



Orange County Transportation Authority

Transit Committee Agenda

Thursday, February 8, 2024 at 9:00 a.m.

Board Room, 550 South Main Street, Orange, California

Committee Members

Fred Jung, Chair

Vicente Sarmiento, Vice Chair

Ashleigh Aitken

Valerie Amezcua

Andrew Do

Patrick Harper

Stephanie Klopfenstein

Any person with a disability who requires a modification or accommodation in order to participate in this meeting should contact the Orange County Transportation Authority (OCTA) Clerk of the Board's office at (714) 560-5676, no less than two business days prior to this meeting to enable OCTA to make reasonable arrangements to assure accessibility to this meeting.

Agenda Descriptions

Agenda descriptions are intended to give members of the public a general summary of items of business to be transacted or discussed. The posting of the recommended actions does not indicate what action will be taken. The Committee may take any action which it deems to be appropriate on the agenda item and is not limited in any way by the notice of the recommended action.

Public Availability of Agenda Materials

All documents relative to the items referenced in this agenda are available for public inspection at www.octa.net or through the Clerk of the Board's office at the OCTA Headquarters, 600 South Main Street, Orange, California.

Meeting Access and Public Comments on Agenda Items

Members of the public can either attend in-person or listen to audio live streaming of the Board and Committee meetings by clicking this link: <https://octa.legistar.com/Calendar.aspx>

In-Person Comment

Members of the public may attend in-person and address the Board regarding any item within the subject matter jurisdiction of the Orange County Transportation Authority. Please complete a speaker's card and submit it to the Clerk of the Board and notify the Clerk regarding the agenda item number on which you wish to speak. Speakers will be recognized by the Chair at the time of the agenda item is to be considered by the Board. Comments will be limited to three minutes. The Brown Act prohibits the Board from either discussing or taking action on any non-agendized items.

TRANSIT COMMITTEE MEETING AGENDA

Written Comment

Written public comments may also be submitted by emailing them to ClerkOffice@octa.net, and must be sent by 5:00 p.m. the day prior to the meeting. If you wish to comment on a specific agenda item, please identify the item number in your email. All public comments that are timely received will be part of the public record and distributed to the Board. Public comments will be made available to the public upon request.

Call to Order

Pledge of Allegiance

Director Aitken

Closed Session

There are no Closed Session items scheduled.

Special Calendar

1. Committee Meeting 2024 Schedule

Fred Jung

Overview

Chair Jung will lead a discussion regarding the 2024 meeting schedule for the Transit Committee.

Recommendation

Approve the 2024 Transit Committee meeting calendar.

Attachments:

[Calendar](#)

2. Roles and Responsibilities of the Transit Committee

Darrell E. Johnson

Overview

The roles and responsibilities of the Transit Committee are reviewed periodically for any appropriate changes or additions.

Recommendation

Approve the 2024 Transit Committee Roles and Responsibilities.

Attachments:

[Supplemental Information](#)

TRANSIT COMMITTEE MEETING AGENDA

Consent Calendar (Items 3 and 4)

All items on the Consent Calendar are to be approved in one motion unless a Committee Member or a member of the public requests separate action or discussion on a specific item.

3. Approval of Minutes

Clerk of the Board

Recommendation

Approve the minutes of the January 11, 2024 Transit Committee meeting.

Attachments:

[Minutes](#)

4. Measure M2 Community-Based Transit Circulators Program Project V Ridership Report

Adrian Salazar/Kia Mortazavi

Overview

Measure M2 contains an array of programs to enhance all modes of transportation, including a program to fund community-based transit circulators known as Project V. The goal of the program is to provide local transit services that complement regional bus and rail service and to meet needs in areas not adequately served by the regional transit services. Funding is awarded to local jurisdictions through a competitive call for projects. Local jurisdictions then implement the awarded services and agree to work towards meeting performance criteria including ridership metrics. The latest ridership information for these awarded services is presented to the Board of Directors twice annually. This report covers the period from April 2023 to September 2023.

Recommendation

Receive and file as an information item.

Attachments:

[Staff Report](#)

[Attachment A](#)

Regular Calendar

5. Contract Change Order for Construction of the OC Streetcar Project

Ross Lew/James G. Beil

Overview

On September 24, 2018, the Orange County Transportation Authority Board of Directors authorized Agreement No. C-7-1904 with Walsh Construction Company II, LLC, for construction of the OC Streetcar project. A contract change order is required for work to address schedule impacts associated with Time Impact Evaluation No. 07.

Recommendation

Authorize the Chief Executive Officer to negotiate and execute Contract Change Order No. 28.3 to Agreement No. C-7-1904 with Walsh Construction Company II, LLC, in the amount

TRANSIT COMMITTEE MEETING AGENDA

of \$1,425,000, for schedule impacts associated with time impact evaluation no. 07 for the OC Streetcar project.

Attachments:

[Staff Report](#)

[Attachment A](#)

[Attachment B](#)

6. Consultant Selection for On-Call Construction Management and Engineering Technical Support Services for Transit Facility Projects

George Olivo/James G. Beil

Overview

On September 25, 2023, the Orange County Transportation Authority Board of Directors authorized the release of a request for proposals to retain a consultant to provide on-call construction management and engineering technical support services for transit facility projects. Board of Directors' approval is requested for the selection of a firm to perform the required work.

Recommendations

- A. Approve the selection of Hout Construction Services, Inc., doing business as Hout Engineering, as the firm to provide on-call construction management and engineering technical support services for transit facility projects.
- B. Authorize the Chief Executive Officer to negotiate and execute Agreement No. C-3-2754 between the Orange County Transportation Authority and Hout Construction Services, Inc., doing business as Hout Engineering, to provide on-call construction management and engineering technical support services for transit facility projects for a three-year term, with one, two-year option term.

Attachments:

[Staff Report](#)

[Attachment A](#)

[Attachment B](#)

[Attachment C](#)

7. Zero-Emission Bus Pilot Update

Cliff Thorne/Johnny Dunning, Jr.

Overview

On October 8, 2020, the Orange County Transportation Authority Board of Directors approved the purchase of ten hydrogen fuel-cell electric buses and ten plug-in battery-electric buses to gain necessary operational and technological experience in preparation for transitioning the Orange County Transportation Authority's bus fleet to zero-emission technologies. This report provides an update on the zero-emission bus pilot performance and deployment efforts.

TRANSIT COMMITTEE MEETING AGENDA

Recommendation

Receive and file as an information item.

Attachments:

[Staff Report](#)

[Presentation](#)

Discussion Items

8. OC Streetcar Project Video Update

Ross Lew/James G. Beil

Overview

Staff will show a video highlighting recent OC Streetcar construction activities.

9. OC Bus and OC ACCESS Services Update

Kim Tucker/Johnny Dunning, Jr.

Overview

Staff will provide an update on the OC Bus and OC ACCESS Services.

Attachments:

[Presentation](#)

10. Public Comments

11. Chief Executive Officer's Report

12. Committee Members' Reports

13. Adjournment

The next regularly scheduled meeting of this Committee will be held:

9:00 a.m. on Thursday, March 14, 2024

OCTA Headquarters
550 South Main Street
Orange, California



ORANGE COUNTY TRANSPORTATION AUTHORITY 2024 TRANSIT COMMITTEE MEETINGS

DRAFT

JANUARY						
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DECEMBER						
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OCTA, OCTD, OCLTA, and OCSAFE regular Board meeting
9:00 a.m., OCTA Headquarters
550 South Main Street, Board Room - Conf. Room 07-08, Orange CA

Transit
9:00 a.m.

Holidays

2024 Transit Committee Calendar - Proposed Exceptions

Standard monthly meeting dates and times are as follows:

Transit (TRANSIT) – 2nd Thursday Monday of the month at 9:00 a.m.

Month	Proposed Exceptions to the Standard Meeting Dates
January	No change
February	No change
March	No change
April	No change
May	No change
June	No change
July	No change
August	No change
September	No change
October	No change
November	No change
December	No change

Committee meeting calendars are pending approval by each committee at their first meeting once assignments are finalized

Draft Transit Committee

Roles and Responsibilities

February 8, 2024

1. Develops, reviews, and provides policy recommendations to the Board of Directors on matters related to the operation of bus, rail, and paratransit services;
2. Reviews and provides recommendations to the Board of Directors on matters pertaining to the planning of bus, rail, and paratransit services;
3. Reviews and provides recommendations to the Board of Directors on transit ridership, schedules, and service policies;
4. Reviews and provides recommendations to the Board of Directors on bus, rail, and paratransit projects, including Orange County Transportation Authority (OCTA) revenue vehicles, support equipment, operations facilities, and Metrolink facilities and stations;
5. Makes recommendations to the Board of Directors on use and procurement of professional services and contractors to support planning and delivery of OCTA [public transit](#) projects, programs, and services;
6. Reviews and provides recommendations to the Board of Directors on future transit programs;
7. Reviews and provides recommendations to the Board of Directors on matters related to transit technology and innovation, such as mobile ticketing applications and other on-demand service delivery models; and
8. Reviews and provides recommendations to the Board of Directors on the role of transit services in attainment of air quality goals.



Committee Members Present

Fred Jung, Vice Chair
Andrew Do
Tam Nguyen
Vicente Sarmiento

Staff Present

Jennifer L. Bergener, Deputy Chief Executive Officer
Michael Cardozo, Employee Rotation Program
Allison Cheshire, Clerk of the Board Specialist, Senior
James Donich, General Counsel
OCTA Staff

Committee Members Absent

None

Call to Order

The January 11, 2024, regular meeting of the Transit Committee was called to order by Committee Vice Chair Jung at 9:02 a.m.

Closed Session

1. Metrolink Mid-Year Report

Darren Kettle, Chief Executive Officer of Metrolink, provided a presentation on this item.

The Committee requested detailed ridership information in future reports provided.

No action was taken on this item.

Consent Calendar (Item 2)

2. Approval of Minutes

A motion was made by Director Sarmiento, seconded by Director Nguyen, and declared passed by those present, to approve the minutes of the December 14, 2023 Transit Committee meeting.

Regular Calendar

3. OC Streetcar Project Quaterly Update

James G. Beil, Executive Director, Capital Programs, and Tresa Oliveri, Principal Community Relations Specialist, Public Outreach, provided a presentation on this item.

No action was taken on this item.



Discussion Items

4. OC Bus and OC ACCESS Service Update

Kim Tucker, Department Manager Schedule and Bus Operations Support, and Ryan Maloney, Manager, Marketing and Data Analytics provided a presentation on this item.

No action was taken on this item

5. Public Comments

No public comments were received.

6. Chief Executive Officer's Report

Jennifer L. Bergener, Deputy Chief Executive Officer, reported the following:

- Darrell Johnson, Chief Executive Officer, is attending the Transportation Research Board's Annual Meeting in Washington, D.C.
- Transit Equity Day will be on Sunday February 4. OCTA and Metrolink will be offering free rides.

7. Committee Members' Reports

There were no Committee Member's reports.

8. Adjournment

The meeting adjourned at 10:18 a.m.

The next regularly scheduled meeting of this Committee will be held:

9:00 a.m. on Thursday, February 8, 2024

OCTA Headquarters
550 South Main Street
Orange, California



February 8, 2024

To: Transit Committee

From: Darrell E. Johnson, Chief Executive Officer

Subject: Measure M2 Community-Based Transit Circulators Program
Project V Ridership Report

Overview

Measure M2 contains an array of programs to enhance all modes of transportation, including a program to fund community-based transit circulators known as Project V. The goal of the program is to provide local transit services that complement regional bus and rail service and to meet needs in areas not adequately served by the regional transit services. Funding is awarded to local jurisdictions through a competitive call for projects. Local jurisdictions then implement the awarded services and agree to work towards meeting performance criteria including ridership metrics. The latest ridership information for these awarded services is presented to the Board of Directors twice annually. This report covers the period from April 2023 to September 2023.

Recommendation

Receive and file as an information item.

Background

The Measure M2 (M2) Community-Based Transit Circulators program, known as Project V, is a competitive grant program that provides funding to develop and implement local transit services. Currently, funded services include seasonal, special-event, commuter, fixed-route, and demand-responsive service intended to complement regional transit, while better meeting specific local needs.

This ridership report covers the fourth quarter for fiscal year (FY) 2022-23 and the first quarter for FY 2023-24 and provides information on boardings per revenue vehicle hour, cost per boarding, customer satisfaction, and on-time performance metrics.

Based on the established program guidelines, Project V-funded services are expected to meet a maximum cost per boarding standard, which is equal to twice the M2 Project V per boarding subsidy. Where services are not meeting this standard, jurisdictions are required to disclose the cost per boarding information to their city council (or board of supervisors in the case of County of Orange services) to continue, restructure, or cancel the service. This approach provides local jurisdictions with the flexibility to deliver Project V services under metrics that are context sensitive yet financially sustainable, and locally driven. For FY 2022-23, the maximum cost per boarding was established at \$20.85 (two times the FY 2022-23 M2 subsidy per boarding of \$10.43) and \$21.24 for FY 2023-24 (two times the FY 2023-24 M2 subsidy per boarding of \$10.62).

Discussion

During this reporting period, Project V services in operation from April 2023 through September 2023 include a combination of seasonal, special-event, commuter, fixed-route, and demand-responsive services, which meet a variety of community needs. In comparison to this time last year (2022), the active services are consistent with previously reported metrics signifying stabilization of ridership trends post-pandemic and serving as new baselines.

Current active Project V services (supported through 15 individual Project V grants) are identified below¹. Detailed grant and service operating information is provided in Attachment A. During this reporting period, all active services successfully met the required program performance standards including the Board-approved maximum cost per boarding requirement of \$20.85 for FY 2022-23 and \$21.24 for FY 2023-24.

