

Committee Members

Andrew Do, Chairman Gregory T. Winterbottom, Vice Chairman Laurie Davies Steve Jones Miguel Pulido Tim Shaw Orange County Transportation Authority Headquarters 550 South Main Street Board Room – Conf. Room 07 Orange, California Thursday, January 9, 2020 at 9:00 a.m.

Any person with a disability who requires a modification or accommodation in order to participate in this meeting should contact the OCTA Clerk of the Board, telephone (714) 560-5676, no less than two (2) business days prior to this meeting to enable OCTA to make reasonable arrangements to assure accessibility to this meeting.

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.

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.

Call to Order

Pledge of Allegiance

Director Shaw

1. Public Comments

Special Calendar

There are no Special Calendar matters.



Consent Calendar (Items 2 through 6)

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.

2. Approval of Minutes

Approval of the minutes of the Transit Committee meeting of November 14, 2019.

3. Request to Exercise Option Term for Project Management Consultant Services for the OC Streetcar Project Mary Shavalier/James G. Beil

Overview

On February 23, 2015, the Orange County Transportation Authority Board of Directors approved an agreement with HDR Engineering, Inc., to provide project management consultant services for the OC Streetcar project, for a term of five years, with two, two-year option terms. An amendment to the existing agreement for execution of the first option term is requested for continued project management consultant services.

Recommendation

Authorize the Chief Executive Officer to negotiate and execute Amendment No. 11 to Agreement No. C-4-1854 between the Orange County Transportation Authority and HDR Engineering, Inc., to exercise the first two-year option term for project management consultant services for the OC Streetcar project, in the amount of \$8,064,286, and extend the term of the agreement through February 22, 2022. This will increase the maximum obligation of the agreement to a total contract value of \$29,026,291.

4. Agreement for Lease and Full Service of Bus Tires

Cliff Thorne/Jennifer L. Bergener

Overview

The Orange County Transportation Authority contracts for the lease and service of tires at all operating bases, including contractor-operated bases for all revenue vehicles. Bids were received in accordance with the Orange County Transportation Authority procurement procedures for competitive sealed bids. Board of Directors' approval is requested to execute the agreement.



4. (Continued)

Recommendation

Authorize the Chief Executive Officer to negotiate and execute Agreement No. C-9-1354 between the Orange County Transportation Authority and Bridgestone Americas Tire Operations, LLC, in the amount of \$10,245,764, for the lease and full service of bus tires for a five-year term.

5. February 2020 Bus Service Change

Gary Hewitt/Kia Mortazavi

Overview

The February 2020 bus service change consists of both major and minor schedule changes to bus routes. The changes address construction delay, coach operator input, customer requests, and implement changes approved by the Board of Directors in July 2019.

Recommendation

Receive and file as an information item.

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

Alfonso Hernandez/Kia Mortazavi

Overview

Measure M2 establishes a competitive program through Project V to fund community-based local transit circulators, designed to complement regional transit services. A ridership report on 20 active Project V services operating through the fourth quarter of fiscal year 2018-19 and first quarter of 2019-20 is provided for Board of Director's information.

Recommendations

- A. Receive and file Project V Ridership Report as an information item.
- B. Authorize amendments to the City of Irvine's iShuttle Project V-funded services to enhance route productivity, and also authorize a six-month delay in achieving minimum required performance standard for year one of service.



Regular Calendar

7. Contract Change Order for Removal and Disposal of Contaminated Materials Within the Orange County Transit District-Owned Pacific Electric Right of Way and Other Project Areas for the OC Streetcar Project Mary Shavalier/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 the continued removal and disposal of contaminated materials within the Orange County Transit District-owned Pacific Electric Right of Way as well as other project areas.

Recommendation

Authorize the Chief Executive Officer to negotiate and execute Contract Change Order No. 3.1 to Agreement No. C-7-1904 with Walsh Construction Company II, LLC, in the amount of \$7,278,795, for the removal and disposal of contaminated materials within the Orange County Transit District-owned Pacific Electric Right of Way and other project areas for the construction of the OC Streetcar project.

8. OC Flex Microtransit Pilot Project: 12-Month Update

Johnny Dunning, Jr./Jennifer L. Bergener

Overview

In October 2018, the Orange County Transportation Authority initiated a microtransit pilot service, branded as OC Flex, in two areas of the county where transit demand does not support traditional fixed-route service. The pilot is intended to match resources with changing demand, increasing the efficiency and effectiveness of the Orange County transit system. This report provides a review of the performance of the OC Flex microtransit pilot during the first year of operation and strategies to improve performance, including modifications to the existing zones and operational adjustments.

Recommendation

Direct staff to extend the Board of Directors-approved one-year pilot of the OC Flex pilot project to October 2020.



9. Bus Operations Performance Measurements Report for the First Quarter of Fiscal Year 2019-20 Johnny Dunning, Jr./Jennifer L. Bergener

Overview

The Orange County Transportation Authority operates fixed-route bus and demand-response paratransit service throughout Orange County and into neighboring counties. The established measures of performance for these services assess the safety, courtesy, reliability, and overall quality of the services. This report summarizes the year-to-date performance of these services through the first quarter of fiscal year 2019-20.

Recommendation

Receive and file as an information item.

Discussion Items

- **10.** Chief Executive Officer's Report
- 11. Committee Members' Reports
- 12. Closed Session

There are no Closed Session items scheduled.

13. Adjournment

The next regularly scheduled meeting of this Committee will be held at **9:00 a.m. on Thursday, February 13, 2020**, at the Orange County Transportation Authority Headquarters, 550 South Main Street, Board Room - Conference Room 07, Orange, California.



Committee Members Present

Andrew Do, Chairman Laurie Davies Steve Jones Miguel Pulido Tim Shaw

Staff Present

Jennifer L. Bergener, Chief Operating Officer Laurena Weinert, Clerk of the Board Olga Prado, Assistant Clerk of the Board James Donich, General Counsel OCTA Staff and members of the General Public

Committee Members Absent

Jose F. Moreno Gregory T. Winterbottom, Vice Chairman

Call to Order

The November 14, 2019 regular meeting of the Transit Committee was called to order by Committee Chairman Do at 9:03 a.m.

Pledge of Allegiance

Director Jones led in the Pledge of Allegiance.

1. Public Comments

No public comments were received.

Special Calendar

There were no Special Calendar matters.

Consent Calendar (Items 2 through 7)

2. Approval of Minutes

A motion was made by Director Davies, seconded by Director Jones, and declared passed by those present, to approve the minutes of the Transit Committee meeting of October 10, 2019.

3. Innovation Update

A motion was made by Director Davies, seconded by Director Jones, and declared passed by those present, to receive and file as an information item.



4. Agreement for the Purchase of Bus Operations Support Vehicles

A motion was made by Director Davies, seconded by Director Jones, and declared passed by those present, to authorize the Chief Executive Officer to negotiate and execute Purchase Order No. C-9-1646 between the Orange County Transportation Authority and FFBH Motors, LLC, doing business as Frontier Ford, in the amount of \$373,703, for the purchase of nine model year 2020 Ford Explorer Hybrid vehicles.

5. Amendment to Cooperative Agreement with the Southern California Regional Rail Authority for the Orange County Maintenance Facility

A motion was made by Director Davies, seconded by Director Jones, and declared passed by those present, to authorize the Chief Executive Officer to negotiate and execute Amendment No. 1 to Cooperative Agreement No. C-9-1127 between the Orange County Transportation Authority and the Southern California Regional Rail Authority, in the amount of \$703,000, for its efforts for the preliminary engineering and environmental documentation of the Orange County Maintenance Facility project. This will increase the maximum obligation for the cooperative agreement to a total contract value of \$703,000.

6. Contract Change Order for Utility Conflicts for the Construction of the OC Streetcar Project

A motion was made by Director Davies, seconded by Director Jones, and declared passed by those present, to authorize the Chief Executive Officer to negotiate and execute Contract Change Order No. 4.1 to Agreement No. C-7-1904 with Walsh Construction Company II, LLC, in the amount of \$833,300, for work to address utility conflicts for the construction of the OC Streetcar project.

7. Consultant Selection for On-Call Materials Testing and Inspection Services for Facilities Projects

A motion was made by Director Davies, seconded by Director Jones, and declared passed by those present, to:

- A. Approve the selection of Ninyo & Moore Geotechnical & Environmental Science Consultants as the firm to provide on-call materials testing and inspection services for facilities projects.
- B. Authorize the Chief Executive Officer to negotiate and execute Agreement No. C-9-1356 between the Orange County Transportation Authority and Ninyo & Moore Geotechnical & Environmental Science Consultants, in the amount of \$461,465, for a three year initial term, with one, two-year option term, to provide on-call materials testing and inspection services for facilities projects.



Regular Calendar

8. Consultant Selection for Preparation of Plans, Specifications, and Estimates for Transit Security and Operations Center

George Olivo, Program Manager, Capital Programs, gave an overview on the background, procurement approach, and the recommendations for the selected firm to perform the required work.

Director Do provided comments and agreed with the evaluation criteria on the three firms and that Stantec, Inc., is ranked as the highest among the proposing firms.

A motion was made by Director Davies, seconded by Director Jones, and declared passed by those present, to:

- A. Approve the selection of Stantec, Inc., as the firm to prepare plans, specifications, and estimates for the Transit Security and Operations Center.
- B. Authorize the Chief Executive Officer to negotiate and execute Agreement No. C-9-0965 between the Orange County Transportation Authority and Stantec, Inc., for preparation of plans, specifications, and estimates for the Transit Security and Operations Center.

9. OC Streetcar Project Quarterly Update

Jim Beil, Executive Director of Capital Programs, Kelly Hart, Project Manager of the OC Streetcar Project, and Tresa Oliveri, Community Relations Officer, co-presented a PowerPoint presentation for this item as follows:

- Background;
- OC Streetcar Features;
- Santa Ana River Bridge:
- Construction Segment 1;
- Maintenance and Storage Facility;
- Construction Segments 2 through 5;
- Third-Party Utilities Relocations;
- Outreach;
- Vehicles; and
- Other key OC Streetcar updates

A discussion ensued regarding:

• Concerns from Brian Chase, a property owner, on small businesses being impacted by the construction of the OC Streetcar project.



9. (Continued)

- Director Jones urged OCTA staff to be proactive about relaying information to the small business owners and the public, in terms of parking, etcetera.
- The City of Santa Ana (Santa Ana) will implement free two-hour parking for shopping and consider giving business owners more time to pay their water bill.
- Construction will not happen on Fourth Street during the holidays in order for businesses not to be impacted.
- A meeting will be held in downtown Santa Ana with Director Pulido, Darrell E. Johnson, Chief Executive Officer, and the Santa Ana City Manager to provide additional information to business owners.
- More development along the corridor in Santa Ana will make an impact in the market.
- Additional suggestions made to support businesses during construction included:
 - Providing discount incentives.
 - Learning what the Los Angeles County Metropolitan Transportation Authority is doing to mitigate.
 - Working with Santa Ana to subsidize parking and display signs that state "free parking."
- An extensive utility review was conducted, and the contractor will be required to do additional potholing in the trenched areas before everything is opened.
- Explanation on a blanket request among all agencies to streamline funding grant agreements within the Capital Investment Grants program (Attachment A) and the delays in the schedule.
- Referenced Slide 10 of the PowerPoint and confirmed that there is a vehicle inspector onsite that conducts quality control checks.

No action was taken on this information item.

Discussion Items

10. ACCESS Vehicle Replacement

Jennifer L. Bergener, Chief Operating Officer (COO), provided opening comments and introduced Cliff Thorne, Director of Maintenance and Motorist Services, who provided a PowerPoint presentation for this item as follows:

- Current Fleet Profile;
- GreenPower Emission Vehicle Star Min-eBus;
- Lightning Systems Electric Bus;
- Motiv Epic E-450 Electric Bus;
- Phoenix Motorcars Zeus Electric Bus;



10. (Continued)

- Vehicle Specification Comparison Fleet;
- Vehicle Specification Comparison 116; and
- ACCESS Vehicle Replacement.

A discussion ensued as follows:

- The existing vehicle holds 12 passengers, it is more beneficial to have 22 passengers in a vehicle, and to combine as many rides as possible.
- The cost per mile is not included, only the capital costs for the vehicles and the infrastructure are noted.
- Explanation on what type of infrastructure will be required for the different types of vehicles.
- Out of the four fuel types, compressed natural gas (CNG) is considered the cheapest source of fuel which does not include the infrastructure.
- Director Do requested that the report be updated to include the cheapest vehicle to operate per year.
- CNG would not be recommend because in 2028, according to the California Air Resources Board, OCTA's entire fleet will have to be zero emissions by 2040.
- The current vehicles have seven years or 200,000 miles left before they need to be replaced and new vehicles would need to be purchased after 2026.
- The required fleet management plan will be brought to the Board of Directors next year.
- The fixed cost for the infrastructure component will apply no matter when OCTA buys the vehicles.
- There is no option from a manufacturer for a hybrid vehicle right now.
- A typical vehicle runs in the range of 200 miles per day.
- Director Pulido expressed the importance in considering electric vehicles: that the range in batteries will increase, maintenance is quieter, and they are more environmentally friendly.
- Buses will not have a vehicle miles traveled fee and all anticipated vehicle replacements will be factored into the budget beforehand.

No action was taken on this information item.





11. Operator Relief Vehicle Replacement

Cliff Thorne, Director, Operations, Motorist Services, provided a PowerPoint presentation for this item as follows:

- Current Operator Relief Vehicles (ORVs);
- Replacement ORV:
- 2020 Honda Civic Gasoline:
- 2020 Toyota Corolla Gasoline Hybrid;
- 2019 Chevrolet Bolt All Electric;
- Greenhouse Gas Emissions;
- Total Cost of Ownership;
- Electric Vehicle Infrastructure; and
- Recommendation/Next Steps.

A discussion ensued as follows:

- The data found in Slide 8 of the PowerPoint is from <u>www.fueleconomy.gov</u>.
- General Motors has a program for recapturing recycled batteries and using them in other applications before they are disposed of.
- Electric Vehicles have a powertrain warranty for eight years and all other vehicles' powertrain warranty is five years.

No action was taken on this information item.

12. Chief Executive Officer's Report

Ms. Bergener, COO, reported on the following:

- The Interstate 5 South County Improvement Project is in full swing and crews will be demolishing the La Paz Road northbound on-ramp this weekend and requires overnight closures of La Paz Road between Cabot Road and Muirlands Boulevard.
 - Closures will be from 10:00 p.m. to 8:00 a.m. on both Friday, November 15th, and Saturday, November 16th.
 - OCTA staff will be notifying the public through all its regular channels.
- On Sunday, November 17th, the Southern California Association of Governments and the Renew Beach Boulevard Coalition are hosting a "Meet on Beach" event along Beach Boulevard. This multi-city event will transform Beach Boulevard into a more walkable and bikeable street for a day with activities at various hubs along the corridor.



12. (Continued)

OCTA staff will be at the following two hubs:

- Anaheim/Buena Park will provide information about Safe Routes to School and
- Huntington Beach will provide information about active transportation and the Orange County Loop.
- Ms. Bergener, COO, stated she has been at OCTA for 17 years and this is the first time she has sat at the Chief Executive Officers seat for a committee meeting. She thanked the Committee Members for the opportunity.

13. Committee Members' Reports

Director Shaw reported when OCTA completes the OC Streetcar Project, it is anticipated that \$798 million would remain in Measure M2's (M2) Project S. Director Shaw stated it is worth thinking about the remaining M2 Project S funds for the future.

14. Closed Session

There were no Closed Session items scheduled.

15. Adjournment

The meeting adjourned at 10:15 a.m.

The next regularly scheduled meeting of this Committee will be held at **9:00 a.m. on Thursday, December 12, 2019**, at the Orange County Transportation Authority Headquarters, 550 South Main Street, Board Room - Conference Room 07, Orange, California.

ATTEST

Laurena Weinert Clerk of the Board

Andrew Do Committee Chairman



January 9, 2020

- 1 Emerete Phille for Darrell E. Johnson, Chief Executive Officer From:
- Subject: Request to Exercise Option Term for Project Management Consultant Services for the OC Streetcar Project

Overview

On February 23, 2015, the Orange County Transportation Authority Board of Directors approved an agreement with HDR Engineering, Inc., to provide project management consultant services for the OC Streetcar project, for a term of five years, with two, two-year option terms. An amendment to the existing agreement for execution of the first option term is requested for continued project management consultant services.

Recommendation

Authorize the Chief Executive Officer to negotiate and execute Amendment No. 11 to Agreement No. C-4-1854 between the Orange County Transportation Authority and HDR Engineering, Inc., to exercise the first two-year option term for project management consultant services for the OC Streetcar project, in the amount of \$8,064,286, and extend the term of the agreement through February 22, 2022. This will increase the maximum obligation of the agreement to a total contract value of \$29,026,291.

Discussion

The Orange County Transportation Authority (OCTA), in cooperation with the cities of Santa Ana and Garden Grove, is implementing a modern streetcar that will operate between the Santa Ana Regional Transportation Center in the City of Santa Ana (City) and the Harbor Boulevard/Westminster Boulevard intersection in the City of Garden Grove. The OC Streetcar project (Project) accessibility. increase transit will improve transit connectivity and options, relieve congestion, and provide benefits to the community and traveling public. The Project is being implemented as part of Measure M2 (M2) Project S – Transit Extensions to Metrolink, approved by Orange County voters in November 2006.

Request to Exercise Option Term for Project Management Page 2 Consultant Services for the OC Streetcar Project

As of November 2019, the construction contractor is approximately 14 percent complete with construction, vehicle production has commenced, third-party utility relocations are near completion, and the operations and maintenance service contract is being procured. Key tasks required for the implementation of the Project include:

- Coordination between the Project designer and the construction management (CM) consultant
- Management oversight of the CM consultant in the review of requests for information, submittals, and processing of construction change orders
- Third-party utility coordination
- Performing quality assurance activities related to design, construction, and vehicle manufacturing
- Risk analysis and management
- Safety and environmental compliance activities
- Project controls, including management of the Project schedule and budget
- Coordination with the Federal Transit Administration (FTA), including reporting requirements and monthly/quarterly meetings with FTA and its project management oversight consultant
- Vehicle design/manufacturing oversight and on-site vehicle inspection
- Operations planning, including Start-Up and Testing
- Public outreach
- Coordination with other third-party stakeholders (the City, City of Garden Grove, County of Orange, US Army Corps of Engineers, Orange County Fire Authority)
- Day-to-day project management activities, including invoice review, permits, document control

HDR Engineering Inc., (HDR) has been providing technical expertise and staff augmentation to assist in the delivery of the Project since 2015. HDR also provides specialized support in delivering an FTA New Starts project with extensive oversight by FTA. Continued support is required from HDR over the next two-year period.

Procurement Approach

The original procurement was handled in accordance with the OCTA Board of Directors (Board)-approved procedures for architectural and engineering services that conform to both state and federal laws. On February 23, 2015, the Board approved an agreement with HDR for an initial term of five years with two, two-year option terms. The total maximum obligation of the initial five-year term

Request to Exercise Option Term for Project Management Page 3 Consultant Services for the OC Streetcar Project

is \$20,962,005 and has been previously amended in accordance with Attachment A.

Staff requested a cost proposal from HDR for the level of effort required. The cost proposal was reviewed by OCTA project staff and found to be fair and reasonable for the tasks to be performed.

At the time of the contract execution, it was assumed that the Project Revenue Service Date (RSD) would occur within the initial base term. Due to delays in negotiations with FTA in the approval of the Full Funding Grant Agreement (FFGA), as well as requests from the construction industry for an extended bidding process and a longer construction duration, the RSD extends beyond the base term of the contract, requiring Board approval to exercise the first two-year option term. Exercising this option term will add funding of \$8,064,286 and extend the term of the agreement through February 22, 2022. With the approval of this amendment, the total contract value will be \$29,026,291.

Fiscal Impact

Funding for the Project is included in OCTA's Fiscal Year 2019-20 Budget, Capital Programs Division, accounts 0051-7519-TS010-Z83 and 0051-7519-TS010-Z71, and is funded with Federal Section 5309 New Starts and local M2 funds.

Project contingency is being used to fund a portion of the option term services given that the required project management services extend beyond the RSD that was assumed in the FFGA. Additionally, a greater level of effort is needed related to CM oversight, vehicle manufacturing oversight, and risk management that was originally not anticipated. The amendment exercising the option term will not result in an increase to the Project cost of \$407.7 million, as defined in the FFGA.

Summary

Staff is recommending the Chief Executive Officer to negotiate and execute Amendment No. 11 to Agreement No. C-4-1854 between the Orange County Transportation Authority and HDR Engineering, Inc., to exercise the first two-year option term for project management consultant services for the OC Streetcar project, in the amount of \$8,064,286, and to extend the term of the agreement through February 22, 2022. This will increase the maximum obligation of the agreement to a total contract value of \$29,026,291.

