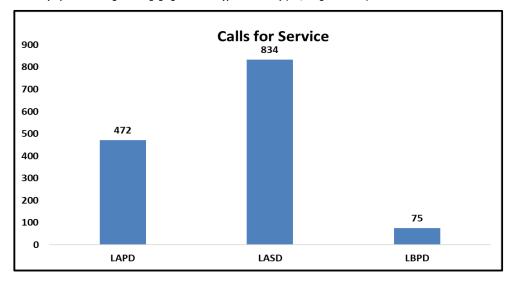
# SYSTEM-WIDE LAW ENFORCEMENT OVERVIEW SEPTEMBER 2023

Attachment C

#### **Total Crimes**



Crimes Against Persons: violent crimes (i.e., homicide, aggravated assaults) are those in which the victims are always individuals Crimes Against Property: crimes to obtain money, property, or some other benefit (i.e., theft, vandalism, robbery) Crimes Against Society: represent society's prohibition against engaging in certain types of activity (i.e., drug violations)



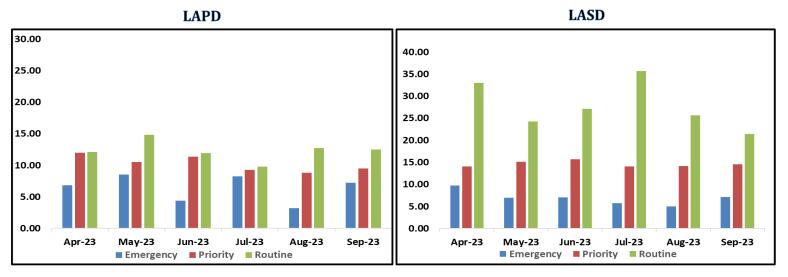


# SYSTEM-WIDE LAW ENFORCEMENT OVERVIEW SEPTEMBER 2023

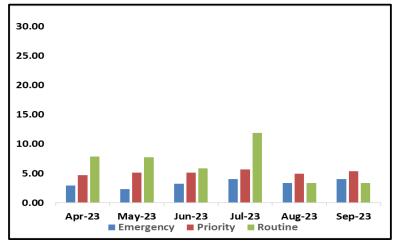
Attachment C

#### **Average Incident Response Times**

These graphs show how long it takes (in minutes) for LAPD, LASD, and LBPD to respond to Emergency, Priority, and Routine calls









# **Transit Police**

**Monthly Crime Report** 



	2023	2022	%
	September	September	Change
CRIMES AGAINST PERSONS			
Homicide	1	0	100.0%
Rape	3	0	300.0%
Robbery	29	32	-9.4%
Aggravated Assault	32	33	-3.0%
Aggravated Assault on Operator	2	1	100.0%
Battery	106	56	89.3%
Battery on Operator	11	5	120.0%
Sex Offenses	7	6	16.7%
SUB-TOTAL	191	133	43.6%
CRIMES AGAINST PROPERTY			
Burglary	1	1	0.0%
Larceny	44	35	25.7%
Bike Theft	3	1	200.0%
Motor Vehicle Theft	2	1	100.0%
Arson	0	0	0.0%
Vandalism	14	18	-22.2%
SUB-TOTAL	64	56	14.3%
CRIMES AGAINST SOCIETY			
Weapons	9	5	80.0%
Narcotics	50	18	177.8%
Trespassing	98	1	9700.0%
SUB-TOTAL	157	24	554.2%
TOTAL	412	213	93.4%
ENFORCEMENT EFFORTS			
Arrests	347	221	57.0%
Citations	558	310	80.0%
Calls for Service	1,381	1,303	6.0%



# SYSTEM SECURITY & LAW ENFORCEMENT

# MONTHLY, BI-ANNUAL, ANNUAL COMPARISON

# SEPTEMBER 2023

Attachment C

Crimes				
Monthly	System-Wide	Sep-23	Sep-22	% Change
	Crimes Against Persons	191	133	43.61%
	Crimes Against Property	64	56	14.29%
	Crimes Against Society	157	24	554.17%
	Total	412	213	93.43%
Six Months	System-Wide	Apr-23-Sep-23	Apr-22-Sep-22	% Change
	Crimes Against Persons	1,096	951	15.25%
	Crimes Against Property	395	432	-8.56%
	Crimes Against Society	1,049	178	489.33%
	Total	2,540	1,561	62.72%
Annual	System-Wide	Oct-22-Sep-23	Oct-21-Sep-22	% Change
	Crimes Against Persons	2,146	1,956	9.71%
	Crimes Against Property	755	887	-14.88%
	Crimes Against Society	1,428	296	382.43%
	Total	4,329	3,139	37.91%

# Average Emergency Response Times

Monthly	Sep-23	Sep-22	% Change
	4:01	5:17	-23.97%
Six Months	Apr-23-Sep-23	Apr-22-Sep-22	% Change
	5:11	5:44	-9.59%
Annual	Oct-22-Sep-23	Oct-21-Sep-22	% Change
	5:20	5:19	0.31%

# **Bus Operator Assaults**

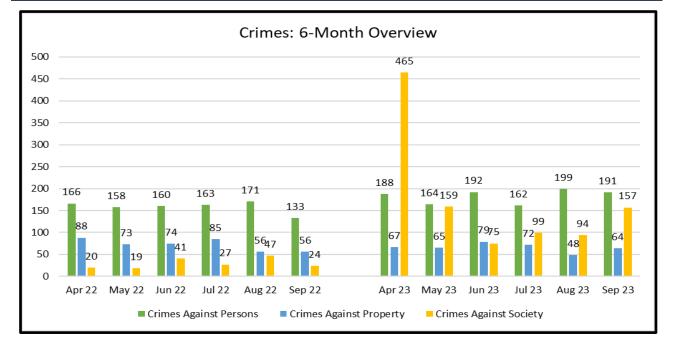
Monthly	Sep-23	Sep-22	% Change
	13	6	116.67%
Six Months	Apr-23-Sep-23	Apr-22-Sep-22	% Change
	81	76	6.58%
Annual	Oct-22-Sep-23	Oct-21-Sep-22	% Change
	164	163	0.61%
Ridership		_	
Monthly	Sep-23	Sep-22	% Change
	24,671,730	22,380,399	10.24%
Six Months	Apr-23-Sep-23	Apr-22-Sep-22	% Change

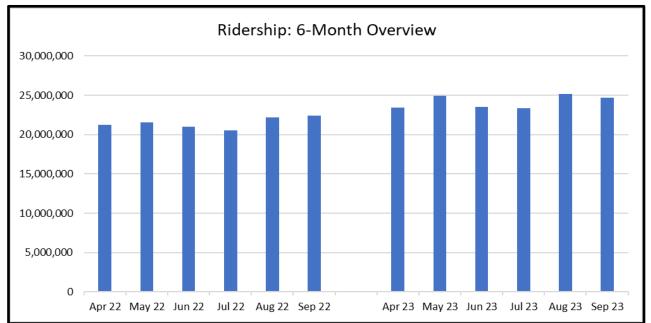
			/o change
	145,019,223	128,894,992	12.51%
Annual	Oct-22-Sep-23	Oct-21-Sep-22	% Change
	277,233,856	255,157,777	8.65%



# SYSTEM SECURITY & LAW ENFORCEMENT

# MONTHLY, BI-ANNUAL, ANNUAL COMPARISON





# SEPTEMBER 2023

Attachment C

# Metro A LINE (BLUE)

#### ATTACHMENT D

REPORTED CRIME						
CRIMES AGAINST PERSONS	LAPD	LASD	LBPD	FYTD		
Homicide	0	0	0	0		
Rape	0	2	0	2		
Robbery	2	3	0	19		
Aggravated Assault	5	2	0	20		
Aggravated Assault on Operator	0	0	0	0		
Battery	5	4	3	38		
Battery Rail Operator	0	0	0	1		
Sex Offenses	0	2	0	4		
SUB-TOTAL	12	13	3	84		
CRIMES AGAINST PROPERTY	LAPD	LASD	LBPD	FYTD		
Burglary	0	0	0	0		
Larceny	5	2	0	23		
Bike Theft	0	0	0	1		
Motor Vehicle Theft	0	2	0	4		
Arson	0	0	0	0		
Vandalism	0	1	1	7		
SUB-TOTAL	5	5	1	35		
CRIMES AGAINST SOCIETY	LAPD	LASD	LBPD	FYTD		
Weapons	0	2	0	9		
Narcotics	3	6	0	26		
Trespassing	7	5	0	31		
SUB-TOTAL	10	13	0	66		
TOTAL	27	31	4	185		

CRIMES PER STATION				
STATION	CRIMES AGAINST PERSONS	CRIMES AGAINST PROPERTY	CRIMES AGAINST SOCIETY	FYTD
APU/Citrus College	0	1	1	10
Azusa Downtown	0	1	0	3
Irwindale	0	0	0	1
Duarte/City of Hope	0	0	0	1
Monrovia	1	0	0	3
Arcadia	0	0	0	2
Sierra Madre Villa	1	1	0	5
Allen	0	0	0	0
Lake	0	0	1	4
Memorial Park	0	0	0	2
Del Mar	0	0	0	1
Fillmore	0	0	1	1
South Pasadena	0	0	0	1
Highland Park	0	0	0	1
Southwest Museum	1	0	0	1
Heritage Square	0	0	0	0
Lincoln/Cypress	0	0	0	1
Chinatown	2	0	0	4
Union Station	0	0	0	0
Little Tokyo/Arts Dist	1	1	3	6
Historic Broadway	0	0	0	1
Grand Av Arts/Bunker Hill	0	0	3	9
7th St/Metro Ctr	1	1	0	8
Pico	3	0	3	10
Grand/LATTC	0	0	0	1
San Pedro St	0	1	0	2
Washington	2	2	1	8
Vernon	1	0	0	4
Slauson	0	0	0	3
Florence	0	0	0	1
Firestone	3	0	0	6
103rd St/Watts Towers	1	0	0	3
Willowbrook/Rosa Parks	5	1	7	34
Compton	2	0	3	16
Artesia	0	1	0	3
Del Amo	1	0	0	6
Wardlow	0	0	0	0
Willow St	1	0	0	4
PCH	0	0	0	4
Anaheim St	1	0	0	6
5th St	0	0	0	0
1st St	1	1	0	2
Downtown Long Beach	0	0	0	6
Pacific Av	0	0	0	0
Blue Line Rail Yard	0	0	0	0
Other	0	0	0	1
Total	28	11	23	185

ARRESTS					
AGENCY	LAPD	LASD	LBPD	FYTD	
Felony	5	6	0	42	
Misdemeanor	19	41	0	201	
TOTAL	24	47	0	243	