The community-based transit programs that were in service and met the average cost per boarding requirement include the following:

- Anaheim Canyon Metrolink Connector Service,
- County of Orange Ranch Ride Service,
- Dana Point Summer Weekend Trolley (2014 grant),
- Dana Point Summer Trolley Expansion (2016 grant),
- Dana Point Summer Trolley Continuity (2018 grant),
- Laguna Beach Off-Season Weekend Trolley Service (2020 grant),
- Laguna Beach Summer Breeze (2018 grant),
- Laguna Niguel Summer Trolley,
- Mission Viejo Community Circulator,

¹ The Huntington Beach Pilot information will be included in the next Project V report

- Newport Beach Balboa Peninsula Trolley (2016 grant),
- Newport Beach Balboa Peninsula Trolley Expansion (2018 grant),
- San Clemente Summer Weekend Trolley and Seasonal Service (2016 grant),
- San Clemente Summer Weekday Trolley and Seasonal Service Expansion (2018 grant),
- San Juan Capistrano Special Event and Weekend Summer Trolley Service, and
- San Clemente SC Rides Service (2016 grant).

To ensure compliance and to meet the intent of the Project V guidelines, local jurisdictions are required to report on-time performance and customer satisfaction on an annual basis, as indicated in their cooperative agreements. All local jurisdictions successfully met their on-time performance and customer satisfaction thresholds (San Clemente trolley services began reporting on customer satisfaction performance as of the first quarter of FY 2023-24).

Summary

A ridership and status report on Project V services is provided. All active services met ridership and service requirements.

Attachment

A. Project V Services – Ridership Report

Prepared by:



Adrian Salazar
Senior Transportation Funding Analyst,
Local Programs
(714) 560-5363

Approved by:



Kia Mortazavi
Executive Director, Planning
(714) 560-5741

Project V Services - Ridership Report

Reporting Period: Q4 of FY 2022-23 and Q1 of FY 2023-24

No.	Agency	Service Description	Measure M2 Total Project V Funds	Service Type	Service Start Month/Year	Boardings Per Revenue Vehicle Hour (B/RVH) ¹	Cost per Boarding (O&M/B) ^{1,2}	Met CS Threshold (Y/N/NA)	Met OTP Threshold (Y/N/NA)
1	Anaheim	Anaheim Canyon Metrolink Connector	\$ 1,141,864	Commuter Service	July 2020	7	\$ 15.07	Y	Y
2	County of Orange	Local Circulator and Special Event Service (OC Ranch Ride)	\$ 2,041,547	Local Circulator and Special Event	June 2017	22	\$ 11.40	Y	Y
3	Dana Point	Dana Point Summer Weekend Trolley ³	\$ 2,456,511	Seasonal Service	June 2015	19	\$ 11.78	NA	NA
4	Dana Point	Dana Point Summer Trolley Expansion	\$ 905,968	Seasonal Service	June 2017	12	\$ 10.49	Y	Y
5	Dana Point	Dana Point Summer Trolley Continuity	\$ 1,745,065	Seasonal Service	September 2019	13	\$ 9.14	Y	Y
6	Laguna Beach	Off-Season Weekend Trolley Service	\$ 3,850,000	Special Event	September 2021	20	\$ 3.76	Y	Y
7	Laguna Beach	Summer Breeze Bus Service	\$ 634,357	Seasonal Service	June 2018	24	\$ 4.67	Y	Y
8	Laguna Niguel	Laguna Niguel Summer Trolley - Southern Section	\$ 886,082	Seasonal and Special Event	May 2022	9	\$ 10.01	Y	Y
9	Mission Viejo	Local Community Circulator	\$ 3,332,879	Local Circulator	October 2016	12	\$ 7.39	Y	Y
10	Newport Beach	Balboa Peninsula Seasonal Trolley	\$ 685,454	Seasonal Service	June 2017	12	\$ 11.89	Y	Y
11	Newport Beach	Balboa Peninsula Seasonal Trolley Expansion	\$ 278,400	Seasonal Service	August 2018	10	\$ 15.12	Y	Y
12	San Clemente	Summer Weekend Trolley and Seasonal Service	\$ 1,181,393	Seasonal and Special Event	May 2017	47	\$ 1.43	Y	Y
13	San Clemente	Summer Weekday Trolley and Seasonal Service Expansion	\$ 1,537,200	Seasonal and Special Event	July 2018	23	\$ 2.98	Y	Y
14	San Juan Capistrano	Special Event and Weekend Summer Trolley Service	\$ 958,642	Seasonal and Special Event	July 2018	20	\$ 9.15	Y	Y
15	San Clemente	SC Rides On-Demand Service	\$ 2,014,203	Ride Hailing	October 2016	8	\$ 6.96	Y	NA

¹ Average of Q4 and Q1, rounded to next whole number² FY 2022-23 maximum cost per boarding is \$20.85; FY 2023-24 maximum cost per boarding is \$21.24³ The City of Dana Point Summer Weekend Trolley (2014 grant) project grant was completed in FY 2022-23 Q4 (Attachment A shows Q4 information only). Trolley services will continue to be funded through Expansion and Continuity grants (2016, 2018, and 2020 grants)

NA - data point not applicable for current performance period (i.e., CS survey annual requirement satisfied in prior reporting period, service provides real-time ETA information, service did not operate with a fixed schedule)

Minimum Performance Standards for Cost per Boarding, O&M/B

- Maintain O&M/B below maximum cost per boarding limit
- \$20.85 maximum cost per boarding set at twice maximum allowable per boarding subsidy of \$10.43 in FY 2022-23 (escalated at 1.85% annually thereafter)
- \$21.24 maximum cost per boarding set at twice maximum allowable per boarding subsidy of \$10.62 in FY 2023-24 (escalated at 1.85% annually thereafter)

ACRONYMS

B - Boardings	OTP - On-time performance
CS - Customer satisfaction	Q1 - Quarter 1 (July 2023 - September 2023)
ETA - Estimated time of arrival	Q4 - Quarter 4 (April 2023 - June 2023)
FY - Fiscal year	RVH - Revenue vehicle hour
NA - Not applicable	SC - San Clemente
O&M - Operations and maintenance	Y/N - Yes/No



February 8, 2024

To: Transit Committee

From: Darrell E. Johnson, Chief Executive Officer

Subject: Contract Change Order for Construction of the OC Streetcar Project

Overview

On September 24, 2018, the Orange County Transportation Authority Board of Directors authorized Agreement No. C-7-1904 with Walsh Construction Company II, LLC, for construction of the OC Streetcar project. A contract change order is required for work to address schedule impacts associated with Time Impact Evaluation No. 07.

Recommendation

Authorize the Chief Executive Officer to negotiate and execute Contract Change Order No. 28.3 to Agreement No. C-7-1904 with Walsh Construction Company II, LLC, in the amount of \$1,425,000, for schedule impacts associated with time impact evaluation no. 07 for the OC Streetcar project.

Discussion

On September 24, 2018, the Orange County Transportation Authority (OCTA) Board of Directors (Board) awarded the contract to construct the OC Streetcar project (Project) to Walsh Construction Company II, LLC (Walsh). The Notice to Proceed with construction was issued to Walsh on March 4, 2019. Since then, the Project has progressed with several construction activities continuing to advance in all segments, as shown in Attachment A.

Construction is approximately 84 percent complete. Construction milestones include the completion of the Santa Ana River and Westminster bridges with the placement of handrails, installation of all tracks and overhead contact system (OCS) poles, placement of approximately 80 percent of the roadway final pavement and striping work, and the reopening of the Santa Ana Boulevard and Santiago Street intersection.

In the Pacific Electric Right-of-Way (PEROW) portion of the alignment, ballasted rail installation was completed, and fence installation is ongoing. The at-grade crossings at Fairview Street, Fifth Street, and Raitt Street are completed with train warning and gate systems installation efforts ongoing. At the maintenance and storage facility (MSF), key activities near completion include installation of exterior walls, conduit and piping, roofing material and skylights, interior painting, heating, ventilation, air conditioning, and bi-fold doors and windows. Given the significance of the MSF to vehicle testing, staff is continuing to coordinate with Walsh to ensure significant completion of the MSF for vehicle storage at the earliest possible date.

Other ongoing construction activities include preparation for the final pavement and striping work at the Santa Ana Boulevard and Ross Street intersection, and Segments 4 and 5, placement of new traffic signal poles at various street intersections, placement of decorative pavers and concrete at Sasscer Park, installation of OCS hardware and overhead wires, service connections for the four traction power substations, installation of canopy and equipment at all 16 stations, parking lot construction at the Harbor Boulevard and Santa Ana Regional Transportation Center stations, and preparation for tree installation along Fourth Street.

For the benefit of the Project and to mitigate potential damages from delays, staff is requesting Board authorization of the following contract change order (CCO).

Schedule Impacts Associated with Time Impact Evaluation (TIE) No. 07

On December 8, 2020, CCO No. 28 was executed to extend the contract completion by 186 days due to redesign of the Sycamore storm drain, and right-of-way contaminated and hazardous soils removal. At that time, it was determined that the compensation related to the days will be evaluated and confirmed at a later date. Staff completed an initial evaluation and determined that most of the delays were concurrent with delays caused by Walsh; however, there was merited compensation for 55 days associated with right-of-way contaminated and hazardous soils removal. Walsh was compensated \$1,300,000 through CCO nos. 28.1 and 28.2. Recently, staff completed another evaluation of TIE 07 based on additional information provided by Walsh and determined that there is additional compensation for 70 days due to delays related to contaminated and hazardous soils removal. CCO No. 28.3, in the amount of \$1,425,000, is needed to provide merited compensation related to various bid items. It is expected that Walsh will not concur with staff's evaluation of merited compensable days.

The CCO will be paid as a combination of a lump sum and time-and-expense basis to the contractor after labor and equipment quantities are confirmed through daily extra work reports prepared by Walsh and approved by the construction management team. The cost of the work associated with this CCO will be funded from the project budget as previously approved by the Board on April 24, 2023.

Procurement Approach

The initial procurement was handled in accordance with OCTA's Board-approved procedures for public works projects. These procedures, which conform to both federal and state requirements, require that contracts are awarded to the lowest responsive, responsible bidder after a sealed bidding process. On September 24, 2018, the Board authorized Agreement No. C-7-1904 with Walsh, in the amount of \$220,538,649, for construction of the Project.

Proposed CCO No. 28.3, in the amount of \$1,425,000, will increase the cumulative value of the contract to \$295,288,698, as shown in Attachment B. Board approval is required for CCO No. 28.3 pursuant to the State of California Public Contracting Code Section 20142. This CCO will be issued with a reservation of rights to advance the Project pending resolution of disputes between OCTA and Walsh. The statements in this report are made in the context of, and subject to, OCTA's reservation of rights.

Fiscal Impact

The additional work for this Project is included in OCTA's Fiscal Year 2023-24 Budget, Capital Programs Division, Account No. 0051-TS010-9017-Z48, and is funded with Federal Transit Administration Section 5309 New Starts grant funds and local Measure M2 funds.

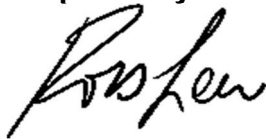
Summary

Staff recommends the Board of Directors authorize the Chief Executive Officer to negotiate and execute CCO No. 28.3, in the amount of \$1,425,000, for schedule impacts associated with TIE 07 to Agreement No. C-7-1904 between the Orange County Transportation Authority and Walsh Construction Company II, LLC for the construction of the Project.

Attachments

- A. Project Map
- B. Walsh Construction Company II, LLC, Agreement No. C-7-1904, Contract Change Order (CCO) Log

Prepared by:



Ross Lew, P.E.
Sr. Program Manager
(714) 560-5775



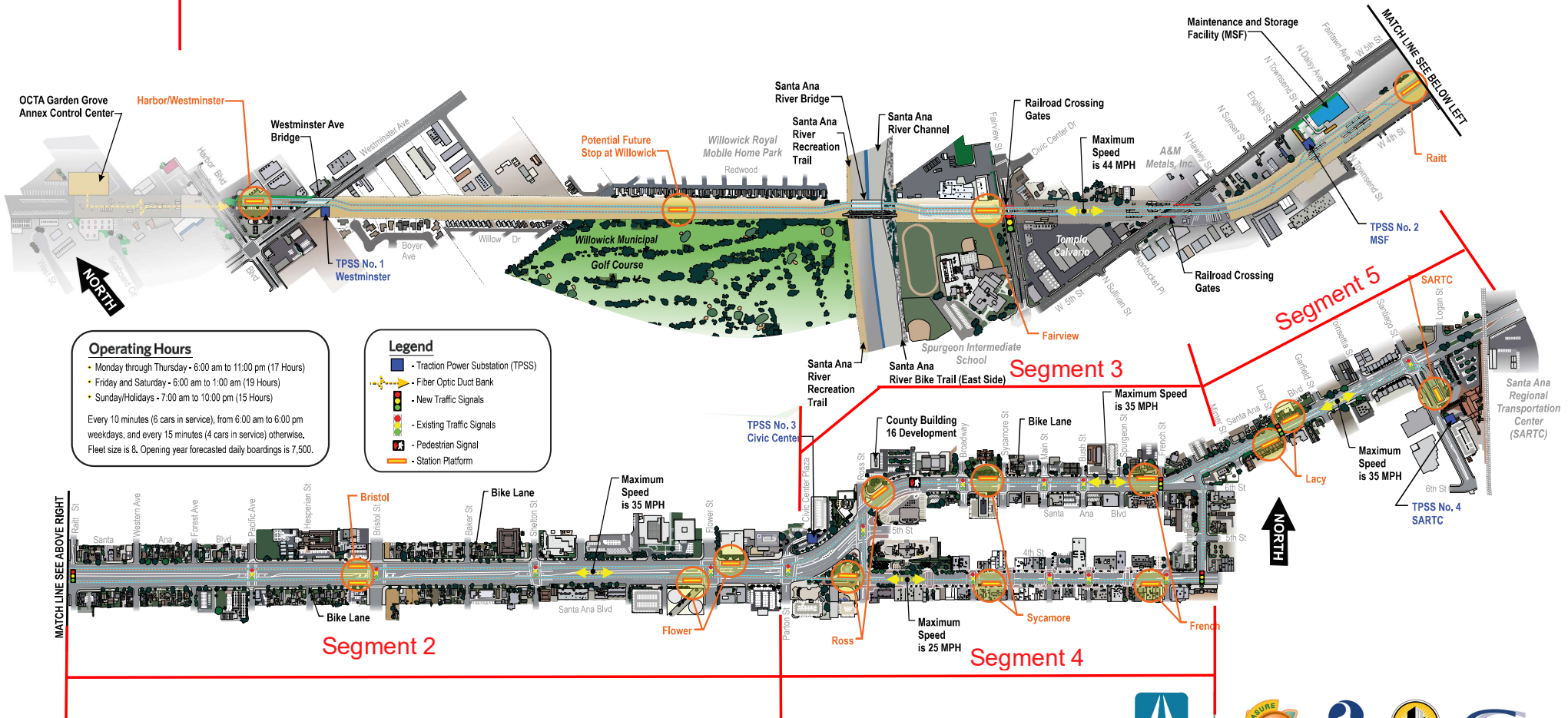
Pia Veasapen
Director, Contracts Administration and
Materials Management
(714) 560-5619