Request to Exercise Option Term for Project Management *Page 4* Consultant Services for the OC Streetcar Project

Attachment

A. HDR Engineering, Inc., Agreement No. C-4-1854 Fact Sheet

Prepared by:

Marysla

Mary Shavalier Program Manager (714) 560-5856

-Valaa

Pia Veesapen Manager, Contracts Administration and Materials Management (714) 560-5619

Approved by:

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

HDR Engineering, Inc. Agreement No. C-4-1854 Fact Sheet

- 1. February 23, 2015, Agreement No. C-4-1854, in the amount of \$21,557,909, approved by the Board of Directors (Board).
 - The agreement was executed on June 1, 2015, to provide project management services for the OC Streetcar project. A Limited notice to proceed was issued on February 25, 2015, to initiate development of the draft scope of work (SOW) for design services and related work to support the vehicle procurement process and interim utility work.
- 2. June 11, 2015, Amendment No. 1 to Agreement No. C-4-1854, \$0, approved by the Contracts Administration and Materials Management (CAMM) Department.
 - Modify hourly rate schedule for subconsultants Arellano Associates, LLC (Arellano), Civil Source, Inc., (Civil Source), Interfleet Technology, Inc. (Interfleet), and Maintenance Design Group, LL
- 3. April 6, 2016, Amendment No. 2 to Agreement No. C-4-1854, (\$595,904) approved by the CAMM Department.
 - Decrease maximum obligation as a result of adjustments to subconsultants Civil Source and Interfleet indirect cost rates; modify hourly rate schedules for subconsultants Hatch Mott MacDonald, IBI Group, Intueor Consulting Inc., Safework, Inc., and Shiels Obletz Johnsen, Inc.
- 4. September 13, 2016, Amendment No. 3 to Agreement No. C-4-1854, \$0, approved by the CAMM Department.
 - Modify subconsultant name Interfleet to SNC-Lavalin Rail & Transit, Inc. (SNC) and update key personnel.
- 5. December 8, 2016, Amendment No. 4 to Agreement No. C-4-1854, \$0, approved by the CAMM Department.
 - Modify subconsultant name Hatch Mott MacDonald, LLC to Mott MacDonald, LLC (Mott MacDonald)
 - Modify other direct costs schedule for subconsultant Arellano
 - Modify hourly rate schedules for SNC
- 6. April 4, 2017, Amendment No. 5 to Agreement No. C-4-1854, \$0, approved by the CAMM Department.
 - Modify hourly rate schedule for subconsultant Mott MacDonald

- 7. August 22, 2017, Amendment No. 6 to Agreement No. C-4-1854, \$0, approved by the CAMM Department.
 - At the request of subconsultant, release subconsultant Safework, Inc., from the agreement as construction safety support portion of the SOW has shifted to the construction management contract.
- 8. December 26, 2017, Amendment No. 7 to Agreement No. C-4-1854, \$0, approved by the CAMM Department.
 - Modify hourly rate schedules for HDR Engineering, Inc.(HDR) and subconsultant Shiels Obletz Johnsen, Inc.
 - Modify schedule and other direct costs schedule for subconsultant Mott MacDonald
- 9. January 8, 2019, Amendment No. 8 to Agreement No. C-4-1854, \$0, approved by the CAMM Department.
 - Modify hourly rate schedule for subconsultant Arellano
- 10. April 16, 2019, Amendment No. 9 to Agreement No. C-4-1854, \$0, approved by the CAMM Department.
 - Amend SOW to include quality assurance activities related to consultants and contractors in field or offsite locations
 - Modify hourly rate schedule for subconsultants Arellano, IBI Group, and Mott MacDonald
 - Modify other direct costs schedule for subconsultant IBI Group
- 11. August 21, 2019, Amendment No. 10 to Agreement No. C-4-1854, \$0, approved by the CAMM Department.
 - Modify hourly rate schedule for prime consultant HDR and subconsultant SNC
- 12. January 27, 2020, Amendment No. 11 to Agreement No. C-4-1854, \$8,064,286, pending Board approval.
 - Exercise the first two-year option term for continued project management consultant services and extend the term of the agreement through February 22, 2022

Total committed to HDR Engineering, Inc., after approval of Amendment No. 11 to Agreement No. C-4-1854: \$29,026,291.



January 9, 2020

То:	Transit Committee
From:	Darrell E. Johnson, Chief Executive Officer

Subject: Agreement for Lease and Full Service of Bus Tires

Overview

The Orange County Transportation Authority contracts for the lease and service of tires at all operating bases, including contractor-operated bases for all revenue vehicles. Bids were received in accordance with the Orange County Transportation Authority procurement procedures for competitive sealed bids. Board of Directors' approval is requested to execute the agreement.

Recommendation

Authorize the Chief Executive Officer to negotiate and execute Agreement No. C-9-1354 between the Orange County Transportation Authority and Bridgestone Americas Tire Operations, LLC, in the amount of \$10,245,764, for the lease and full service of bus tires for a five-year term.

Discussion

The Orange County Transportation Authority (OCTA) contracts for the lease and service of bus tires at all bus bases. The contractor provides trained service personnel at all five operating bases to mount and dismount the tires from wheels, balance wheels, keep tires inflated to the recommended pressure, make repairs to tires to ensure tires are in proper operating condition, and paint or powder coat steel wheels as requested by OCTA. OCTA pays a fixed cost per mile to the contractor for each tire that is used, for service personnel, for damaged tires based on remaining useful life, and per wheel for painting the steel wheels. Additionally, OCTA pays for the remaining useful life of the tires when buses are retired and the title is transferred to another entity.

The leasing of tires and the provision of tire service by a contractor is a common industry practice, and OCTA has engaged these services for its revenue vehicles since 1973. This has proven to be cost effective in terms of material and labor

Agreement for Lease and Full Service of Bus Tires

The current agreement for these services will expire on April 30, 2020.

Procurement Approach

This procurement was handled in accordance with OCTA Board of Directors (Board)-approved procedures for materials and equipment greater than \$50,000. These procedures, which conform to both federal and state requirements, are used when minimum requirements can be clearly specified and, therefore, the lowest price is the only criterion for choosing among the bidders who are responsive and responsible after a sealed bid process.

On September 9, 2019, the Board authorized the release of Invitation for Bids (IFB) 9-1354 through OCTA's CAMM NET system. The project was advertised on September 10 and 17, 2019, in a newspaper of general circulation. A pre-bid conference and job walk were held on September 19, 2019, and was attended by two firms. Two addenda were issued to post the pre-bid conference registration sheets, respond to questions received, and handle administrative issues related to the IFB. On October 29, 2019, three bids were received and publicly opened.

All bids were reviewed by staff from both Contracts Administration and Materials Management and Maintenance departments to ensure compliance with the contract terms and conditions, and technical specifications. The list of bidders and bid amounts, which include mileage charges, tire service, estimated damaged tire charges, and sales tax are presented below:

Firm and Location	Bid Amount
Bridgestone Americas Tire Operations, LLC Nashville, Tennessee	\$10,245,764
The Goodyear Tire & Rubber Company Akron, Ohio	\$10,781,258
Michelin North America, Inc. Greenville, South Carolina	\$11,312,456

The OCTA project manager's estimate for this project was \$12,000,000. The recommended firm's bid is about 14.6 percent below the project manager's estimate and is considered by staff to be fair and reasonable.

Agreement for Lease and Full Service of Bus Tires

State law requires award to the lowest responsive, responsible bidder. As such, staff recommends award to Bridgestone Americas Tire Operations, LLC, the lowest responsive, responsible bidder, in the amount of \$10,245,764, for lease and full service of bus tires.

Fiscal Impact

The project was approved in OCTA's Fiscal Year 2019-20 Budget, Operations Division, various accounts, and is funded through the Local Transportation Fund.

Summary

Based on the information provided, staff recommends the Board authorize the Chief Executive Officer to negotiate and execute Agreement No. C-9-1354, between the OCTA and Bridgestone Americas Tire Operations, LLC, in the amount of \$10,245,764, for the lease and full service of bus tires for a five-year period.

Attachment

None.

Prepared by:

Cliff Thorne Director, Maintenance and Motorist Services 714-560-5975

Pia Veesapen Department Manager, Contracts Administration and Materials Management 714-560-5619

Approved by:

Jennifer L. Bergener Chief Operating Officer, Operations 714-560-5462



January 9, 2020

To: Transit Committee

Jemete Prija for

From: Darrell E. Johnson, Chief Executive Officer

Subject: February 2020 Bus Service Change

Overview

The February 2020 bus service change consists of both major and minor schedule changes to bus routes. The changes address construction delay, coach operator input, customer requests, and implement changes approved by the Board of Directors in July 2019.

Recommendation

Receive and file as an information item.

Background

The Orange County Transportation Authority (OCTA) implements schedule and route revisions to selected bus routes three times a year, in February, June, and October. The next bus service change is scheduled for implementation on February 9, 2020. The primary focus of the fiscal year (FY) 2019-20 Bus Service Plan is to respond to customer requests, increase productivity, and implement routing changes in preparation for the OC Streetcar construction. Three community meetings were held at various locations throughout Orange County in May 2019, and a public hearing was conducted at the OCTA Board of Directors' (Board) meeting on June 10, 2019. The Board approved the final service change recommendations on July 22, 2019, following public open houses and a public hearing. In addition to the changes included in the Bus Service Plan, there are minor modifications to routes based on road construction and additional coach operator and customer feedback.

Discussion

Major changes to bus service will be implemented in FY 2019-20, with the October 2019 and February 2020 service changes as part of the comprehensive OC Bus 360° Program. The October 2019 service changes were successfully implemented on October 13, 2019. The February 2020 bus service change,

February 2020 Bus Service Change

which is scheduled to go into effect on February 9, 2020, includes adjustments to 24 OCTA bus routes designed to address seasonal demand, as well as improve connections, on-time performance, and system productivity.

A summary of the changes planned for the routes included in the February 2020 bus service change is provided in Attachment A, and a map of affected routes is included as Attachment B. Overall the changes will increase total annual revenue hours by 8,924 and decrease one peak vehicle.

Service Change Highlights

- Eliminate routes 21 and 24 and replace with new Route 123, covering most of the discontinued routes with service from the Goldenwest Transportation Center to Anaheim Canyon Metrolink Station via the Buena Park Metrolink Station (weekdays),
- Extend all peak trips on Route 54 to the start of the route at Chapman Avenue and Valley View Street (weekdays),
- Improve frequencies on routes 56 and 72 (weekends),
- Improve frequency on Route 143 (weekdays),
- Make minor schedule adjustments to improve on-time performance on routes 25, 37, 38, 42, 59, and 177,
- Make temporary schedule adjustments to improve on-time performance on routes 43, 47, and 57 because of street and freeway construction delay, and
- Make minor schedule adjustments to improve on-time performance on routes 83, 213, and 862, which had major alignment adjustments in October 2019.

Title VI and Environmental Justice Analyses

As part of the FY 2019-20 Bus Service Plan, Title VI and environmental justice analyses were performed for the February 2020 bus service change because some changes were considered major per OCTA policy. The analysis assessed the impacts to minority and low-income communities by comparing the transit service levels before and after the route changes. Based on this analysis, it was determined that the final FY 2019-20 Bus Service Plan recommendations, taken in their entirety, did not have a disparate impact on minority persons nor a disproportionate burden on low-income persons.

February 2020 Bus Service Change

Summary

The February 2020 bus service change consists of both major and minor schedule changes to bus routes which address road construction, coach operator input, customer requests, and implement changes approved by the Board in July 2019. The changes are intended to increase productivity and ridership by reallocating resources. Notification of the changes to customers is expected three weeks prior to implementation of the service change.

Attachments

- A. February 2020 Bus Service Change Summary
- B. February 2020 Bus Service Change System Map, Schedule and Route Adjustments

Prepared by:

Gary Hewitt Section Manager, Transit Planning (714) 560-5715

Approved by:

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

February 2020 Bus Service Change Summary

		Change in Annual RVH				
Route	Changes	WKD	SAT	SUN	Total	Peak Buses
21	Delete segment south of Graham Street and McFadden Avenue; terminate route at Goldenwest Transportation Center; combine with Route 24 on 65-minute frequency by creating new Route 123	(17,476.0)	-	-	(17,476.0)	(6)
24	Delete segment south of Tustin Avenue and La Palma Avenue: terminate route at Anaheim Canyon Metrolink; combine with Route 21 on a 65-minute frequency by creating new Route 123	(,,			(,	(-)
25	Schedule adjustment all days of the week	14.2	41.6	46.4	102.2	
37	Schedule adjustment on weekdays	308.8	-	-	308.8	
38	Schedule adjustment all days of the week	212.5	2.6	1.9	217.0	
42	Schedule adjustment on weekdays		-	-	17.0	
43	Schedule adjustment on weekdays	323.0	-	-	323.0	
47	Schedule adjustment on weekdays	(378.3)	-	-	(378.3)	
54	Eliminate peak hour short turn terminal on west end of the route and start all trips at Chapman Avenue and Valley View Street	637.5	-	-	637.5	
56	Improve frequency from 70 to 45 minutes on weekends	-	864.9	982.1	1,847.1	
57	Schedule adjustment all days of the week	(153.0)	142.1	121.8	110.9	
59	Schedule adjustment on weekdays	161.5	-	-	161.5	
72	Schedule adjustment on weekdays; improve frequency from 65 to 45 minutes on weekends	(131.8)	625.7	720.2	1,214.2	
83	Schedule adjustment all days of the week	824.5	89.3	9.7	923.4	
123	Implement new route on 65-minute frequency from combined portions of routes 21 and 24	16,545.3	-	-	16,545.3	4
143	Improve frequency from 75 to 50 minutes on weekdays	4,122.5	-	-	4,122.5	1
177	Schedule adjustment on weekdays	4.3	-	-	4.3	
213	Schedule adjustment on weekdays	386.8	-	-	386.8	
862	Schedule adjustment all days of the week	(42.5)	(47.7)	(53.2)	(143.3)	
	Total	5,390.4	1,718.6	1,828.9	8,923.8	(1)

RVH - Revenue vehicle hours

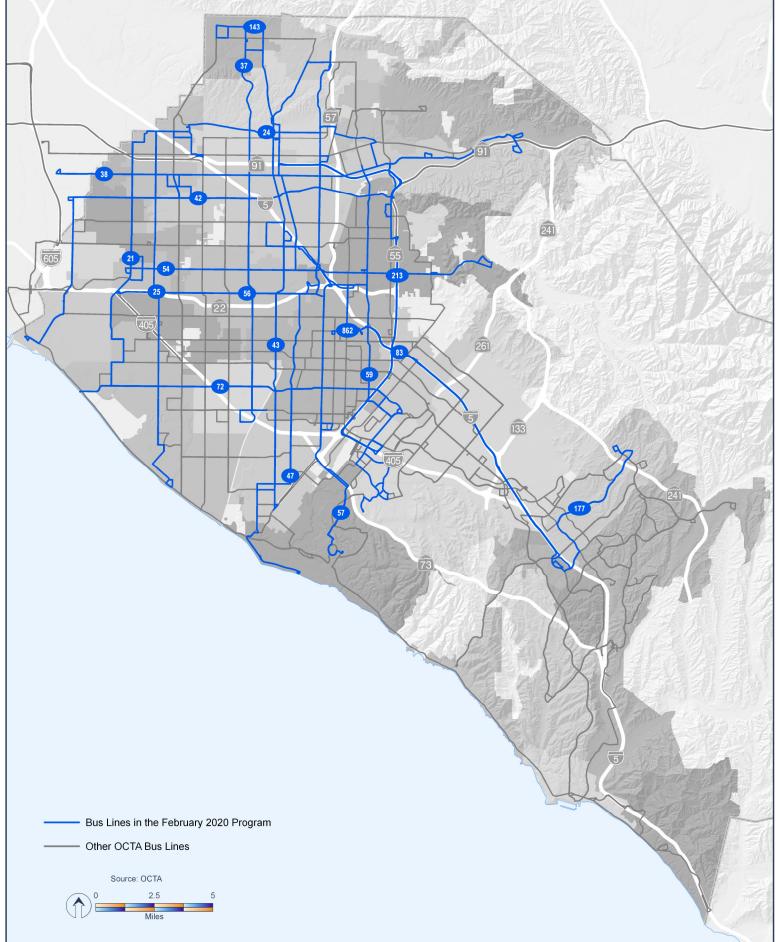
WKD - Weekday

SAT - Saturday

SUN - Sunday

February 2020 Bus Service Change System Map Schedule and Route Adjustments







January 9, 2020

Jemmete Prija for

From: Darrell E. Johnson, Chief Executive Officer

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

Overview

Measure M2 establishes a competitive program through Project V to fund community-based local transit circulators, designed to complement regional transit services. A ridership report on 20 active Project V services operating through the fourth quarter of fiscal year 2018-19 and first quarter of 2019-20 is provided for Board of Director's information.

Recommendations

- A. Receive and file Project V Ridership Report as an information item.
- B. Authorize amendments to the City of Irvine's iShuttle Project V-funded services to enhance route productivity, and also authorize a six-month delay in achieving minimum required performance standard for year one of service.

Background

The Community-Based Transit Circulators Program (Project V) is a competitive program under Measure M2 (M2), which provides funding to develop, implement, and operate local transit services. Services eligible under the program include community-based circulators, shuttles, trolleys, and demand-responsive services intended to complement regional transit, while also better suiting local needs in areas not adequately served by regional transit.

M2 Project V services are required to adhere to performance standards. If services are not meeting standards, or are trending toward not meeting minimum standards, Orange County Transportation Authority (OCTA) staff will meet with the local agency and suggest adjustments, with an overall goal of attempting to improve ridership (i.e. boardings per revenue vehicle hour [B/RVH]). If a service continues to perform below minimum performance standards, M2 Project V funds will be cancelled, consistent with Board of Directors (Board)-approved program guidelines. If M2 Project V funds are cancelled, local agencies can still participate in future funding cycles with new service concepts that are anticipated to be more productive.

Project V-funded service performance is reported to the OCTA Board semi-annually. This reporting period includes ridership information for the fourth quarter of fiscal year 2018-19 and first quarter of fiscal year 2019-20, (i.e. April 1, 2019 through September 30, 2019), and reports on 20 active services.

Discussion

Current Project V services include a combination of seasonal, special event, commuter, fixed-route, and demand-response projects, which meet a variety of community needs. The prior ridership report reflected 19 services in operation. Since that time, the City of Dana Point initiated its Continuity and Expansion and Weekend Service, which was approved by the Board during the 2018 Project V call for projects (call). As such, this ridership report reflects 20 active services.

All active services must achieve or exceed six B/RVH by the end of year one of service and ten B/RVH by the end of year two of service. After the second year of service, ten B/RVH must be maintained (or exceeded) through the remainder of the Project V grant period.

Active Project V services are identified below. Ridership details and performance standards are provided in Attachment A.

The La Habra – Special Event Service did not operate during this reporting period. Therefore, no information is provided in this report for that service.

Services meeting or exceeding their respective minimum performance standards included the following:

- County of Orange Local Circulator and Special Event Service (OC Ranch Ride),
- Dana Point Summer Trolley and Seasonal Shuttle,
- Dana Point Pacific Coast Highway and Special Event Trolley,
- Huntington Beach Holiday and Event Shuttle,
- Laguna Beach Summer/Weekend Trolley and Seasonal Service,
- Laguna Beach Summer Breeze Bus Service,

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

- Lake Forest Commuter Vanpool Service Irvine Station and Ossur,
- Lake Forest Commuter Shuttle Service Irvine Station and Panasonic,
- Newport Beach Balboa Peninsula Seasonal Trolley,
- Newport Beach Balboa Peninsula Seasonal Trolley Expansion,
- San Clemente Summer Weekend Trolley and Seasonal Service,
- San Clemente Summer Weekday Trolley and Seasonal Service Expansion,
- San Juan Capistrano Special Event and Weekend Summer Trolley, and
- San Clemente Demand-Response Service¹.

Services not at their respective minimum performance standard requirement included the following:

- Laguna Beach Weekend Residential Trolley Service, and
- Mission Viejo Local Community Circulator.

The Laguna Beach Weekend Residential Trolley Service² did not meet the minimum performance target in the timeframe required. OCTA notified the City of Laguna Beach (Laguna Beach) of this finding on July 31, 2019, and Laguna Beach cancelled the service effective September 30, 2019. It should be noted that as part of the 2020 Project V call, Laguna Beach is exploring implementation of other service concepts and options for some of its other more productive routes.

The City of Mission Viejo's (Mission Viejo) service began in October 2016, and is currently reporting seven B/RVH, which is below the ten B/RVH performance threshold required for year two (and the subsequent remaining years) of the grant. However, on May 13, 2019, the Board, in recognition of several complex issues and challenges confronting this service, authorized a policy exception to the minimum performance standard in order to give Mission Viejo an additional year to modify the service and meet minimum performance targets. The Board's action was conditioned upon Mission Viejo taking over responsibility to operate the service. Mission Viejo began operating the service in October, and has until the end of June 2020, to achieve ten B/RVH. If by that time, the performance

¹ The City of San Clemente's minimum performance standard was modified in early 2019 in order to better reflect the dynamics of this unique program. As such, its performance standard is reported as boardings per hour of service (no minimum), so long as the cost per boarding remains under OCTA's specified \$9.00 per boarding. Based upon the last invoicing received from 2018, the service's cost was approximately \$5.73 per boarding.

² This service's performance difficulties were reported to the Board in the last three M2 Community-Based Transit Circulators Program Project V ridership reports, which were presented in July 2018, April 2019, and August 2019.

Services in Start-Up Period:

- Dana Point Trolley Continuity and Expansion and Weekend Service,
- Irvine Irvine iShuttle Route E Irvine Metrolink Station Service East, and
- Irvine Irvine iShuttle Route F Tustin Metrolink Station/Irvine Business Complex West.

During this reporting period, the City of Dana Point initiated its Continuity and Expansion and Weekend Service, which was authorized by the Board during the 2018 Project V call. In its initial month of service, the first-year minimum performance requirement of six B/RVH was achieved.

The City of Irvine's (Irvine) two new iShuttle routes (listed above) were launched in February 2019, and are still in the initial start-up period. During this reporting period, the Irvine iShuttle Route E performed at three B/RVH and the Irvine iShuttle Route F performed at five B/RVH. Irvine has until January 2020 to achieve its six B/RVH requirement for the first year of service. Irvine is also currently working with OCTA on a route modification concept(s), which may improve productivity. However, given the amount of time it may take to implement the requested route modifications, a six-month delay in achieving the year one minimum performance standard for iShuttle services is requested.

OCTA staff will continue to closely monitor services that are at or below minimum performance standards and will meet with local agency staff on ideas and concepts to improve service productivity and ridership, when appropriate. Staff will also continue to provide twice yearly updates to the Board on overall Project V status and performance.

Summary

A status report on Project V services is provided for information purposes. Staff will continue to work with local agencies and monitor these services. The next M2 Community-Based Transit Circulators Program Project V Ridership Report is scheduled for July 2020.