CITATIONS					
AGENCY	LAPD	LASD	LBPD	FYTD	
Misdemeanor Citations	0	0	1	3	
Other Citations	12	44	4	220	
Vehicle Code Citations	0	0	10	20	
TOTAL	12	44	15	243	

CALLS FOR SERVICE					
LAPD	LASD	LBPD	FYTD		
6	160	4	608		
30	88	52	566		
5	16	19	97		
41	264	75	1,271		
	LAPD 6 30 5	LAPD         LASD           6         160           30         88           5         16	LAPD         LASD         LBPD           6         160         4           30         88         52           5         16         19		

DISPATCHED VS. PROACTIVE						
AGENCY	LAPD	LASD	LBPD			
Dispatched	18%	N/C	3%			
Proactive	82%	N/C	97%			
TOTAL	100%	0%	100%			

PERCENTAGE OF TIME SPENT ON THE RAIL SYSTEM						
Blue Line-LAPD 85%						
Blue Line-LASD	N/C					
Blue Line-LBPD	80%					

GRADE CROSSING OPERATIONS				
LOCATION	LAPD	LASD	LBPD	FYTD
Azusa	0	19	0	48
Irwindale	0	37	0	97
Duarte Station	0	6	0	19
Monrovia	0	4	0	18
Magnolia Ave	0	0	0	0
Arcadia Station	0	12	0	22
Pasadena	0	28	0	93
South Pasadena	0	7	0	21
Marmion Way	0	0	0	0
Flower St	0	0	0	0
Washington St	32	0	0	124
Slauson	0	9	0	21
Florence	0	21	0	50
Firestone	0	9	0	19
103rd St	10	0	0	25
Willowbrook	0	25	0	102
Compton	0	4	0	24
Artesia	0	8	0	30
Del Amo	0	19	0	84
Wardlow Rd	0	0	4	6
Long Beach Blvd	0	0	0	0
Pacific Av	0	0	0	0
TOTAL	42	208	4	803

LEGEND
Los Angeles Police Department
Los Angeles County Sheriff's Department
Long Beach Police Department



# **B LINE (RED)**

# ATTACHMENT D

REPORTED CRIME				
CRIMES AGAINST PERSONS	LAPD	FYTD		
Homicide	1	1		
Rape	0	1		
Robbery	9	17		
Aggravated Assault	9	35		
Aggravated Assault on Operator	0	0		
Battery	31	70		
Battery Rail Operator	0	0		
Sex Offenses	0	5		
SUB-TOTAL	50	129		
CRIMES AGAINST PROPERTY	LAPD	FYTD		
Burglary	0	0		
Larceny	12	23		
Bike Theft	0	0		
Motor Vehicle Theft	0	0		
Arson	0	0		
Vandalism	3	6		
SUB-TOTAL	15	29		
CRIMES AGAINST SOCIETY	LAPD	FYTD		
Weapons	5	10		
Narcotics	25	54		
Trespassing	71	106		
SUB-TOTAL	101	170		
TOTAL	166	328		

CRIMES PER STATION						
STATION	CRIMES AGAINST PERSONS	CRIMES AGAINST PROPERTY	CRIMES AGAINST SOCIETY	FYTD		
Union Station	1	2	0	7		
Civic Center/Grand Park	1	1	6	12		
Pershing Square	1	1	10	18		
7th St/Metro Ctr	7	0	9	34		
Westlake/MacArthur Park	5	1	35	86		
Wilshire/Vermont	5	0	4	28		
Wilshire/Normandie	2	0	2	4		
Vermont/Beverly	0	0	1	7		
Wilshire/Western	1	0	0	7		
Vermont/Santa Monica	1	1	4	10		
Vermont/Sunset	2	1	2	8		
Hollywood/Western	5	0	2	17		
Hollywood/Vine	2	2	1	13		
Hollywood/Highland	4	0	5	16		
Universal City/Studio City	3	0	2	11		
North Hollywood	10	6	18	50		
Red Line Rail Yard	0	0	0	0		
Total	50	15	101	328		

ARRESTS				
AGENCY	LAPD	FYTD		
Felony	36	76		
Misdemeanor	121	204		
TOTAL	157	280		

CITATIONS				
AGENCY	LAPD	FYTD		
Other Citations	28	87		
Vehicle Code Citations	0	0		
TOTAL	28	87		

CALLS FOR SERVICE					
AGENCY LAPD FYT					
Routine	23	69			
Priority	145	444			
Emergency	19	43			
TOTAL	187	556			
	10/	900			

DISPATCHED VS. PROACTIVE			
AGENCY LAPD			
Dispatched	21%		
Proactive	79%		
TOTAL 100%			

PERCENTAGE OF TIME SPENT ON THE RAIL SYSTEN		
Red Line- LAPD	82%	
Red Line- LAPD	82%	

LEGEND		
Los Angeles Police Department		



# C LINE (GREEN)

# ATTACHMENT D

REPORTED CRIME					
CRIMES AGAINST PERSONS	LAPD	LASD	FYTD		
Homicide	0	0	1		
Rape	0	1	1		
Robbery	0	3	10		
Aggravated Assault	0	3	9		
Aggravated Assault on Operator	0	0	0		
Battery	2	4	11		
Battery Rail Operator	0	0	0		
Sex Offenses	0	0	0		
SUB-TOTAL	2	11	32		
CRIMES AGAINST PROPERTY	LAPD	LASD	FYTD		
Burglary	0	0	1		
Larceny	9	0	19		
Bike Theft	0	0	1		
Motor Vehicle Theft	0	0	2		
Arson	0	0	0		
Vandalism	0	2	7		
SUB-TOTAL	9	2	30		
CRIMES AGAINST SOCIETY	LAPD	LASD	FYTD		
Weapons	0	0	1		
Narcotics	0	3	15		
Trespassing	1	0	6		
SUB-TOTAL	1	3	22		
TOTAL	12	16	84		

CRIMES PER STATION				
STATION	CRIMES AGAINST PERSONS	CRIMES AGAINST PROPERTY	CRIMES AGAINST SOCIETY	FYTD
Redondo Beach	0	0	0	1
Douglas	0	0	0	2
El Segundo	0	1	0	2
Mariposa	0	0	0	1
Aviation/LAX	1	1	1	6
Hawthorne/Lennox	1	0	2	9
Crenshaw	0	0	0	7
Vermont/Athens	1	0	0	3
Harbor Fwy	1	6	0	10
Avalon	0	2	0	5
Willowbrook/Rosa Parks	3	0	1	13
Long Beach Bl	4	0	0	12
Lakewood Bl	0	1	0	6
Norwalk	2	0	0	7
Total	13	11	4	84

ARRESTS				
AGENCY LAPD LASD FYTD				
Felony	1	4	13	
Misdemeanor	1	8	43	
TOTAL	2	12	56	

CITATIONS			
AGENCY	LAPD	LASD	FYTD
Other Citations	5	15	157
Vehicle Code Citations	0	2	4
TOTAL	5	17	161

CALLS FOR SERVICE			
AGENCY	LAPD	LASD	FYTD
Routine	8	110	361
Priority	19	29	135
Emergency	1	6	22
TOTAL	28	145	518

DISPATCHED VS. PROACTIVE				
AGENCY LAPD LASD				
Dispatched	15%	15%		
Proactive	85%	85%		
TOTAL 100% 100%				

PERCENTAGE OF TIME SPENT ON THE RAIL SYSTEM				
Green Line-LAPD 87%				
Green Line-LASD 94%				

LEGEND
Los Angeles Police Department
Los Angeles County Sheriff's Department

# E LINE

# ATTACHMENT D

### MONTHLY UPDATE ON TRANSIT POLICING PERFORMANCE - SEPTEMBER 2023

REPORTED CRIME					
CRIMES AGAINST PERSONS	LAPD	LASD	FYTD		
Homicide	0	0	0		
Rape	0	0	0		
Robbery	3	0	9		
Aggravated Assault	1	1	14		
Aggravated Assault on Operator	0	0	0		
Battery	2	2	15		
Battery Rail Operator	0	0	0		
Sex Offenses	0	0	2		
SUB-TOTAL	6	3	40		
CRIMES AGAINST PROPERTY	LAPD	LASD	FYTD		
Burglary	0	1	1		
Larceny	3	1	13		
Bike Theft	0	0	0		
Motor Vehicle Theft	0	0	0		
Arson	0	0	0		
Vandalism	0	0	1		
SUB-TOTAL	3	2	15		
CRIMES AGAINST SOCIETY	LAPD	LASD	FYTD		
Weapons	0	0	1		
Narcotics	1	0	2		
Trespassing	3	0	10		
SUB-TOTAL	4	0	13		
TOTAL	13	5	68		

CRIMES PER STATION					
STATION	CRIMES AGAINST PERSONS	CRIMES AGAINST PROPERTY	CRIMES AGAINST SOCIETY	FYTD	
Atlantic	0	1	0	3	
East LA Civic Ctr	0	0	0	1	
Maravilla	0	0	0	2	
Indiana (both LAPD & LASD)	0	0	0	2	
Soto	0	0	0	0	
Mariachi Plaza	0	0	0	0	
Pico/Aliso	0	0	0	0	
Little Tokyo/Arts Dist	0	0	0	0	
Historic Broadway	0	0	0	4	
Grand Av Arts/Bunker Hill	0	0	0	0	
7th St/Metro Ctr	1	0	0	1	
Pico	0	1	0	4	
LATTC/Ortho Institute	2	0	1	6	
Jefferson/USC	0	0	0	3	
Expo Park/USC	1	0	0	3	
Expo/Vermont	1	1	0	5	
Expo/Western	0	0	1	2	
Expo/Crenshaw	0	0	2	5	
Farmdale	1	0	0	3	
Expo/La Brea	0	0	0	3	
La Cienega/Jefferson	0	1	0	2	
Culver City	0	0	0	1	
Palms	0	0	0	2	
Westwood/Rancho Park	0	0	0	1	
Expo/Sepulveda	0	0	0	4	
Expo/Bundy	0	0	0	1	
26th St/Bergamot	0	0	0	0	
17th St/SMC	0	0	0	1	
Downtown Santa Monica	3	1	0	9	
Expo Line Rail Yard Total	0	0	0	0 68	
וטנמו	9	Ð	4	Page 4	

ARRESTS					
AGENCY LAPD LASD FYTD					
Felony	1	0	13		
Misdemeanor	3	3	22		
TOTAL	4	3	35		

CITATIONS					
AGENCY LAPD LASD FYTD					
Other Citations	12	4	30		
Vehicle Code Citations	0	0	0		
TOTAL	12	4	30		