Approved by:



James G. Beil, P.E.
Executive Director, Capital Programs
(714) 560-5646

Segment 1



Walsh Construction Company II, LLC
Agreement No. C-7-1904
Contract Change Order (CCO) Log

CCO No.	Title	Status	Date Executed	Cost
1	Maintenance and Storage Facility (MSF) Removals	Approved	6/20/2019	\$199,749.00
1.1	MSF Removals Additional Funding	Approved	6/25/2019	\$113,884.77
1.2	Time Impact Evaluation (TIE) 01 - Schedule Impacts Associated with Change Directive (CD)-001 and CD-003	Approved	6/17/2020	\$0.00
1.3	Schedule Impacts Associated with TIE 01	Approved	10/17/2022	\$2,100,000.00
2	MSF Removal of Additional Hazardous Materials	Approved	6/25/2019	\$200,000.00
2.1	MSF Removal of Additional Hazardous Materials Additional Funding	Approved	8/15/2019	\$160,000.00
3	Removal and Disposal of Contaminated Materials within the Orange County Transit District (OCTD)-Owned Pacific Electric Right-of-Way (PEROW)	Approved	9/12/2019	\$1,600,000.00
3.1	Removal and Disposal of Contaminated Materials Additional Funding	Approved	2/25/2020	\$7,278,795.00
3.2	Removal and Disposal of Contaminated Materials Additional Funding	Approved	10/18/2021	\$1,100,000.00
3.3	Removal and Disposal of Contaminated Materials Additional Funding	Approved	4/18/2023	\$1,500,000.00
4	Work Related to Existing Utility Conflicts	Approved	8/27/2019	\$200,000.00
4.1	Work Related to Existing Utility Conflicts Additional Funding	Approved	2/25/2020	\$833,300.00
4.2	Work Related to Existing Utility Conflicts Additional Funding	Approved	6/9/2020	\$2,426,000.00
4.3	Work Related to Existing Utility Conflicts Additional Funding	Approved	6/21/2021	\$2,000,000.00
4.4	Work Related to Existing Utility Conflicts Additional Funding	Approved	11/19/2021	\$3,500,000.00
5	Tree Trimming and Removal	Approved	6/9/2020	\$129,215.52
5.1	Tree Trimming and Removal Additional Funding	Approved	12/29/2023	\$300,000.00
7	Orange County Sanitation District Specifications Revisions	Approved	6/9/2020	\$82,445.00
8	Orange County Flood Control District Maintenance Path Profile Revisions	Approved	6/9/2020	\$6,055.00
9	MSF Vapor Barrier	Approved	12/22/2020	\$395,717.00
10	112 Tram Rail Ultrasonic Testing	Approved	6/10/2020	\$0
11	GPS Priority Control System	Approved	6/9/2020	\$40,120.00
12	Santa Ana River Bridge (SARB) Precast Girders	Approved	8/27/2020	\$88,877.00
13	Retaining Wall 544 Reinforcing Steel	Approved	9/3/2020	\$2,321.30
14	Retaining Wall 508	Approved	12/14/2020	\$125,341.00
15	Utility Relocations for Overhead Contact System (OCS) Pole Foundations and Traffic Signal Pole Foundations	Approved	6/17/2020	\$195,723.00
16	OCS and Traffic Signal Pole Foundations Hand Excavation and Survey	Approved	6/23/2020	\$198,808.00
16.1	OCS, Traffic Signal, and Streetlight Foundation Hand Excavation, Layout and Survey Additional Funding	Approved	6/26/2020	\$1,400,000.00
16.2	OCS, Traffic Signal, and Streetlight Foundation Hand Excavation, Layout and Survey Additional Funding	Approved	4/15/2021	\$1,400,000.00
16.3	OCS, Traffic Signal, and Streetlight Foundation Hand Excavation, Layout and Survey Additional Funding	Approved	5/1/2023	\$250,000.00
17	Westminster Bridge OCS Diaphragm	Approved	10/30/2020	\$1,682.00
18	Remove Buried Man-Made Objects	Approved	11/23/2020	\$300,000.00
18.1	Remove Buried Man-Made Objects Additional Funding	Approved	10/25/2021	\$300,000.00
18.2	Remove Buried Man-Made Objects Additional Funding	Approved	5/1/2023	\$600,000.00
19	Removal of Boulders	Approved	11/17/2020	\$160,000.00
20	Removal of Chain Link Fence	Approved	3/9/2021	\$7,316.90
21	Changes to Turnout Geometry	Approved	10/5/2020	\$0
22	Railroad Crossing Gate Bells	Approved	10/5/2020	\$0
23	SARB, OCS Pole, and OCS Down Guy Diaphragms	Approved	1/19/2021	\$7,419.00
24	OCS Sectionalization – Siemens Portion	Approved	10/5/2020	\$158,941.01
24.1	OCS Sectionalization Additional Funding	Approved	4/27/2021	\$722,253.92
26	Revisions to Station Color Schedule, Glass, and Pylon	Approved	4/19/2021	\$176,419.84
27	Street Lighting	Approved	11/19/2020	\$12,347.91
28	Schedule Impacts Associated with TIE 04 and 07	Approved	12/8/2020	\$0.00
28.1	Schedule Impacts Associated with TIE 07	Approved	10/17/2022	\$1,300,000.00
28.2	Schedule Impacts Associated with TIE 07	Approved	1/17/2024	\$0.00
28.3	Schedule Impacts Associated with TIE 07	Pending		\$1,425,000.00
29	Revision to MSF, Traction Power Substation (TPSS), and OCS Siemens Portion	Approved	11/19/2020	\$34,216.80
29.1	Revision to MSF, TPSS, and OCS Siemens Portion	Approved	6/22/2023	\$209,947.55
30	SARB Pile, Westminster Bridge, and Demonstration Section Electrical Continuity Testing	Approved	2/1/2021	\$23,928.10
30.1	Electrical Continuity Testing Additional Funding	Approved	3/16/2021	\$320,164.40
31	MSF Building and Southern California Edison (SCE) Design Revisions	Approved	1/17/2022	\$207,367.00
32	Asbestos Survey	Approved	2/1/2021	\$25,000.00
35	No Sunshade for Variable Message Sign	Approved	12/22/2020	\$0.00
37	Station Platform Power	Approved	5/18/2021	\$58,414.15
38	Modify OCS Foundation Schedule	Approved	6/15/2021	\$32,733.04
39	OCS Revisions Based on Field Walks	Approved	6/17/2021	\$28,088.32
39.1	Additional Revisions to OCS Hardware	Approved	6/26/2023	\$180,709.28
40	MSF Remote Yard Gates	Approved	11/3/2021	\$32,307.66
40.1	MSF Remote Yard Gates	Pending		\$62,989.67

CCO No.	Title	Status	Date Executed	Cost
41	Auxiliary Feeder Pullbox Sizes- Segment 3A	Approved	11/23/2021	\$61,041.24
42	Department Acceptance Testing for Gamma-Gamma Logging of Cast-In-Drilled-Hole (CIDH) Piles	Approved	10/22/2021	\$35,138.00
43	End of Life Communication Equipment	Approved	5/3/2021	\$372,136.38
44	Design of Temporary Traffic Signals Segment 2A - Stages 1 and 2	Approved	4/26/2021	\$41,967.00
44.1	Design of Temporary Traffic Signals Segment 3A	Approved	11/24/2021	\$50,813.00
44.2	Design of Temporary Traffic Signals and Video Detections	Approved	10/4/2022	\$907,220.00
45	Thickened Asphalt Concrete (AC) Pavement	Approved	1/19/2021	\$60,000.00
46	MSF Video Servers from Garden Grove Bus Annex to MSF	Approved	10/13/2021	\$40,267.30
47	Archaeological Security and Data Recovery at MSF	Approved	1/19/2021	\$110,000.00
47.1	Archaeological Security and Data Recovery at MSF Additional Funding	Approved	5/8/2023	\$98,000.00
48	Thickened AC Pavement	Approved	4/27/2021	\$1,177,362.00
49	Retaining Wall 501 Encroachment	Approved	6/17/2021	\$181,802.77
50	MSF Street and Yard Utility Conflicts	Approved	5/25/2021	\$200,000.00
51	MSF Yard Light Connection Details	Approved	2/17/2023	\$193,803.00
52	Over Excavation of Unsuitable Soils	Approved	6/21/2021	\$209,500.00
52.1	Over Excavation of Unsuitable Soils Additional Funding	Approved	6/21/2021	\$540,000.00
53	SARB Bridge Decking	Approved	6/17/2021	\$9,002.94
54	Revisions to the Traction and Power Substation Site Plan	Approved	5/18/2022	\$1,200,000.00
55	Bid Item 24 - Earthwork Credit	Approved	5/3/2022	(\$659,666.73)
56	Exploratory Potholing Allowance	Approved	4/26/2001	\$200,000.00
56.1	Exploratory Potholing Allowance	Approved	9/8/2021	\$1,100,000.00
56.2	Exploratory Potholing Allowance	Approved	5/8/2023	\$500,000.00
58	Vehicle Platform Tolerances	Approved	12/6/2021	\$0.00
59	Direct Fixation Fasteners	Approved	6/7/2021	\$0.00
60	Base Contract Utility Credits	Approved	5/25/2021	(\$1,842,680.00)
61	Loop Relocation and Block Out	Approved	10/25/2021	\$80,000.00
62	Backfill of OCS Foundations	Approved	11/8/2021	\$200,000.00
63	Graffiti Removal	Approved	5/18/2021	\$100,000.00
64	SCE Meter Switchgear Engineering and Submittal Costs	Approved	5/18/2021	\$17,618.00
64.1	SCE Meter Switchgear Additional Funding	Approved	10/13/2021	\$191,950.00
64.2	SCE Meter Switchgear Additional Funding	Approved	1/19/2022	\$669,573.00
65	Additional Environmental Soil Investigation on West Santa Ana Boulevard/ Bristol Street Station Stop (Stage 1)	Approved	5/18/2021	\$9,840.60
66	Ground Penetrating Radar Investigation	Approved	9/1/2021	\$208,000.00
67	City of Garden Grove Driveway Standard Update	Approved	11/24/2021	\$20,637.83
68	Ross Intersection Traffic Signal Conduit Installation	Approved	6/7/2021	\$18,000.00
69	Optical Backbone Network System Redundancy	Approved	2/25/2022	\$520,582.00
71	Traffic Signal Interconnect	Approved	4/12/2022	\$208,000.00
71.1	Traffic Signal Interconnect Additional Funding	Approved	5/31/2022	\$500,000.00
72	Cathodic Protection at MSF and Car Wash	Approved	11/30/2023	\$292,746.00
77	Pavement Modification at Street Intersections	Approved	12/28/2021	\$208,000.00
77.1	Pavement Modifications Along Embedded Tracks and Grade Crossings	Approved	5/3/2022	\$400,000.00
77.2	Pavement Modifications Along Embedded Tracks and Grade Crossings	Approved	9/22/2023	\$480,000.00
77.3	Pavement Modifications and Restoration Along Embedded Tracks and Grade Crossings	Pending		\$1,300,000.00
79	MSF Permit Drawings and Revisions	Approved	6/24/2022	\$3,000,000.00
80	Contract Language Modifications Escrow Documents	Approved	4/12/2022	\$0.00
82	Third-Party Utility Work - Southern California Gas: Expose Abandoned Gas Lines	Approved	6/9/2022	\$100,000.00
82.1	Third-Party Utility Work - AT&T	Approved	6/21/2022	\$108,000.00
83	Additional Storage of Four TPSS Units at Factory	Approved	6/21/2022	\$208,000.00
86	OCS Pole Grounding Conduit Routing at PEROW	Approved	5/24/2022	\$200,000.00
86.1	OCS and Platform Grounding Conduit Additional Funding	Approved	4/18/2023	\$300,000.00
88	Traction Power Sub-Station Grounding Revisions	Approved	6/6/2022	\$209,839.49
89	Equipment and Security Upgrades	Approved	6/22/2022	\$2,200,000.00
90	Contract Language Modifications - Electronic Compliance Auditing Tool Disadvantaged Business Enterprise Reporting	Approved	11/17/2022	\$0.00
91	Customer Information Center Enclosure and Component Modifications	Approved	6/20/2022	\$1,650,000.00
92	Changes to Platform SCE Meter Pedestals	Approved	6/28/2023	\$208,613.05
93	Wheel Tiring Pit Modifications	Pending		\$318,486.42
94	Traffic Signal Pole Modifications	Approved	6/22/2022	\$800,000.00
96	Relocate Bumping Posts and Train Signal Cabinet at Harbor Station	Approved	6/22/2022	\$400,000.00
105	Modifications to the Track Slab Detail to Clear Utility Conflicts	Approved	5/18/2023	\$3,500,000.00
108	Traffic Signal and Pedestrian Crossing Equipment Modifications	Pending		\$300,000.00
110	Malcom and Spectrum Utility Concurrent Impacts (Claim 09)	Approved	12/30/2021	\$123,714.20
117	Manual Train Control Override	Approved	4/29/2022	\$208,000.00
117.1	Manual Train Control Override Additional Funding	Approved	6/9/2022	\$700,000.00
118	Added Pedestrian Crossing and Updated City Standard Signage	Pending		\$26,158.00
130	Drainage and Traction Power Underground Conflicts	Approved	10/11/2023	\$138,724.00
131	Impedance Bond Assembly at Embedded Track Slab	Pending		\$82,137.00
133	MSF Western Concrete Masonry Unit Wall Modifications	Approved	1/27/2023	\$208,000.00