Measure M2 Community-Based Transit Circulators ProgramPage 5Project V Ridership ReportPage 5

Attachment

A. Project V Services – Ridership Report

Prepared by:

Alfonso Hernandez Senior Transportation Funding Analyst, Local Programs (714) 560-5363

Approved by:

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

ATTACHMENT A

Project V Services - Ridership Report

Agency	Service Description	Measure M2 Project V Funds	Service Type	Service Start Month/Year	Boardings Per Revenue Vehicle Hour (B/RVH) ¹	Notes
County of Orange	Local Circulator and Special Event Service	\$ 2,041,547	Fixed-Route and Special Event	June 2017	11	
Dana Point	Summer Trolley and Seasonal Shuttle	\$ 2,456,511	Seasonal Fixed-Route and Special Event	June 2015	14	
Dana Point	Pacific Coast Highway and Special Event Trolley	\$ 905,968	Seasonal Fixed-Route	June 2017	13	
Huntington Beach	Holiday and Event Shuttle	\$ 93,287	Special Event	July 2015	22	
Irvine	Irvine iShuttle Route E - Irvine Station - East	\$ 2,705,984	Fixed-Route	February 2019	3	Service recently initiated and productivity is expected to increase.
Irvine	Irvine iShuttle Route F - Tustin Station - Irvine Business Complex	\$ 2,712,258	Fixed-Route	February 2019	5	Service recently initiated and productivity is expected to increase.
La Habra	Special Event Service	\$ 96,810	Special Event	November 2016	N/A ²	No special event service provided during reporting period.
Laguna Beach	Summer/Weekend Trolley and Seasonal Service	\$ 3,559,860	Fixed-Route and Special Event	March 2015	23	
Laguna Beach	Weekend Residential Trolley Service	\$ 1,967,400	Fixed-Route	July 2017	6	City canceled service on September 30, 2019.
Laguna Beach	Summer Breeze Bus Service	\$ 634,357	Seasonal Fixed-Route	July 2018	29	
Lake Forest	Commuter Vanpool Service Irvine Station and Ossur	\$ 148,855	Vanpool/Commuter	July 2015	24	
Lake Forest	Commuter Shuttle Service Irvine Station and Panasonic	\$ 1,226,862	Vanpool/Commuter	June 2017	10	Advisory letter issued to City regarding maintaining the minimum performance standard for service (10 B/RVH).
Mission Viejo	Local Community Circulator	\$ 3,332,879	Fixed-Route	October 2016	7	The Board of Directors authorized a one year extension to June 2020 to allow Mission Viejo time to achieve the Project V minimum performance standard of ten B/RVH, subject to Mission Viejo taking over administration of the service. As of October 14, 2019, Mission Viejo has taken over administration of the service.
Newport Beach	Balboa Peninsula Seasonal Trolley	\$ 685,454	Seasonal Fixed-Route and Special Event	June 2017	14	
Newport Beach	Balboa Peninsula Seasonal Trolley Expansion	\$ 278,400	Seasonal Fixed-Route	July 2018	20	
San Clemente	Summer Weekend Trolley and Seasonal Service	\$ 1,181,393	Seasonal Fixed-Route and Special Event	May 2017	41	
San Clemente	Summer Weekday Trolley and Seasonal Service Expansion	\$ 1,537,200	Seasonal Fixed-Route	July 2018	13	
San Juan Capistrano	Special Event and Weekend Summer Trolley Service	\$ 958,642	Seasonal Fixed-Route and Special Event	July 2018	26	
Dana Point	Dana Point Trolley Continuity and Expansion and Weekend Service	\$ 1,745,065	Seasonal Fixed-Route	September 2019	10	Service recently initiated
Agency	Service Description	Measure M2 Project V Funds	Service Type	Service Start Month/Year	Boardings Per Hour of Service (B/HOS) ¹	Notes

914,400 Ride Hailing

\$

1. Rounded to the next whole number.

2. N/A - No service hours during reporting period (seasonal services).

On-Demand

ACRONYMS

San Clemente

Q4 - Quarter 4 (April - June)

Q1 - Quarter 1 (July - September)

FY - Fiscal year

N/A - Not applicable

NOTE: Services below the minimum performance standard are shaded

Minimum Performance Standards for B/RVH

October 2016

· Six passenger B/RVH by end of year one (12 months from the first day of operating the service).

Maintain six B/RVH and meet or exceed ten B/RVH by end of year two.

8

 $\cdot\,$ Ten B/RVH must then be maintained every year thereafter.

Minimum Performance Standards for B/HOS

Staff will continue to monitor and measure service performance and assess appropriate next steps for this program

-

which will include evaluation of all project related efforts and existing policies in order to determine how best to support

and administer this emerging transit delivery model.



January 9, 2020

From:

Darrell E. Johnson, Chief Executive Officer Contract Change Order for Removal and Disposal of Contaminated Subject: Materials Within the Orange County Transit District-Owned Pacific Electric Right of Way and Other Project Areas for 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 the continued removal and disposal of contaminated materials within the Orange County Transit District-owned Pacific Electric Right of Way as well as other project areas.

Recommendation

Authorize the Chief Executive Officer to negotiate and execute Contract Change Order No. 3.1 to Agreement No. C-7-1904 with Walsh Construction Company II, LLC, in the amount of \$7,278,795, for the removal and disposal of contaminated materials within the Orange County Transit District-owned Pacific Electric Right of Way and other project areas for the construction of the OC Streetcar project.

Discussion

On September 24, 2018, the Orange County Transportation Authority (OCTA) awarded the contract for construction of 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.

Construction activities are underway, with the focus on construction of the maintenance and storage facility, storm drain, sewer, and water system relocations within City of Santa Ana (City) streets. Installation of foundations Contract Change Order for Removal and Disposal of *Page 2* Contaminated Materials Within the Orange County Transit District-Owned Pacific Electric Right-of-Way and Other Project Areas for the OC Streetcar Project

and retained approaches for the new 350-foot-long bridge across the Santa Ana River and the bridge over Westminster Avenue is also underway.

The Project utilizes approximately two miles of the Pacific Electric Right of Way (PEROW) between Raitt Street northwest to Harbor Boulevard. Historically, rail operations have been known to use weed control substances and experience spills and leaks that could cause environmental impacts. The construction contract requires Walsh to remove the top one foot of soil in the PEROW, stockpile the materials, and test the soil against regulatory limits. The soil testing results revealed that some soil exceeds the California hazardous waste criteria for arsenic and petroleum hydrocarbons, and some soil was deemed contaminated non-hazardous. Other soil was determined to be uncontaminated and can be reused on the Project or transported to a local landfill. Concentrations of the contaminants are somewhat irregular.

On August 27, 2019, the OCTA Board of Directors (Board) approved Contract Change Order (CCO) No. 3, in the amount of \$1,600,000, for the removal and disposal of contaminated materials from the top one foot of soil within the PEROW. The work has been proceeding, with the soil transported to disposal facilities based upon the soil testing and profile results. Walsh is being paid on a time-and-materials basis.

In addition to the top one foot of soil, deeper excavations are required in the PEROW for several Project elements, including retaining walls, bridge abutments, storm drains and ditches, utility duct banks, overhead catenary foundations, and the track bed. In preparation for this work, Walsh advised that due to the quantities of contaminated soil being generated by the Project, disposal facilities are requiring soil testing for soil profiling to minimize liability.

Soil testing was conducted in these excavation areas this fall. The results revealed that while some soil can be reused on the Project, soil in several segments exceeded the California and federal hazardous waste criteria for arsenic and petroleum hydrocarbons, and some soil was determined to be contaminated non-hazardous. Similar to the top one foot of soil, this level of contamination and the subsequent requirements for removal was unanticipated based on the results of the 2017 Limited Phase II Environmental Site Assessment conducted during the Project design.

Excavations are also occurring within City streets for the relocation of storm drains and sewer and water lines, with the track bed scheduled to be excavated in early 2020. Most of this soil must be hauled off as it must be replaced by crushed rock bedding and material with a high sand content, per requirements of City technical specifications. Testing of the soil excavated from several utility relocations revealed that some of the soil exceeded California hazardous waste

Contract Change Order for Removal and Disposal of Page 3 Contaminated Materials Within the Orange County Transit District-Owned Pacific Electric Right-of-Way and Other Project Areas for the OC Streetcar Project

criteria for arsenic and some soil was determined to be contaminated nonhazardous. Soil that exceeds the California and federal hazardous waste criteria must be transported off-site to approved disposal facilities. Contaminated nonhazardous soil which cannot be reused on the Project must be transported to approved disposal facilities because contamination levels exceed local landfill waste acceptance criteria. The facilities accepting the hazardous soil and contaminated non-hazardous soil are a substantial distance from the Project, resulting in higher transportation and disposal costs.

Walsh has also been encountering a significant amount of buried railroad ties during the excavations. The ties were part of the Pacific Electric 'Redcar' that operated until 1950. The ties are treated with chemicals that are potentially hazardous to human health. State regulations require the ties be taken to designated disposal facilities.

The cost of the work to address the contamination is expected to significantly exceed the approved CCO No. 3 budget. Staff is recommending that a supplemental CCO be approved for the additional removal and disposal of the contaminated and hazardous soil that cannot be reused on the Project, as well as the disposal of the treated wood waste. An independent cost estimate, which provides an order of magnitude cost for the additional anticipated work, has been prepared by the construction management team. The cost of the additional work is estimated at \$7,278,795.

The contractor will be paid on a time-and-materials basis. Before payment is made to the contractor, quantities will be confirmed through surveys and disposal facility records, and the soil classification and disposition checked against the final testing results. Deductive change orders will be issued for any work included in the original contract that was not performed.

The cost of the work will be funded from the Project contingency because the extent of contaminated soil that requires removal was not discovered nor evident when the Project cost estimate was prepared. This will not increase the Project cost of \$407,759,966, as defined in the Full Funding Grant Agreement.

Contract Change Order for Removal and Disposal of Page 4 Contaminated Materials Within the Orange County Transit District-Owned Pacific Electric Right-of-Way and Other Project Areas for the OC Streetcar Project

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 \$220,638,549, for construction of the Project.

Proposed CCO No. 3.1, in the amount up to \$7,278,795, will increase the cumulative value of the contract to \$231,124,377, as shown in Attachment A. Board approval is required for CCO No. 3.1, pursuant to the State of California Public Contracting Code Section 20142.

Fiscal Impact

included The additional work described in CCO No. 3.1 is in OCTA's Fiscal Year 2019-20 Budget, Capital Programs Division. Account 0051-9017-TS010-Z40, and is funded with Federal 5309 New Starts and local Measure M2 funds.

Summary

Staff recommends Board authorization for the Chief Executive Officer to negotiate and execute CCO No. 3.1 to Agreement No. C-7-1904 with Walsh, in the amount of \$7,278,795, for the additional removal and disposal of contaminated materials on the PEROW for the Project.

Contract Change Order for Removal and Disposal of Page 5 Contaminated Materials Within the Orange County Transit District-Owned Pacific Electric Right-of-Way and Other Project Areas for the OC Streetcar Project

Attachment

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

Prepared by:

Marystance

Mary Shavalier Program Manager (714) 560-5856

- Vera

Pia Veesapen Manager, Contracts Administration and Materials Management (714) 560-5619

Approved by:

SAL

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

Remarks								
Cost	\$199,749	\$113,884	\$200,000	\$160,000	\$1,600,000	\$7,278,795	\$200,000	\$833,300
Date Executed	6-20-19	6-25-19	6-25-19	8-15-19	9-12-19		8-27-19	Pending
Status	Approved	Approved	Approved	Approved	Approved	Pending	Approved	Approved
Title	Demolition, Removals, and Disposal at the Maintenance and Storage Facility (MSF) Property	Demolition, Removals, and Disposal at the MSF Property Additional Funding	Removal and Disposal of Contaminated Materials at the MSF Property	Removal and Disposal of Contaminated Materials at the MSF Property Additional Funding	Removal and Disposal of Contaminated Materials within the Orange County Transit District-Owned Pacific Electric Right-of-Way	Contract Change Order for Removal and Disposal of Contaminated Materials Within the Orange County Transit District-Owned Pacific Electric Right of Way and Other Project Areas for the OC Streetcar Project	Required Work to Address Utility Conflicts	Required Work to Address Utility Conflicts Additional Funding
CCO No.	1	1.1	2	2.1	3	3.1	4	4.1

Subtotal Executed CCOs Subtotal Pending CCOs TOTAL CCOs	ORIGINAL VALUE PROPOSED REVISED VALUE
Subtotal Executed CCO Subtotal Pending CCOs TOTAL CCOs	ORIGINAL VALUE PROPOSED REVIS

\$2,473,633 <u>\$8,112,095</u> \$10,585,728 \$220,538,649 \$231,124,377

ATTACHMENT A



January 9, 2020

То:	
From:	Darrell E. Johnson, Chief Executive Officer
Subject:	OC Flex Microtransit Pilot Project: 12-Month Update

Overview

In October 2018, the Orange County Transportation Authority initiated a microtransit pilot service, branded as OC Flex, in two areas of the county where transit demand does not support traditional fixed-route service. The pilot is intended to match resources with changing demand, increasing the efficiency and effectiveness of the Orange County transit system. This report provides a review of the performance of the OC Flex microtransit pilot during the first year of operation and strategies to improve performance, including modifications to the existing zones and operational adjustments.

Recommendation

Direct staff to extend the Board of Directors-approved one-year pilot of the OC Flex pilot project to October 2020.

Background

In 2015, the Orange County Transportation Authority (OCTA) Board of Directors (Board) endorsed a comprehensive action plan known as OC Bus 360° to match resources with changing demand for public transportation. One of the strategies identified in this plan was the potential role that microtransit would play in Orange County. On October 15, 2018, OCTA launched a one-year pilot to explore the merits of a microtransit service in select areas that historically have not supported productive fixed-route bus service.

Provided in two zones, OC Flex is characterized as microtransit, providing on-demand service that uses technology for flexible, real-time scheduling and dispatching of accessible transit vans. The two zones include parts of Huntington Beach and Westminster to the southwest of the core of Orange County, and parts of Aliso Viejo, Laguna Niguel, and Mission Viejo in south Orange County. These areas are shown on Attachment A. OC Flex is a curb-to-curb service with in-app virtual hubs to direct customers to board or alight at operationally safe and efficient locations. This is a turnkey service, with operations and maintenance provided by a contractor. The technology supporting the operation to schedule and dispatch trips, as well as collect pertinent data, provides customers with the use of a mobile app to schedule rides and pay fares, similar to other ride-hailing services.

The Board approved five primary goals and performance metrics to evaluate the pilot program following the initial six months of operation and after a full year of operation. These goals and metrics include:

- Provide public transit mobility in lower-demand areas: to be measured by ridership and productivity
- Reduce total operating and capital costs: to be measured by subsidy per boarding
- Reduce vehicle miles traveled: to be measured by shared rides occurring
- Extend the reach of OC Bus and Metrolink services: to be measured by connecting transit trips
- Meet customer needs: to be measured by customer satisfaction

Discussion

This report provides an update on the performance of the OC Flex microtransit pilot project and discusses the strategies considered to continue to improve performance. This report covers the performance during the first twelve months of operation, from October 15, 2018 through October 31, 2019.

OC Flex service performance continues to trend favorably. Below is a summary of each of the established performance metrics as related to the project goals.

- <u>Productivity</u> Through the review period, OC Flex ridership has steadily increased month over month, with 36,789 total boardings. For the month of October 2019, the average weekly ridership within both zones combined was over 870. Though below the performance target of six boardings per revenue vehicle hour (B/RVH), productivity was 2.3, up from the 1.7 B/RVH reported during the six-month update.
- <u>Cost Effectiveness</u> Cost effectiveness is measured by subsidy per boarding, the ratio of actual direct costs of the service less fare revenue and divided by total boardings. In the first full month of operation, the subsidy per boarding was \$54.19. As ridership continued to increase, this amount has decreased. As of October 31, 2019, the subsidy per boarding was \$20.14. This level of subsidy represents a reduction of 51 percent

- <u>Shared Rides</u> Shared rides are the number of trip bookings that share a vehicle, including group trips. The performance target is 25 percent. Through the 12-month review period, the percent of shared rides on OC Flex gradually increased to more than 37 percent, an increase of 14 percentage points from the 23 percent rate for shared rides reported for the six-month update.
- <u>Connecting Transit Trips</u> This measure is represented by the percentage of trips to or from transit hubs, specifically the Goldenwest Transportation Center and the Laguna Niguel-Mission Viejo Metrolink Station. During the review period, the percentage of total trips transferring to/from the OC Bus or Metrolink services was 32 percent, three percentage points better than the 29 percent reported during the six-month update and exceeding the established year-end target of 25 percent.
- <u>Customer Satisfaction</u> This key metric is tracked by measuring the percentage of passengers satisfied with the service. The targeted level for customer satisfaction is 85 percent. Customers reported their satisfaction via a second survey, and the results indicate that 91 percent the respondents were "likely" or "extremely likely" to recommend OC Flex to a friend or colleague. This was a two percent improvement from the 89 percent customer satisfaction rate reported during the six-month update.

Other Measures - Customer Experience

Other measures tracked include the average wait time and the average trip time. To be comparable to other ride-hailing services, the targeted average wait time was 15 minutes. Through the 12-month review period, the wait times, overall, were greater than targeted wait time, averaging 17.6 minutes. Though there is no target trip time, the average trip times are lower than the wait times overall and by zone. Survey results indicate that customers are satisfied with trip times.

Next Steps

Through 12 months of service, the OC Flex microtransit pilot performance has been positive, exceeding three of the five performance targets and trending favorably in the remaining two. Given these trends, staff is recommending an extension of the OC Flex microtransit pilot program to October 2020. The intent of the extension is to implement strategies to improve performance and allow for greater service establishment and awareness. Proposed changes are outlined below:

- <u>Zone Changes</u> Based on an analysis of trip activity in and around the existing zones, areas adjacent to both zones were added while areas with low activity were removed.
- <u>Operational Adjustments</u> To improve productivity while maintaining service quality, the span of service hours will be adjusted based on utilization, and the number of virtual stops, or predetermined pick-up points, will be increased to improve service response time.
- <u>Pass Considerations</u> Changes to fare media allowed on OC Flex include the expansion of the current "50 Percent Off" promotion to all days, allowing free transfers to OC Flex with OC Bus 30-day, OC Express, and Express passes, and the introduction of a "Train Buddies" program for Metrolink passengers. The intent of these changes is to encourage group rides and increase overall ridership.
- <u>Promotions</u> To create awareness of the new enhancements of OC Flex and increase ridership, promotional campaigns will target residents and businesses in the areas where service is added and continue to position OC Flex as a viable, convenient connection from OC Bus and Metrolink services.

The complete set of the proposed changes is scheduled for implementation by mid-February. Staff will continue to provide quarterly updates on the performance of the OC Flex microtransit pilot and the changes as implemented.

Summary

Through 12 months of operation, the OC Flex microtransit pilot project has been well received and customer satisfaction is high. Of the five Board-approved performance metrics, three have reached the respective targets, and the remaining two, though below their respective targets, are trending in the right direction. With the staff recommendation to extend the pilot through October 2020, several strategies are proposed for implementation during the extended period. These strategies include slightly expanding the existing zones along with more OC pass options to increase ridership, implementing operational adjustments to improve productivity, and conducting marketing activities to create awareness of the OC Flex options available under the proposed changes. Additionally, as the current operating contract expires in October 2020, staff will initiate necessary procurement activities for a new contractor for the OC Flex service.

Attachments

- A. OC Flex Pilot Program Zones
- B. OC Flex Microtransit Pilot Project: 12 Month Update, October 2018 October 2019

Prepared by:

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Beth McCormick General Manager, Operations (714) 560-5964

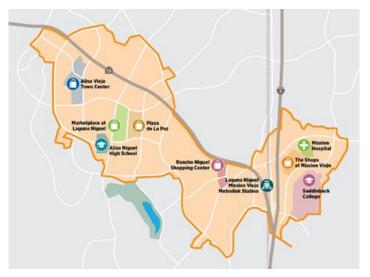
OC Flex - Pilot Program Zones

Blue Zone - Huntington Beach/

Westminster Area



Orange Zone - Aliso Viejo/ Laguna Niguel/Mission Viejo Area



ATTACHMENT B



UPDATE

Goldenwest Transportation C

A

Ocean View High School

Bella Terra

O Pavilions Place

Goldenwest College

Edinger Plaza

Marina High School

Meadowlark Golf Club OCTOBER 2018 – OCTOBER 2019

BACKGROUND

In 2015, the Board of Directors (Board) of the Orange County Transportation Authority (OCTA) endorsed a comprehensive action plan known as OC Bus 360° to address declining bus ridership. This effort included a review of current and former rider perceptions, a peer review of OCTA's performance and plans, new branding and the use of marketing tactics tied to rider needs, upgraded bus routes and services, technology solutions to improve the passenger experience, pricing and revenue considerations to stimulate ridership, and pursuing new funding opportunities.

One of the technology solutions considered as part of the OC Bus 360° Plan is the evaluation of an on-demand microtransit solution, called OC Flex. Initiated in October 2018, OC Flex is an on-demand, curb-to-curb service that extends or complements the OC Bus and Metrolink services provided in the county. Implemented as a one-year pilot, OC Flex is available in two areas identified after a planning analysis, a market survey, and technology considerations.

Prior to launch, community feedback was gathered to ensure the new service was market-driven and customer-oriented. This research, including a survey and customer focus groups, helped determine areas of highest ridership potential as well as customer preferences regarding fares, hours and days of operation, and points of interest.

As a service concept, the intent of the OC Flex microtransit pilot is to provide a transit option in areas either not adequately served by the existing and planned fixed-route bus network or have recently had unproductive fixed-route bus service removed. The following project goals and performance measures were developed and approved by the Board of Directors to evaluate this service concept.

- 1. Provide public transit mobility in lower-demand areas
 - Measure: Ridership/Productivity
- 2. Reduce total operating and capital costs
 - Measure: Subsidy per Boarding
- 3. Reduce Vehicle Miles Travelled
 - Measure: Shared Rides
- 4. Extend reach of OC Bus and Metrolink services
 - Measure: Connecting Transit Trips
- 5. Meet customer needs

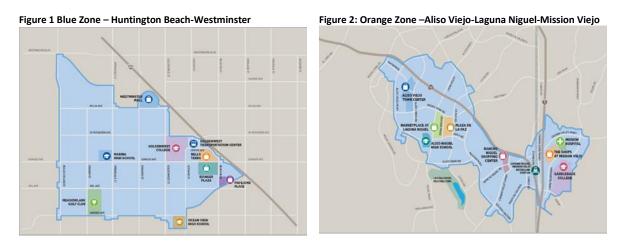
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• Measure: Percent of Passengers Satisfied with Service

This report covers the performance during the first 12 months of operation, from October 15, 2018 through October 31, 2019 based on the Board-approved performance measures. A summary of the performance using these metrics, customer feedback, and strategies for performance improvement are provided.

Overall, the results to date are consistent with expectations for a new service. There is steady growth with observable trends indicating areas of opportunity. The customer response to the service has been positive. Staff reviews performance regularly, seeking opportunities to promote the service and make adjustments that meet customer needs within existing resources to ensure a comprehensive evaluation of this service delivery model.

The two zones included in the pilot program service areas are referred to by color. The Blue Zone represents the OC Flex service operated in parts of Huntington Beach and Westminster. The Orange Zone represents the OC Flex service operated in parts of Aliso Viejo, Laguna Niguel, and Mission Viejo.