CALLS FOR SERVICE					
AGENCY LAPD LASD FYTD					
12	91	309			
65	23	228			
8	8	37			
85	122	574			
	LAPD 12 65 8	LAPD         LASD           12         91           65         23           8         8			

DISPATCHED VS. PROACTIVE					
AGENCY LAPD LASD					
Dispatched	16%	N/C			
Proactive	84%	N/C			
TOTAL 100% 0%					

 PERCENTAGE OF TIME SPENT ON THE RAIL SYSTEM

 Expo Line-LAPD
 86%

 Expo Line-LASD
 N/C

GRADE CROSSING OPERATIONS						
LOCATION LAPD LASD FYTD						
East Los Angeles	0	25	102			
Figueroa St	0	0	0			
Exposition Blvd	122	0	327			
Culver City	0	2	3			
Santa Monica	0	22	68			
TOTAL	122	49	500			

LEGEND
Los Angeles Police Department
Los Angeles County Sheriff's Department



# SYSTEM SECURITY & LAW ENFORCEMENT

# **G LINE (ORANGE)**

# ATTACHMENT D

REPORTED CRIME				
CRIMES AGAINST PERSONS	LAPD	FYTD		
Homicide	0	0		
Rape	0	0		
Robbery	0	1		
Aggravated Assault	0	1		
Aggravated Assault on Operator	0	0		
Battery	0	1		
Battery Bus Operator	0	0		
Sex Offenses	0	0		
SUB-TOTAL	0	3		
CRIMES AGAINST PROPERTY	LAPD	FYTD		
Burglary	0	0		
Larceny	1	3		
Bike Theft	0	0		
Motor Vehicle Theft	0	0		
Arson	0	0		
Vandalism	1	1		
SUB-TOTAL	2	4		
CRIMES AGAINST SOCIETY	LAPD	FYTD		
Weapons	0	0		
Narcotics	0	1		
Trespassing	0	1		
SUB-TOTAL	0	2		
TOTAL	2	9		

CRIMES PER STATION						
STATION	CRIMES AGAINST PERSONS	CRIMES AGAINST PROPERTY	CRIMES AGAINST SOCIETY	FYTD		
North Hollywood	0	1	0	4		
Laurel Canyon	0	0	0	0		
Valley College	0	0	0	1		
Woodman	0	0	0	0		
Van Nuys	0	0	0	1		
Sepulveda	0	0	0	0		
Woodley	0	0	0	0		
Balboa	0	0	0	1		
Reseda	0	0	0	0		
Tampa	0	0	0	0		
Pierce College	0	0	0	0		
De Soto	0	1	0	1		
Canoga	0	0	0	1		
Warner Center	0	0	0	0		
Sherman Way	0	0	0	0		
Roscoe	0	0	0	0		
Nordhoff	0	0	0	0		
Chatsworth	0	0	0	0		
Total	0	2	0	9		

ARRESTS				
AGENCY	LAPD	FYTD		
Felony	2	5		
Misdemeanor	8	11		
TOTAL	10	16		

CITATIONS				
AGENCY	LAPD	FYTD		
Other Citations	0	0		
Vehicle Code Citations	102	252		
TOTAL	102	252		

CALLS FOR SERVICE					
AGENCY LAPD FYTD					
Routine	0	0			
Priority	5	13			
Emergency	0	0			
TOTAL	5	13			

DISPATCHED VS. PROACTIVE			
AGENCY LAPD			
Dispatched	15%		
Proactive 85%			
TOTAL 100%			

PERCENTAGE OF TIME SPENT ON THE BUS SYSTEM			
Orange Line- LAPD	89%		

LEGEND		
Los Angeles Police Department		



# J LINE (SILVER)

# ATTACHMENT D

REPORTED CRIME					
CRIMES AGAINST PERSONS	LAPD	LASD	FYTD		
Homicide	0	0	0		
Rape	0	0	0		
Robbery	1	0	2		
Aggravated Assault	0	0	1		
Aggravated Assault on Operator	0	0	0		
Battery	1	0	1		
Battery Bus Operator	0	0	0		
Sex Offenses	0	0	0		
SUB-TOTAL	2	0	4		
CRIMES AGAINST PROPERTY	LAPD	LASD	FYTD		
Burglary	0	0	0		
Larceny	1	0	1		
Bike Theft	0	0	0		
Motor Vehicle Theft	0	0	0		
Arson	0	0	0		
Vandalism	0	0	0		
SUB-TOTAL	1	0	1		
CRIMES AGAINST SOCIETY	LAPD	LASD	FYTD		
Weapons	0	0	0		
Narcotics	0	0	0		
Trespassing	0	0	1		
SUB-TOTAL	0	0	1		
TOTAL	3	0	6		

CRIMES PER STATION				
STATION	CRIMES AGAINST PERSONS	CRIMES AGAINST PROPERTY	CRIMES AGAINST SOCIETY	FYTD
El Monte	0	0	0	0
Cal State LA	0	0	0	0
LAC/USC Medical Ctr	0	0	0	0
Alameda	0	0	0	0
Downtown	0	0	0	0
37th St/USC	0	0	0	0
Slauson	0	0	0	0
Manchester	0	1	0	1
Harbor Fwy	2	0	0	2
Rosecrans	0	0	0	0
Harbor Gateway Transit Ctr	0	0	0	0
Carson	0	0	0	0
РСН	0	0	0	0
San Pedro/Beacon	0	0	0	0
Total	2	1	0	3

ARRESTS					
AGENCY LAPD LASD FYTD					
Felony	0	0	1		
Misdemeanor	0	2	6		
TOTAL	0	2	7		

CITATIONS			
AGENCY	LAPD	LASD	FYTD
Other Citations	0	0	260
Vehicle Code Citations	213	0	213
TOTAL	213	0	473

CALLS FOR SERVICE			
AGENCY	LAPD	LASD	FYTD
Routine	0	18	39
Priority	3	2	14
Emergency	0	0	2
TOTAL	3	20	55

DISPATCHED VS. PROACTIVE				
AGENCY LAPD LASD				
Dispatched	17%	19%		
Proactive 83% 81%				
TOTAL 100% 100%				

PERCENTAGE OF TIME SPENT ON THE BUS SYSTEM			
Silver Line- LAPD	87%		
Silver Line- LASD	88%		

LEGEND
Los Angeles Police Department
Los Angeles County Sheriff's Department



**K** LINE

# ATTACHMENT D

REPORTED CRIME			
CRIMES AGAINST PERSONS	LAPD	LASD	FYTD
Homicide	0	0	0
Rape	0	0	0
Robbery	0	0	1
Aggravated Assault	0	0	2
Aggravated Assault on Operator	0	0	0
Battery	0	1	2
Battery Bus Operator	0	0	0
Sex Offenses	0	0	1
SUB-TOTAL	0	1	6
CRIMES AGAINST PROPERTY	LAPD	LASD	FYTD
Burglary	0	0	0
Larceny	0	0	1
Bike Theft	0	0	0
Motor Vehicle Theft	0	0	0
Arson	0	0	0
Vandalism	0	0	0
SUB-TOTAL	0	0	1
CRIMES AGAINST SOCIETY	LAPD	LASD	FYTD
Weapons	0	0	2
Narcotics	0	2	2
Trespassing	0	0	2
SUB-TOTAL	0	2	6
TOTAL	0	3	13

CRIMES PER STATION				
STATION	CRIMES AGAINST PERSONS	CRIMES AGAINST PROPERTY	CRIMES AGAINST SOCIETY	FYTD
Expo / Crenshaw	0	0	0	0
Martin Luther King Jr Station	0	0	0	2
Leimert Park Station	0	0	0	2
Hyde Park Station	0	0	0	1
Fairview Heights Station	1	0	1	5
Downtown Inglewood Station	0	0	1	2
Westchester / Veterans Station	0	0	0	1
Total	1	0	2	13

ARRESTS			
AGENCY	LAPD	LASD	FYTD
Felony	1	0	3
Misdemeanor	0	2	5
TOTAL	1	2	8

CITATIONS			
AGENCY	LAPD	LASD	FYTD
Other Citations	11	0	13
Vehicle Code Citations	0	0	0
TOTAL	11	0	13

LAPD	LASD	FYTD
0	38	110
1	2	23
0	0	1
1	40	134
	LAPD 0 1 0 1	0 38 1 2 0 0

DISPATCHED VS. PROACTIVE			
AGENCY	LAPD	LASD	
Dispatched	16%	19%	
Proactive	84%	81%	
TOTAL 100% 100%			

PERCENTAGE OF TIME SPENT ON THE RAIL SYSTEM			
K Line - LAPD	86%		
K Line - LASD	93%		

LEGEND
Los Angeles Police Department
Los Angeles County Sheriff's Department

### **BUS PATROL**

Metro

#### MONTHLY UPDATE ON TRANSIT POLICING PERFORMANCE - SEPTEMBER 2023

REPORTED	CRIME		
CRIMES AGAINST PERSONS	LAPD	LASD	FYTD
Homicide	0	0	0
Rape	0	0	0
Robbery	4	2	24
Aggravated Assault	4	6	45
Aggravated Assault on Operator	2	0	13
Battery	25	6	76
Battery Bus Operator	9	2	29
Sex Offenses	4	0	8
SUB-TOTAL	48	16	195
CRIMES AGAINST PROPERTY	LAPD	LASD	FYTD
Burglary	0	0	1
Larceny	4	2	24
Bike Theft	1	1	5
Motor Vehicle Theft	0	0	1
Arson	0	0	0
Vandalism	2	4	15
SUB-TOTAL	7	7	46
CRIMES AGAINST SOCIETY	LAPD	LASD	FYTD
Weapons	0	2	10
Narcotics	5	5	29
Trespassing	0	0	1
SUB-TOTAL	5	7	40
TOTAL	60	30	281

LASD's Crir	nes per Sector	
Sector		FYTD
Westside	1	7
San Fernando	0	3
San Gabriel Valley	5	10
Gateway Cities	6	23
South Bay	18	57
Total	30	100
LAPD's Crir	nes per Sector	
Sector		FYTD
Valley	Bureau	
Van Nuys	2	5
West Valley	1	2
North Hollywood	3	10
Foothill	0	1
Devonshire	0	5
Mission	1	2
Topanga	0	3
Centra	al Bureau	
Central	10	30
Rampart	6	11
Hollenbeck	0	1
Northeast	4	7
Newton	8	22
West	Bureau	
Hollywood	1	7
Wilshire	1	7
West LA	1	6
Pacific	0	2