CCO No.	Title	Status	Date Executed	Cost
139	Soundwall #2 CIDH Foundation Adjustments	Approved	7/24/2023	\$29,570.95
140	TPSS Additional Rear Doors	Approved	9/28/2023	\$64,275.10
145	Structural Steel Quality Control Inspection and Testing	Approved	5/31/2022	\$350,000.00
146	Train Signal Modifications	Approved	6/14/2022	\$850,000.00
148	Emergency Communication Devices	Approved	2/17/2023	\$195,000.00
150	Fourth Street Extended Work Hours and Public Safety	Approved	9/28/2022	\$500,000.00
150.1	Fourth Street Extended Work Hours and Public Safety Additional Funding	Approved	12/15/2022	\$800,000.00
150.2	Fourth Street Extended Work Hours Additional Funding	Pending		\$250,000.00
157	Traffic Control Allowance Extension (Bid Item 33)	Approved	2/6/2023	\$208,000.00
157.1	Traffic Control Allowance Extension (Bid Item 33)	Approved	9/21/2023	\$300,000.00
158	Station Canopy Glass Price Escalation	Approved	10/17/2022	\$72,607.09
161	Contract Language Modification - Article 9 - Notices	Approved	11/17/2022	\$0.00
164	Station Platform, Parking Lot, and Sasscer Park Lights	Approved	5/18/2023	\$300,000.00
173	Buried OCS Pole Grounding	Pending		\$209,500.00
173.1	Buried OCS Pole Grounding	Pending		\$123,643.00
177	Traffic Signal Plan Revisions: Utilizing Different Anchor Bolt Patterns	Approved	1/27/2023	\$208,000.00
182	Homeless Security and Cleanup	Approved	2/16/2023	\$208,000.00
183	Track Switch Indication Lights	Approved	2/28/2023	\$480,000.00
184	Santa Ana Boulevard Extended Hours	Approved	12/14/2022	\$208,000.00
185	Additional Builder Risk Insurance	Approved	2/8/2023	\$550,000.00
186	MSF Catenary Interlock System	Approved	2/17/2023	\$208,000.00
187	Schedule Impacts Associated with TIE 08	Approved	10/24/2022	\$0.00
187.1	Schedule Impacts Associated with TIE 08	Approved	6/22/2023	\$2,847,000.00
190	Track Bumping Post Modifications	Pending		\$206,920.32
191	Four-Fold and Coiling Doors at the MSF	Approved	6/20/2023	\$300,902.44
193	Embedded Track Transition to Paved Ballasted Track	Pending		\$182,498.67
194	Malcom's Differing Site Condition Impacts for CIDH Pile Installation (Claim 10)	Approved	3/16/2023	\$209,999.00
195	Schedule Impacts Associated with TIE 12	Approved	3/27/2023	\$0.00
195.1	Schedule Impacts Associated with TIE 12	Approved	6/20/2023	\$1,249,403.38
195.2	Schedule Impacts Associated with TIE 12	Pending		\$245,501.00
195.3	Schedule Impacts Associated with TIE 12	Pending		\$535,000.00
196	Shore Power at the MSF	Pending		\$600,000.00
197	OCS Pole and Foundation Revisions	Approved	6/19/2023	\$128,706.34
198	Fourth Street Planter Lighting, Irrigation Wiring, and Power Modifications	Pending		\$420,000.00
199	Improvements at Civic Center Plaza	Approved	3/16/2023	\$208,000.00
200	Infrastructure for Electric Vehicle Charger at SARTC	Approved	8/21/2023	\$25,000.00
201	Intumescent Fireproof Coating on Structural Steel at the MSF	Approved	12/29/2023	\$450,000.00
201.1	Intumescent Fireproof Coating on Structural Steel at the MSF	Pending		\$123,039.00
203	Sidewalk Paver Material and Labor Escalation	Approved	6/19/2023	\$209,730.72
204	MSF Pedestal Track Spacing M1-M2	Approved	12/28/2023	\$20,325.88
206	Track Isolation at end of Embedded Track	Pending		\$93,569.00
207	Sewer Ejector Changes at MSF	Pending		\$208,221.98
210	MSF Extended Work Hours	Approved	1/2/2024	\$209,500.00
211	OCS Pole Re-Raking and Adjustment	Pending		\$208,000.00
212	Restraining Rail Conflicts at M1, M2, M3 and Y1 Tracks	Pending		\$35,426.59
214	SCE Switchgear Breaker Setting and Commissioning	Pending		\$208,986.69
215	Emergency Walkway Track Crossing at Raitt and Fairview Platform	Approved	12/28/2023	\$113,812.10
223	Rail Between M2 and M3 at MSF	Pending		\$181,985.00

Subtotal Executed CCOs	\$67,402,986.54
Subtotal Pending CCOs	\$7,347,062.34
TOTAL CCOs	\$74,750,048.88
ORIGINAL VALUE	\$220,538,649.00
PROPOSED REVISED VALUE	\$295,288,697.88



February 8, 2024

To: Transit Committee

From: Darrell E. Johnson, Chief Executive Officer

Subject: Consultant Selection for On-Call Construction Management and Engineering Technical Support Services for Transit Facility Projects

Overview

On September 25, 2023, the Orange County Transportation Authority Board of Directors authorized the release of a request for proposals to retain a consultant to provide on-call construction management and engineering technical support services for transit facility projects. Board of Directors' approval is requested for the selection of a firm to perform the required work.

Recommendations

- A. Approve the selection of Hout Construction Services, Inc., doing business as Hout Engineering, as the firm to provide on-call construction management and engineering technical support services for transit facility projects.
- B. Authorize the Chief Executive Officer to negotiate and execute Agreement No. C-3-2754 between the Orange County Transportation Authority and Hout Construction Services, Inc., doing business as Hout Engineering, to provide on-call construction management and engineering technical support services for transit facility projects for a three-year term, with one, two-year option term.

Discussion

Transit facilities engineering is responsible for the development and implementation of capital rehabilitation, modifications, and new capital projects for Orange County Transportation Authority (OCTA) transit facilities, including five bus bases, five transportation centers, two park-and-ride facilities, and other transit-related projects located throughout Orange County. A construction

management (CM) and engineering consultant supports OCTA with on-call staff assistance and engineering technical support managing and delivering transit facility projects. The consultant provides professional services as needed to OCTA for project matters related to planning and development, environmental clearance, design, engineering, right-of-way, and construction activities associated with OCTA transit facilities. The consultant also provides engineering technical support and staff assistance to help manage development and delivery of capital rehabilitation, facility modifications, and new capital projects for OCTA transit facilities. OCTA is responsible for maintaining transit facilities in a state of good repair in accordance with Federal Transit Administration requirements and guidance.

Transit operations, transportation center, and park-and-ride facility projects may include heating and ventilation unit replacement, pavement striping and marking, pavement maintenance or replacement, upgrades to video, lighting, and electrical systems, and a wide range of other facility needs. Projects typically range in value from \$100,000 to \$4,000,000. Other transit projects may include the new capital improvement projects such as the Transit Security Operations Center, facility condition assessments, and other capital maintenance projects.

Procurement Approach

The procurement was handled in accordance with OCTA's Board of Directors (Board)-approved procedures for architectural and engineering (A&E) services that conform to both state and federal laws. Proposals are evaluated and ranked in accordance with the firm's qualifications, staffing and project organization, and work plan approach. As this is an A&E procurement, price is not an evaluation criterion pursuant to state and federal laws. Proposal evaluations were conducted based on overall qualifications to develop a competitive range of offerors. The highest-ranked firm is requested to submit a cost proposal, and the final agreement is negotiated. Should negotiations fail with the highest-ranked firm, a cost proposal will be solicited from the second-ranked firm in accordance with Board-approved procurement policies.

On September 25, 2023, the Board authorized the release of Request for Proposals (RFP) 3-2754, which was electronically issued on CAMM NET. The solicitation was advertised on September 25 and October 2, 2023, in a newspaper of general circulation. A pre-proposal conference was held on October 4, 2023, with 25 attendees representing 12 firms. Three addenda were issued to make available pre-proposal conference registration sheets, provide responses to questions received, and handle administrative issues related to the RFP.

On October 23, 2023, four proposals were received. An evaluation committee consisting of members from OCTA's Contracts Administration and Materials Management, Safety and Environmental, Facilities Maintenance Administration, and Facilities Engineering departments, met to review all the submitted proposals. The proposals were evaluated utilizing the following Board-approved evaluation criteria and weightings.

- Qualifications of the Firm 25 percent
- Staffing and Project Organization 40 percent
- Work Plan 35 percent

In developing the criteria and weightings, multiple factors were considered. The firm's qualifications and experience in the areas of work identified in the scope of work (SOW) and ability to support the necessary level of effort over the term of the contract are important to the success of the project. Staff assigned the highest weighting to the staffing and project organization criterion, as the qualifications of the construction manager and construction engineer, subconsultant teams, and the key team members must demonstrate experience and ability to work successfully on transit facility projects. The consultant's staff's ability to manage and support a variety of capital improvement projects at various sites is critical to timely project delivery. The work plan criterion was assigned a weighting of 35 percent as the technical approach and project direction is important to developing realistic schedules to complete the work.

On November 15, 2023, the evaluation committee reviewed all four proposals based on the evaluation criteria and found two firms most qualified to perform the required SOW. The most qualified firms are listed below in alphabetical order:

Firm and Location

Hill International, Inc. (Hill)
Irvine, California

Hout Construction Services, Inc. doing business as Hout Engineering (Hout)
Newport Beach, California

On November 28, 2023, the evaluation committee interviewed the two short-listed firms. The interviews consisted of a presentation to demonstrate the firms' understanding of the project's SOW. The firms' construction manager, construction engineer, and key team members presented qualifications and responded to the evaluation committee's questions. Questions were asked

about OCTA construction safety requirements, construction management qualification and experience, approach to resolving construction management issues, and construction engineering field experience. Clarifying questions were asked of each firm related to their submitted proposal. After considering responses to the interview questions from both firms, the evaluation committee adjusted the preliminary scoring for Hout and the firm remained the top-ranked firm with the higher cumulative score.

Qualifications of the Firm

Both short-listed firms are well established firms with experience in construction management and construction field engineering services. Positive references were received for both firms.

Hout was founded in 2007, has eight employees, and serves public work projects by providing comprehensive construction management and engineering services on various types of government agency projects. The firm's proposed team has successfully completed similar assignments described in the SOW. The firm has experience working on OCTA's facility engineering on-call project management and construction management contract for the past five years. In addition to experience at OCTA, the firm has experience with public works projects for the City of Rancho Palos Verdes on-call project management/construction management's task order contract. These projects entailed technical reviews and overseeing construction projects. Hout has design management oversight experience for the Orange County Great Park Corporation in cooperation with the City of Irvine. The firm proposes to utilize three subconsultants to provide right-of-way support, soil and material testing, and mechanical and electrical technical review services.

Hill was established in 1976, specializes in major construction projects and has experience in over 500 transit-related projects with a value of over \$275 billion. Hill employs 3,300 professionals with 170 employees based in Irvine, California, offering a large pool of resources for projects. Experience in transit projects is demonstrated by their work for OCTA on the City of Orange Metrolink Parking Structure Project. Hill also has recent experience in highway and rail public works projects but did not present any recent facility rehabilitation/ modification projects as reference. Hill proposes to utilize four subconsultants to provide construction engineering, surveying, and environmental and inspection services. Hill's key subconsultant, CPM Partners, provided construction management and inspection services on the Irvine Bus Base Wash Rehabilitation and Santa Ana Bus Base Lift Replacement projects for OCTA.

Staffing and Project Organization

Both firms listed key personnel and subconsultants with relevant construction management and construction engineering experience. Each firm proposed staff resources to address the work requirements in the SOW.

Hout proposed the commitment of the required staff as identified in the RFP. The firm submitted a detailed staffing plan proposing experienced key personnel with relevant experience in managing and delivering transit facility-related projects.

The proposed construction manager has over 35 years of experience completing transit facility projects, of which 13 years have been at OCTA. Many of the construction manager's past and current project experience is with bus bases, transportation centers, and park-and-ride facilities. Hout has experience managing OCTA Measure M projects. Hout's proposed construction engineer has 19 years of experience and is committed to working full time at the OCTA administrative office with primary responsibility for facility construction management assignments.

Hill identified proposed staff experienced in public works and government agency projects. These key personnel demonstrate solid construction management experience on a variety of public work projects. Proposed subject matter experts demonstrate good project support services, including safety, project controls, and construction inspection. The proposed construction manager has 38 years of experience in all phases of construction, which meets the SOW requirements. The proposed construction engineers also have the experience required by SOW. However, during the interview it was not clear to the evaluation committee the percentage of time each of the two proposed construction engineers would be available to support facility construction projects, or the difference in their individual roles.

Work Plan

Both short-listed firms met the requirement of the RFP, and each firm discussed its approach to the proposed construction management and engineering technical support services.

Hout's work plan approach demonstrates the firm's clear understanding and focus on key elements of the SOW. The work plan is outlined in detail listing all the tasks needed for the successful completion of a construction project. The work plan demonstrated a solid plan for following a manageable and

sequential task path to complete a project. The work plan addressed the need for all safety protocols to be adhered to at all times. In the interview, the team explained its approach to OCTA's safety requirements by reinforcing the need for safety personnel to be on site at all times.

Hill addressed most tasks needed to complete a transit facility project. Overall, the work plan was structured, organized, and had a good sequence of described tasks. The work plan demonstrated a general understanding of the SOW, although many of the tasks listed were not part of the SOW. The work plan did not list a safety plan; however, the firm was responsive to the evaluation committee's interview questions about OCTA's construction project safety requirements.

Procurement Summary

Based on the evaluation of the written proposals and information obtained from the interviews, the evaluation committee recommends the selection of Hout as the top-ranked firm to provide on-call construction management and engineering technical support services for transit facility projects. The Hout team provided detailed and thorough responses to the interview questions, demonstrated excellent relevant experience, and submitted a comprehensive proposal that was responsive to all requirements of the RFP.

Fiscal Impact

The project is included in OCTA's Fiscal Year 2023-24 Budget, Capital Programs Division, Account No. 1722-7519-D3120-0F3 and is funded with Federal Transit Administration funds.

Summary

Staff requests Board of Directors' authorization for the Chief Executive Officer to negotiate and execute Agreement No. C-3-2754 with Hout Construction Services, Inc., doing business as Hout Engineering, as the firm to provide on-call construction management and engineering technical support services for transit facility projects.