SERVICE ELEMENTS

The service is operated under contract by Keolis Transit Services, LLC, using four dedicated wheelchair accessible OCTA-owned minivans and two contractor-provided non-dedicated vehicles. Based on demand trends through the first 12 months, three dedicated vehicles are assigned to the Orange Zone, and one is assigned to the Blue Zone. When needed, the contractor will deploy an additional vehicle to either zone. The technology solution selected for the mobile application is provided by Via Transportation, Inc. (Via). The Via software provides customers with an app for their smart phone that allows them to place reservations, pay their fare, and monitor their ride. Via also provides a web interface for dispatching and data collection. In addition, riders can call the contractor directly and book a trip, and they can pay their fare on-board. Passengers receive a discount for using the mobile app to pay their fare. Riders transferring to or from Metrolink or OC Bus can use their Metrolink ticket or the OCTA day pass for a free transfer to/from the OC Flex.

KEY PERFORMANCE MEASURES

Ridership/Productivity

Over the initial one-year review period, OC Flex ridership has steadily increased month-over-month, carrying more than 3,960 riders in October 2019. This represents a 29 percent increase from the 3,065 boardings reported in May 2019 at the time of the six-month update. From October 15, 2018 through October 31, 2019, there were 36,740 total boardings (Figure 3). In October 2019, the average weekly ridership was approximately 850, a 21 percent increase from the weekly average reported at the six-month mark.

During the reporting period, ridership in the Orange Zone steadily increased month-over-month while the ridership in the Blue zone was stable with between 200 and 250 boardings per week.

Notable ridership trends:

- Ridership is heaviest during the weekday peak periods (a.m./p.m.); lower on Saturdays; and light on Sundays
- Highest daily ridership: 178 riders (Friday, March 22, 2019)
- Low ridership was experienced on Holidays (Thanksgiving, Christmas, New Year's Day, etc.)
- A strong commuter base exists in the Orange Zone as many trips begin and/or end at the Laguna Niguel/Mission Viejo (LN-MV) Metrolink Station during the weekday peaks
 - Strong first/last mile connections to points east and west of the rail station

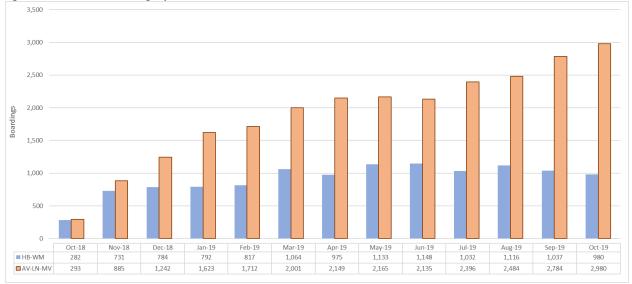


Figure 3 – Total OC Flex Boardings by Month

Productivity is measured using boardings per revenue vehicle hour. This is consistent with how productivity is measured on the OC Bus and OC ACCESS services. Ridership data is captured through the Via microtransit software. The established target for the pilot is six boardings per revenue vehicle hour (B/RVH). For reference, the following table shows the respective productivity rates for OC Bus (by category), OC ACCESS, and OC Flex service for the first quarter of fiscal year 2019-20 (July, August, and September).

Table 1: Service	Productivity Comparison
------------------	--------------------------------

Service	Service Type	B/RVH
OC Bus Local	Fixed-Route	24.0
OC Bus StationLink	Fixed-Route	14.0
OC Bus Community	Fixed-Route	13.1
OC Bus Express	Fixed-Route	5.9
OC Flex Orange	MicroTransit	2.6
AccessACS (OC ACCESS)	ADA Paratransit	2.0
OC Flex Blue	MicroTransit	1.6

ADA – Americans with Disabilities Act

Similar to ridership, productivity on OC Flex is trending positively, increasing from 1.7 B/RVH up to 2.3 B/RVH. A look at the zone level shows productivity in Aliso Viejo-Laguna Niguel-Mission Viejo (AV-LN-MV) increasing to as high as 2.63 B/RVH while productivity in Huntington Beach-Westminster (HB-WM), up to 1.79 B/RVH, has shown signs of improvement since August 2019 with the implementation of operational adjustments.

Though the trend is positive, it is well below the target of six B/RVH. A review of peer agencies implementing microtransit pilots show levels ranging from 3.0 B/RVH to 4.5 B/RVH. Given these findings, a productivity level within this range on OC Flex seems achievable with more time to implement several ridership growth strategies to increase ridership. The specific strategies to achieve this will be discussed later this report.



Figure 4 –OC Flex Productivity by Month

Cost Effectiveness

The measure of cost effectiveness for this pilot is subsidy per boarding calculated using the direct cost of the service less fare revenue and divided by the total boardings. The performance target for this measure is \$9.00 per boarding. This is consistent with the productivity target of six B/RVH, as they are inversely related since the cost per operating hour is approximately \$54. As of October 2019, the subsidy per boarding was \$20.14 (Figure 5). As with the increasing trend in productivity, the trend for subsidy per boarding decreased each month, dropping by 32 percent from March to October 2019. At the zone level, the subsidy per boarding in the AV-LN-MV zone is lower, at \$17.69, given the higher ridership and productivity. The subsidy per boarding in the HB-WM zone, though lower in ridership, also decreased to \$27.60 as of October 2019.





For reference to the other modes of service provided by OCTA, the following table shows the respective subsidy rates for OC Bus (by category), OC ACCESS, and OC Flex service for the first quarter of fiscal year 2019-20 (July, August, and September). Comparatively, the higher performing OC Flex Orange zone is between the subsidy rate for OC Bus Express (\$14.41) and the services provided under the ADA-related Special Agency Agreements (\$21.75).

Service	Service Type	Subsidy/Boarding
OC Bus Local	Fixed-Route	\$ 2.60
OC Bus Community	Fixed-Route	\$ 3.74
OC Bus StationLink	Fixed-Route	\$ 5.70
Same Day Taxi	Taxi	\$ 14.30
OC Bus Express	Fixed-Route	\$ 14.41
OC Flex Orange	Microtransit	\$ 19.38
Special Agencies Agreements	ADA Paratransit	\$ 21.75
OC Flex Blue	Microtransit	\$ 33.95
OC ACCESS	ADA Paratransit	\$ 38.18
OC ACCESS (Supplemental Taxi)	ADA Paratransit	\$ 39.93

Shared Rides

The key metric for measuring vehicle miles travelled reduction is the percent of shared trips or rides. The data to calculate this measure comes from the microtransit software package that records the number of booked trips that share a vehicle. Performance through October 31, 2019 show a mixed trend for shared rides across both zones. The AV-LN-MV zone performed above the established target, increasing month-over-month since March 2019, reaching 42.4 percent. Though the HB-WM zone has yet to reach the 25 percent target, the trend is positive.



Figure 6: OC Flex Shared Trip by Month

Connecting Transit Trips

The key measure for connecting transit trips is the percentage of trips to/from transit hubs, namely the Goldenwest Transportation Center (GWTC) and the Laguna Niguel-Mission Viejo (LN-MV) Metrolink Station. The transfers by zone show more transfer activity to or from the Metrolink station in the Orange zone while the rate in the Blue zone is much lower, indicating a lower transfer rate.

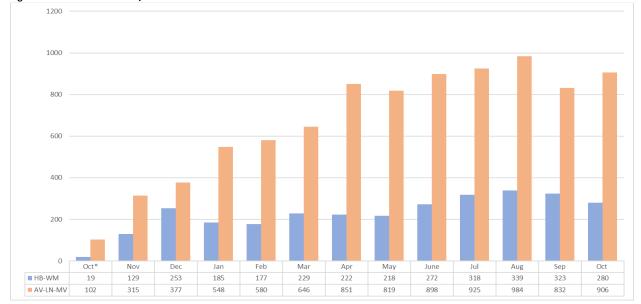
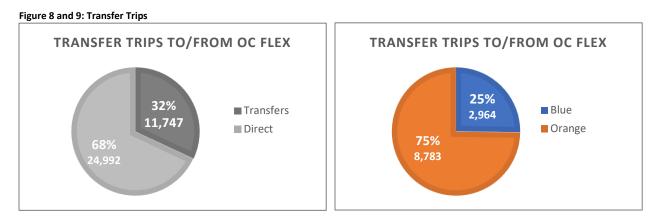


Figure 7: OC Flex Transfers to/from Transit Hubs

Riders connecting to or from OC Flex at GWTC are generally transferring from OC Bus routes. Those riders connecting to and from OC Flex at the LN-MV Metrolink station are assumed to be generally transferring from the regional rail system, though there is a measurable amount of OC Bus transfer activity. The performance target for trips to transit hubs is 25 percent. Of the 36,740 riders through the review period, 11,747 trips were transfers to or from the transit hubs, a rate of 32 percent (Figure 8).

The comparative transfer rate by zone shows that 75 percent of all OC Flex transfers occur in the Orange zone; for each transfer in the Blue zone, three transfers are made in the Orange zone (Figure 9).



Customer Satisfaction

The metric for customer satisfaction was to reach an 85 percent passenger satisfaction level by the end of the first year of service. Based on two customer satisfaction surveys of all OC Flex riders, the service has met and maintained its customer satisfaction goal for the first year of service. A total of 89 percent of respondents to a January 2019 customer satisfaction survey reported that they were "likely to extremely likely" to recommend OC Flex to a friend or colleague (127 respondents). In a following August 2019 survey, those "likely to extremely likely" to recommend OC Flex had increased to 91 percent of the 197 survey respondents. In addition to overall service feedback, OC Flex riders are also prompted to rate each OC Flex trip on a "five-star" score. Of the more than 8,700 ride ratings received from October 2018 to October 2019, 95 percent of the trip scores received have been five stars.

Board Adopted Goals (Measures)	Target	Performance*	Goal Met?
Productivity (Boardings per Revenue Vehicle Hour)	6	2. 33	×
Cost Effectiveness (Subsidy per Boarding)	\$9.00	\$20.14	×
Shared Rides (% of Bookings sharing a vehicle, groups)	25%	37.2%	✓
Connecting Transit Trips (% of transfer trips)	25%	32%	√
Customer Satisfaction – (by survey) (% "likely"/"very likely" to recommend service)	85%	91%	✓

Figure 10: OC Flex Performance: Through the First 12 Months

* Performance for October 2019

Other Measures: Customer Experience

Wait Time

A general objective of the OC Flex microtransit pilot is to attract riders who consider traditional transit to be inconvenient or unavailable. Based on a customer survey conducted during the initial planning, the parameters of the service were set to achieve an average wait time of 15 minutes. As of October 2019, the overall average wait time after a rider books an OC Flex trip is over 17 minutes. At the zone level, the average wait time in the Blue Zone was 15 minutes, while the wait time in the Orange Zone is more than 18 minutes, increases of 50 percent and 32 percent, respectively since March 2019. The increase in wait time is attributed to the increase in demand while resources (vehicles) have remained constant. In August 2019, due to low demand, the resources in the Blue zone were reduced to one vehicle all day and an additional vehicle was added to the Orange Zone during the weekday peak periods.

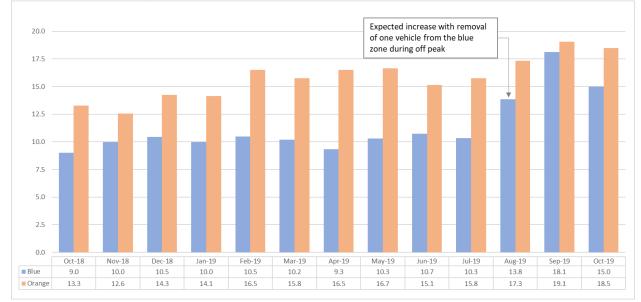


Figure 11: Average Wait Time by Zone

Travel Time

Though shared rides are a primary goal, the in-vehicle time of the customer is tracked to be kept to a minimum in order to meet the customer preference for fast and direct service. Through the first twelve months, the average trip time is approximately 10 minutes. As with wait time, there is a difference at the zone level, with the Blue Zone averaging 10 minutes of in-vehicle time and the Orange Zone averaging 13.8 minutes of in-vehicle time.

ADJUSTMENTS DURING THE 12 MONTHS

An advantage of a pilot service is the ability to implement minor adjustments to service allowing for a more comprehensive evaluation while meeting the customer needs. Over the last six months of service (April 2019 - October 2019) OCTA staff, continued working with the service contractor and technology vendor, to explore various strategies to improve performance. Since many of the strategies discussed required implementation times beyond October 2019, only operational adjustments and extended marketing promotions were made as discussed below.

Vehicle Deployment

Under the operating agreement, the contractor provides up to two vehicles (one in each zone) as necessary to accommodate increased passenger demand during peak periods. To meet the growing demand during the peak period in the Orange Zone, a fourth vehicle was deployed daily during the weekday peak. This adjustment required pulling a vehicle from the Blue zone which had low productivity. The impact of this change includes improved productivity in the Blue zone and helped meet the increasing number of trips requested during the peak in the Orange Zone. The use of toll-road transponders to allow use of CA-73 in the Orange Zone also improved routing and trip times.

Marketing/Promotions

To create awareness of and interest in riding OC Flex, OCTA has conducted ongoing, targeted marketing and outreach campaigns since the service inception. Highlights of the marketing programs included a comprehensive launch campaign including direct mail, business and community outreach, special events, and digital and outdoor advertising that reached nearly 200,000 people. In addition, OCTA partners with 25 businesses which offer discounts to OC Flex customers. Targeted promotions have included incentives to induce ridership during lower-demand time periods such as holidays and weekends. This included a holiday promotion to students, shoppers, and families, as well as a discounted fare promotion for groups with two or more riders during weekends. As a result of these promotions, more than 380 group-ride weekend passes were sold between February and December 24, 2019.

In addition to participating in community events to promote OC Flex, OCTA continues to market the OC Flex to area businesses such as hotels, auto dealerships, and medical complexes to encourage their patrons to use the OC Flex as a transportation option to and from their businesses. More than 80 of the free ride codes were redeemed from these marketing efforts.

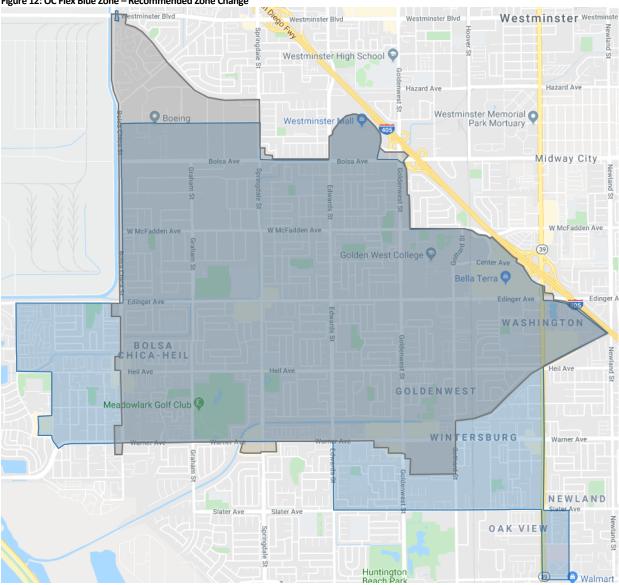
NEXT STEPS - OC FLEX 1.5

Through 12 months of service, the OC Flex microtransit pilot performance has been well received by customers and is exceeding three of the five performance targets and trending favorably in the remaining two. Given these trends, OCTA staff is recommending an extension of the OC Flex microtransit pilot program to October 2020. The intent of the extension is to maintain service continuity, test the strategies considered to improve performance, and allow time for the procurement of a new service contract beyond October 2020 as approved. The strategies include minor changes to the zone boundaries, operational adjustments, pass considerations, and promotions.

Zone Changes

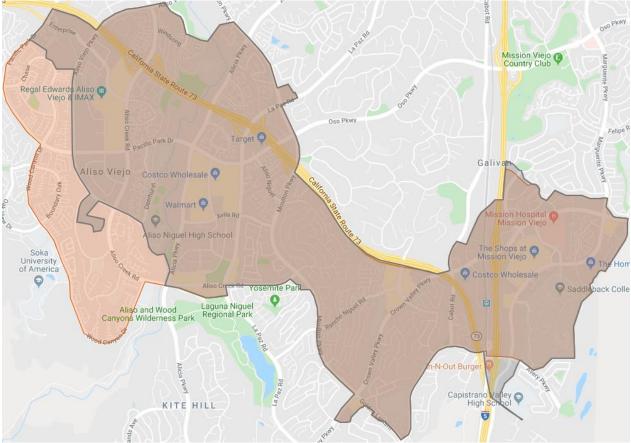
Based on geographic information systems analysis of trip activity and home-work trips, notable concentrations of trip activity in areas adjacent to the existing zones show potential for increased ridership. These findings, coupled with a high volume of customer requests to expand the zone with the same resources, slight modifications to both zones are recommended. Figures 12 and 13 show the proposed modifications extending to adjacent areas and include additional points of interests and high trip generators.

Figure 12: OC Flex Blue Zone – Recommended Zone Change



Changes to the Blue zone boundary include adding high-density trip areas west of the zone and south to Slater Avenue while removing the area north of the Boeing facility and other small areas at the edges due to low activity. A transfer point to OC Bus service (Routes 60 and 560) at Westminster Boulevard will be retained. The zone size increases by one square mile, from approximately 6.5 square miles to 7.5 square miles.

Figure 13: OC Flex Blue Zone – Recommended Zone Change



Changes to the Orange Zone boundary include adding a high-density trip area west of the zone and adjacent to the SOKA University Campus while removing the area south of Avery Parkway that includes Capistrano Valley High School. The Orange Zone size will also increase slightly by one square mile, from approximately 6.2 square miles to 7.2 square miles.

Operational Adjustments

To improve productivity while maintaining service quality, the span of service hours will be adjusted based on utilization. OC Flex service on Fridays and Saturdays will no longer operate until 11:00 p.m. due to very low ridership. OC Flex service will operate from 6:00 a.m. to 9:00 p.m. on weekdays and from 9:00 a.m. to 9:00 p.m. on weekends. To maintain or improve service response time, the number of virtual stops, or predetermined pick-up points, will be increased, and in anticipation of the success of the proposed growth strategies, the second vehicle will be restored to the Blue Zone during peak service hours.

Fares and Passes

To encourage group riders, the existing "50 Percent Off" weekend promotion for two to four riders will be available on all days. Since the promotion was initially launched in February of 2019, 366 promotional passes were purchased. To improve trip grouping at the Metrolink Station, a program for Metrolink passengers will be introduced. The "Train Buddies" program will allow Metrolink riders to use a single transfer pass for multiple riders resulting in a higher grouping rate and more efficient operation. To increase ridership, changes to fare media allowed on OC Flex include other prepaid OC passes. During the initial pilot period, only the OC Bus Day Pass was accepted for free transfer to the OC Flex service. The purpose was to avoid overwhelming

the service given the limited capacity and the inability to implement a variable pricing structure. After the initial pilot period, the trends indicate there is capacity to allow free transfers to OC Flex for passengers with OC Bus 30-day, OC Express, and Express passes. To ensure that the current resource level for OC Flex is not inundated, the acceptance of the additional prepaid OC Bus passes will be implemented for a limited time. The intent of these changes is to encourage group rides and increase ridership.

Promotions

The robust marketing for the OC Flex service will continue. The intent of the marketing activities for the extended pilot period will be to create awareness of the upcoming changes to OC Flex and increase ridership. Promotional campaigns and activities will target residents and businesses in the added areas and continue to position OC Flex as a viable, convenient connection from OC Bus and Metrolink services. Actions include reaching out to inactive account holders and providing a "free-ride" incentive to try the service, gathering feedback from non-users through survey, and promoting the service enhancements via in-person meetings and promotional materials.

SUMMARY

Through 12 months of operation, the performance of the OC Flex microtransit pilot project has been well received and customer satisfaction is high. Of the five Board-approved performance metrics, three have reached the respective targets, and the remaining two, though below their respective targets, are moving in the right direction. With the staff recommendation to continue to operate the pilot through October 2020, several strategies are set for implementation to improve performance during the extended period. These strategies include slightly expanding the existing zones and pricing changes to increase ridership, implementing operational adjustments to improve productivity, and marketing activities to create awareness of the OC Flex options available with the proposed changes. Additionally, as the current operating contract expires in October 2020, staff will be engaged in procurement activities for a new contractor for the OC Flex service. The complete set of the upcoming changes can be implemented by mid-February 2020. Staff will continue to provide quarterly updates on the performance of the OC Flex microtransit pilot and the changes as implemented.