1

5

1

11

4

60

Southwest Bureau

8

15

3

25

9

181

Olympic

Southwest

77th Street

Southeast

Harbor

Total

#### ATTACHMENT D

ARRESTS			
AGENCY	LAPD	LASD	FYTD
Felony	11	20	84
Misdemeanor	13	25	130
TOTAL	24	45	214

CITATIONS			
AGENCY	LAPD	LASD	FYTD
Other Citations	21	43	170
Vehicle Code Citations	0	19	44
TOTAL	21	62	214

CALLS FOR SERVIO	CE		
AGENCY	LAPD	LASD	FYTD
Routine	1	138	512
Priority	2	95	296
Emergency	3	10	29
TOTAL	6	243	837

DISPATCHED VS. PROA	CTIVE	
AGENCY	LAPD	LASD
Dispatched	19%	2%
Proactive	81%	98%
TOTAL	100%	100%

PERCENTAGE OF TIME SPENT ON	THE BUS SYSTEM
LAPD BUS	85%
LASD BUS	92%

LEGEND
Los Angeles Police Department
Los Angeles County Sheriff's Department



## **UNION STATION**

### ATTACHMENT D

#### **MONTHLY UPDATE ON TRANSIT POLICING PERFORMANCE - SEPTEMBER 2023**

REPORTED CRIMI	1	
CRIMES AGAINST PERSONS	LAPD	FYTD
Homicide	0	0
Rape	0	0
Robbery	1	4
Aggravated Assault	1	5
Aggravated Assault on Operator	0	0
Battery	17	33
Battery Rail Operator	0	0
Sex Offenses	1	3
SUB-TOTAL	20	45
CRIMES AGAINST PROPERTY	LAPD	FYTD
Burglary	0	0
Larceny	4	19
Bike Theft	1	2
Motor Vehicle Theft	0	0
Arson	0	0
Vandalism	0	1
SUB-TOTAL	5	22
CRIMES AGAINST SOCIETY	LAPD	FYTD
Weapons	0	1
Narcotics	0	4
Trespassing	6	15
SUB-TOTAL	6	20
TOTAL	31	87

	ARRESTS	
AGENCY	LAPD	FYTD
Felony	3	11
Misdemeanor	11	40
TOTAL	14	51

	CITATIONS	3
AGENCY	LAPD	FYTD
Other Citations	2	4
Vehicle Code Citations	0	0
TOTAL	2	4

<b>APD</b> 14	<b>FYTD</b> 42
74	100
74	183
10	22
98	247

DISPATCHED VS. PROACTIVE						
AGENCY LAPD						
Dispatched	19%					
Proactive	81%					
TOTAL	100%					

PERCENTAGE OF TIME SPENT ON THE SYSTEM				
Union Station	81%			

LEGEND Los Angeles Police Department



## **7TH & METRO STATION**

### ATTACHMENT D

#### **MONTHLY UPDATE ON TRANSIT POLICING PERFORMANCE - SEPTEMBER 2023**

REPORTED CRIME							
CRIMES AGAINST PERSONS	LAPD	FYTD					
Homicide	0	0					
Rape	0	0					
Robbery	1	2					
Aggravated Assault	0	0					
Aggravated Assault on Operator	0	0					
Battery	3	12					
Battery Rail Operator	0	0					
Sex Offenses	0	0					
SUB-TOTAL	4	14					
CRIMES AGAINST PROPERTY	LAPD	FYTD					
Burglary	0	0					
Larceny	0	1					
Bike Theft	0	0					
Motor Vehicle Theft	0	0					
Arson	0	0					
Vandalism	0	0					
SUB-TOTAL	0	1					
CRIMES AGAINST SOCIETY	LAPD	FYTD					
Weapons	0	0					
Narcotics	0	0					
Trespassing	5	10					
SUB-TOTAL	5	10					
TOTAL	9	25					

ARRESTS							
AGENCY LAPD FYTD							
Felony	0	0					
Misdemeanor	0	0					
TOTAL	0	0					

CITATIONS							
AGENCY	LAPD	FYTD					
Other Citations	10	21					
Vehicle Code Citations	0	0					
TOTAL	10	21					

CALLS FOR SERVICE							
AGENCY LAPD FYTD							
Routine	2	5					
Priority	14	33					
Emergency	2	4					
TOTAL	18	42					
	10	74					

DISPATCHED VS. PROACTIVE						
AGENCY LAPD						
Dispatched	16%					
Proactive	84%					
TOTAL	100%					

PERCENTAGE OF TIME SPENT ON THE SYSTEM					
7th & Metro Station	83%				

LEGEND Los Angeles Police Department

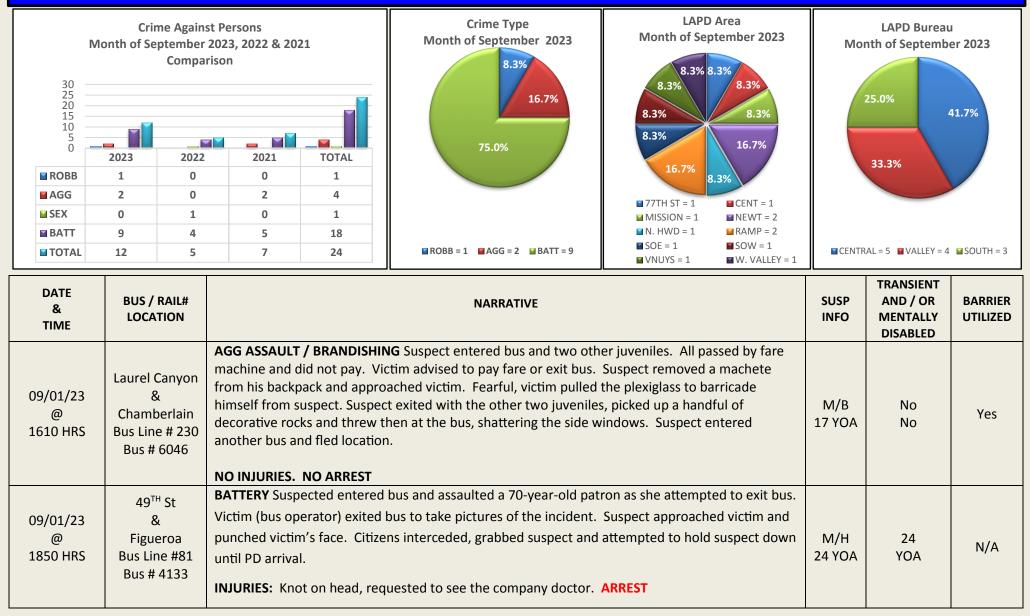
Attachment E



Los Angeles Police Department - Transit Services Division Monthly Bus / Rail Operator Assault Recap Report

# SUSSI SERVICES DIUIDIO SUSSI SERVICES DIUIDIO 3 TOP

# September 2023



#### Monthly Bus / Rail Operator Assaults Recap Report September 2023 Page 2

DATE & TIME	BUS / RAIL# LOCATION	NARRATIVE	SUSP INFO	TRANSIENT AND / OR MENTALLY DISABLED	BARRIER UTILIZED
09/05/23 @ 1730 HRS	Ventura Blvd & Valley Vista Bus Line# 240 Bus #8484	<ul> <li>BATTERY Suspect entered bus and proceeded to the back of the bus. Suspect stated, "you mother f, you grazed me." Suspect approached victim 1 and punched victim's cheek. Victim 2 (bus operator), contacted BOC and reported incident. Suspect observed victim 2's reaction, approached victim 2 and punched the plexiglass. Suspect then spat on victim, striking victim's face. Suspect exited and fled.</li> <li>INJURIES: Spit on face. Victim requested to see company doctor. NO ARREST</li> </ul>	M/B 50 YOA	Yes Yes	Yes
09/08/23 @ 2200 HRS	Adams Blvd & La Brea Bus Line 212 Bus # 5699	<ul> <li>BATTERY Suspect requested to exit bus premature of the bus stop. Victim advised it was not safe and she was unable to stop bus and allow suspect to exit. Upon arrival at the next bus stop, suspect stepped on th4e farebox platform and spat on victim's face causing saliva to enter victim's eye.</li> <li>INJURIES: Spit on right eye causing irritation. Too Nervous to Continue. NO ARREST</li> </ul>	M/H 60 YOA	Unkn Unkn	Yes
09/13/23 @ 0910 HRS	Ventura Blvd. & Newcastle Bus Line #240 Bus # 8440	<ul> <li>BATTERY Suspect entered the bus and asked victim to wait for his friend. Victim advised he could not wait because it would cause him to be late for his other bus stops. Victim proceeded to drive bus. Suspect approached victim, raised his head over the plexiglass and spat on victim's face. Suspect exited bus and fled location.</li> <li>INJURIES: Spit on face. NO ARREST</li> </ul>	М/В 17 YOA	No No	Yes
09/15/23 @ 0725 HRS	Adams Blvd & Griffith Bus Line # 55 Bus # 4055	<ul> <li>BATTERY Suspect entered bus another parting holding a small dog. Victim asked if it was a "service dog?" Suspect entered bus with other party and began to argue. Victim contacted BOC and advised of the situation. Suspect and other party (with dog) proceeded to exit bus. Prior to exiting, suspect reach over plexiglass and spat on victim.</li> <li>NO INJURIES. Victim requested to see company doctor. NO ARREST</li> </ul>	M/H 25 YOA	Unkn Unkn	Yes
09/15/23 @ 1910 HRS	Westlake Av & Wilshire Blvd Bus Line #51 Bus # 9501	<b>ROBBERY</b> Victim parked bus at the "layaway." Victim noted bus was empty. Victim exited bus and soon observed suspect exit the rear door holding victim's purse. Victim demanded suspect to return her purse and then grabbed her purse. Suspect began hitting victim's head with a portable desk lamp. Victim reached and took the portable desk lamp from suspect and began hitting suspect. Suspect managed to regain possession of the lamp and again struck victim. Suspect also kicked victim's stomach. Fearful, victim allowed suspect to take possession of her purse and belongings (fell out of purse during the struggle) and fled.	M/B 40 YOA	Unkn Unkn	N/A

\* Please note that the robbery incident on 9/15/2023 was reported as a robbery and not as a bus operator assault since a crime cannot be counted more than once and a robbery has a higher severity than a battery.