Attachments

- A. Review of Proposals, RFP 3-2754 On-Call Construction Management and Engineering Technical Support Services for Transit Facility Projects
- B. Proposal Evaluation Matrix (Short-Listed Firms), RFP 3-2754 On-Call Construction Management and Engineering Technical Support Services for Transit Facility Projects
- C. Contract History for the Past Two Years, RFP 3-2754 On-Call Construction Management and Engineering Technical Support Services for Transit Facility Projects

Prepared by:

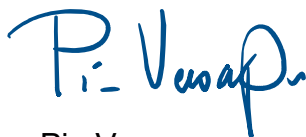


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Review of Proposals

RFP 3-2754 On-Call Construction Management and Engineering Technical Support Services for Transit Facility Projects

Presented to the Transit Committee - February 8, 2024

4 proposals were received, 2 firms were interviewed, 1 firm is being recommended.

Overall Ranking	Proposal Score	Firm & Location	Sub-Contractors	Evaluation Committee Comments
1	84	Hout Construction Services Inc., doing business as Hout Engineering Newport Beach, California	BKF Engineers, Inc. MTGL, Inc. Jeff Oviedo and Associates, Inc.	Firm has recent, relevant experience providing construction management services. Qualified team, including key personnel, technical staff, and subconsultants with experience working together on similar projects. The proposed project team has the experience required by the scope of work. Proposed construction manager has over 35 years of transit project management experience. Proposed construction engineer has 19 years of construction inspection and construction management services experience. Work plan approach demonstrates the firm's clear understanding and focus on key elements of the scope of work. Thorough presentation and participation from all key team members during interview demonstrated strong team cohesiveness. Provided detailed, project specific responses to interview questions further highlighting the team's expertise and understanding of the scope of work. Positive references received.
2	76	Hill International, Inc. Irvine, California	CPM Partners, Inc. Coast Surveying, Inc. GEI Consultants, Inc. MTGL, Inc.	Firm has strong experience providing construction management services on transit facilities projects. Proposed key personnel, technical staff, and subconsultants have the construction management and construction engineering experience required by the scope of work. Proposed construction manager has 38 years of structural and civil engineering experience. Proposed construction engineers have over 20 years combined experience in the construction and engineering industry. Demonstrated an understanding of scope of work. Work plan demonstrated a general understanding of the scope of work but did not discuss the required safety plan. During the interview, the firm discussed approach, including key stakeholders, potential risks, and quality control. Positive references received.

Evaluation Panel:

Internal:
Contracts Administration and Materials Management (1)
Safety and Environmental (1)
Facilities Maintenance Administration (1)
Facilities Engineering (2)

Proposal Criteria

Qualifications of the Firm
Staffing and Project Organization
Work Plan

Weight Factors

25%
40%
35%

PROPOSAL EVALUATION CRITERIA MATRIX (Short-Listed Firms)
RFP 3-2754 On-Call Construction Management and Engineering Technical Support Services
for Transit Facility Projects

Hout Construction Services, Inc. doing business as Hout Engineering							
Evaluator Number	1	2	3	4	5	Weights	Criteria Score
Qualifications of Firm	4.50	4.50	4.00	4.50	4.00	5	21.5
Staffing/Project Organization	4.00	4.50	4.00	4.00	3.50	8	32.0
Work Plan	4.50	4.00	4.00	4.50	4.50	7	30.1
Overall Score	86	87	80	86	80		84

Hill International, Inc.							
Evaluator Number	1	2	3	4	5	Weights	Criteria Score
Qualifications of Firm	4.00	4.00	4.00	4.00	4.00	5	20.0
Staffing/Project Organization	4.00	4.00	3.50	4.00	3.50	8	30.4
Work Plan	4.00	3.50	3.50	3.50	4.00	7	25.9
Overall Score	80	77	73	77	76		76

The range of scores for non-short-listed firms was 43-67.

CONTRACT HISTORY FOR THE PAST TWO YEARS

RFP 3-2754 On-Call Construction Management and Engineering Technical Support Services for Transit Facility Projects

Prime and Subconsultants	Contract No.	Description	Contract Start Date	Contract End Date	Subconsultant Amount	Total Contract Amount
Hout Construction Services, Inc., doing business as Hout Engineering						
Contract Type: Time and Expense	C81428	On-Call Project Management and Construction Management	March 19, 2019	February 17, 2024		\$ 2,323,142
Subconsultants:						
AESCO, INC.					N/A	
IDC Consulting Engineers, INC.					N/A	
JOA Group					N/A	
Hill International, Inc.						
Contract Type: N/A	None		N/A	N/A	N/A	\$ -
Subconsultants: N/A						
Total:						\$ 2,323,142



February 8, 2024

To: Transit Committee

From: Darrell E. Johnson, Chief Executive Officer

Subject: Zero-Emission Bus Pilot Update

Overview

On October 8, 2020, the Orange County Transportation Authority Board of Directors approved the purchase of ten hydrogen fuel-cell electric buses and ten plug-in battery-electric buses to gain necessary operational and technological experience in preparation for transitioning the Orange County Transportation Authority's bus fleet to zero-emission technologies. This report provides an update on the zero-emission bus pilot performance and deployment efforts.

Recommendation

Receive and file as an information item.

Background

In 2018, the California Air Resources Board (CARB) passed the Innovative Clean Transit (ICT) rule requiring all public transit agencies to transition their bus fleets to zero-emission technologies by the year 2040. Transit agencies were required to develop and submit a rollout plan that describes how the agency will transition to a zero-emission bus (ZEB) fleet by 2040, with purchasing requirements beginning in 2023. On June 22, 2020, the Orange County Transportation Authority (OCTA) Board of Directors (Board) approved the OCTA ZEB Rollout Plan, which included the deployment of a mix of hydrogen fuel-cell electric buses (FCEB) and plug-in battery-electric buses (BEB) to prepare for compliance with the ICT rule.

In anticipation of the ICT rule, OCTA developed a strategy to pilot both FCEB and BEB technologies using available grant funding. Piloting both technologies will allow OCTA to gain direct experience with operational effectiveness, maintenance, and cost. OCTA has initiated pilots using both technologies, discussed herein. In 2017, OCTA entered into an agreement to utilize grants

provided by CARB and the South Coast Air Quality Management District to purchase ten FCEBs in lieu of compressed natural gas (CNG)-powered buses to replace buses that had reached their useful life. The grant also funded the required supporting infrastructure, including the hydrogen fueling station and maintenance shop upgrades.

On February 9, 2020, OCTA initiated the FCEB pilot, which included ten, 40-foot FCEBs operating in OC Bus fixed-route service, and a hydrogen fueling station, located at the Santa Ana Bus Base, capable of fueling up to 50 buses per day.

On October 12, 2020, the Board approved the purchase of ten plug-in BEBs as a pilot for operation in OC Bus fixed-route service. To support the charging of these vehicles, OCTA is partnering with Southern California Edison (SCE) and the Charge Ready Transport Program to provide electrical infrastructure at the Garden Grove Bus Base. In addition to the equipment being provided by SCE, OCTA is required to provide the BEB charging stations.

On June 14, 2021, the Board approved the purchase of ten, 150-kilowatt (kW) BEB charging stations that will provide power to ten depot charging stations. The chargers can supply power evenly or sequentially to the charging stations. This allows buses to be intelligently charged in a manner tailored to the power and logistical needs of each bus. BEBs can be fully charged in less than four hours.

The first two BEBs arrived in December 2021. After acceptance testing and working through supply chain issues, the buses went into OC Bus fixed-route service in July 2022. The remaining eight buses arrived in December 2022. Delays in receiving the remaining eight BEBs were related to electronic parts shortages and other supply chain issues.

In December 2023, SCE completed the infrastructure upgrades required to install ten BEB charging stations. The charging stations were connected, energized, and made operational immediately following the SCE upgrades. However, during the commissioning and testing of the charging stations certain equipment components were identified as having water corrosion. Due to the high voltage and risk of malfunctioning, the charging station manufacturer requires replacing the affected components to maintain the warranty. The procurement of replacement components is being expedited and the charging stations are expected to be operational in February 2024. In the interim, the BEBs are being charged using pay-per-use level III charging stations, designed to charge light-duty vehicles, installed at both directly-operated bus bases. This results in BEBs taking longer to charge limiting bus usage to four buses per day.

On August 16, 2022, the Federal Transit Administration (FTA) awarded OCTA \$2.5 million in federal funding toward the purchase of ten battery-electric paratransit buses that will replace ten gasoline OC ACCESS cutaway buses. OCTA applied for and was awarded this funding through a competitive FTA grant program.

Discussion

The FCEBs have been in service for four years and the BEBs have been deployed sporadically for the last 18 months due to delays in infrastructure upgrades. The performance data included in this report covers the period beginning February 2020 through December 2023 (46 months). The performance of the ten FCEBs and ten BEBs is measured against the performance of ten CNG buses that were selected during the onset of the pilot to provide comparative performance analytics. General vehicle information on all three bus types is provided in the following chart.

Vehicle Information	FCEB	BEB	CNG
Number of Buses	10	10	10
Manufacturer/Model	New Flyer Xcelsior	New Flyer Xcelsior	New Flyer Xcelsior
Model Year	2018	2020	2016
Bus Cost Each	\$1.3M	\$1.1M	\$580,000
Length	40 feet	40 feet	40 feet
Curb Weight	33,560 pounds	33,500 pounds	30,000 pounds
Propulsion System	Ballard Fuel Cell 85 kW	Siemens Electric Motor 210 kW	Cummins CNG Engine 280 hp
	Siemens Electric Motor 210 kW		Allison Transmission
Energy Storage	Five Composite Fuel Cylinders		Six Composite Fuel Cylinders
	Lithium-Ion Batteries 100 kW	Lithium-Ion Batteries 440kW	
Operating Range	300 miles	200 miles	400 miles

The key performance indicators for the pilot include bus availability, miles between road calls (MBRC), fuel economy, and cost per mile (CPM).

Bus availability, which is a measure of reliability, is the percentage of days the buses are available compared to the total number of days that the buses are planned for revenue service. Buses available for service may be used in revenue service, training, special events, or they may be available but not used. Buses unavailable for service may have had mechanical issues with the propulsion system (fuel-cell system, electric drive system, engine), regular scheduled maintenance, or required unscheduled repairs.

The OCTA performance standard for bus availability is 80 percent. However, for new bus technology, especially during a pilot, availability can be challenging as the system issues are analyzed and buses are out of service for a longer period. For 2023, both the FCEBs and BEBs fell below the target at 52 percent and 66 percent respectively, while CNG buses fell just below the goal at 78 percent.

The FCEBs did not achieve the goal mainly due to electrical issues. The FCEBs dropped slightly from 55 percent availability in 2022 to 52 percent availability in 2023. Most of the downtime was related to unscheduled maintenance related to batteries and electrical management systems. In addition, a growing number of supply chain issues heavily impacted the FCEB availability. It has become common to see FCEBs out of service for 60-100 days at a time waiting for parts.

The BEBs achieved 66 percent availability in the last year. The BEBs have also experienced electrical issues and long wait times for parts. As of this report, a replacement battery pack has a lead time of 135 days.

MBRC is a measurement of bus reliability. A road call is defined as a revenue vehicle mechanical or system failure that causes the bus to be replaced in route or causes a significant delay in the bus schedule.

The OCTA performance standard for MBRC is 14,000 miles. The ten CNG buses declined in reliability as expected due to the engine and transmission reaching their end of useful life. A mid-life overhaul is scheduled for each of these buses, consistent with OCTA maintenance practices. Once the mid-life overhaul is completed, MBRCs are expected to improve. Last year, the CNG buses achieved 12,844 MBRCs but the average over the last four years remains above the goal at 24,581.

The FCEBs did not meet the standard, achieving only 4,717 MBRCs. Taking into consideration that this is new technology and only 30 FCEBs were built by this manufacturer at the time of delivery, peak performance may not yet be realized. However, the MBRCs appear to be in line with other agencies operating FCEBs.

In the early months of the pilot there were a variety of issues including software and calibration issues, but more recently most of the road failures are related to electrical components, like battery and electrical management system failures. In terms of the fuel cell performance, it is performing very well, and very little maintenance is required.

The BEBs also did not meet the standard, achieving 4,593 MBRCs. The BEBs are experiencing a variety of issues as expected for a bus under two years old, but the primary issues are battery related, such as battery failures and electrical management system failures.

Fuel economy is a measurement of how efficiently the fuel is being used by the propulsion system. Because CNG is measured in therms, hydrogen is measured in kilograms, and battery power in kW, fuel types are converted to a common measurement. In this case, all three technologies are measured in miles per diesel gallon equivalent (mpdge). CNG buses are averaging 3.91 mpdge, while FCEBs have more than doubled that with an average of 8.92 mpdge. The BEBs are achieving the highest mpdge with an average of 17.05 mpdge.

OCTA calculates total CPM for each technology by tracking parts and labor cost and fuel cost. CPM is used due to being the lowest common denominator. Assigning a daily, weekly, or monthly cost value can vary as a result of buses being assigned to various routes with varying miles.

The parts and labor CPM for FCEBs increased in 2023, exceeding that of CNG for the first time since the pilot began. The primary reasons for the increase are related to the buses being out of warranty and increasing parts cost. The parts and labor CPM for FCEBs is currently \$1.84, compared to \$1.65 for CNG buses. The BEB had a lower cost than both FCEBs and CNG buses at \$1.40, bearing in mind that these buses have been in service for less than two years.

FCEB fuel cost significantly increased from 2022 to 2023 by 131 percent due to cost increases in the option year of the hydrogen fueling station operations and maintenance (O&M) agreement. O&M and the leasing of certain equipment was included in the first three years of the hydrogen fueling station agreement. In 2023, the first option year was exercised triggering a \$300,000 annual O&M cost and \$51,000 leasing cost. These costs were combined with the cost of liquid hydrogen fuel and estimated cost of electricity usage totaling \$2.50 CPM. CNG CPM decreased from 2022 to 2023 by 64 percent mainly due to lower cost for renewable natural gas. CNG CPM in 2022 was \$0.79, in 2023 \$0.28. BEB remained steady at \$0.41 CPM. However, it is important to note that with electricity, cost is based on kW usage and due to current rate structures, as that usage increases the cost per kW also increases, which will affect the CPM. The BEB fuel CPM is expected to increase when all ten buses are in service.