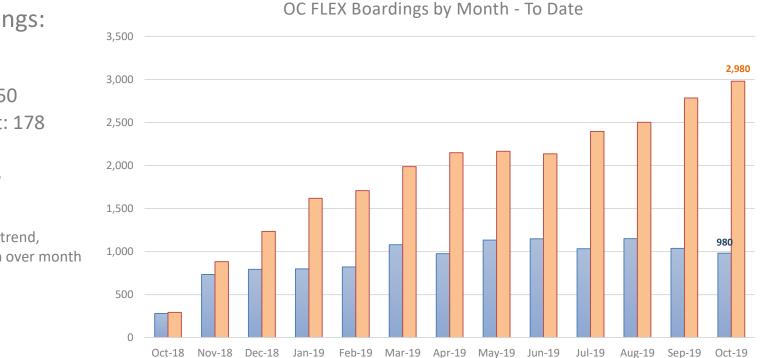




Microtransit Pilot Project: 12-Month Update







- Total Boardings: 36,789
 - Weekly*: ~850
 - Daily Highest: 178
- Zone trends
 - Blue: Static
 - Orange: Positive trend, increasing month over month

3

 As measured by customer satisfaction: 85% of riders "likely"/"very likely" to recommend OC Flex

- As measured by boardings per revenue vehicle hour (B/RVH): 6 B/RVH
- Reduce total operating and capital costs
 - As measured by subsidy per boarding: \$9.00 per boarding

Provide public transit mobility in lower-demand areas

- Reduce Vehicle Miles Travelled (VMT)
 - As measured by percent of bookings sharing a vehicle: 25% Shared Rides
- Extend reach of OC Bus and Metrolink services
 - As measured by percent of trips to/from transit hubs: 25% transfer trips
- Meet customer needs





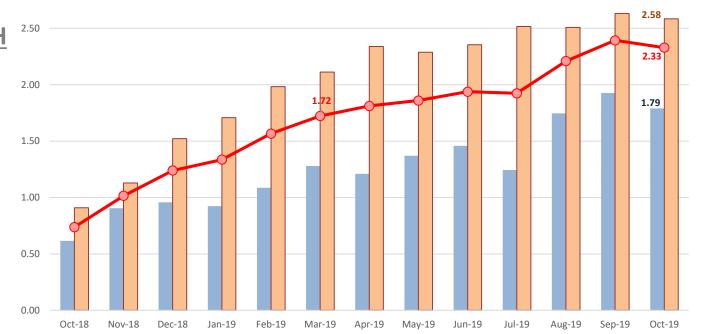


4

PRODUCTIVITY (B/RVH)

3.00

- Target: 6 B/RVH
- System: 2.3 B/RVH
 - Blue: 1.79 B/RVH
 - Orange: 2.58 B/RVH
- Trend: <u>Positive</u>

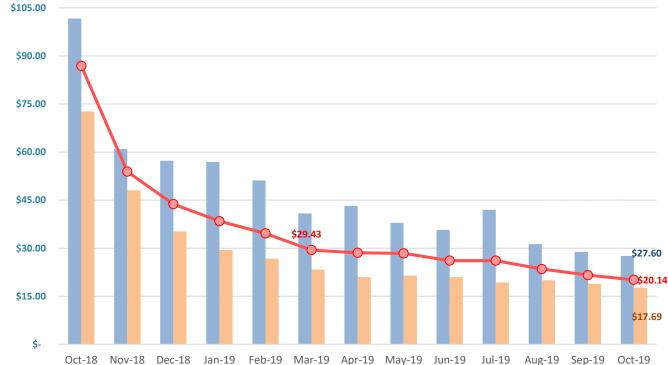




Target: \$9/Boarding

SUBSIDY PER BOARDING

- System: <u>\$20.14</u>
 - Blue: \$27.60 B/RVH
 - Orange: \$17.69 B/RVH
- Trend: Positive





SUBSIDY PER BOARDING – ALL MODES (Q1 FY2019-20)



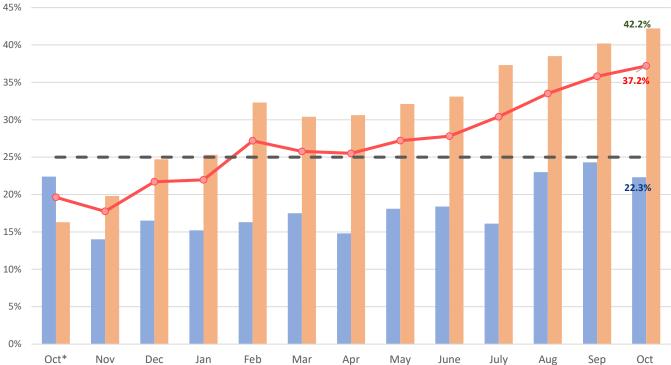
Service	Service Type	Subsidy/Boarding
OC Bus Local	Fixed-Route	\$ 2.60
OC Bus Community	Fixed-Route	\$ 3.74
OC Bus StationLink	Fixed-Route	\$ 5.70
Same Day Taxi	Taxi	\$ 14.30
OC Bus Express	Fixed-Route	\$ 14.41
OC Flex Orange	Microtransit	\$ 19.38
Special Agencies Agreements	ADA Paratransit	\$ 21.75
OC Flex Blue	Microtransit	\$ 33.95
OC ACCESS	ADA Paratransit	\$ 38.18
OC ACCESS (Supplemental Taxi)	ADA Paratransit	\$ 39.93

ADA – Americans with Disabilities Act

Orange County Transportation Authority

• Target: 25%

- System: <u>37.2%</u>
 - Blue: 22.3%
 - Orange: 42.2%
- Trends:
 - Blue: Below target
 - Orange: Exceeded target every month since January
 - High volume of trips to/from Metrolink station



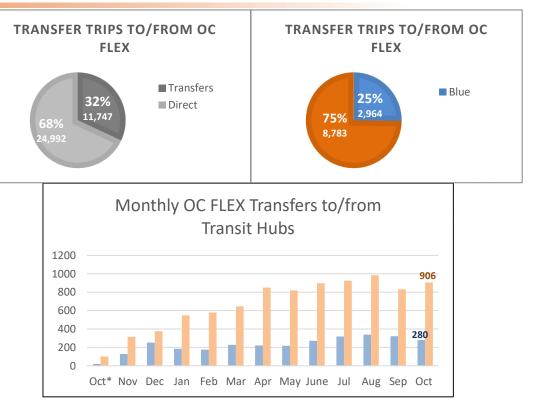




CONNECTED TRIPS



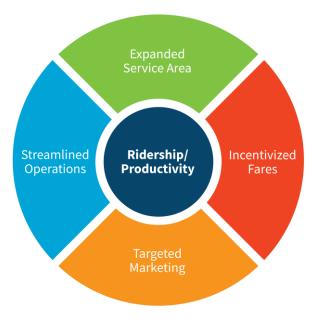
- Target: 25%
- System: <u>32%</u>
- Favorable trend:
 - Above 25% target for transfers
 - High transfer rate in the Orange Zone is due to high volume of trips to and from the Laguna Niguel-Mission Viejo Metrolink Station
 - First/Last mile connections to points east and west of station



STAFF RECOMMENDATIONS



- Extend Pilot through October 2020
 - Maintain service continuity
 - Test strategies considered to improve performance
 - Allow time for the procurement of a new service contract beyond October 2020 as approved.
- Strategies for Improvement
 - Zone Changes
 - Operational Improvements
 - Fare/Pass Considerations
 - Promotions



Orange County Transportation Authority

EXPANDED SERVICE AREA

- GIS Zone Travel Analysis
 - Trip Activity
 - Home-Work Trips
- Added Adjacent High Demand Areas
- Removed Some Lower Demand Areas
- Anticipate Increase in Demand and Wait Time

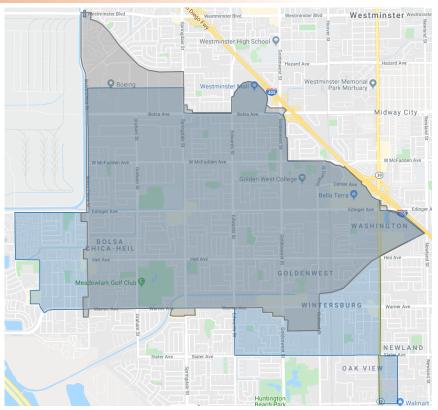




HUNTINGTON BEACH / WESTMINSTER ZONE

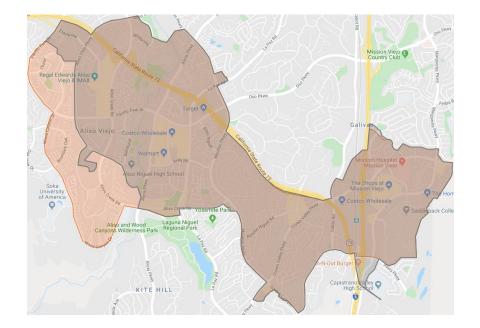


- Zone Size
 - Increased from 6.45 to 7.51 square miles (+16.4%)
- New Areas
 - High-density trip area west of zone
 - High-density trip area south to Slater Avenue
 - Huntington Beach Hospital area
- Reduced Areas
 - Area north of Boeing
 - New "Island" for connection to Route 60/560
 - Minor changes at edges



ALISO VIEJO / LAGUNA NIGUEL / MISSION VIEJO ZONE

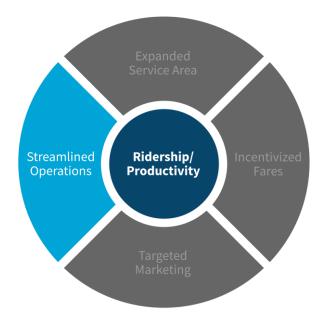
- Zone Size
 - Increased from 6.16 to 7.22 square miles (+17.2%)
- New Areas
 - High-density trip area west of zone
 - Adjacent to SOKA Campus
- Reduced Areas
 - South of Avery to Capistrano Valley High School



13

STREAMLINED OPERATIONS

- Goals
 - Improve productivity
 - Maintain quality of service
- Proposed Changes
 - Reduce span of service hours due to low ridership (stop earlier)
 - Monday thru Friday: 6 AM to 9 PM
 - $\circ~$ Saturday and Sunday: 9 AM to 9 PM
 - Increase the number of Virtual Stops to maintain and/or improve service response time
 - Increase revenue vehicle hours in the Blue Zone during anticipated peak hours of service to accommodate zone changes and other efforts

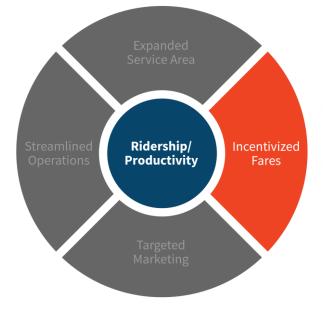




PASS CONSIDERATIONS

- Goals:
 - Increase ridership
 - Encourage shared rides
- Proposed Changes
 - Introduce "Train Buddies" program
 - Metrolink riders to use transfer passes so multiple riders can be scheduled together
 - Expand current weekend BOGO program to all days
 - Allow free transfers for OC Bus 30-day passholders



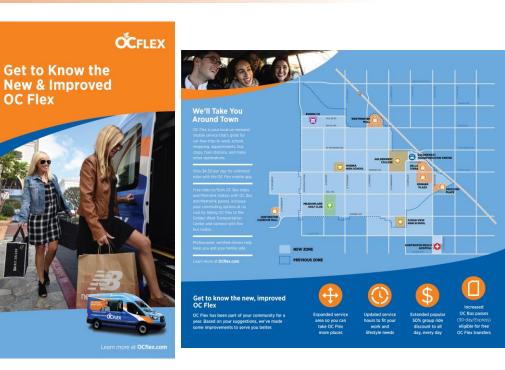


TARGETED MARKETING



• Target Audiences and Tactics

- Zone residents
 - o Promote new enhancements
 - Direct mail/digital ads/outreach
 - Gather feedback from non-users (survey link)
- Business and schools
 - **o** New organizations in the expanded areas
 - Promote new enhancements
 - In-person meetings
 - **o** OC Flex business cards with promo codes



TARGETED MARKETING



- Current OC Bus and Metrolink customers
 - Position OC Flex as part of OC transit family, providing easy connections to/from bus and trains
 - Promote NEW free transfers via regular OC Bus passes
- Potential off-peak users
 - 50% off group ride fare (at all times)
 - Seniors, stay-at-home parents, students
 - Free hands-on group travel training/tours
- Current customers _
 - Promote new enhancements
 - Communicate benefits of changes 0
 - Remind of referral promotion
- Inactive account holders _
 - Try us now, FREE!



OCFLEX

Connect free with Metrolink!*

is the way to go, and it's FREE with





Orange County Transportation Authority

Learn more at OCflex.com

and go more places.



January 9, 2020

То:	Transit Committee	Chief Executive Officer	for
From:	Darrell E. Johnson,	Chief Executive Officer	(

Subject: Bus Operations Performance Measurements Report for the First Quarter of Fiscal Year 2019-20

Overview

The Orange County Transportation Authority operates fixed-route bus and demand-response paratransit service throughout Orange County and into neighboring counties. The established measures of performance for these services assess the safety, courtesy, reliability, and overall quality of the services. This report summarizes the year-to-date performance of these services through the first quarter of fiscal year 2019-20.

Recommendation

Receive and file as an information item.

Background

The Orange County Transportation Authority (OCTA) operates a countywide network of 60 routes, including local, community, rail connector, and express bus routes serving over 5,000 bus stops. Fixed-route bus (OC Bus) service operates in a 798 square-mile area, serving more than three million residents in 34 cities and unincorporated areas, with connections to transit services in Orange, Los Angeles, and Riverside counties. OCTA provides these services through both directly-operated (DOFR) and contracted fixed-route service (CFR). OCTA also provides OC ACCESS, a federally-mandated paratransit service, which is a shared-ride program available for people unable to use the OC Bus service because of functional limitations. Performance measures for both, OC Bus and OC ACCESS services are summarized and reported quarterly (Attachment A).

Discussion

This report provides an update on the performance of the OC Bus and OC ACCESS services by presenting the current trends and comparisons with OCTA-established performance standards for transit system safety, courtesy, and reliability. OCTA counts preventable vehicle accidents to evaluate system safety, customer complaints to assess courtesy, and uses both on-time performance and miles between road calls (MBRC) to measure service reliability. This report includes year-to-date performance through the first quarter, July, August, September, of fiscal year (FY) 2019-20.

- <u>Safety</u> OC Bus and OC ACCESS services both fell below the accident frequency standard as the number of preventable accidents recorded for each mode exceeded one preventable accident per 100,000 service miles. In response to the increase in vehicle accidents for DOFR, safety-related campaigns were conducted in July, August, September, and October focusing on accident prevention and safety awareness. The Safety Managers for the contract operators have been emphasizing safety and the accident reporting procedures in monthly safety meetings.
- <u>Customer Service</u> Customer service is measured by evaluating the number of valid customer complaints received compared to boardings. During the first quarter, all modes of service performed above the respective standards.
- <u>Reliability</u> On-time performance (OTP) for OC Bus and OC ACCESS was below target. Under performing fixed-route OTP rates can be attributed to several factors, including vehicle reliability, driver behavior, high passenger loads, construction, and dynamic traffic conditions. Traffic pattern impacts associated with the new school year and an increase in road improvement projects across the county were factors impacting OTP during the reporting period. The OTP for OC ACCESS continued to be impacted by an operator shortage. The recent ratification of the contractor's collective bargaining agreement is expected to resolve the operator shortage issue.

The MBRC for DOFR OC Bus service exceeded the standard, while CFR OC Bus service and OC ACCESS service came in below standard. While still below the goal, the MBRC for CFR OC Bus service experienced significant improvement as a result of the contractor's recent recruiting efforts to fill key positions, such as maintenance supervision, resulting in a better controlled maintenance environment and less technician turnover and an improved maintenance program. The substandard performance

Bus Operations Performance Measurements Report for the Page 3 First Quarter of Fiscal Year 2019-20

for OC ACCESS is in large part due to an aging OC ACCESS fleet that is beginning to require repairs beyond regular preventive maintenance. The Board of Directors has approved the purchase of 116 new ACCESS vehicles. Delivering is expected in FY 2020-21.

The report also includes:

- An assessment of the efficiency of OCTA transit operations based on industry standards for ridership, productivity, farebox recovery, and cost per revenue vehicle hour;
- A review of contractor performance for CFR and OC ACCESS services;
- A route-level performance evaluation that includes subsidy per boarding, revenue per boarding, and resource allocation (buses); and
- A status report on the service adjustments and strategies implemented under the OC Bus 360° Program, including OC Flex and the College Pass Program.

Summary

Through the first quarter of FY 2019-20, the performance of OC Bus service exceeded the performance in the areas of courtesy and reliability, but was below the standard for safety and OTP. In addition, CFR was below the standard on MBRC. The performance of OC ACCESS also exceeded the standard for courtesy, but fell below the performance standard for safety and reliability. OCTA staff continue to focus on continuous quality improvement in safety and reliability as detailed in the report. Service efficiency and route performance remain stable as OC Bus 360° implementation continues. In addition to tracking the established key performance indicators, staff will continue to manage the service contracts pursuant to contract requirements and work to identify other strategies to improve overall system performance.

Bus Operations Performance Measurements Report for the Page 4 First Quarter of Fiscal Year 2019-20

Attachment

A. Bus Operations Performance Measurements Report, First Quarter, Fiscal Year 2019-20

Prepared by:

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Jennifer L. Bergener

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Approved by:

Beth McCormick General Manager, Operations (714) 560-5964

ATTACHMENT A

Bus Operations Performance Measurements

Report





First Quarter Fiscal Year 2019-20

About This Report

The Orange County Transportation Authority (OCTA) operates a countywide network of 60 routes, including local, community, rail connector, and express bus routes serving over 5,000 bus stops known as OC Bus. OCTA also operates paratransit service (OC ACCESS), a shared-ride program available for people unable to use the standard OC Bus service because of functional limitations. OC Bus service is provided through both direct operations by OCTA referred to as directly-operated fixed-route (DOFR) and contracted operations referred to as contracted fixed-route (CFR). The OC ACCESS service is a contract-operated demand-response service required by the Americans with Disabilities Act that is complementary to the fixed-route service and predominately accounts for the overall paratransit services operated by OCTA. These services make up the bus transit system and are evaluated by the performance measurements summarized in this report.

This report tracks bus system safety, as measured by vehicle accidents; courtesy, as measured by customer complaints; and reliability, as measured by on-time performance (OTP) and miles between road calls (MBRC). Along with these metrics, industry-standard measurements are tracked to assess OCTA bus operations; these measurements include ridership, productivity, farebox recovery ratio (FRR), and cost per revenue vehicle hour (RVH). Graphs accompany the details of each indicator showing the standards or goals and the values for the current reporting period. The following sections provide performance information for OC Bus service, DOFR and CFR, and OC ACCESS service.

Safety: Preventable Vehicle Accidents

OCTA is committed to the safe delivery of the OC Bus service. The safety standard for DOFR, CFR, and OC ACCESS services is no more than one vehicle accident per 100,000 miles. Preventable vehicle accidents are defined as incidents when physical contact occurs between vehicles used for public transit and other vehicles, objects, or pedestrians, and where a coach operator failed to do everything reasonable to prevent the accident.

Through the first quarter of fiscal year (FY) 2019-20, all modes of service were below the safety standard with more than one accident per 100,000 miles.

DOFR and CFR OC Bus service experienced an increase in preventable accidents, including fixed-object and stationary (parked) vehicle collisions, and passenger falls. To address this trend, OCTA Operations staff conducted safety-related campaigns and focus on safety. This included campaigns in July, August, September and October on tire strikes, safety around schools, wheelchair securement, passenger falls, and fatigue awareness. The Safety Managers for the contract services are emphasizing safety and the accident reporting procedures in their monthly safety meetings.

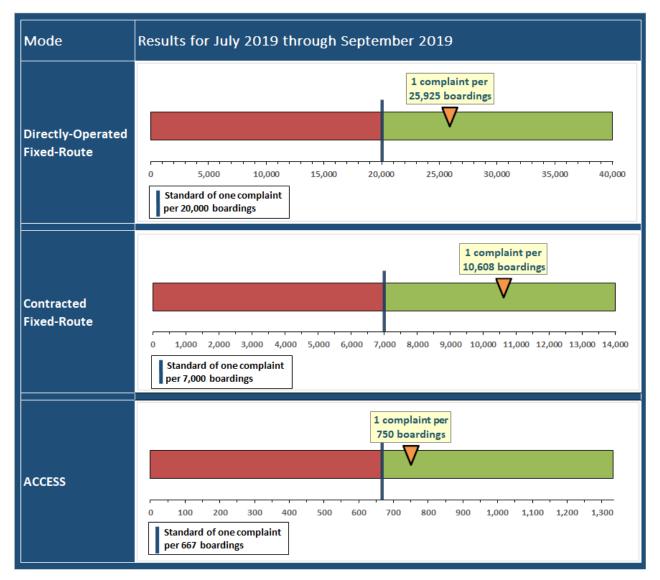
For OC ACCESS, a modest increase in curb strikes, a total of nine in the first quarter, along with the typical collisions with fixed objects (poles) and side mirror strikes resulted in performance just below standard. The contractor identified the need to repaint the mirror station at Irvine Construction Circle and conducted a campaign for drivers to increase awareness and instruction on how to properly adjust their mirrors at the station before leaving the yard. In addition, the Southern California Director of Safety for MV Transportation, Inc. (MV) is in the process of putting together a new safety incentive program to enhance safety awareness and promote safe driving techniques.



Courtesy: Customer Complaints

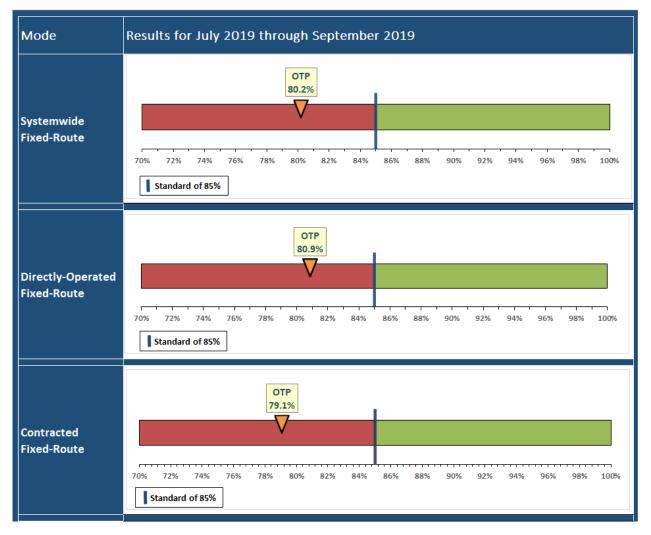
OCTA strives to achieve a high level of customer satisfaction in the delivery of OC Bus services. The performance standard for customer satisfaction is courtesy as measured by the number of valid complaints received. Customer complaints are the count of incidents when a rider reports dissatisfaction with the service. The standard adopted by OCTA for DOFR OC Bus is no more than one customer complaint per 20,000 boardings; the standard for CFR OC Bus service is no more than one complaint per 7,000 boardings; and the contractual standard for OC ACCESS is no more than one complaint per 667 boardings.

Through the first quarter of FY 2019-20, all modes of service exceeded the courtesy standard with less than one valid complaint per 20,000, 7,000, and 667 boardings, respectively. Notably, courtesy for the CFR OC Bus service in the first quarter experienced significant improvement, with a 30 percent reduction in complaints compared to last quarter.



Reliability: On-Time Performance

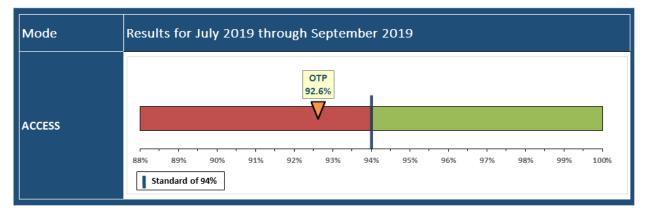
Reliability is vital to a successful transportation network. Reliability for OCTA is measured in part by OTP. OTP is a measure of performance which evaluates the schedule adherence of a bus operating in revenue service according to a published schedule. Schedule adherence is tracked by monitoring the departure of vehicles from time points, which are designated locations on a route used to control vehicle spacing as shown in the published schedule. For OC Bus service, a trip is considered on-time if it departs the time point anywhere from zero minutes early to no more than five minutes late. OCTA's fixed-route system standard for OTP is 85 percent. For OC ACCESS service, OTP is a measure of performance evaluating a revenue vehicle's adherence to a scheduled pick-up time for transportation on a demand response trip. A trip is considered on-time if the vehicle arrives within a 30-minute window. The OC ACCESS OTP standard is 94 percent. Both OC Bus and OC ACCESS failed to meet the standard in the first quarter.