### Attachment E

#### Monthly Bus / Rail Operator Assaults Recap Report September 2023 Page 3

DATE & TIME	BUS / RAIL# LOCATION	NARRATIVE	SUSP INFO	TRANSIENT AND / OR MENTALLY DISABLED	BARRIER UTILIZED
09/18/23 @ 2225 HRS	7 <sup>th</sup> St. & Spring Bus Line # 28 Bus # 3995	<ul> <li>BATTERY Victim drove passed suspects 1 – 2 and stopped at the closest bus stop. Suspects angered victim did not stop prematurely prior to approaching the bus stop. Suspects 1 – 2 yelled at victim. Victim asked suspects exit due to their demeanor. Suspects punched victim 4 – 5 times, exited bus and fled location.</li> <li>INJURIES: Laceration (1 inch), middle of forehead. NO ARREST</li> </ul>	Susp 1 M/B 25 YOA & Susp 2 F/B 25 YOA	Unkn Unkn	Unkn
09/22/23 @ 2335 HRS	N. Hollywood Orange Line Bus Layover Bus Line # 901 Bus # 19539	<ul> <li>BATTERY Victim arrived at last stop and advised all patrons to exit bus. Suspect was observed lingering and advised he was looking for his drugs. Suspect accused victim of making him loose his drugs due to victim driving bus too fast. Eventually suspect exited bus along with victim. Suspect continued to yell at victim and then pushed victim. Victim took a defensive stance to defend himself but suspect not push him a 2<sup>nd</sup> time.</li> <li>INJURIES: No physical injuries. Too Nervous to Continue. ARREST</li> </ul>	M/B 44 YOA	Yes Unkn	N/A
09/25/23 @ 1840 HRS	Gage & Broadway Bus Line # 44 Bus # 3920	ADW Victim exited bus to utilize a business restroom (Hercules Burger). Suspect approached the bathroom and discovered suspect was preventing him from entering. Victim advised the urgency of utilizing the bathroom. Victim entered restroom. As victim exited restroom, suspect grabbed victim's neck. Victim pushed suspect away causing suspect to become enraged. Suspect followed victim back to the bus and pepper sprayed victim as he entered bus. Suspect fled location. INJURIES: Restricted breathing (coughing) due to pepper spray exposure. Transported to Gardena Hospital. NO ARREST	F/B 40 YOA	No No	N/A
09/26/2023 @ 1530 HRS	Alvarado N/O Temple Bus Line # 2 Bus # 8414	<b>BATTERY</b> Suspect utilized profanity towards other bus patrons. Victim asked suspect to stop. Suspect approached victim, spat on victim's face, exited bus, then turned and kicked out the windows on the bus door causing it to shatter. Suspect fled location. <b>INJURIES:</b> Spit on face. <b>NO ARREST</b>	M/H 25 YOA	Unkn Unkn	Yes
09/29/23 @ 1015 HRS	95 <sup>th</sup> St & Central Bus Line # 53 Bus # 1866	<ul> <li>BATTERY Suspects 1 – 2 entered bus and immediately began to comment on victim's hair and expressed they were upset that victim did not greet them "good morning." Suspects and victim engaged I a verbal altercation. Both suspects spat on victim and began to hit victim. Suspects exited bus, entered another bus and fled location.</li> <li>INJURIES: Spit on face. NO ARREST</li> </ul>	Susp 1 F/B 30 YOA & Susp 2 F/B 30 YOA	No No	Unkn

#### Attachment E

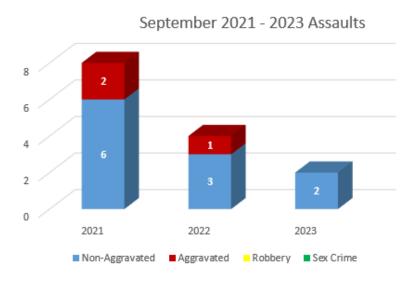


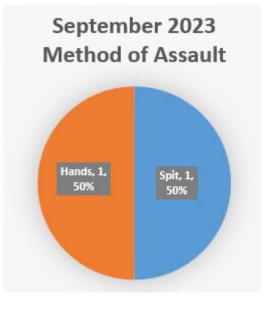
## Monthly Bus/Rail Operator Assault Report



September 2023







In September, there were two non-aggravated assaults with one arrest.

Date	Time	Line	Bus #	Narrative	Barrier
			Santa Monica 9/28 0150hrs		
9/28/2023	1:50	20	5645	Sus MB/30yrs spit on bus op when told it was the last stop	Yes
				East LA 9/29 0730hrs	
9/29/2023	7:30	18	1596	Sus MH/28yrs arrested for punching bus op for no reason	Yes

\*B (NU): Barrier installed, not used; N/A (o): Not applicable, assault occurred outside of barrier



#### System Security & Law Enforcement

#### Sexual Crimes / Harassment Calls for Service September 2023

Calls related to sexual crimes / harassment are routed through System Security & Law Enforcement Operations Center, which then transfers the caller to a free 24/7 hotline — Center for the Pacific Asian Family Inc., and Sister Family Services — that can provide more directed counseling. Between September 1<sup>st</sup> and September 30<sup>th</sup>, Metro Transit Security, LAPD, LASD, and LBPD received ten (10) incidents and referred all victims of sexual crimes / harassment to the above free hotlines.

September 2023 Incident Type & Totals										
LAPD LASD LBPD MTS SSLE										
Sexual Harassment	0	1	0	0	1					
Sexual Battery	5	1	0	0	6					
Lewd Conduct	0	0	0	0	0					
Indecent Exposure	0	0	0	0	0					
Rape	0	3	0	0	3					
TOTAL	· · · · · · · · · · · · · · · · · · ·									

Counseling Information Provided		
	September 2023	
YES	10	
NO- If no, why?	0	
Gone On Arrival	0	
Did Not Have Info	0	
Telephonic Report	0	
Not Offered	0	
Refused	0	
Officer Witnessed Incident	0	
TOTAL	10	

# November 2023 Monthly Update on Public Safety

Gina Osborn Chief Safety Officer

# New Multi-Layered Deployment Update

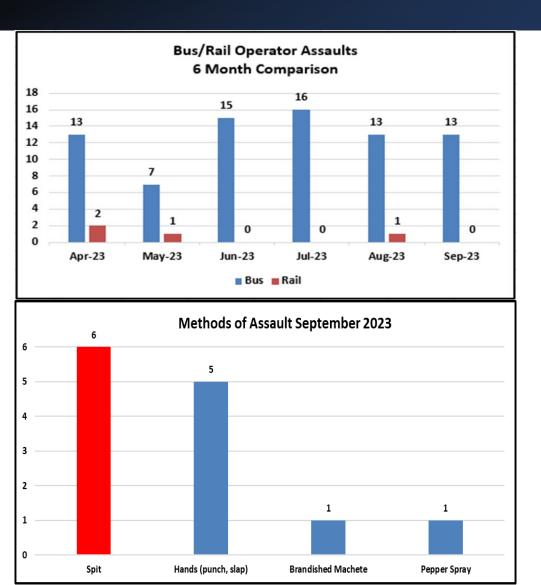
- On July 10, Metro established a multi-layered deployment that will have a significant impact across the entire rail system including end-of-line stations and mid-point (Focus) stations, decreasing the number of non-destination travelers that are required to leave the rail system at the end of the night when the system closes.
- The following reflects the results of the deployment for the month of September.
  - 207 citations and written warnings, and 1,901 verbal warnings issued by Transit Security Officers.
  - Law enforcement conducted:
    - 347 arrests
    - 558 citations
    - 733 warnings

Law Enforcement Homeless Outreach	Totals
	Offered: 93
LAPD HOPE Team Outreach Services	Accepted: 6
	Offered: 613
LASD MET Team Outreach Services Contacts	Accepted: 1
	Offered: 55
Long Beach Quality of Life Team (QOL)	Accepted: 30

# September Public Safety Trends and Statistics

- Overall systemwide Part 1 crimes (violent or major crime classification) declined by 17% (117 vs 141) when comparing August to September.
  - The decline was associated to a drop of 41.8% (32 vs 55) in aggravated assaults and 21.6% (29 vs 37) in robberies.
- Part 2 crimes (less serious crime classification) systemwide increased by 47.5% (295 vs 200) in comparison from August to September.
  - The increase was a direct result of a significant rise of 145% (98 vs 40) in trespassing arrests, 26.2% (106 vs 84) in battery incidents, and 22% in narcotic arrests.
  - The substantial increase in the number of trespassing arrests is directly attributed to an increased focus on addressing trespassers both in the ancillary areas and on the system.
- Since our increased enforcement efforts began in April, overall crime is still sharply down across the system by 42.7%.

# September 2023 Operator Assaults



- Bus/Rail operator assaults decreased from 14 in August to 13 in September
- Spitting on the operator was the top method of assault followed by assault with hands (punch, slap)
- No reason and upset over stop were the top reasons for assaults

Top Reasons for Assault September 2023				
	Reason Count			
	No reason	10		
	Upset over stop	2		
	Upset over fare 1			
	Grand Total 13			

# Metro Ambassadors Update

### **SUPPORT**

Metro Ambassadors continue to support riders, connect riders to resources, and report incidents or maintenance needs. They were deployed on the A Line, B Line, C Line, D Line, E Line, K Line, J Line, as well as bus lines 210, 40, 20, and 720.

## CONNECT

For the month of **September 2023**, Metro Ambassadors conducted **53,964** customer interactions and reported the following:

- 881 Cleanliness Issues
- 262 Elevator and Escalator Problems
- 278 Graffiti Incidents
- 209 Safety Issues

## REPORT

Ambassadors were certified and equipped to carry and administer Narcan in April 2023. For the month of September 2023, Metro Ambassadors reported **11 Narcan** incidents:

- (4) incidents at WLMP
- (2) incidents at Union Station
- (1) incidents at 7th St. Metro Ctr.
- (1) incident at Wilshire/Vermont Station
- (1) incident at Historic Broadway Station
- (1) incident at Civic Center/Grand Park Station
- (1) incident at Irwindale Station

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



**Board Report** 

File #: 2023-0496, File Type: Contract

Agenda Number: 30.

#### OPERATIONS, SAFETY, AND CUSTOMER EXPERIENCE COMMITTEE NOVEMBER 16, 2023

#### SUBJECT: HR5000 HEAVY RAIL VEHICLE (HRV) PROCUREMENT

#### ACTION: APPROVE RECOMMENDATIONS

#### RECOMMENDATION

AUTHORIZE the Chief Executive Officer to:

- A. AWARD Contract No. HR5000-2023 to the Hyundai Rotem Company for the manufacturing and delivery of 182 heavy rail vehicles (HRVs), in the amount of \$663,688,303 for the base contract buy, exclusive of one (1) contract option for an additional 50 HRVs, totaling 232 HRVs, subject to the resolution of any properly submitted protest(s), if any;
- B. APPROVE a combined Life of Project (LOP) budget of \$730,057,133, which includes the cost of the vehicle contract of \$663,688,303 and Contract Modification Authority of \$66,368,830; and
- C. NEGOTIATE AND EXECUTE future contract modifications to the Contract up to \$1,000,000.