Combining parts and labor cost and fuel cost results in the FCEB total CPM increasing 101 percent from 2022 to 2023. The total CPM in 2023 for the FCEB is \$4.34, compared to CNG bus at \$1.93, and BEB at \$1.80. Since BEBs share many of the same components with the FCEBs and electricity rates will increase with increased usage, the BEB CPM is expected to increase.

Hydrogen Fuel Station Update

For the last two years, the hydrogen fueling station has performed consistently well, matching the performance of the CNG fueling station. Monthly meetings with the fueling station provider are held to ensure incidents are discussed and resolved immediately. Although the hydrogen fueling station is performing well, there are times when the station is out of service resulting in buses not being fueled and not deployed into service. The CNG fueling station also goes down at times; however, fueling can be accomplished by sending buses to another base. Currently there is no backup fueling infrastructure, public or private, available for hydrogen. OCTA has plans to build a second hydrogen fueling station that will provide the infrastructure resiliency needed to ensure fuel is available for FCEB deployments and will support a larger fleet.

Summary

After four years, much has been gained in terms of knowledge and experience from the ZEB pilot program. Although the performance of the ZEBs does not match the performance of the CNG buses, there is a greater understanding of the differences between the technologies, what components need improvement to improve reliability, and where training can be developed to help mitigate issues. Understanding the various costs to operate and maintain ZEBs helps drive financial planning and advocacy for funding and lowering costs, such as the need to find solutions to lower the cost of hydrogen fuel and electricity infrastructure.

The next steps are to expand the ZEB pilot program by procuring 40 additional FCEBs, ten additional BEBs, and ten battery-electric vans for paratransit service. This will require additional infrastructure, which will include procuring a second hydrogen fuel station, ten additional BEB charging stations, and charging stations for the battery-electric vans. The pilot expansion will allow OCTA to accelerate its operational and technological experience to shape and define the fleet mix required to meet the service demands of Orange County when utilizing ZEBs as well as move closer to transitioning the fleet to 100 percent zero-emission. Staff will continue to provide updates to the Board on the performance of the ZEB fleet and of any changes to the ZEB Pilot Program.

Attachment

None.

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Zero-Emission Bus Pilot Update

Background

- December 2018, the California Air Resources Board passed the Innovative Clean Transit (ICT) rule
 - Requires transitioning to zero-emission bus fleet by 2040
 - Purchasing requirements begin in 2023
- June 2020, the OCTA Board of Directors (Board) approved the OCTA Zero-Emission Bus (ZEB) Rollout Plan
 - Includes a mix of zero emission technologies
- February 2020, OCTA initiated the Fuel Cell Electric Bus (FCEB) Pilot
 - Ten 40-foot FCEBs, a hydrogen fueling station, maintenance shop upgrades
 - Grant funded \$13.2M - California Air Resources Board and South Coast Air Quality Management District
- July 2022, OCTA initiated the Battery Electric Bus (BEB) Pilot
 - Started with two BEBs, eight more arrived in December 2022
 - Grant funded \$10.3M - California Transportation Commission Solutions for Congested Corridors Program (SCCP) under SB 1 (Chapter 5, Statutes of 2017) and the Low Carbon Transit Operations Program (LCTOP)
- August 2022, Battery Electric Paratransit Bus Pilot
 - FTA awarded \$2.5M for ten battery-electric paratransit buses and infrastructure
 - Grant funded \$2.5M - FTA's Buses and Bus Facilities, and Low and No Emission Vehicle programs

ZEB Pilot Buses

Vehicle Information	FCEB	BEB	CNG
Number of Buses	Ten	Ten	Ten
Manufacturer/Model	New Flyer Xcelsior	New Flyer Xcelsior	New Flyer Xcelsior
Model Year	2018	2020	2016
Bus Cost Each	\$1.3M	\$1.1M	\$580,000
Length	40 feet	40 feet	40 feet
Curb Weight	33,560 pounds	33,500 pounds	30,000 pounds
Propulsion System	Ballard Fuel Cell 85 kW	Siemens Electric Motor 210 kW	Cummins CNG Engine 280 hp
	Siemens Electric Motor 210 kW		Allison Transmission
Energy Storage	Five Composite Fuel Cylinders		Six Composite Fuel Cylinders
	Lithium-Ion Batteries 100 kW	Lithium-Ion Batteries 440kW	
Operating Range	300 miles	200 miles	400 miles

*FCEB – Fuel Cell Electric Buses
 *BEB – Battery Electric Buses
 *CNG – Compressed Natural Gas



FCEB

- Deployed in February 2020
- Same standard equipment as the OCTA CNG Bus
- Fuel cell acts as an onboard battery charger
- Operated 1,037,910 miles
- Usable operating range 250 miles
- Operates on 80% of OCTA routes
- Refuel in six to ten minutes, similar to CNG



BEB

- Deployed in December 2022
- Same standard equipment as the OCTA CNG bus
- 100% battery electric
- Operated 145,618 miles
- Usable operating range 150 miles
- Operates on 20% of OCTA routes
- Recharge in four hours



Key Performance Indicators

Bus Availability

- Percentage of days the buses are available compared to the total number of days that the buses are planned for revenue service

Miles Between Road Calls

- A road call is defined as a revenue vehicle mechanical or system failure that causes the bus to be replaced in route or causes a significant delay in the bus schedule

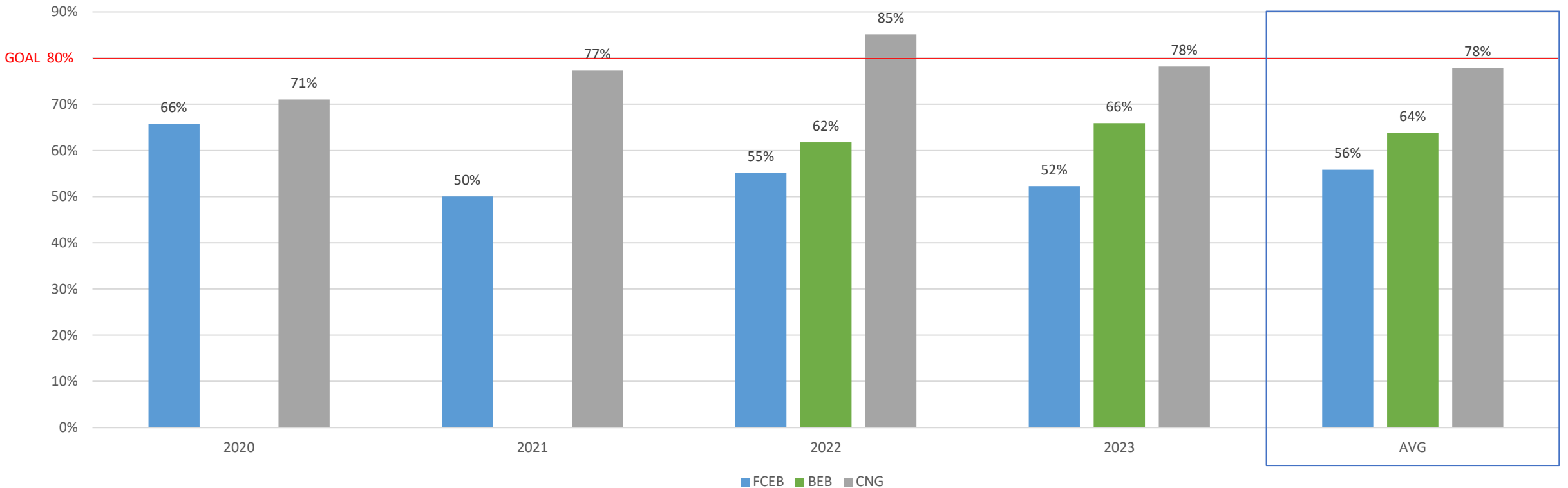
Fuel Economy

- Fuel economy is a measurement of how efficiently the fuel is being used by the propulsion system

Cost Per Mile (CPM)

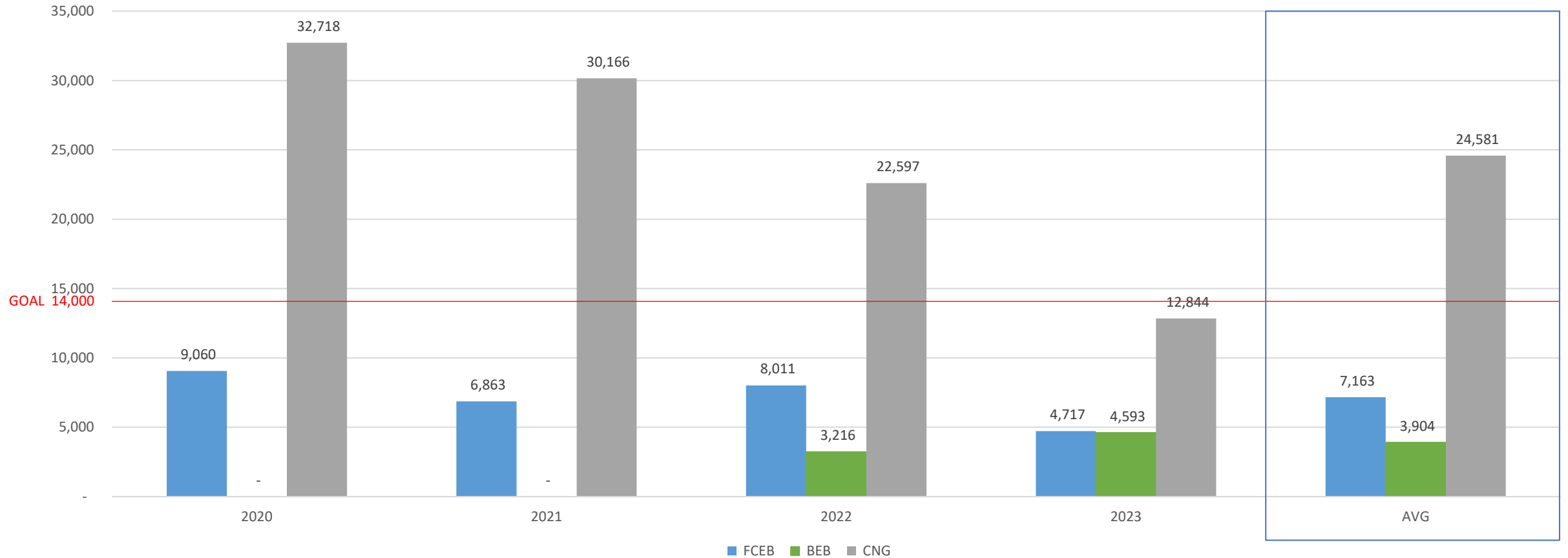
- OCTA calculates total CPM for each technology by tracking parts and labor cost and fuel cost
- CPM is the lowest common denominator between the three technologies

Bus Availability



Downtime Reasons	FCEB	BEB	CNG	Description
Propulsion System	5.8%	2.5%	2.3%	Engine, Trans, Batteries, Fuel Cell
Unscheduled Maintenance	25.6%	33.4%	16.3%	General Repairs
Scheduled Maintenance	11.7%	1.0%	3.3%	Preventive Maintenance, Training, Special Events

Miles Between Road Calls



Fuel Economy

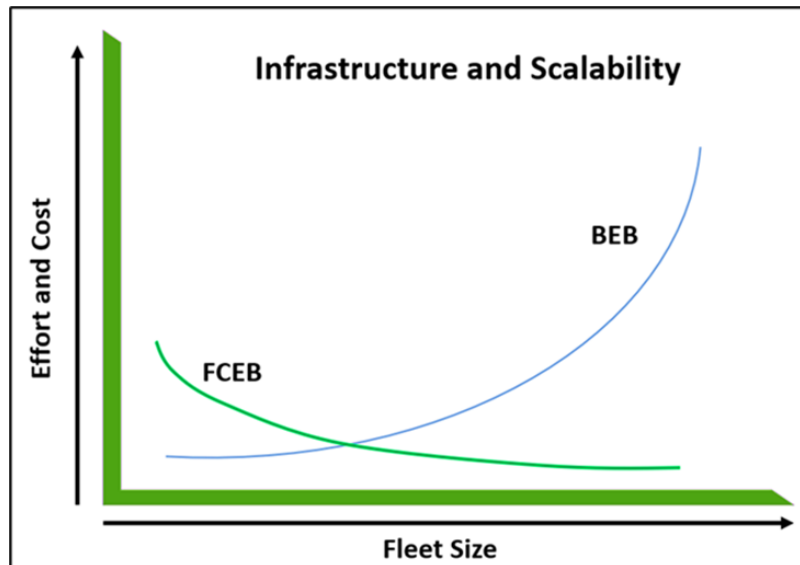
Measurement	FCEB	BEB	CNG
Miles per diesel gallon equivalent	8.92	17.05	3.91
Miles per kilogram equivalent	7.9	13.63	3.57
Miles per kilowatt	0.24	0.46	0.11