Through the first quarter of FY 2019-20, systemwide fixed-route OTP was 80.2 percent, 4.8 percent below the standard. This marks a 2.1 percent drop from the previous quarter and a 2.0 percent drop from the same quarter last year.

OTP for the DOFR OC Bus service through the first quarter was at 80.9 percent, a 2.5 percent drop from last quarter and 2.0 percent lower than the same time last year. Based on observations and coach operator feedback, contributing factors to the drop in OTP include additional traffic associated with the beginning of the school year and construction projects. Road improvement projects underway throughout the area have resulted in increased service detours, as well as increased local traffic on many of OCTA's service corridors.

The OTP for the CFR OC Bus service through the first quarter was at 79.1 percent, a 1.5 percent drop from last quarter and 2.0 percent lower than the same time last year. In addition to traffic concerns as noted above, the contractor continues to experience manpower shortages. This in turn results in the use of field supervisors to operate vacant assignments rather than focus on service performance. OCTA staff continue to work with the contractor to address service performance in this area.



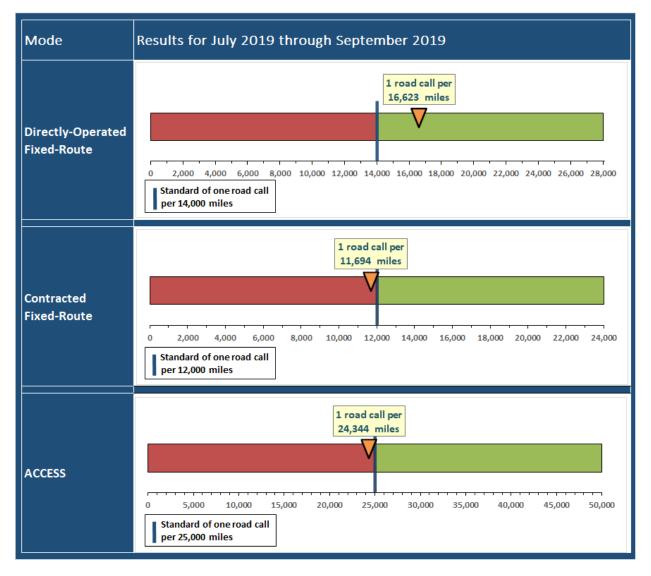
OTP for OC ACCESS service (Primary Service and Supplemental Taxi) for the first quarter was 92.6 percent, 1.4 percent below the standard, 0.5 percent lower than last quarter, and 1.5 percent lower than the 94.1 percent reported during the same period last year.

During a significant portion of the first quarter, the contract operator struggled with an operator shortage, reducing service capacity and requiring the need to assign additional trips to the supplemental taxi service. A recent ratification of the Collective Bargaining Agreement (CBA) for OC ACCESS drivers went into effect on July 12th increasing the starting wage from \$13 per hour to \$15 per hour. The CBA ratification did have a positive impact by generating an increase in applications. However, due to the amount of time required to hire and train a driver before they are released into service, the improvement was not recognized in time to improve performance during this quarter.

OCTA staff will continue to monitor service delivery to ensure contractor efforts are working to attain performance standards.

Reliability: Miles Between Road Calls

MBRC is a vehicle reliability performance indicator that measures the average distance in miles that a transit vehicle travels before failure of a vital component forces removal of the vehicle from service. OCTA has adopted standards for the MBRC for DOFR, CFR, and OC ACCESS services. These standards vary to align with the specific type of service being provided and account for the variability inherent to each of these services including the vehicles assigned. The specific standards as adopted by OCTA are 14,000 MBRC for DOFR OC Bus service; 12,000 MBRC for CFR OC Bus service; and 25,000 MBRC for OC ACCESS.



Through the first quarter of FY 2019-20, OC Bus services showed improved performance in this measure. DOFR OC Bus service performed above standard, averaging 16,623 vehicle MBRC, an increase of 8.3 percent from last quarter, and a 9.4 percent increase from the same quarter of last year. This improvement in performance is a result of timely bus replacements and mid-life engine repowers.

In the last two years, the Maintenance Department completed the acceptance of 157 new buses which are now reaching peak performance. In addition, 98 buses were repowered with new near-zero low emissions engines.

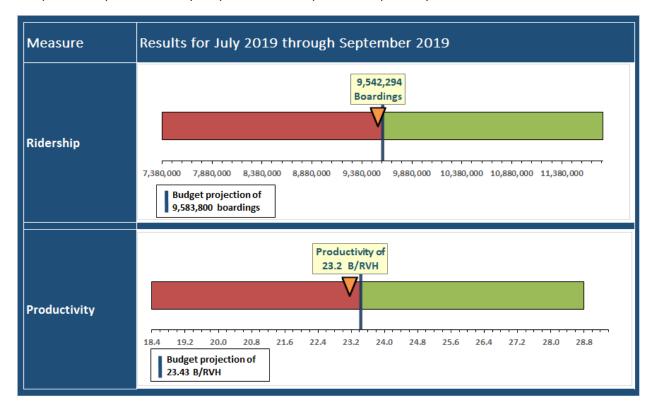
MBRC for the CFR OC Bus service was slightly below standard at 11,694 MBRC through the first quarter of FY 2019-20. This represents a 26 percent improvement from the 9,249 MBRC reported last quarter, and a 56 percent improvement compared to the same quarter last year. The positive trend for MBRC for CFR OC Bus has been driven by First Transit, Inc. (First Transit)'s corporate support and hiring well-qualified, experienced maintenance personnel. This has led to a better controlled maintenance environment, resulting in less technician turnover and an improved maintenance program.

The MBRC for OC ACCESS service was slightly below the standard, averaging 24,344 miles between road calls. As the ACCESS fleet ages and vehicle mileage increases, repairs outside of the regular preventive maintenance are required. Just as with coach operators, staffing levels in the maintenance area also continue to be below standard for a fleet of this size. OCTA has discussed these concerns with the contractor's local and corporate management, resulting in an action plan detailing recruitment efforts and current staffing levels and consideration for the development of an apprentice program for mechanics. Staff meets weekly with the contractor to review progress on the action plan. OCTA staff will continue to monitor performance in this area and work with the contractor to improve overall performance and ensure the maintenance program meets the terms and conditions of the agreement.

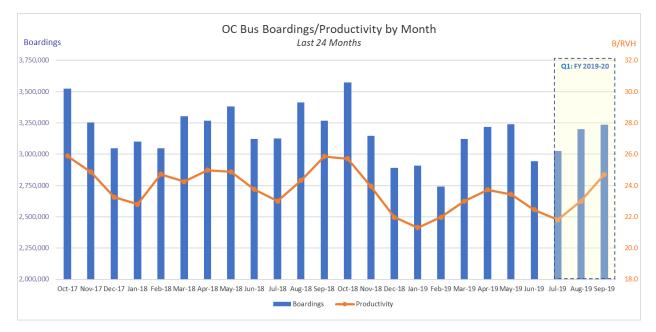
Ridership and Productivity – OC Bus

Ridership (or boardings) is the number of rides taken by passengers using public transit and is influenced by level of service provided, weather, economy, and seasonal variations in demand. Productivity is an industry measure that counts the average number of boardings for each RVH that is operated. RVH is any 60-minute increment of time that a vehicle is available for passengers within the scheduled hours of service, excluding deadhead (a non-revenue movement of a transit vehicle to position it for service). Boardings per RVH (B/RVH) is calculated by taking the boardings and dividing it by the number of RVH operated.

Through the first quarter of FY 2019-20, both ridership and productivity for OC Bus service were slightly lower than budgeted projections. As shown in the chart below, compared to the same time last year, ridership and productivity were down by 2.7 percent and 4.9 percent, respectively.



Over the last two years, ridership and productivity reflect a trend in slight decline, as shown in the following chart. Ridership and productivity tend to peak during the spring and fall when school is in session, and dip during the winter and summer when students are on vacation. Through the first quarter, September ridership exceeded August ridership, a change from last year, while productivity increased month-over-month through the summer and into the beginning of the 2019-20 school year.



Ridership and Productivity – OC ACCESS

(Primary Service Provider and Supplemental Taxi)

Through the first quarter of FY 2019-20, the ridership for OC ACCESS exceeded budgeted projections by less than one half of a percent. Productivity is trending below the budgeted projection by 2.9 percent.

Measure	Results for July 2019 through September 2019
Ridership	382,253 Boardings 290,000 310,000 330,000 350,000 370,000 390,000 410,000 430,000 450,000 470,000 Budget Projection of 380,644 boardings
Productivity	Productivity of 2.03 B/RVH

Contractor Performance: Fixed-Route

Per Agreement No. C-4-1737 between OCTA and First Transit, additional measures are tracked to ensure the CFR OC Bus service meets specified standards for safety, customer service, and reliability. When the contractor's monthly performance exceeds the standard as set forth in the agreement, financial incentives are paid to the contractor; conversely, when the monthly performance of the contractor is below the standard as set forth in the agreement, penalties are assessed and are paid to OCTA by the contractor.

Through the first quarter of FY 2019-20, the overall performance of the contracted OC Bus service as determined by the performance categories outlined in the contract was below standard for the measures of safety and reliability, including accident frequency and accident reporting.

Table 1 provides the penalties and incentives assessed to the contractor by quarter for FY 2019-20. The incentives paid in the first quarter relate to courtesy and total \$14,500. The total penalties assessed to the contractor during the quarter total \$278,400. Missed trips and unreported accidents were the primary categories where poor performance was realized. When an accident occurs, it must be reported verbally or in writing within a 24-hour period. After 24 hours, the accident is considered unreported. For the quarter, 17 accidents were reported beyond the 24-hour reporting period.

Table 1:	Performance Categories	FY20 Q1	FY20 Q2	FY20 Q3	FY20 Q4	ļ	FYTD 19
	On-Time Performance	\$ (6,000)	\$ -	\$ - :	\$-	\$	(6,000)
	Valid Complaints: Per 7,000 boardings	\$ -	\$ -	\$ - :	\$-	\$	-
	Unreported Accident	\$ (85,000)	\$ -	\$ - :	\$-	\$	(85,000)
	Accident Frequency Ratio	\$ (20,000)	\$ -	\$ - :	\$-	\$	(20,000)
	Key Positions	\$ -	\$ -	\$ - :	\$-	\$	-
Penalties	California Highway Patrol Terminal Inspection:	\$ -	\$ -	\$ - :	\$-	\$	-
Penalties	Reports	\$ -	\$ -	\$ - :	\$-	\$	-
	Preventive Maintenance	\$ -	\$ -	\$ - :	\$-	\$	-
	Road Calls	\$ (1,400)	\$ -	\$ - :	\$-	\$	(1,400)
Incentives	Vehicle Damage: Per vehicle per day	\$ -	\$ -	\$ - :	\$-	\$	-
	Missed Trips	\$ (166,000)	\$ -	\$ - :	\$-	\$	(166,000)
	Total	\$ (278,400)	\$ -	\$ -	\$-	\$	(278,400)
	On-Time Performance	\$ -	\$ -	\$ - :	\$-	\$	-
	Valid Complaints: Per 7,000 boardings	\$ 14,500	\$ -	\$ - :	\$-	\$	14,500
	Accident Frequency Ratio	\$ -	\$ -	\$ - :	\$-	\$	-
	Total	\$ 14,500	\$ -	\$ - :	\$-	\$	14,500
	Road Calls	\$ -	\$ -	\$ - :	\$ -	\$	-
Prior Periods Adjustment	Key Position	\$ -	\$ -	\$ -	\$-	\$	-
Aujustment	Total	\$ -	\$ -	\$ -	\$ -	\$	-
All	Total	\$ (263,900)	\$ -	\$ -	\$-	\$	(263,900)

Contractor Performance: OC ACCESS

(Primary Service Provider and Supplemental Taxi)

Per Agreement No. C-2-1865 between OCTA and MV, additional measures are tracked to ensure OC ACCESS meets the standards for safety, customer service, and reliability. When the contractor's monthly performance exceeds the standard as set forth in the agreement, financial incentives are paid to the contractor; conversely, when the monthly performance of the contractor is below the standard as set forth in the agreement, penalties are assessed and must be paid to OCTA by the contractor.

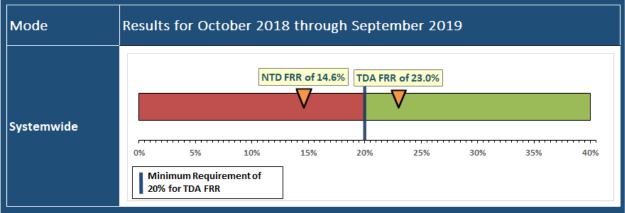
As presented in this report, the overall performance of the contractor providing OC ACCESS service through the first quarter of FY 2019-20 is above standard with respect to courtesy, while below standard for safety and reliability. Table 2 below lists, by quarter, the penalties and incentives assessed to the OC ACCESS contractor as established in the agreement. Through the first quarter, there were no incentives awarded to the contractor, but \$63,500 in penalties were assessed. Penalties were assessed for passenger productivity, OTP, call center hold times, excessively late trips, missed trips, and road calls. Additionally, the contractor was credited \$10,000 for a correction related to an unreported accident during the previous quarter.

Table 2:	Performance Categories		FY20 Q1		FY20 Q2		FY20 Q3		FY20 Q4	FYTD 20
	Passenger Productivity	\$	(10,000)	\$	-	\$	-	\$	-	\$ (10,000)
	On-Time Performance	\$	(15,000)		-	\$	-	\$	-	\$ (15,000)
	Customer Comments	\$	(2,800)	\$	-	\$	-	\$	-	\$ (2,800)
	Call Center Hold Times	\$	(5,000)	\$	-	\$	-	\$	-	\$ (5,000)
	Excessively Late Trips	\$	(20,000)	\$	-	\$	-	\$	-	\$ (20,000)
	Missed Trips	\$	(5,000)	\$	-	\$	-	\$	-	\$ (5,000)
.	Unreported Accident	\$	(5,000)	\$	-	\$	-	\$	-	\$ (5,000)
Penalties	Preventive Maintenance	\$	-	\$	-	\$	-	\$	-	\$ -
	Road calls	\$	(700)	\$	-	\$	-	\$	-	\$ (700)
	Reports	\$	-	· \$ - \$ - \$ - \$ - \$ - · \$ - \$ - \$ - \$ - \$ - \$ - · \$ - \$ - \$ - \$ - \$ - \$ - · \$ - \$ - \$ - \$ - \$ - \$ - · \$ - \$ - \$ - \$ - \$ - \$ - · \$ - \$ - \$ - \$ - \$ - \$ - · \$ - \$ - \$ - \$ - \$ - \$ - · \$ - \$ - \$ - \$ - \$ - \$ - · \$ - \$ - \$ - \$ - \$ - \$ - · \$ - \$ - \$ - \$ - \$ - \$ - \$ · \$ - \$ - \$ - \$ - \$ - \$ - \$ · \$ - \$ - \$ - \$ - \$ - \$ - >						
	Key Positions	\$	-	\$	-	- \$ - \$ - \$ (700) - \$ - \$ - \$ - - \$ - \$ - \$ - - \$ - \$ - - \$ - \$ - - \$ - \$ - - \$ - - \$ - - \$ - \$ -				
	CHP Terminal Inspections	\$	-	\$	-	\$	-	\$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -		
	Vehicle Damage	rminal Inspections \$ - \$ - \$ Damage \$ - \$ - \$ \$ 63,500) \$ - \$	-	\$	-	\$ -				
	Total	\$	(63,500)	\$	-	\$	-	\$	-	\$ (63,500)
	Passenger Productivity	\$	-	\$	-	\$	-	\$	-	\$ -
	On-Time Performance	\$	-	\$	-	\$	-	\$	-	\$ -
Incentives	Excessively Late Trips	\$	-	\$	-	\$	-	\$	-	\$ -
	Missed Trips	\$	-	\$	-	\$	-	\$	-	\$ -
	Total	\$	-	\$	-	\$	-	\$	-	\$ -
Prior Periods	Customer Comments	\$	-	\$	-	\$	-	\$	-	\$ -
	Unreported Accident	\$	10,000	\$	-	\$	-	\$	-	
Adjustment	Total	\$	10,000	\$	-	\$	-	\$	-	\$ 10,000
All	Total	\$	(53,500)	\$	-	\$	-	\$	-	\$ (53,500)

Farebox Recovery Ratio

Farebox Recovery Ratio (FRR) is a measure of the proportion of operating costs recovered by passenger fares, calculated by dividing the farebox revenue by total operating expenses. A minimum FRR of 20 percent for all service is required by the Transportation Development Act (TDA) in order for transit agencies to receive the state sales tax available for public transit purposes. In an effort to normalize seasonal fluctuations, data shown below reflects actuals over the last 12 months from October 2018 through September 2019.

FRR, based on the National Transit Database (NTD) definition in which only passenger fares are included under revenue, did not meet the 20 percent goal. However, as a result of the passage of Senate Bill No. 508 (SB 508), OCTA was able to adjust the FRR to include local funds. SB 508 states, *"If fare revenues are insufficient to meet the applicable ratio of fare revenues to operating cost required by this article, an operator may satisfy that requirement by supplementing its fare revenues with local funds. As used in this section, "local funds" are any non-federal or non-state grant funds or other revenue generated by, earned by, or distributed to an operator." After incorporating property tax revenue, advertising revenue, and Measure M fare stabilization, the adjusted FRR was 23.0 percent, a decrease of 0.7 percent from the previous quarter and a 1.6 percent drop from the same quarter last year.*



Note:

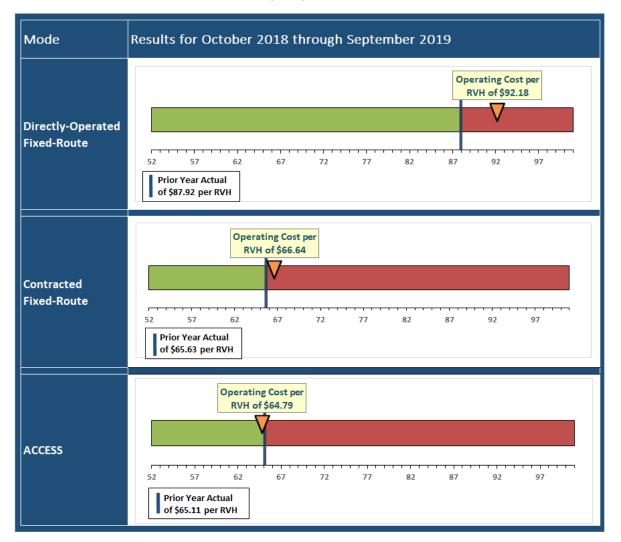
- National Transit Database (NTD) FRR consists of only passenger fares

- Transportation Development Act (TDA) FRR includes passenger fares, property tax revenue, advertising revenue and Measure M fare stabilization

Operating Cost per Revenue Vehicle Hour

Cost per RVH is one of the industry standards used to measure the cost efficiency of transit service. It is derived by dividing operating expenses by RVH. In order to provide a more comparable illustration, all metrics below are calculated based on direct operating cost, which excludes capital, general administrative, and other overhead costs.

Similar to the FRR, the statistics below depict actuals over the last 12 months. All modes operated at a higher cost per RVH than the same 12-month period of the prior year except for OC ACCESS due to reimbursement to the contractor for Same Day Taxi call center operations. The adjustment totaled \$513,000 and was paid in March 2018 through June 2018. The difference in cost per RVH from the prior FY was a 4.8 percent increase in DOFR, 1.5 percent increase in CFR, and 0.5 percent decrease in OC ACCESS. The increase in DOFR was primarily due to the execution of the new labor agreement for Coach Operators which included a wage increase each year. In addition, DOFR and CFR costs were both increased due to a higher-than-expected compressed natural gas rate since July 2018. Also contributing to the higher cost per hour was the Alternative Fuel Tax Credit that was received in March 2018, but not received in March 2019. This reduced costs by 2.1 percent in 2018.



Performance Evaluation by Route

Continuing efforts are underway to better understand, evaluate, and improve route performance. Performance evaluation is important because it provides:

- A better understanding of where resources are being applied;
- A measure of how well services are being delivered;
- A measure of how well these services are used; and
- An objective basis for decisions regarding future service changes and service deployment.

The tables on the following pages summarize route-level performance through the first quarter. The first three tables present the route-level performance sorted by routes with the highest net subsidy per boarding to routes with a lower net subsidy per boarding, and the remaining three tables present the same information sorted by routes that have the highest boardings to routes with a lower level of boardings.

A route guide listing all of the routes and their points of origins and destinations is provided after the route-level performance tables. Route types are grouped by route numbers as follows:

- Routes 1 to 99 Local routes include two sub-categories:
 - Major: These routes operate as frequent as every 15 minutes during peak times. Major routes operate seven days a week throughout the day. Together, the Major routes form a grid on arterial streets throughout the highest transit propensity portions of the OC Bus service area, primarily in northern parts of the county.
 - Local: These routes operate on arterials within the grid created by the Major routes, but at lower frequencies. Local routes also operate in parts of Orange County with lower transit demand. Most Local routes operate seven days per week, however some operate on weekdays only.
- Routes 100 to 199: Community routes to connect pockets of transit demand with major destinations and offer local circulation. Routes tend to be less direct than Local routes, serving neighborhoods and destinations off the arterial grid. Approximately half of Community routes operate seven days per week.
- Routes 200 to 299: Intra-county express routes operate on weekdays only at peak times and connect riders over long distances to destinations within Orange County, using freeways to access destinations.
- **Routes 400 to 499**: Stationlink routes are rail feeder services designed to connect Metrolink stations to nearby employment destinations. These routes have relatively short alignments, with schedules tied to Metrolink arrivals and departures. They operate during weekday peak hours only, in the peak direction, from the station to destinations in the morning and the reverse in the evening.
- **Routes 500 to 599**: Bravo! routes are limited-stop services operated with branded vehicles.
- **Routes 600 to 699**: Seasonal or Temporary routes (these are not included on the following charts) such as the OC Fair Express.
- Routes 700 to 799: Inter-county express routes that operate on weekdays only at peak times and connects riders over long distances to destinations outside of Orange County, often using freeways to access destinations.