#### <u>ISSUE</u>

New HRVs are required to meet the revenue service requirements and enhanced service capacity for Westside Purple Line Extensions (PLE) 2 & 3, as specified in the 30/10 Initiative, as well as replace the existing A650 HRV fleets when they have reached the end of their useful lives.

#### BACKGROUND

In December 2022, the Board authorized staff to issue a federally funded solicitation for a Best Value Request for Proposals (RFP) utilizing competitive negotiations pursuant to PCC § 20217 for the procurement of the 182 Base Order and 50 Option HRVs. Metro's Rail Fleet Management Plan FY2020-FY2040, describes the rail fleet requirements to accommodate anticipated growth in ridership, support line extensions and replace vehicles reaching the end of their useful revenue service lives.

The existing A650 HRV fleets consist of 100 vehicles; 30 Base Buy, DC-motor HRVs of which four (4) have been retired and 74 Option Buy, AC-motor HRVs. Based on a 30-year useful life, the Base Buy vehicles are scheduled to be retired between 2022 and 2023, and the Option Buy vehicles between 2027 and 2029.

The HR4000 HRV procurement project will deliver 64 new HRVs by mid-2025; thirty will be used to replace the original 30 A650 Base Buy HRVs, and the remaining 34 HRVs will be used to support the expanded service with the opening of Purple Line Extension 1.

The intent of the HR5000 program is to procure the additional one hundred eighty-two (182) Base Order HRVs anticipated to be needed for PLE Sections 2 & 3, System Service Expansion, and replacement of the existing seventy-four (74) A650 Options Order vehicles.

#### DISCUSSION

Staff's recommendation presents the firm that is most advantageous to Metro. Hyundai Rotem Company's offer represents the Highest Rated and Best Value to Metro when all technical and price factors are considered in accordance with the RFP evaluation criteria, including US content and Employment Plan. The Best Value evaluation is inclusive of the vehicle quantities for the Contract Base and Contract Option. The Procurement Summary (Attachment A) further provides the detailed evaluation results and rankings for all proposers, including the weighted scores associated with each evaluation factor.

The 182 HRV Base Order will address the operational service requirements of PLE Section 2 with 20 HRVs; PLE Section 3 with 40 HRVs, replacement of the 74 A650 Option vehicles, which will be reaching the end of their useful revenue service lives in approximately ten (10) years; the remaining 48 HRVs will be used to support Metro's planned HRV Line service expansion.

If the Board approves this Contract, Hyundai Rotem Company will deliver 46 new HRVs by July of 2027. The balance will be delivered to support committed levels of service for service expansions as well as the 2028 Olympics.

The contract includes incentives to complete delivery of the first three married-pairs (6 pilot HRVs) by February 1, 2027, thirty-nine (39) months following the issuance of NTP. Thirty-six production vehicles are scheduled to be delivered by the end of July 2027 at a rate of minimally four (4) vehicles per month. The contract also includes provisions to impose liquidated damages for late deliveries.

The Contract contains one (1) option, for up to 50 additional vehicles, as part of this procurement action, but the authority to award the options is not included in the staff recommendation. Should Metro determine the need to exercise this option, approval to do so will be requested.

This procurement is in compliance with Buy America and Metro's Manufacturing Careers Policy.

#### DETERMINATION OF SAFETY IMPACT

The approval of this contract award will have a direct and positive impact on system safety, service

quality, system reliability and overall customer satisfaction. The procurement of 182 new HRVs will feature the most current safety systems and augment service levels in addition to replacing the existing A650 series HRVs.

#### FINANCIAL IMPACT

The total requested LOP budget is a combination of contract amount of the 182 Base Order HRVs of \$663,688,303 and 10 percent (10%) Contract Modification Authority which equals \$730,057,133.

Since this is a multi-year contract, the cost center Manager, project manager, and Chief Operations Officer will ensure that costs will be budgeted in future years.

#### Impact to Budget

The FY24 planned expenditure of \$32,000,000 is included in the combined annual budgets for the aforementioned projects in Project 206037, Cost Center 3043, Rail Vehicle Acquisition, and Projects 865522 and 865523, Cost Center 8510, Construction Contracts/Procurement. The current sources of funds for this action affecting PLE Sections 2 and 3 is a combination of Federal New Starts, TIFIA, and Measure R 35%. Due to the four minute headway requirement for the PLE projects and difference between estimated vs. actual cost per vehicle, it is anticipated that PLE may seek an increase to their LOP in the future to reflect the new vehicle cost and number of vehicles needed, contingent upon receipt of the temporary FTA waiver. Funding sources for the PLE Sections 2 and 3 are planned for the design, construction and procurement efforts; these funds are not eligible for operations. Funding for the replacement vehicles share of the procurement (project 206037) is Proposition A 35%, which is eligible for Rail Operations. The funding sources under this Project (inclusive of Project 865522 and Project 865523) for the 182 HRV Base Order HRVs are sufficient to award the base contract of this recommendation. Staff is actively pursuing additional eligible federal sources. Staff is also pursuing additional State and Local funding sources as they become available to meet the funding needs of this project.

#### EQUITY PLATFORM

Part of the new HR5000 rail vehicles will be used to replace the existing aged A650 Option vehicles and the remaining will be used on the Purple Line Extensions. Approving the recommendations in this board report will support the identified fleet expansion and service needs and will encourage fair, competitive bidding processes for the selection of best value, qualifying contractor to deliver new vehicles on Metro's existing heavy rail vehicle lines that are currently serving passengers in majority Equity Focus Communities who rely on public transportations to commute to their jobs and other life commitments. Based on the 2019 Customer Survey, the Red and Purple heavy rail lines serve the following ridership:

- 27.7% below the poverty line
- 56.4% had no car available

Rider Ethnicity:

- Latino 38.9%;
- Black 13.1%;
- White 25.8%;
- Asian/Pacific Islander 15.2%;
- Other 6.5%

In addition, these areas include Union Station to Downtown LA, Koreatown (Wilshire/Western), Hollywood, Universal City, and North Hollywood.

#### IMPLEMENTATION OF STRATEGIC PLAN GOALS

These recommendations support Metro Strategic Plan Goal No. 5) to "provide responsive, accountable, and trustworthy governance within the Metro organization". This goal strives to position Metro to deliver the best possible mobility outcomes and improve business practices so that Metro can perform more effectively and adapt more nimbly to the changing needs of our customers.

#### ALTERNATIVES CONSIDERED

The Board of Directors may choose not to authorize the contract award for this project; however, this alternative is not recommended as this project is critical to support the Purple Line Extensions, committed level of service to FTA, Olympic service need, and retirement the oldest HRVs in the fleet.

#### NEXT STEPS

Upon Board award approval, a Contract will be executed and a Notice-to-Proceed will be issued to the Hyundai Rotem Company once all insurance and bonding requirements are met. Metro and the Hyundai Rotem Company will then mobilize required resources to ensure timely completion of deliverables by the Vehicle Contractor. Staff will also begin solicitation for consultant services to assist Metro with the Project Management/Control and Technical Support Services.

#### **ATTACHMENTS**

Attachment A - Procurement Summary Attachment B - DEOD Summary Attachment C - Funding & Expenditure Plan

Prepared by: Annie Yang, Deputy Executive Officer, Operations Rail Vehicle Acquisitions (213)

925-1044

Jesus Montes, Sr. Executive Officer, Vehicle Engineering & Acquisitions (213) 418-3277

Matthew Dake, Deputy Chief Operations Officer, (213) 922-4061

Debra Avila, Deputy Chief Vendor/Contract Management Officer, (213) 418-3051

Reviewed by: Conan Cheung, Chief Operations Officer, (213) 418-3034

File #: 2023-0496, File Type: Contract

Agenda Number: 30.

ie N. Wi ph Ste 1 Chief Executive Officer

#### ATTACHMENT A

#### **PROCUREMENT SUMMARY**

#### HR5000 Heavy Rail Vehicle (HRV) Procurement

1.	Contract Number: HR5000				
2.	Recommended Vendor: HYUNDAI ROTEM				
3.	Type of Procurement (check one):IfNon-CompetitiveModification	-B <b>RFP</b> RFP–A&E n Task Order			
4.	Procurement Dates:				
	A.Issued: 12.05.22				
	B.Advertised/Publicized: 12.10.22				
	C.Pre-proposal/Pre-Bid Conference: 12	.15.22			
	D.Proposals/Bids Due: 04.17.23				
	E. Pre-Qualification Completed: 10.	24.23			
	F. Conflict of Interest Form Submit	ted to Ethics: 04.18.23			
	G.Protest Period End Date: 11.30.23				
5.	Solicitations Picked	Bids/Proposals Received: 3			
	up/Downloaded: 121				
6.	Contract Administrator:	Telephone Number:			
	Robert Pennington	(213) 922-5527			
7.	Project Manager:	Telephone Number:			
	Annie Yang	(213) 922-3254			

#### A. Procurement Background

LACMTA is currently expanding its rail network and services, including extending the Purple Subway Line (PLE). The Westside Purple Line Extension, previously named the Westside Subway Extension, extends service from the terminus at Wilshire and Vermont Station to Westwood (UCLA and Veteran's Administration Hospital). This extension, consisting of nearly nine (9) miles of track and seven (7) stations, is planned to be constructed in three (3) segments.

To meet this extension of service, LACMTA anticipates procuring a Base Order of one hundred eighty-two (182) Heavy Rail Vehicles (HRVs). Included in its solicitation is an Option quantity of fifty (50) to meet future HRV fleet needs for service expansions and new extensions.

The Contractor's primary responsibility under the Contract is to deliver to LACMTA up to two hundred thirty-two (232) HRVs (Base Order plus Options subject to Board approval) Model HR5000 Heavy Rail Vehicles ready for revenue service. The Contractor shall design, test for design conformance, manufacture, test for production conformance, Deliver, perform First Article acceptance tests on the first three (3) Married-Pair Vehicles (the Pilot Vehicles) pursuant to the HR5000 Validation and Testing, furnish Spare Parts and tooling as listed in the Contractual Requirements, and warrant the quality, performance, maintainability, interface,

operational reliability and intended purpose of all HR5000 HRVs produced and delivered to LACMTA.

This Board Action is to approve Contract No. HR5000 issued in support of the HR5000 Heavy Rail Vehicle (HRV) Program, subject to the resolution of any properly submitted protest(s), if any.

The RFP was issued in accordance with Metro's Acquisition Policy and the contract type is a firm fixed unit price.