Fuel Cost	FCEB	BEB	CNG
Per kg, kW, Therm, respectively	\$22.25	\$0.17	\$1.08

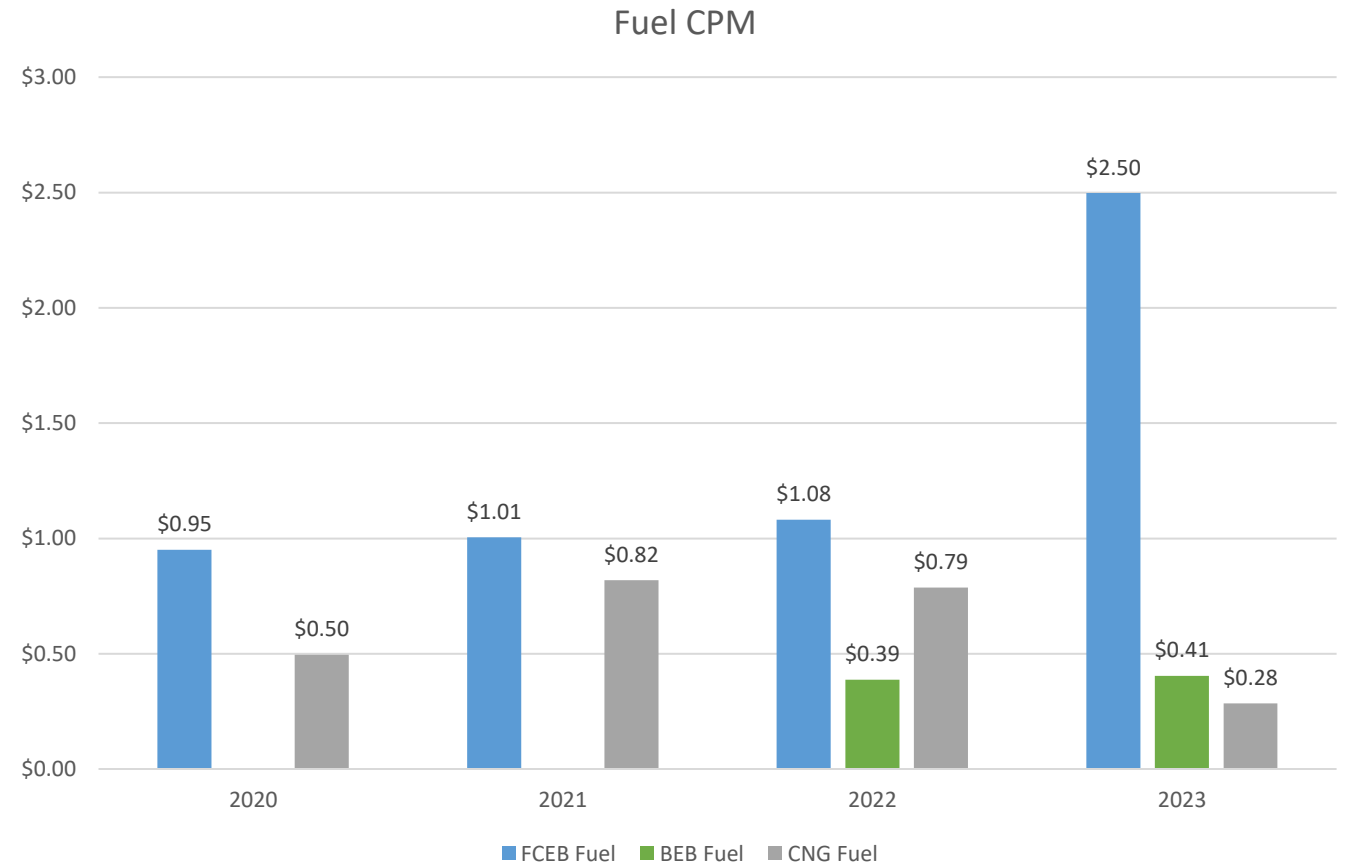


Cost per Mile

- FCEB fuel cost increased 131% due to O&M agreement
- CNG fuel cost decreased 64% due to lower renewable natural gas prices
- BEB electricity cost remained neutral, but will increase when bus chargers are activated

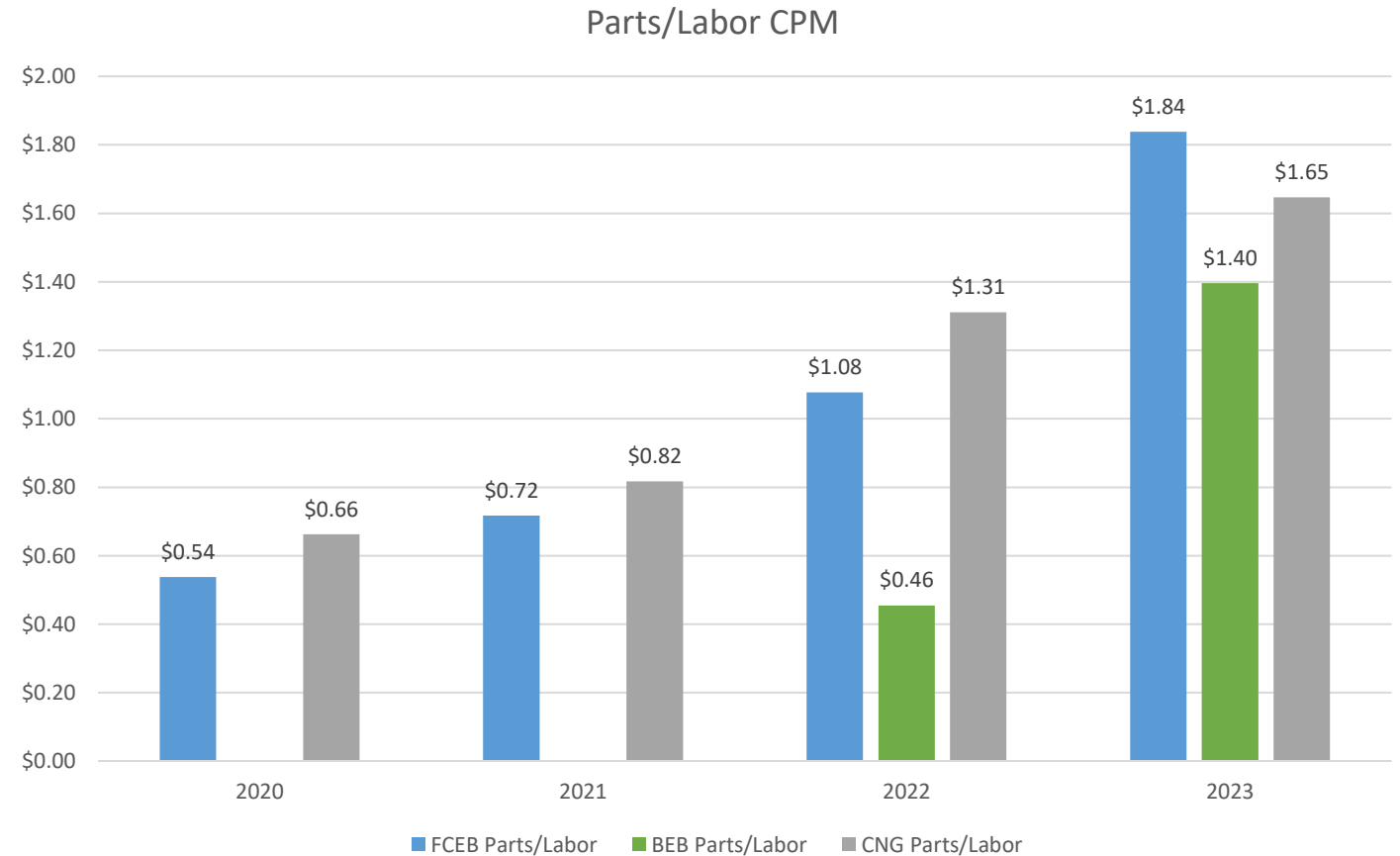


*O&M – Operations and Maintenance



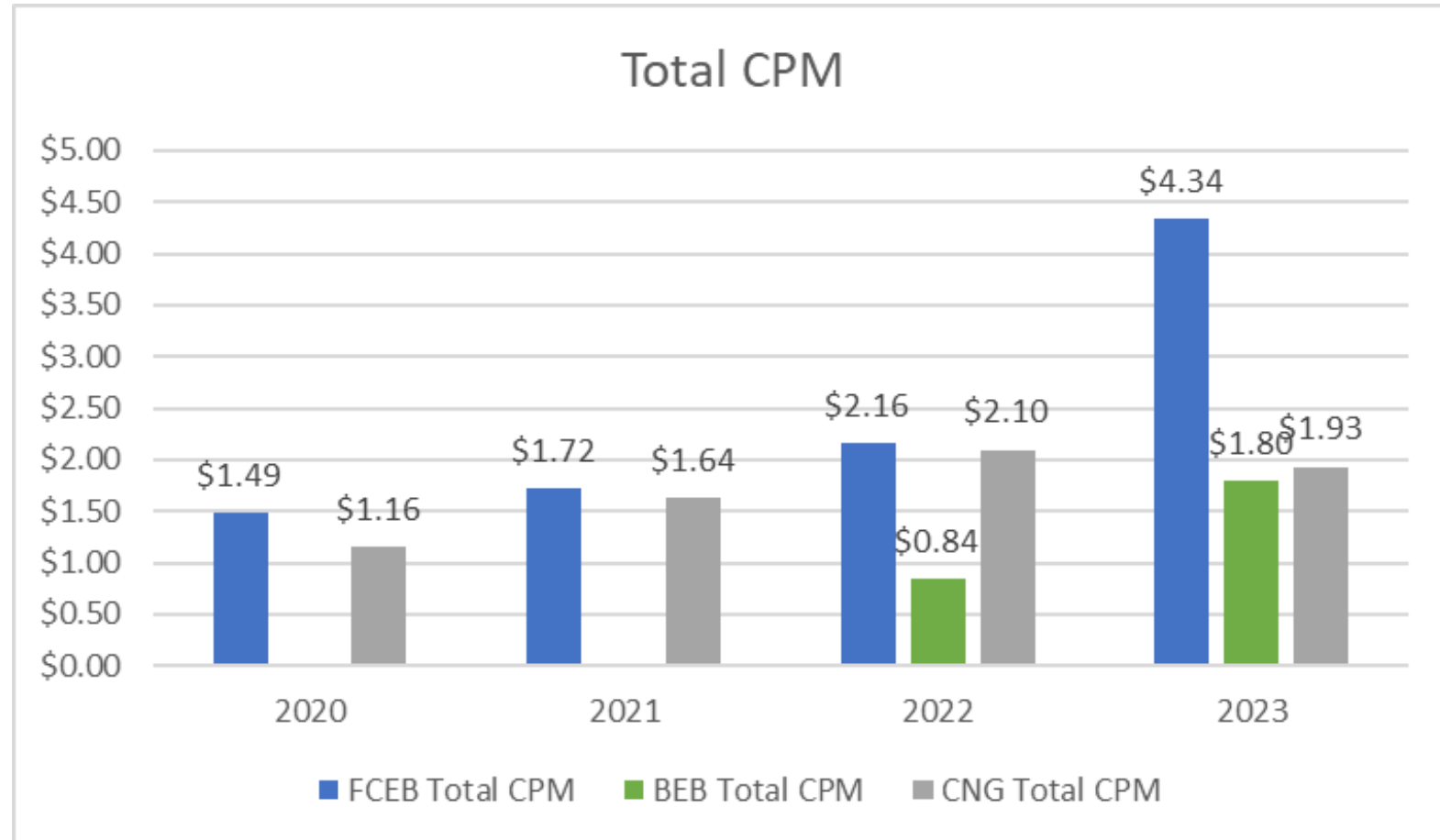
Cost per Mile (Cont.)

- CNG normal increases due to age
- FCEB increased due to increases in parts
- BEB increased due to failures outside the warranty



Cost per Mile (Cont.)

- Total CPM includes
 - Fuel CPM
 - Parts and Labor CPM
- FCEB four-year average
 - \$2.43, 42% > CNG
- BEB two-year average
 - \$1.32, 23% < CNG



Infrastructure



BEB Charging Stations

- Located at the Garden Grove Base
- Ten charging stations
- 50-150kW each
- Fully operational in February 2024

Hydrogen Fueling Station

- Located at the Santa Ana Base
- Two dispensers
- 50 buses per day
- Fully operational since 2020



Next Steps

- Expand ZEB Pilot
 - 40 additional 40ft FCEBs
 - Ten additional 40ft BEBs
 - Ten battery electric paratransit buses/vans
- Add Infrastructure
 - Second H2 Fueling Station at Garden Grove Base
 - Ten additional BEB Charging Stations at Santa Ana Base
 - Battery Charging Stations for battery electric paratransit buses/vans



OC Bus and OC ACCESS Services Update

Ridership

- Average weekday boardings and productivity as measured by boardings per revenue vehicle hour (B/RVH)