0 00	Subsidy per Boarding	Direct Subsidy	Indirect Subsidy	"Capital Subsidy" Per Boarding	Revenue per Boarding	Boardings	CostVSH	Direct CostVSH	CostVSM	BoardVSH	NSH	40 FT 3	32 FT 60 FT
12.21	- L	\$ 6.68	\$ 4.63	\$ 0.90	\$ 0.86	15,893	\$ 99.12	\$ 63.52	\$ 7.73	8.14	1,952	- 1	2
11.0	0 00	6.29	4.23	0.56	0.78	03, 130	140.3/	94.04 92.74	9.10	12.55	0,494 11.410	<u>ი</u> თ	
10.1	9	5.43	3.77	0.96	0.96	18,749	93.77	62.11	7.59	9.22	2,033		
9.74	4 2	5.35	3.60	0.79	0.81	22,577	133.19	86.26	11.35	13.64	1,655	0 0	,
- 6 6	- @	5.12	3.55	0.81	0.85	17.617	92.49 96.84	63.15	6.45	3.31 10.16	1.733	1	- 2
9.3	9.33	5.05	3.43	0.85	0.86	21,109	92.67	61.80	7.42	9.92	2,127	2	
7.9	4	4.39	2.95	0.60	0.80	150,226	141.06	92.30	7.80	17.35	8,659	10	
~ 1	49	4.07	2.76	0.66	0.97	21,752	93.66	62.07	7.22	12.02	1,809	,	2
1.7	7.27	3.76	2.61	0.90	0.87	29,951	93.94 05.40	62.09 62.35	7.71	12.97	2,309	m •	
	- 2	3.60	20.2	0.73	10.0	40,709	90. 19 05.07	02.30 6.7 83	10.1	13.40	2,432	τα	
9.9	2 9	3.51	2.43	0.72	0.83	37.263	91.94	61.72	7.10	13.58	2.745		
9	3 00	3.24	2.25	1.09	1.04	16,458	105.06	65.10	7.18	16.11	1.022		
6.9	5	3.52	2.36	0.63	0.77	184,337	142.22	92.23	12.52	21.37	8,627	-	
9.7	ç	3.46	2.40	0.54	0.81	99,816	93.52	62.14	8.19		7,126		
6.2	9	3.49	2.34	0.43	0.75	104,525	136.47	88.31	12.84		5,037		
6.	5	3.30	2.29	0.56	0.98	80,024	97.36	63.30	6.52	14.83	5,396	5	
9.0	g	3.38	2.29	0.36		50,036	93.89	62.28	8.50	14.19	3,527		
5, L	ຕ ເຊິ່	3.19	2.16	0.58		46,718	93.39	62.18	8.35	15.04	3,107	en ç	
2.0	ກຸ	3.2U	1 06	0.85	0.79	401,499	144.9/	93.90 62 80	0.63	23.02 16 84	7 502	13	
5.6	22	3.12	2.10	0.43	0.81	126.063	133.16	86.35	10.80		5.708		
5.6	33	2.90	2.01	0.72	0.85	137,058	95.54	62.54	8.66	16.55	8,283	11	
5.	5.58	3.11	2.09	0.38	06.0	329,218	136.89	88.61	12.30		14,664		
ı ن	5.51	3.05	2.05	0.41	0.80	304,439	139.21	90.20	12.45	23.64	12,876		
ų, r	20	3.10	2.08	0.32	0.73	321,436	137.84	89.32	12.18		13,800	1	
ω Ω	11	2.73	1.89	0.49	0.94	90,813	92.89	62.10 00.67	1.43		5,435	Ω ,	
i in	5.07	2.72	1.88	0.07	0.02	94.775	93.40	62.23	66.7	17.04	5,563	- <i>v</i> .	
5.0	5 2	2.78	1.93	0.33	0.82	107.688	93.15	61.85	9.54		6.395		
4	62	2.67	1.80	0.40	0.76	223,172	139.81	90.58	12.74	26.72	8,352	10	
4.	87	2.64	1.83	0.40	0.84	180,981	95.26	62.67	7.66	17.95	10,082		
4.	4.61	2.55	1.71	0.35	0.82	503,749	161.54	104.82	14.84	31.84	15,824	4	
4	4	2.49	1.67	0.28	0.88	537,532	137.81	89.22	12.41	27.33	19,667	Ì	
4.	29	2.18	1.52	0.59	0.82	226,777	96.31	62.93	8.27	21.29	10,653		
4	14	2.11	1.46	0.57	0.75	202,737	95.28	62.54	8.37	22.06	9,192		
4 4	4.16	2.30	1.50	0.20	0.79	346 458	130.43	03.93	15.59	30.05	10,898	+ +	
	.90	2.09	1.45	0.36	0.79	172,817	92.41	62.04	7.14	21.34	8,098	7	
	3.81	2.09	1.40	0.32	0.79	170,392	125.82	81.26	12.12		5,806	9	
	3.72	1.95	1.35	0.42	0.79	257,121	94.71	62.50	8.07		11,095	12	
.,	3.69	2.02	1.40	0.27	0.72	99,036	92.84	62.03	7.51	22.44	4,413		
Ŭ	3.64	2.04	1.37	0.23	0.83	541,891	137.04	88.54	13.51		16,736	14	
(,)	.63	1.94	1.35	0.34	0.83	159, 191	93.30	62.17	8.22	22.64	7,031	9	
ст с	8	1.95	1.31	0.36	0.82	266,645	126.09	81.54	11.43	30.94	8,619	~	
	3.29	1.84	1.24	0.21	0.84	210,134 270 AEC	135.23	81.30 57.25	13.04	34.40 26.67	14,9/8	7 4	
	0.0	1.04	1 13	10.0	92.0	37 9,430	30.32 130.06	02.30	10.08	20.07	0.872	0	
	20.0	00.1	1.15	17.0	0./0	300,030	1.01.00	90.40	14.21	03.13	3,012	ה מ	
. 4	8	90.1	c0.1	0.17	G/.0	155,524	125.83	81.28	12.08	37.41	4,15/	m	

OCT A Operating Statistics By Route for Local and Community Services (Sorted by Subsidy per Boarding)

Image: Face box Direct busidy busidy per Boarding Capital busidy per Boarding Capital busidy per Boarding Capital busidy per Boarding Direct busidy per Boarding <thd< th=""><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th>В</th><th>us Coui</th><th>nt</th></thd<>														В	us Coui	nt
\$		Farebox		Direct Subsidy	Indirect Subsidy	"Capital Subsidy" Per Boarding	Revenue per Boarding	Boardings	CostVSH	Direct CostVSH	CostVSM	BoardVSH	HSV	40 FT	32 FT	60 FT
38.88 21.05 13.21 4.62 1.97 5.822 219.71 145.90 8.49 6.06 6.06 31.33 16.05 9.81 5.47 0.96 5.223 97.84 60.40 5.79 3.65 3.65 25.94 13.46 8.45 4.03 2.34 6.670 5.73 16.76 10.46 3.65 25.94 13.46 6.40 2.34 6.670 7.81 10.56 10.44 25.39 10.12 6.18 0.365 120.80 70.91 6.73 6.99 18.94 8.74 5.34 4.76 5.89 7.53 149.53 6.59 7.49 7.49	1	2.7%	\$ 39.53			\$	\$	3,225			\$ 6.50	3.66	881		4	•
3.6% 3.1.33 16.05 9.81 5.47 0.96 5,223 97.84 60.40 5.79 3.65 3.65 3.65 3.65 3.65 3.65 3.65 10.24 10.58 10.58 10.58 10.58 10.64 5.79 3.65 10.77 10.778 10.58 10.44 5.96 5.7% 23.29 10.12 6.18 6.99 0.98 3.065 120.80 70.91 6.34 6.99 29.5% 18.84 8.74 5.34 4.76 5.89 7.533 149.53 96.25 5.59 7.49 7.49		5.4%	38.88	21.05		4.62		5,822	219.71		8.49	6.06	096	3	-	-
9.6% 25.94 13.46 8.45 4.03 2.34 6,670 253.17 167.78 10.58 10.44 5.7% 23.29 10.12 6.18 6.99 0.98 3,065 120.80 70.91 6.34 6.99 29.5% 18.84 8.74 5.34 4.76 5.89 7,533 149.53 96.25 5.59 7.49		3.6%	31.33	16.05		5.47		5,223	97.84		5.79	3.65	1,431		4	-
5.7% 23.29 10.12 6.18 6.99 0.98 3.065 120.80 70.91 6.34 6.99 29.5% 18.84 8.74 5.34 4.76 5.89 7.533 149.53 96.25 5.59 7.49		9.6%	25.94	13.46				6,670	253.17		10.58	10.44	639	3	-	-
29.5% 1884 8.74 5.34 4.76 5.89 7.533 149.53 96.25 5.59 7.49 ·		5.7%	23.29	10.12				3,065	120.80		6.34	66.9	438		3	-
	_	29.5%	18.84	8.74		4.76		7,533	149.53		5.59	7.49	1,006	4	-	-
(429) is b		Submode ECL EDLB ECL ECL ECL ECL ECL ECL ECL	Submode Farebox ECL 2.7% ECL 3.6% ECL 3.6% ECL 3.6% ECL 5.7% ECL 5.7% ECL 2.7% ECL 3.6% ECL 2.7% (429) is based on PM wei 20.5%	CTA Conc Submode Farebox Subsidy per Boarding 213 N ECL 2.7% \$ 39.53 213 N ECL 2.7% \$ 39.53 211 N ECL 3.6% 31.33 211 C ECL 3.6% 31.33 211 C ECL 3.6% 21.33 211 C ECL 3.6% 21.33 214 C ECL 3.6% 21.33 214 C ECL 3.6% 21.33 214 C ECL 3.6% 23.54 206 C ECL 3.7% 23.54 704 C ECL 2.7% 23.54 704 C ECL 2.7% 23.54 704 C ECL 2.7% 23.54 705 C ECL 2.7% 23.54 704 C ECL 2.7% 23	ents.	eect Ind sidy Sut 19.04 \$ 21.05 13.46 10.12 8.74	ect Indirect Subsidiver Subsidiver Subsidiver Subsidiver Subsidiver Perent 19.04 \$ 11.63 \$ Perent 19.04 \$ 13.21 \$ Perent 13.24	ect Indirect Subsidy "Capital Subsidy Per Revenue sidy Subsidy Per Boardi 19.04 \$ 11.63 \$ 8.86 \$ 10.05 13.21 4.62 \$ 13.26 9.81 5.47 \$ 10.16 8.16 5.47 \$ 13.46 8.18 6.99 \$ 13.45 8.18 6.99 \$ 13.45 5.34 4.76 \$ 8.74 5.34 4.76 \$	Capital "Capital Pect "Capital Boardin sidy Subsidy Pert Buarding Boarding Boarding 19.04 \$ 11.63 \$ 3.86 \$ 0.84 1.97 10.05 13.21 4.62 1.97 1.97 16.05 9.81 5.47 0.96 1.324 13.46 8.46 4.03 2.34 1.37 13.46 8.45 0.96 0.96 1.324 10.12 8.45 6.03 0.96 1.324 10.14 6.18 6.93 0.96 1.324 10.12 8.45 4.03 2.34 1.34 10.12 6.18 6.93 0.98 1.476 5.89	ect "Capital "Capital Boardings Cos sidy Subsidy Revenue per Boarding Boardings Cos 19.04 \$ 11.63 \$ 8.86 \$ 0.84 3,225 \$ 5,822 \$ 10.05 13.21 4.62 1.97 5,822 \$ \$ 13.46 \$ 4.03 5.47 0.96 5.223 \$	ect "Capital "Capital "Capital Boardings CostVSH Dir sidy Subsidy Websidy Revenue per Boardings CostVSH Cost 19.04 \$ 11.63 \$ 8.86 \$ 0.84 3,225 \$ 115.36 \$ 215.31 1 10.05 13.21 4.62 1.97 5,822 219.71 1 18.06 9.81 5.47 0.96 5,223 219.71 1 13.24 8.45 -0.96 5,223 219.71 1 1 13.46 8.45 -0.96 0.523 213.71 1 1 13.46 8.45 -0.98 -0.96 2.53.47 1 1 10.12 6.19 0.98 3.065 120.80 1 1 10.12 5.34 4.76 5.89 7,533 149.53 1	ect "Capital "Capital Boarding Boardings CostVSH Direct CostVSH CostVSH <t< td=""><td>ect "Capital "Capital Revenue per Boarding CostVSH Direct CostVSM Boarding Boarding sidy Subsidy Subsidy Revenue per Boarding CostVSH CostVSH CostVSH Boarding 19.04 \$ 11.63 \$ 0.84 3,225 \$ 115.35 \$ 66.56 \$ 6.50 \$ 8.49 10.05 13.21 4.62 1.97 5,822 219.71 145.90 8.49 \$ 7.9 16.05 9.81 5.47 0.96 5,223 97.84 60.40 5.79 10.56 10.40 5.79 16.05 9.81 5.43 0.96 5.223 97.84 60.40 5.79 10.56 <</td><td>ect "Capital "Capital Board/VSH Board/VSH Direct "Capital Board/VSH VS sidy Subsidy Revenue per Boarding Boarding CostVSH CostVSH Board/VSH VS 19:04 \$ 11:63 \$ 0.84 3.225 \$ 115.35 \$ 66:55 \$ 6:50 3.66 10:05 13:21 4.62 1.97 5.822 219.71 145.90 8.49 6.06 16:05 9.81 5.47 0.96 5.223 97.84 60.40 5.79 3.66 16:05 9.81 5.47 0.96 5.233 97.84 60.40 5.79 3.66 10:16 8.48 0.308 3.065 7.070 10.44 10.44 10:12 6.18 0.99 3.065 7.091 6.99 7.49 7.49 7.49 7.49 7.49 7.49 7.49 7.49 7.49 7.49 7.49 7.49 7.49 7.49 7.49 7.49</td><td>ect "Capital "Capital Revenue per Boarding Boarding CostVSH Direct CostVSH BoardVSH WSH 9:04 \$ 11:63 \$ 8:86 \$ 0.84 3,225 \$ 115.35 \$ 6:65 \$ 6:50 3.66 9:04 9:04 \$ 11:63 \$ 8:86 \$ 0.84 3,225 \$ 115.35 \$ 6:65.56 \$ 6:50 3.66 9:61 10:04 \$ 11:63 \$ 8:86 \$ 0.84 3,225 \$ 115.35 \$ 6:65.56 \$ 6:50 3.66 9:61 10:05 \$ 13.21 \$ 4.62 \$ 1.97 \$ 5,822 \$ 219.71 145.90 \$ 8.49 \$ 6:06 960 16:05 \$ 9.81 \$ 5.33 \$ 716.71 \$ 145.30 \$ 6:0.40 \$ 5.73 \$ 3:061 960 13:46 \$ 8:46 \$ 0.39 \$ 3:052 \$ 2:0.31 \$ 167.78 \$ 0.40 \$ 5:30 \$ 143.53 13:46 \$ 6:30 \$ 2:08 \$ 3:065 \$ 2:09 \$ 7.43 \$ 6:39 \$ 7.43 10:5<td>ect "Capital "Capital Revenue per Boarding Boarding CostVSH Direct CostVSH BoardVSH WSH 9:04 \$ 11:63 \$ 8:86 \$ 0.84 3,225 \$ 115.35 \$ 6:65 \$ 6:50 3.66 9:04 9:04 \$ 11:63 \$ 8:86 \$ 0.84 3,225 \$ 115.35 \$ 6:65.56 \$ 6:50 3.66 9:61 10:04 \$ 11:63 \$ 8:86 \$ 0.84 3,225 \$ 115.35 \$ 6:65.56 \$ 6:50 3.66 9:61 10:05 \$ 13.21 \$ 4.62 \$ 1.97 \$ 5,822 \$ 219.71 145.90 \$ 8.49 \$ 6:06 960 16:05 \$ 9.81 \$ 5.33 \$ 716.71 \$ 145.30 \$ 6:0.40 \$ 5.73 \$ 3:061 960 13:46 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7.49 7.49 7.49 7.49 7.49 7.49 7.49 7.49 7.49 7.49 7.49	ect "Capital "Capital Revenue per Boarding Boarding CostVSH Direct CostVSH BoardVSH WSH 9:04 \$ 11:63 \$ 8:86 \$ 0.84 3,225 \$ 115.35 \$ 6:65 \$ 6:50 3.66 9:04 9:04 \$ 11:63 \$ 8:86 \$ 0.84 3,225 \$ 115.35 \$ 6:65.56 \$ 6:50 3.66 9:61 10:04 \$ 11:63 \$ 8:86 \$ 0.84 3,225 \$ 115.35 \$ 6:65.56 \$ 6:50 3.66 9:61 10:05 \$ 13.21 \$ 4.62 \$ 1.97 \$ 5,822 \$ 219.71 145.90 \$ 8.49 \$ 6:06 960 16:05 \$ 9.81 \$ 5.33 \$ 716.71 \$ 145.30 \$ 6:0.40 \$ 5.73 \$ 3:061 960 13:46 \$ 8:46 \$ 0.39 \$ 3:052 \$ 2:0.31 \$ 167.78 \$ 0.40 \$ 5:30 \$ 143.53 13:46 \$ 6:30 \$ 2:08 \$ 3:065 \$ 2:09 \$ 7.43 \$ 6:39 \$ 7.43 10:5 <td>ect "Capital "Capital Revenue per Boarding Boarding CostVSH Direct CostVSH BoardVSH WSH 9:04 \$ 11:63 \$ 8:86 \$ 0.84 3,225 \$ 115.35 \$ 6:65 \$ 6:50 3.66 9:04 9:04 \$ 11:63 \$ 8:86 \$ 0.84 3,225 \$ 115.35 \$ 6:65.56 \$ 6:50 3.66 9:61 10:04 \$ 11:63 \$ 8:86 \$ 0.84 3,225 \$ 115.35 \$ 6:65.56 \$ 6:50 3.66 9:61 10:05 \$ 13.21 \$ 4.62 \$ 1.97 \$ 5,822 \$ 219.71 145.90 \$ 8.49 \$ 6:06 960 16:05 \$ 9.81 \$ 5.33 \$ 716.71 \$ 145.30 \$ 6:0.40 \$ 5.73 \$ 3:061 960 13:46 \$ 8:46 \$ 0.39 \$ 3:052 \$ 2:0.31 \$ 167.78 \$ 0.40 \$ 5:30 \$ 143.53 13:46 \$ 6:30 \$ 2:08 \$ 3:065 \$ 2:09 \$ 7.43 \$ 6:39 \$ 7.43 10:5</td>	ect "Capital "Capital Revenue per Boarding Boarding CostVSH Direct CostVSH BoardVSH WSH 9:04 \$ 11:63 \$ 8:86 \$ 0.84 3,225 \$ 115.35 \$ 6:65 \$ 6:50 3.66 9:04 9:04 \$ 11:63 \$ 8:86 \$ 0.84 3,225 \$ 115.35 \$ 6:65.56 \$ 6:50 3.66 9:61 10:04 \$ 11:63 \$ 8:86 \$ 0.84 3,225 \$ 115.35 \$ 6:65.56 \$ 6:50 3.66 9:61 10:05 \$ 13.21 \$ 4.62 \$ 1.97 \$ 5,822 \$ 219.71 145.90 \$ 8.49 \$ 6:06 960 16:05 \$ 9.81 \$ 5.33 \$ 716.71 \$ 145.30 \$ 6:0.40 \$ 5.73 \$ 3:061 960 13:46 \$ 8:46 \$ 0.39 \$ 3:052 \$ 2:0.31 \$ 167.78 \$ 0.40 \$ 5:30 \$ 143.53 13:46 \$ 6:30 \$ 2:08 \$ 3:065 \$ 2:09 \$ 7.43 \$ 6:39 \$ 7.43 10:5

OCTA Operating Statistics By Route for Express Service (Sorted by Subsidy per Boarding) Fiscal Year 2019-20 Through Q1 \leq

(2) C under Zone is Central County, N is North County and S is South County.

	_		_					
	nt	40 FT 32 FT 60 FT	•	•	•	•	•	•
	Bus Count	32 FT	'	•	•	•	•	•
	ш	40 FT	4	e	-	٢	e	1
		нsл	758	493	462	471	475	464
		BoardVSH	6.14	15.00	14.32	13.97	20.00	19.54
		CostVSM	\$ 14.16	11.95	24.18	13.63	13.58	19.92
(6		Direct CostVSH	\$ 99.18 \$	97.18	97.87	98.38	100.23	95.89
Boardinç		CostVSH	4,655 \$ 148.57 \$	140.83	144.50	144.99	157.46	137.14
ubsidy per		Boardings	4,655	7,390	6,612	6,585	9,491	9,065
orted by S		Revenue per Boarding	\$ 0.86	0.93	0.53	0.88	0.93	0.92
ervice (S		"Capital Subsidy" Per Boarding	\$ 7.70	3.64	1.36	1.36	2.83	0.99
onlink S		Indirect Subsidy	9.40	3.41	3.85	3.83	2.80	2.46
or Stati		Direct Subsidy	31.04 \$ 13.94 \$	5.05	5.71	5.67	4.15	3.64
OCTA Operating Statistics By Route for Stationlink Service (Sorted by Subsidy per Boarding) Fiscal Year 2019-20 Through Q1)	Route Zone Submode Farebox Subsidy per Boarding	\$ 31.04	12.10	10.92	10.86	82.6	60'.4
ing Stati		Farebox	3.5%	9.9%	5.2%	8.5%	11.8%	13.1%
OCT A Operating Statistics Fiscal Year 2019-20 Through Q1		Submode	RCL	RCL	RCL	RCL	RCL	RCL
OCT, Fiscal		Zone	υ	ပ	z	c	С	С
\leq	OCTA	Route	463	472	453	480	473	462

 462
 C
 RCL
 13.1%
 7.09
 3

 (1) Total bus count (429) is based on PM weekday equipment requirements.
 (2) C under Zone is Central County, N is North County and S is South County.