Ten (10) Amendments were issued during the solicitation phase of this RFP:	
--	--

Amend.	Date	Document Title	Section	Revision/Change
No. 1	7-Dec-22	Letter of Invitation	Section One	Letter of Invitation – Correction of the Solicitation Title
No. 2	24-Jan-23	Letter of Invitation	Paragraph 2	Change date: Proposal submission clarifications, and TF- 3 Form
No. 3	4-Feb-23	Technical Specifications	Multiple Technical Specifications	Modify requirements
No. 4	24-Feb-23	Price Sheet	PF-1 through PF-7	Replace all pricing forms to clarify column header
		Commercial Terms	Liquidated Damages, Compensation, General Conditions	Correct references to other clauses
		Technical Specifications	Multiple kequirements	Moairy requirements
No. 5	7-Mar-23	Technical Specifications	Multiple requirements	Modify requirements
No. 6	15-Mar-23	Letter of Invitation	Section One	Change proposal submission date and number of proposal copies
No. 7	29-Mar-23	Commercial Terms	General Conditions	Modify requirements
		Technical Specifications	Multiple Requirements	Modify requirements
No. 8	2-0ct-23	Letter of Invitation	BAFO Proposal Submittal Instructions	New instructions for BAFO submission
		Commercial Terms	General Conditions and Escrow	Modify requirements
No. 9	9-Oct-23	Commercial Terms	General Conditions	Modify requirements
No. 10	10/12/2023	Commercial Terms	General Conditions	Modify requirements

A Pre-Proposal Conference was held on December 15, 2022, at the USG Building and was also conducted via Microsoft Teams for those proposers that could not attend in person.

Three (3) qualified proposals were received on Monday, April 17, 2023. Proposer Site Visits and Interviews were conducted at each proposers manufacturing facility located in the United States and overseas between July 17, 2023, and September 2, 2023. The purpose of the visit was to inspect and qualify the proposed manufacturing and assembly facilities and interview the Proposers prospective Project Team.

Responses to proposer's questions were received throughout the solicitation period. Those questions not resulting in an Amendment were grouped and posted to the project data repository accessible to all planholders as Clarification responses. Six (6) sets of Clarification responses were uploaded to the site from January 10, 2023, to March 28, 2023. All available drawings, manuals, and other reference material were also posted to the site.

#### B. Evaluation of Proposals/Bids

A Source Selection Committee (SSC) consisting of staff from LACMTA Operations convened and conducted a comprehensive technical evaluation of the proposals received.

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

	Proposal Evaluation Criteria	
1.	Past Experience and Past Performance	300
2.	Technical Compliance	250
3.	Project Management Experience	200
4.	Price	200
5.	U.S. Employment Plan (USEP)	50
Tota	Available Points	1,000

The evaluation criteria are appropriate and consistent with criteria developed for other similar vehicle acquisition and overhaul procurements. The USEP is included as a mandatory criterion in accordance with the January 2018 Board Motion (File 2017-0904 Agenda Number 45). Proposers were provided with the opportunity to augment their proposal

scoring by participating in an additional Evaluation Criteria element by proposing additional U.S. component content greater than the Federal Buy America requirement of 70%. Proposers may choose not to participate in this element and may still be considered responsive if they meet all other requirements of the RFP.

The evaluation criteria and their Subfactors were numerically scored and ranked for all responsive Proposers. Numerical scores will indicate the degree to which the Proposer's technical and price offer has met the standard for each criterion evaluated. The standard for each numerical value defined was used by the SSC as a guide during the evaluation process. Each SSC member also provided brief narratives in their evaluation that supports the numerical scoring they presented. Several factors were considered when developing these weights, giving the greatest importance to past experience and past performance on rail vehicle overhaul and integration or new rail vehicle acquisition.

All three of the proposals received were determined to be within the competitive range. The firms are listed below in alphabetical order:

- 1. Hitachi Rail, Los Angeles
- 2. Hyundai Rotem
- 3. Stadler US

The proposal evaluation kick-off meeting was conducted on April 25, 2023, with the SSC and Subject Matter Experts (SMEs) present, however the SSC evaluation process did not start until May 30, 2023. The SMEs were used to support the SSC with their expertise in the relevant subject matter on various subsystems. Comments from the SMEs were compiled and presented to the SSC on June 15, 2023. Request for Clarification, instructions for oral presentations and site inspection visits agendas were sent to the Proposers the week of June 26, 2023.

For scheduling purposes, site inspection visits were defined by geographic area into U.S. manufacturing/assembly facilities, Asia manufacturing facilities, and European manufacturing facilities. Proposer oral presentations and LACMTA clarification requests were combined with site inspection visits. Except for requests for clarifications, the meeting agenda for each Proposer was identical. The SSC conducted site visits to each of the firms proposed manufacturing and assembly locations. The first site was to Hyundai Rotem fabrication facility in Korea, the week of July 15, 2023. The SSC team next visited Stadler's U.S. manufacturing/assembly facility in Salt Lake City, UT the week of July 24, 2023. SSC visits to Hyundai Rotem's and Hitachi's U.S. assembly facilities were conducted the week of August 14, 2023. The last round of site visits occurred the week of August 26, 2023, to Hitachi's and Stadler's manufacturing facilities in Italy, Switzerland and Hungary. The SSC were able to evaluate and assess each of the Proposer's facilities along with the corresponding capability and capacity of the location.

On September 8, 2023, the SSC met to consider the proposals, oral presentations, and the site visits in their initial proposal evaluation score. The SSC Chair compiled the SSC evaluation scores based on technical merit. The price proposals were then revealed to the SSC members and the SMEs to review and discuss the technical merit against the prices. Pre-negotiation positions were established based on technical clarifications and proposer deviations/exceptions, and using pricing variations from LACMTA's Independently Cost Estimate (ICE). Although Proposer pricings was within the overall ICE and project budget, certain component pricing needed to be reviewed. The basis of LACMTA's ICE was reexamined and determined to be sound.

Notices were sent to all three of the Proposers targeting September 24 through September 26, 2023, for the discussions/negotiations to be held virtually due to scheduling constraints. The Proposers were notified of their respective strengths and weaknesses that could be enhanced in a Best and Final Offer (BAFO), this would also include any Proposer deviation/exception to the RFP documents or Technical Specifications. Negotiations were completed on October 12, 2023, after reviewing with County Counsel to finalize agreements on outstanding Proposer commercial exceptions. Amendment numbers nine (9) and ten (10) were the results of these agreements. The BAFO request was released on October 2, 2023, with a due date of October 16, 2023.

The SC Team met on October 23, 2023, with the SME's updated report on the technical merits of each Proposer's BAFO submittal and all previously presented factors. The SSC Team was charged to evaluate and score each of the Proposers' technical proposals and provide their score to the SSC Chair to be compiled. The SSC team and Chair met on October 26, 2023, to review the Teams' evaluation and scores. The Team discussed the factors in the scores and reached a consensus on a final technical evaluation. The SSC Chair then revealed the BAFO price proposals to the SSC Team for review and discussion.

Final evaluations and discussion of the BAFO submittals were held on Friday, October 27, 2023, and were used as the basis of the recommendation for award.

#### C. Qualifications Summary of Firms:

#### Hitachi Rail, Los Angeles LLC

Hitachi Rail STS Los Angeles LLC, an incorporated Joint Venture between Hitachi Rail STS USA Inc. and Hitachi Rail STS S.p.A., both of which are a part of the Hitachi Rail STS global organization. Hitachi Rail was created to allow Hitachi to utilize the TVM certification of Hitachi Rail STS USA and the car building experience from Hitachi Rail SYS S.p.A, leveraging the capabilities and facilities of both regional divisions of Hitachi Rail STS on this project. Hitachi Rail recently built a new \$70M US permanent and fully owned rail car manufacturing facility and test rack in Washington County in the City of Hagerstown,

Maryland where Hitachi Rail proposes to complete final assembly and testing of the HR5000 vehicles.

#### Hyundai Rotem

Hyundai Rotem USA Corporation (HRU) will be the main contractor for LACMTA HR5000 Project, a subsidiary of Hyundai Rotem Company (HRC), which is the parent company of the HRU for engineering, subsystem procurement, quality assurance and pilot car and carbody manufacturing. Hyundai Precision Industry, founded in 1977, was relaunched in 1999 as Hyundai Rotem Company ("Hyundai Rotem") as a consequence of the Korean Government's 'Bid Deal No.1'. This deal merged three domestic companies in the railway vehicle sector to reinforce the competitiveness of the business through a single Hyundai Rotem brand. Then, in 2001 Hyundai Rotem was incorporated into Hyundai Motor Group and has become a global top tier railway systems provider in a relatively short period of time due to its world-class technology and high-quality products. Hyundai Rotem entered the North American market in 1998, Hyundai Rotem USA Corporation was established in 2005 in advance of the first equipment orders from Southeastern Pennsylvania Transportation Authority (SEPTA). Hyundai Rotem is the parent company of Hyundai Rotem USA Corporation

#### Stadler US

Stadler Rail US is the US based manufacturing facility for Stadler Rail which produces railway rolling stock. Stadler Rail is headquartered in Bussnang, Switzerland. In June of 2015, Stadler was awarded an order for 8 new FLIRT model diesel-electric low-floor multiple unit vehicles. Since federal funds were being used for the order made it subject to the Buy America Act, and Stadler quickly found a former Union Pacific plant in Salt Lake City, and built a permanent 230,000 ft2, \$50 million state-of-the-art facility on a 62-acre property, just five minutes from the Salt Lake City International Airport completed in 2018.

FIRM	AVERAGE SCORE	WEIGHT FACTOR	WEIGHTED AVERAGE SCORE	RANK
HITACHI RAIL LOS ANGELES, LL	C			
Proposal Evaluation Criteria				
Past Experience & Past Performance	73.5	300	222	
Project Management Experience	75.2	250	188	

#### Technical Evaluation Scores (alphabetical order)

Technical Compliance	77.9	200	163	
TOTAL		750	573	3

FIRM	AVERAGE SCORE	WEIGHT FACTOR	WEIGHTED AVERAGE SCORE	RANK
HYUNDAI ROTEM				
Proposal Evaluation Criteria				
Past Experience & Past Performance	84.3	300	255	
Project Management Experience	83.5	250	208	
Technical Compliance	82.7	200	172	
TOTAL		750	635	1

FIRM	AVERAGE SCORE	WEIGHT FACTOR	WEIGHTED AVERAGE SCORE	RANK
STADER RAIL US				
Proposal Evaluation Criteria				
Past Experience & Past Performance	80.8	300	234	
Project Management Experience	78.1	250	189	
Technical Compliance	75.2	200	159	
TOTAL		750	581	2

#### US Employment Program

All Proposers were required to propose a level of participation in the United States Employment Program (USEP). This participation resulted in a normalized distribution of the 50 points allocated in accordance with their respective commitment value of the new and sustained jobs retained by each firm and the value of U.S. facility investments and added to the final evaluation score. The Proposer with the highest combined USEP commitment value and therefore received the maximum incentive score.