On-Time Performance

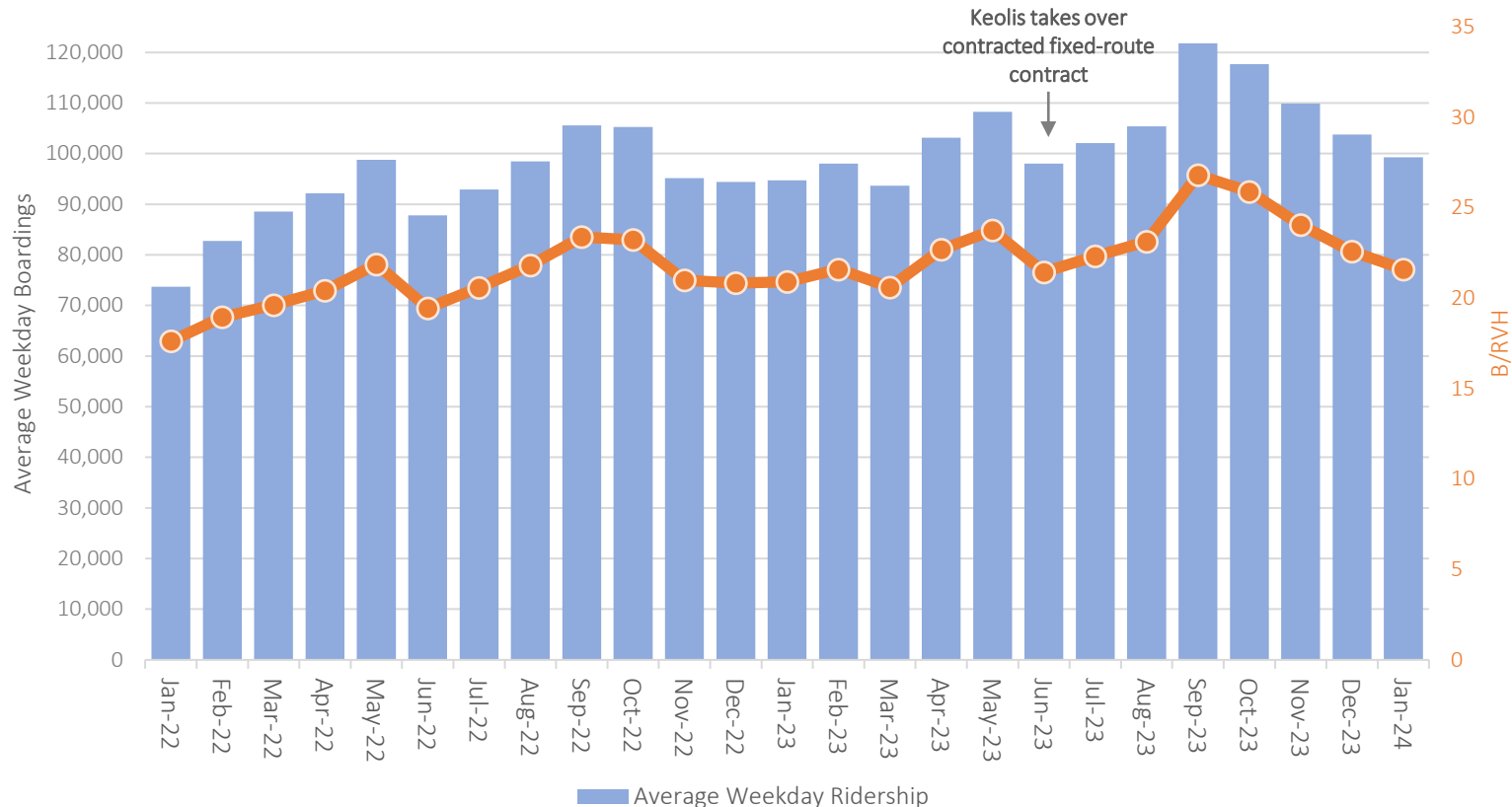
- Measuring service quality

Customer Comments

- Trends, feedback, and issues reported

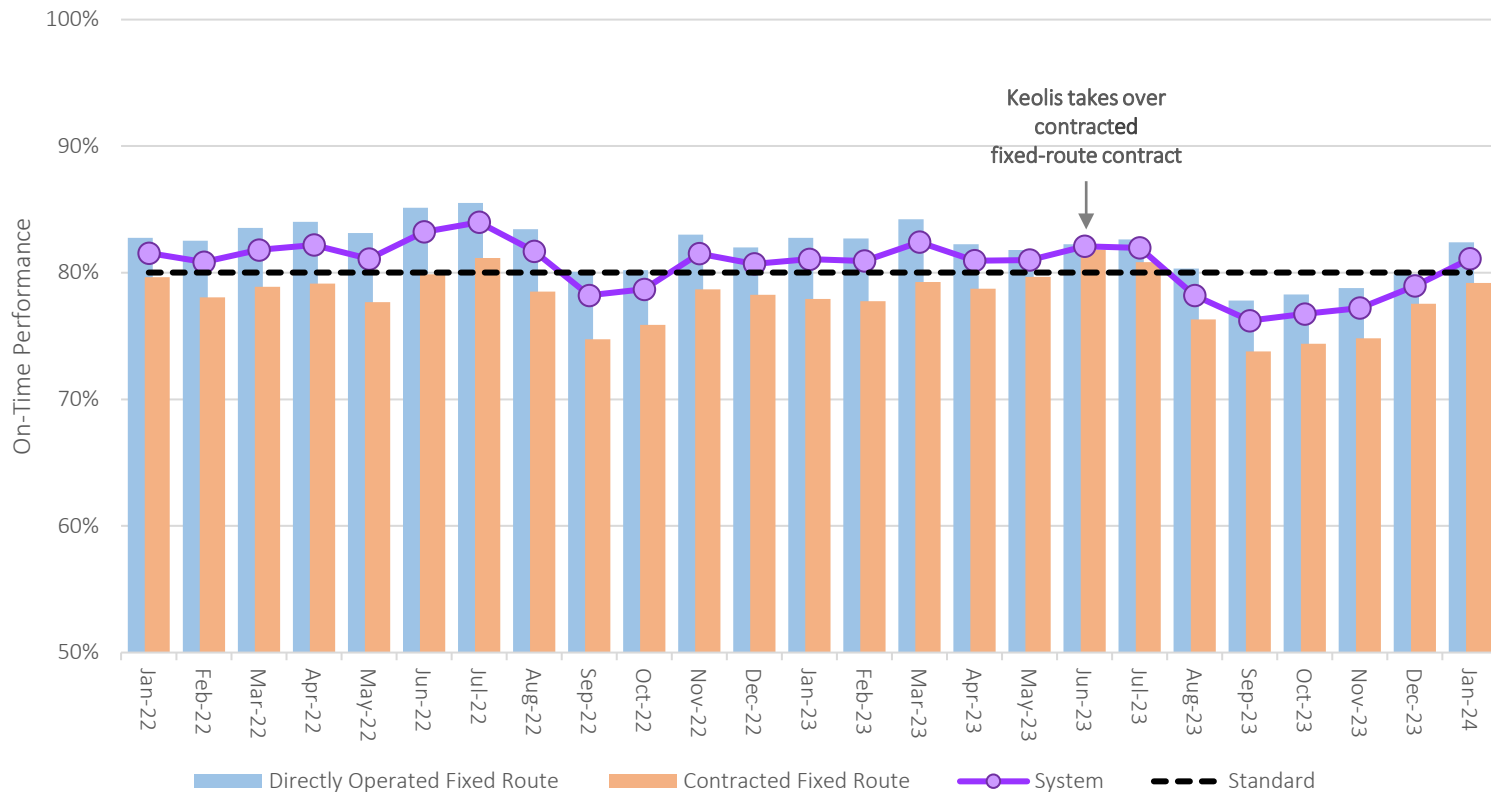
OC BUS RIDERSHIP AND PRODUCTIVITY

(AVERAGE WEEKDAY – LAST TWO YEARS)



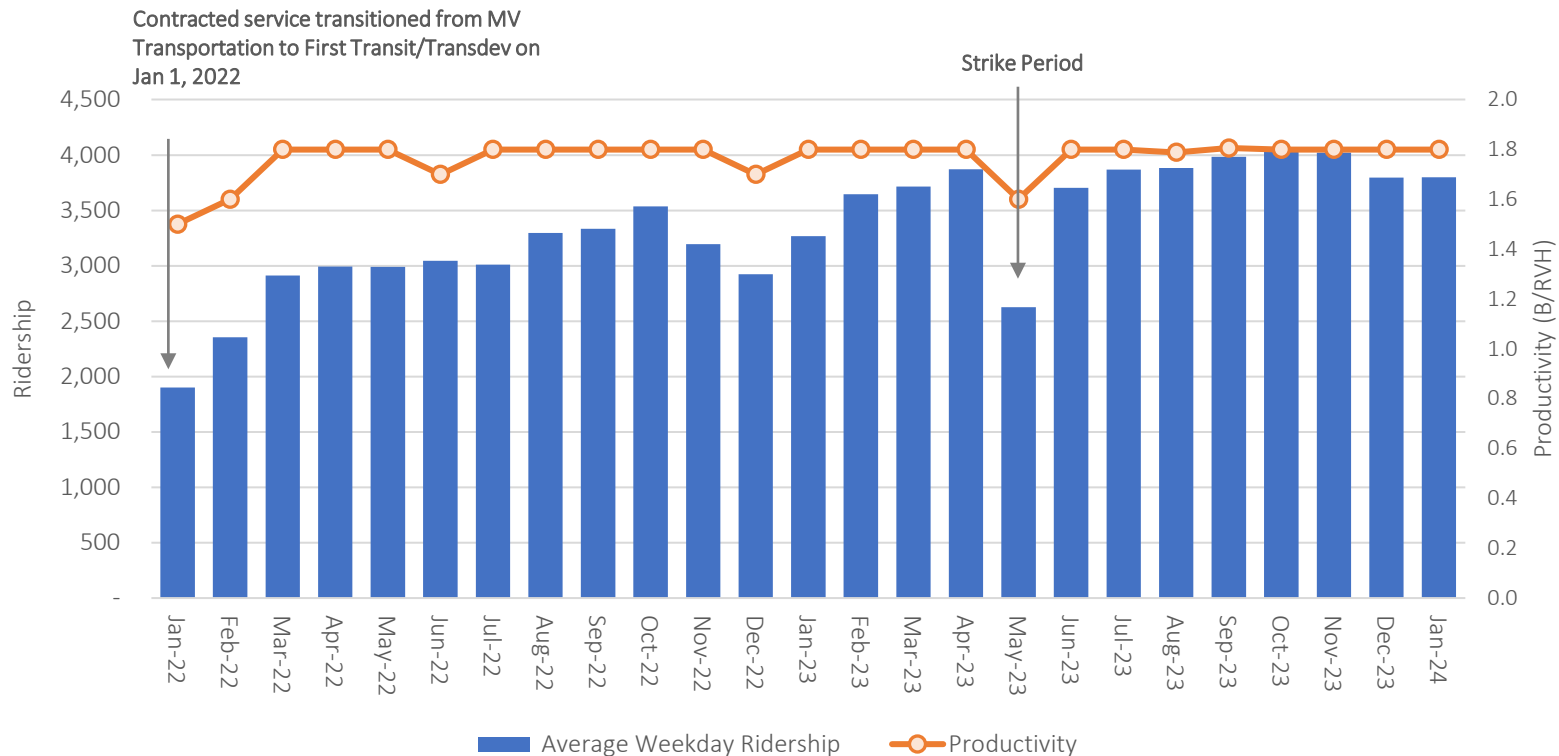
OC BUS ON-TIME PERFORMANCE

(AVERAGE WEEKDAY)



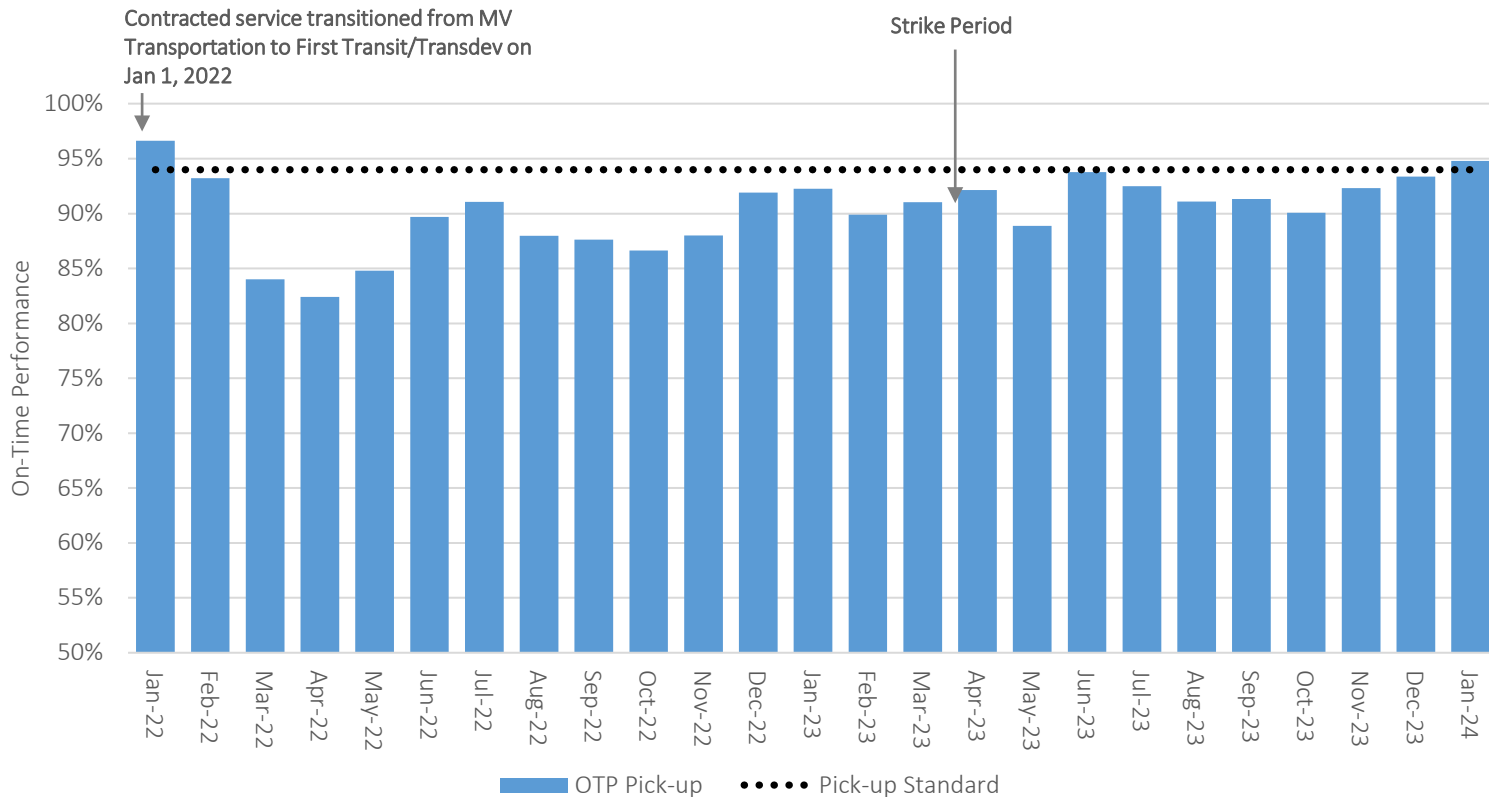
OC ACCESS RIDERSHIP AND PRODUCTIVITY

(AVERAGE WEEKDAY)



OC ACCESS ON-TIME PERFORMANCE

(AVERAGE WEEKDAY)



CUSTOMER COMMUNICATION AND FEEDBACK

Marketing and Customer Communications

Customer Communications

- Launched Community College Pass Program campaign with school partnerships, outreach, and social media encouraging students to ride.



Customer Comments

Bus Pass-bys

- Complaints on pass-bys in January slightly increased to an average of 10.4 complaints per week compared to an average of 10.2 complaints per week in December.

No Shows

- Complaints for “no show” routes in January decreased to an average of one complaint per week from an average of 1.8 complaints per week in December.

Good News Story

“The caller wanted to compliment the coach operator of the 29 bus ... he stated that even though the road was slippery due to the rain, he felt safe in the bus as she is an incredibly safe and cautious coach operator. She is very friendly, kind, and patient with all of her passengers.” – Customer Call

NEXT STEPS

Continue to Track Service Performance

- Ridership trends
- On-time performance



Next Service Change

- February 11, 2024