FIRM	Hitachi Los Angeles	Hyundai Rotem	Stadler US
USEP Labor (Prime/Sub)	\$ 104,000,000	\$ 107,903,918	\$ 100,613,875
USEP Facility Improvement	\$ 77,000,000	\$ 13,996,082	\$ 2,000,000
Net Evaluation Amount	\$ 181,200,000	\$ 121,900,000	\$ 102,613,875
Evaluation Points	50	34	28

#### **Buy American Pre-Award Audit**

As required by the RFP Buy America Requirements and in accordance with FTA requirements as stated in 49 CFR 663, an initial Buy America Pre-Award Audit was conducted during the weeks of August 17, 2023, through September 2, 2023. As a precaution, all three proposer firms were audited, and all were determined to satisfy the stated Buy America requirements. As part of the Audit process, the auditor confirmed the proposer's Enhanced U.S. Component Content valuation. A second Buy America Pre-Award Audit was conducted the week of October 24 through October 27, 2023, to reconfirm the Buy America content and the Enhanced U.S. Component Content value.

#### Enhanced U.S. Component Content Program

All the Proposers participated in the Enhanced U.S. Component Content Program, submitting proposals with additional U.S. component content above that required by R-15 Buy America, currently at seventy percent (70%), and were verified by an independent pre-award audit in accordance with 49 C.F.R. Part 663. The U.S. Component Content was not part of any direct evaluation scoring, but was considered in the overall pricing evaluation and its Best Value trade-off analysis on a dollar-for-dollar formula of "Total Price – (Value of U.S. content greater than 70%) = Evaluation Price.

LACMTA conducted Buy America Audits after receipt of the initial proposal submittal and after the BAFO proposal submittal to verify the cost component of the Enhanced U.S.

FIRM	Hitachi Los Angeles	Hyundai Rotem	Stadler US
BAFO PRICE	\$ 751,854,859	\$ 835,527,427	\$ 821,909,985
Enhanced US Component %	74.6%	77.1%	94.5%
Enhanced US Component \$	\$ 17,579,405	\$ 27,861,558	\$ 98,655,168
Net Evaluation Price	\$ 734,275,454	\$ 807,257,427	\$ 723,254,817
Evaluation Points	197	179	200

Component Content Program. The value of participation was included in the overall price evaluation.

#### D. Cost/Price Analysis

The proposed prices have been determined to be fair and reasonable based upon adequate competition, technical evaluation, fact finding, and negotiations. All the proposed price offers submitted were below LACMTA's ICE and project budget. All proposed pricing was at least 3.7% below LACMTA's ICE and were within 11.7% from the highest to lowest price. The SSC considered all price aspects in relationship to their technical evaluations and analysis to develop their evaluation that would present LACMTA with its best overall value when all evaluation factors are considered, including schedule risk, past performance, technical expertise, project management and U.S. jobs creation.

Proposer	Base Proposal	Option 1 Proposal	Combined Proposal
ICE	\$693,244,129	\$165,070,250	\$858,314,379
Hitachi Los Angeles	\$600,946,082	\$150,911,777	\$751,857,859
Hyundai Rotem	\$663,688,303	\$171,430,682	\$835,118,985
Stadler US	\$658,877,133	\$163,430,682	\$821,909,985

The RFP for the new HRV acquisition project contained work elements that could be exercised as an option. The Option 1 elements consisted of 50 HRVs and PF-7 Alternate Technology which were included in the technical and price evaluation. These options can be unilaterally exercised at Metro's discretion. The following table provides the Option 1 and Alternate Technology pricing.

	Proposer	Option 1 HRVs	Alternate Tech	Total
1.	Hitachi Los Angeles	\$150,911,777	\$ 4,780,695	\$155,692,472
2.	Hyundai Rotem	\$171,430,682	\$ 7,792,744	\$179,223,424
3.	Stadler US	\$163,032,852	\$ 8,863,000	\$172,293,682

### E. Technical and Price Evaluation

The tables below combine the technical evaluation scores with the price scores achieved based on calculations.

FIRM	AVERAGE SCORE	WEIGHT FACTOR	WEIGHTED AVERAGE SCORE
HITACHI RAIL LOS ANGELES, LLC			
Proposal Evaluation Criteria			
Past Experience & Past Performance	73.5	300	222
Project Management Experience	75.2	250	188
Technical Compliance	77.9	200	163
Price		200	197
U.S. Employment Plan Evaluation		50	28
TOTAL		1000	798

FIRM	AVERAGE SCORE	WEIGHT FACTOR	WEIGHTED AVERAGE SCORE			
HYUNDAI ROTEM						
Proposal Evaluation Criteria						
Past Experience & Past Performance	84.3	300	255			

Project Management Experience	83.5	250	208
Technical Compliance	82.7	200	172
Price		200	179
U.S. Employment Plan Evaluation		50	34
TOTAL		1000	848

FIRM	AVERAGE SCORE	WEIGHT FACTOR	WEIGHTED AVERAGE SCORE
STADER RAIL US			
Proposal Evaluation Criteria			
Past Experience & Past Performance	80.8	300	234
Project Management Experience	78.1	250	189
Technical Compliance	75.2	200	159
Price		200	200
U.S. Employment Plan Evaluation		50	50
TOTAL		1000	831

#### F. <u>Recommended Contractor</u>

In following the instructions in the RFP document, Instructions to Proposer (IP-25) the SSC Team will make its recommendation for an award a contract resulting from responses to this RFP to a responsive and responsible Proposer whose offer conforms to the RFP and will be most advantageous to LACMTA, with price and other factors specified elsewhere in this RFP being considered.

Recommendation for award may or may not be made to the lowest-priced Proposal. Although technical, project management, past performance and experience are considered vital to a successful project, LACMTA may not necessarily make an award to the Proposer with the highest technical ranking nor award to the Proposer with the lowest price proposal if doing so would not be in the overall best interest of LACMTA.

Based on the technical evaluation and economic analysis, the recommended price addresses all cost elements and presents the best overall value when all evaluation factors are considered, including schedule risk, past performance, technical expertise, project management and U.S. jobs creation, the SSC Team recommends an award to Hyundai Rotem. Although the recommendation for award is being recommended to a proposer other than the lowest price offeror, the SSC Team believes that Hyundai Rotem proposal represents the best opportunity to meet LACMTA's project goals.

#### **DEOD SUMMARY**

#### HR5000 HEAVY RAIL VEHICLE (HRV) PROCUREMENT

#### A. Small Business Participation

Hyundai Rotem USA, a Transit Vehicle Manufacturer (TVM), is on the Federal Transit Administration's (FTA) list of eligible TVMs. Hyundai Rotem USA has submitted its overall Disadvantaged Business Enterprise (DBE) goal of 5.30% to FTA, in compliance with 49 Code of Federal Regulations (CFR) Section 26.49(a)(1). TVMs submit overall DBE goal methodology and semi-annual reports directly to FTA.

#### 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 FUNDING EXPENDITURE PLAN HR5000 HEAVY RAIL VEHICLE (HRV) PROCUREMENT

#### ATTACHMENT C - Funds Uses and Sources Tables

		From Inception to										
		Date (ITD) thru										
		FY23 Jun	7/1/23 - 6/30/24	7/1/24 - 6/30/25	7/1/25 - 6/30/26	7/1/26 - 6/30/27	7/1/27 - 6/30/28	7/1/28 - 6/30/29	7/1/29 - 6/30/30	7/1/30 - 6/30/31		
1	Use of Funds		FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31	Total	% of Project
2	HR5000 New HRV Procurement: 122 Vehicles	\$0	\$32,000,000	42,000,000	52,030,619	52,000,000	104,000,000	82,000,000	53,860,000	26,999,341	\$444,889,960	60.9%
3	Purple Line Extension 2: 20 Vehicles	\$0		45,150,000	27,782,781						\$72,932,781	10.0%
4	Purple Line Extension 3: 40 Vehicles	\$0			47,186,600	98,678,961					\$145,865,561	20.0%
5	10% CMA/Contingency	\$0				\$8,000,000			\$29,184,415	\$29,184,415	\$66,368,830	9.1%
	Base Order Total	\$0	\$32,000,000	\$87,150,000	\$127,000,000	\$158,678,961	\$104,000,000	\$82,000,000	\$83,044,415	\$56,183,756	\$730,057,132	100.0%

## HR5000 New Heavy Rail Vehicle Procurement





# SCOPE & PLAN

- Base Order | 182 HRVs
  - Replace Existing Fleet (74 Cars)
  - Support Purple Line Extensions Section 2 & 3
  - Add Capacity for 4 Minutes Headway as committed to FTA
- Option Order | 50 HRVs
  - Support Service Expansion on future HRT lines, requested LOP does not included the option.



# PROCUREMENT EVALUATION PROCESS

•	RFP Issued Date	December 5, 2022
•	Proposals received	April 17, 2023
•	Initial Interviews Conducted	July 17, 2023
•	Proposer Site Visits conducted	July 17, 2023
•	Agency reference checks conducted	September 2023
•	Negotiations completed	September 28, 2023
•	Best and Final Offer (BAFO) received	October 16, 2023
•	Final Price & Technical Evaluation completed	October 26, 2023
•	Issue Notice of Intent to Award	November 15, 2023



# AWARD RECOMMENDATION SUMMARY

Award to Hyundai Rotem Company (HRC) for \$663,688,303 as rated highest in accordance with approved evaluation criteria.

Category	Weight	Hitachi Rail	Hyundai Rotem	Stadler Rail US
	Factor	Los Angeles, LLC	Company (HRC)	
Past Experience & Past	300	222	255	234
Performance				
Project Management	250	188	208	189
Experience				
Technical Compliance	200	163	172	159
Price	200	197	179	200
US Employment Plan	50	28	34	50
Evaluation				
Total	1000	798	848	831



# PROJECT SCHEDULE – GOING FORWARD

## Milestones:

Board Award Approval Issue NTP Pilot Car Delivery & Acceptance Complete delivery of 36 base order cars (minimally 4 cars /month) Open PLE, Section 2 Open PLE, Section 3 **Completion Date:** 

November 2023 December 2023 August 2027 April 2028

Complete delivery of all 182 base order cars by December 31, 2029 (NTP + 75 months, at 6 HRVs/month delivery rate)



# Thank you