Farebox Subsidy par Basidy par Boarding Indirect Subsidy Subsidy Toring Paring Coshidi Dearding Coshidi Paring Coshidi Paring <thcoshidi Paring Coshidi Paring</thcoshidi
Ans Subsidy pre bar Treat barding Capital barding
And Subsidy Free Direct Subsidy Subsi
Zone Farebox Subsidy predicting Banding Topolity Subsidy breading Capital Boarding Revenue predicting Boarding Subsidy breading Revenue predicting Boarding Subsidy breading Revenue predicting Boarding Boarding Boarding Subsidy breading Boarding
Con Subsidy per Boarding Threet Subsidy Threet Subsidy Threet Subsidy Tability Subsidy Subsidy Subsidy Subsidy Subsidy Supsidy Subsidy C 7.15% 3.44 2.49 1.67 0.23 C 7.15% 3.24 1.61 2.69 0.23 C 16.1% 4.61 2.55 1.71 0.23 C 14.8% 5.08 2.82 1.89 0.33 C 2.12% 3.02 1.68 1.14 0.21 N 14.8% 5.08 2.80 1.89 0.33 N 1.12.4% 5.50 3.10 2.06 0.34 N 12.4% 5.51 3.10 2.06 0.34 N 12.4% 5.51 3.30 2.16 0.44 N 12.4% 5.51 3.30 2.16 0.44 N 12.4% 5.51 2.41 1.36 0.36 N 12.4% 5.51 2.41
Com Farebox Subsidy per Boarding Direct Subsidy Indirect Subsidy Subsidy Subsidy Cap Table Subsidy N 196% \$ 3.364 \$ 2.04 \$ 1.37 \$ C 115% -4461 2.56 1.34 2.49 1.24 Boarding C 1418% 5.00 \$ 1.13 1.24 1.13 N 1418% 5.00 1.68 1.13 Boardi N 21.2% 3.31 1.64 1.14 Boardi N 21.2% 3.31 1.64 1.14 N 21.2% 3.31 1.64 1.14 N 13.5% 5.51 3.05 2.06 1.16 N 13.5% 5.51 3.05 2.16 1.14 N 13.5% 5.51 3.05 2.06 1.16 N 11.3% 5.51 3.05 2.06 1.16 N 11.2% 5.51
Zone Farebox Subsidy per Boarding Subsidy subsidy subsidy subsidy subsidy Inter subsidy
Zone Farebox Subsidy per Boarding Sub Sub Boarding Sub Sub Sub Boarding Sub Sub Sub Sub Sub Sub Sub Sub Sub Sub
Zone Farebox Bubard N 17.5% Board C C 21.5% Board C C 21.5% Board C C 16.1% Board N N 12.6% Board N C 21.2% 17.3% N 21.2% 17.3% 17.3% N 21.2% 17.3% 17.3% N 12.48% N 12.8% N 12.48% N 12.8% N 12.8% 11.6% 11.6% N 13.5% 11.6% 11.6% N 13.6% 11.6% 11.6% N 13.6% 11.16% 11.14% N 14.8% 11.14% 11.14% N 14.6% 11.14% 11.14% N 11.14% 11.14% 11.14% N 11.14% 11.14% 11.14% N 11.14% 1
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OCTA Operating Statistics By Route for Local and Community Services (Sorted by Boardings)

\leq	OCT, Fiscal	A Opera Year 201	OCT A Operating Statistics By Route Fiscal Year 2019-20 Through Q1	stics By h Q1		or Expre	ss Service	for Express Service (Sorted by Boardings)	Boarding	s)						
OCTA														ы	Bus Count	
Route	Zone	Farebox	Subsidy per Boarding	Direct Subsidy	Indirect Subsidy	"Capital Subsidy" Per	Revenue per Boarding	Boardings	CostVSH	Direct CostVSH	CostVSM	BoardVSH	HSV	40 FT 32 FT 60 FT	32 FT (6	00 FT
						Boarding										
794	ပ	29.5%	\$	18.84 \$ 8.74 \$	\$ 5.34 \$	\$ 4.76	\$ 5.89	7,533	7,533 \$ 149.53	\$ 96.25	\$ 5.59	7.49	1,006	4		
701	ပ	9.6%	25.94	13.46	8.45	4.03	2.34	6,670	253.17	167.78	10.58	10.44	639	3	-	
721	z	5.4%	38.88	21.05	13.21	4.62	1.97	5,822	219.71	145.90	8.49	6.06	960	3	•	
211	ပ	3.6%	31.33	16.05	9.81	5.47	96.0	5,223	97.84	60.40	5.79	3.65	1,431	•	4	
213	z	2.7%	39.53	19.04	11.63	8.86	0.84	3,225	115.35	66.55	6.50	3.66	881	-	4	
206	ပ	5.7%	23.29	10.12	6.18	66.9	0.98	3,065	120.80	70.91	6.34	66.9	438	•	3	
(1) Total b	us count	(429) is bas	(1) Total bus count (429) is based on PM weekday equipment requirements.	day equipm	ent requirem	ents.										
(2) C unde	r Zone is	Central Cou	(2) C under Zone is Central County, N is North County and S is South County	County and	S is South (County.										

OCT A Operating Statistics By Route for Stationlink Service (Sorted by Boardings) Fiscal Year 2019-20 Through Q1

														ВU	Bus Count	
Route		Zone Farebox	Subsidy per Boarding	Direct Subsidy	Indirect Subsidy	"Capital Subsidy" Per Boarding	Revenue per Boarding	r Boardings	CostVSH	Direct CostVSH	CostVSM	BoardVSH	HSV	40 FT 32 FT 60 FT	32 FT	50 FT
473	ပ	11.8%	\$	\$ 4.15	9.78 \$ 4.15 \$ 2.80	\$ 2.83	\$ 0.93	3 9,491	\$ 157.46 \$	\$ 100.23	\$ 13.58	20.00	475	e		
462	ပ	13.1%	7.09	3.64	2.46	66.0	0.92	2 9,065	137.14	95.89	19.92	19.54	464	-		
472	ပ	9.9%	12.10	5.05	3.41	3.64	0.93	3 7,390	140.83	97.18	11.95	15.00	493	с		
453	z	5.2%	10.92	5.71	3.85	1.36	0.53	3 6,612	144.50	97.87	24.18	14.32	462	1		
480	С	8.5%	10.86	5.67	3.83	1.36	0.88	8 6,585	144.99	98.38	13.63	13.97	471	1		
463	ပ	3.5%	31.04	13.94	9.40	7.70	0.86	6 4,655	148.57	99.18	14.16	6.14	758	4		
(1) Total b	ous count	t (429) is bat	1) Total bus count (429) is based on PM weekday equipment requirements.	day equipm	nent requirem	nents.										

(2) C under Zone is Central County, N is North County and S is South County.

Route Reference Table

Route	Route Description	Main Street	Route Category
1	Long Beach - San Clemente	via Pacific Coast Hwy	LOCAL
21	Buena Park - Sunset Beach	via Valley View St/ Bolsa Chica Rd	LOCAL
24	Buena Park - Orange	via Malvern Ave/ Chapman Ave/ Tustin Ave	LOCAL
25	Fullerton - Huntington Beach	via Knott Ave/ Goldenwest St	LOCAL
26	Fullerton - Placentia	via Commonwealth Ave/ Yorba Linda Blvd	LOCAL
29	La Habra - Huntington Beach	via Beach Blvd	LOCAL
30	Cerritos - Anaheim	via Orangethorpe Ave	LOCAL
33	Fullerton - Huntington Beach	via Magnolia St	LOCAL
35	Fullerton - Costa Mesa	via Brookhurst St	LOCAL
37	La Habra - Fountain Valley	via Euclid St	LOCAL
38	Lakewood - Anaheim Hills	via Del Amo Blvd/ La Palma Ave	LOCAL
42	Seal Beach - Orange	via Seal Beach Blvd/ Los Alamitos Blvd/ Lincoln Ave	LOCAL
43	Fullerton - Costa Mesa	via Harbor Blvd	LOCAL
46	Long Beach - Orange	via Ball Road/ Taft Ave	LOCAL
47	Fullerton - Balboa	via Anaheim Blvd/ Fairview St	LOCAL
50	Long Beach - Orange	via Katella Ave	LOCAL
53/53X	Anaheim - Irvine	via Main St	LOCAL
54	Garden Grove - Orange	via Chapman Ave	LOCAL
55	Santa Ana - Newport Beach	via Standard Ave/ Bristol St/ Fairview St/ 17th St	LOCAL
56	Garden Grove - Orange	via Garden Grove Blvd	LOCAL
57/57X	Brea - Newport Beach	via State College Blvd/ Bristol St	LOCAL
59	Anaheim - Irvine	via State Conege Brod/ Blistol St via Kraemer Blvd/ Glassell St/ Grand Ave/ Von Karman Ave	LOCAL
60	Long Beach - Tustin	via Westminster Ave/ 17th St	LOCAL
64/64X	Huntington Beach - Tustin	via Bolsa Ave/ 1st St	LOCAL
66 70	Huntington Beach - Irvine	via McFadden Ave/ Walnut Ave	LOCAL
70	Sunset Beach - Tustin	via Edinger Ave	
71	Yorba Linda - Newport Beach	via Tustin Ave/ Red Hill Ave/ Newport Blvd	LOCAL
72	Sunset Beach - Tustin	via Warner Ave	LOCAL
76	Huntington Beach - John Wayne Airport	via Talbert Ave/ MacArthur Blvd	LOCAL
79	Tustin - Newport Beach	via Bryan Ave/ Culver Dr/ University Ave	LOCAL
82	Foothill Ranch - Rancho Santa Margarita	via Portola Pkwy/ Santa Margarita Pkwy	LOCAL
83	Anaheim - Laguna Hills	via 5 Fwy/ Main St	LOCAL
85	Mission Viejo - Laguna Niguel	via Marguerite Pkwy/ Crown Valley Pkwy	LOCAL
86	Costa Mesa - Mission Viejo	via Alton Pkwy/ Jeronimo Rd	LOCAL
87	Rancho Santa Margarita - Laguna Niguel	via Alicia Pkwy	LOCAL
89	Mission Viejo - Laguna Beach	via El Toro Rd/ Laguna Canyon Rd	LOCAL
90	Tustin - Dana Point	via Irvine Center Dr/ Moulton Pkwy/ Golden Lantern St	LOCAL
91	Laguna Hills - San Clemente	via Paseo de Valencia/ Camino Capistrano/ Del Obispo St	LOCAL
129	La Habra - Anaheim	via La Habra Blvd/ Brea Blvd/ Birch St/ Kraemer Blvd	COMMUNITY
143	La Habra - Brea	via Whittier Blvd/ Harbor Blvd/ Brea Blvd/ Birch St	COMMUNITY
150	Santa Ana - Costa Mesa	via Fairview St/ Flower St	COMMUNITY
153	Brea - Anaheim	via Placentia Ave	COMMUNITY
167	Orange - Irvine	via Irvine Ave/ Hewes St/ Jeffrey Rd	COMMUNITY
177	Foothill Ranch - Laguna Hills	via Lake Forest Dr/ Muirlands Blvd/ Los Alisos Blvd	COMMUNITY
178	Huntington Beach - Irvine	via Adams Ave/ Birch St/ Campus Dr	COMMUNITY
206	Santa Ana - Lake Forest Express	via 5 Fwy	EXPRESS BUS
211	Huntington Beach - Irvine Express	via 405 Fwy	EXPRESS BUS
213	Brea - Irvine Express	via 55 Fwy	EXPRESS BUS
453	Orange Transportation Center - St. Joseph's Hospital	via Chapman Ave/ Main St/ La Veta Ave	STATIONLINK
462	Santa Ana Regional transportation Center - Civic Center	via Santa Ana Blvd/ Civic Center Dr	STATIONLINK
463	Santa Ana Regional transportation Center - Hutton Centre	via Grand Ave	STATIONLINK
472	Tustin Metrolink Station - Irvine Business Complex	via Edinger Ave/ Red Hill Ave/ Campus Dr/ Jamboree Rd	STATIONLINK
473	Tustin Metrolink Station - U.C.I.	via Edinger Ave/ Harvard Ave	STATIONLINK
480	Irvine Metrolink Station - Lake Forest	via Alton Pkwy/ Bake Pkwy/ Lake Forest Dr	STATIONLINK
529	Fullerton - Huntington Beach	via Beach Blvd	BRAVO
543	Fullerton Transportation Center - Santa Ana	via Harbor Blvd	BRAVO
560	Santa Ana - Long Beach	via 17th St/ Wesminster Blvd	BRAVO
701	Huntington Beach - Los Angeles Express	via 405 Fwy/ 605 Fwy/ 105 Fwy/ 110 Fwy	EXPRESS BUS
701	Fullerton - Los Angeles Express	via 110 Fwy/ 91 Fwy	EXPRESS BUS
111			LAENEDD BUD

OC Bus 360° Plan: Performance to Date

To address declining bus ridership, the OCTA Board of Directors (Board) endorsed a comprehensive action plan known as OC Bus 360° plan in 2015. This effort included a comprehensive review of current and former rider perceptions, a peer review panel that reviewed OCTA's performance and plans, new branding and marketing tactics tied to rider needs, upgraded bus routes and services to better match demand and capacity, technology solutions to improve passenger experience, and pricing, as well as other revenue changes to stimulate ridership and provide new funding.

Extensive work was invested by OCTA divisions to implement the OC Bus 360° plan. These efforts included:

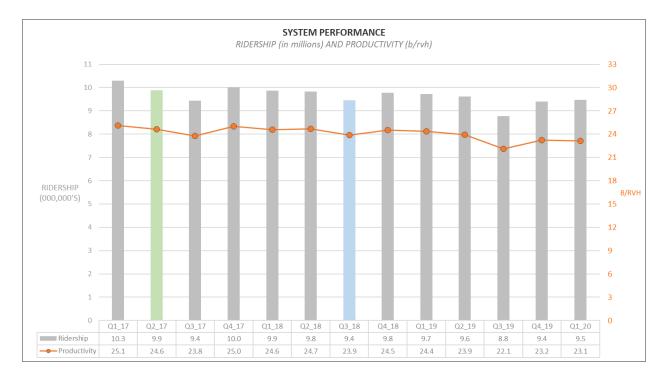
- Implementation of new and faster bus routes;
- Redeployment of services in June 2016, October 2016, October 2017, and February 2018, to improve efficiencies and build ridership;
- Competitively-awarded grants to local agencies through Project V for transit services tailored to community needs;
- Implementation of a promotional fare and college pass program;
- Rollout of new technologies, such as mobile ticketing, real-time bus arrival information, a microtransit service; and
- Extensive marketing, public outreach, and promotional campaigns.

Impact of the Service Changes

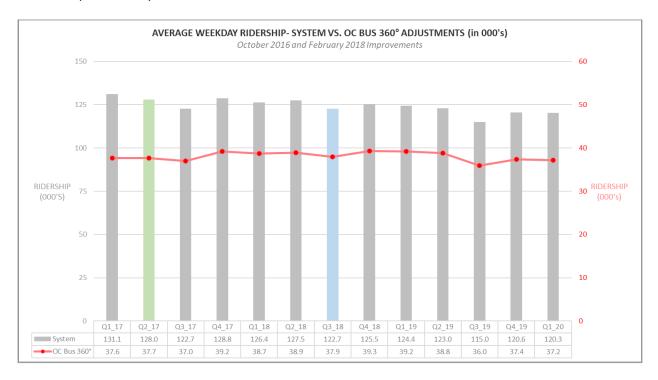
Of the series of approved bus service changes under the OC Bus 360° plan, the changes implemented in October 2016 and February 2018 were the most significant and are tracked for overall OC Bus 360° plan impact. Provided below is a series of charts that show overall system performance over the last 13 quarters and the impact of these route adjustments (*October 2016 marked by green bar; February 2018 marked by blue bar*). In this review, performance is measured by change in average weekday boardings for routes that were improved and average B/RVH for routes that were reduced. This analysis is necessary and on-going to gauge the effectiveness of the recommended changes and the overall OC Bus 360° plan. The trend of overall system ridership and productivity is provided on the following chart.

Through the first quarter of FY 2019-20:

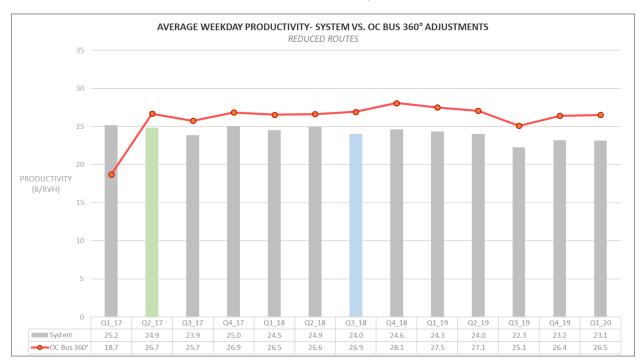
- Ridership was 0.7 percent higher than the previous quarter, but 2.6 percent lower than the same quarter last year.
- Productivity through the first quarter fell by one third of a percent from last quarter and dropped by 5.0 percent from the same quarter last year.



The impacts of the adjustments implemented under the OC Bus 360° plan are consistent with the systemwide trend. The following chart compares the system trend against the group of routes improved under the OC Bus 360° plan. The average weekday ridership systemwide and for the improved routes was steady compared to last quarter but dropped by 3.3 percent and 5.1 percent, respectively compared to the same quarter last year.



Improved system and route productivity are the goals for services that are *reduced* or *eliminated* under the OC Bus 360° plan – making low performing routes more productive.



The following chart compares the system productivity trend against the productivity of the group of routes that were reduced/eliminated in October 2016 and February 2018.

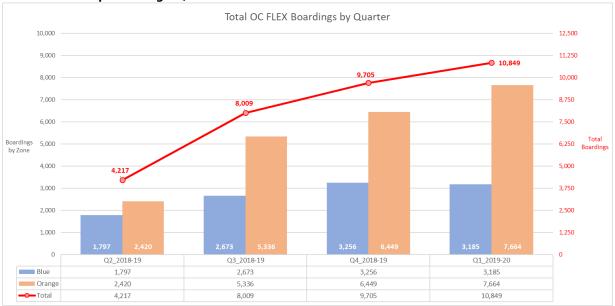
During the first quarter of FY 2019-20, productivity systemwide and for the collective reductions was steady compared to last quarter, but fell by 5 percent and 3.6 percent, respectively compared to the same quarter last year. Overall, the productivity for the routes reduced under OC Bus 360° remain above the system average by 14.7 percent.

Other OC Bus 360° Initiatives

OC Flex Pilot Program

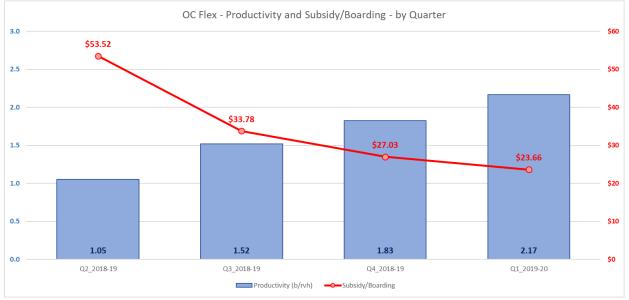
OC Flex began service October 2018 in two zones under a one-year pilot program. Upon approval of the pilot program, the Board directed staff to provide updates on the performance metrics as part of quarterly Bus Operations Performance Measurements Report.

Through the first quarter of FY 2019-20, ridership continued to increase month-over-month. Three of the five performance metrics, shared trips, connecting trips and customer satisfaction, have reached the respective targets. The remaining two measures, productivity and subsidy per boarding, are trending below their respective targets but the trends remain favorable (see charts below). The OC Flex team continues to monitor and adjust the service as needed to meet the established performance targets while maintaining service quality. Though the pilot evaluation period was scheduled to end in October 2019, OC Flex service will continue to operate while staff prepares recommendations to be presented to the Board for consideration in January 2020. Extending the pilot allows for service continuity, the testing of performance improvement strategies, the tracking of seasonal variations, and time for the procurement of a new service contract beyond October 2020 as approved.

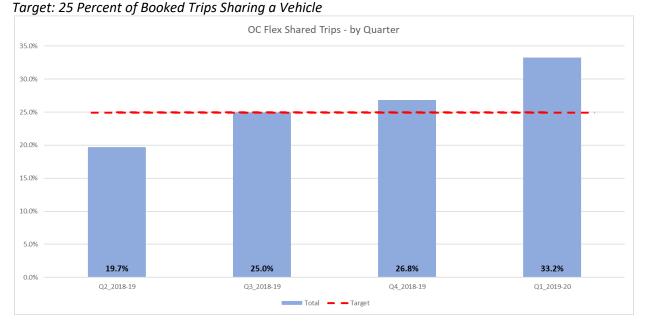


OC Flex Ridership – Through Q1-FY 2019-20

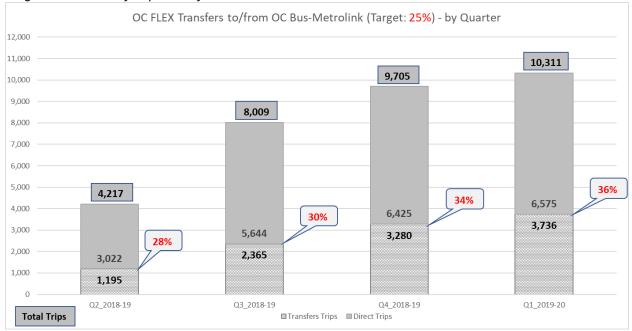
OC Flex Productivity (B/RVH) and Direct Subsidy per Boarding – Through Q1-FY 2019-20 Targets: Productivity – Six B/RVH; Direct Subsidy per Boarding - \$9 per Boarding



OC Flex Shared Trips – Through Q1-FY 2019-20



OC Flex Connecting Trips (Transfers) – Through Q1-FY 2019-20



Target: 25 Percent of Trips Transfer to OC Bus or Metrolink Service

College Pass Program

The College Pass Program started in August 2017 with students from Santa Ana College and continuing education students from Santa Ana College and Santiago Canyon College. In August 2018, the program expanded to include all students from Santiago Canyon College.

In Fall 2019, both Goldenwest and Fullerton Colleges joined the College Pass Program. Since starting on August 26, 2019 to the end of the September 2019 reporting period, Fullerton College reported 33,834 boardings and Goldenwest College reported 16,894 boardings. Both colleges saw rapid adoption by students, with the number of unique student riders at Fullerton College increasing by 64 percent (from 1,163 in August 2019 to 1,913 by the end of September 2019) and number of unique student riders at Goldenwest College increasing by 88 percent (from 415 in August 2019 to 782 by the end of September 2019).

As of September 30, 2019, a little over two years since starting, the overall College Pass Program has reported 2.48 million boardings with 16,480 unique students among participating colleges since August 2017. Compared to the same period in 2018 (and including the newly added colleges), ridership in the third quarter increased by 11.68 percent, from 186,882 boardings to 208,706 boardings.

The College Pass Program has been very successful and popular among students and colleges. OCTA continues to work with other interested colleges to expand the College Pass Program with college-provided funding or student fees and available Low Carbon Transit Operations Program and Mobile Source Air Pollution Reduction grant funds.

BUS OPERATIONS PERFORMANCE MEASUREMENTS REPORT

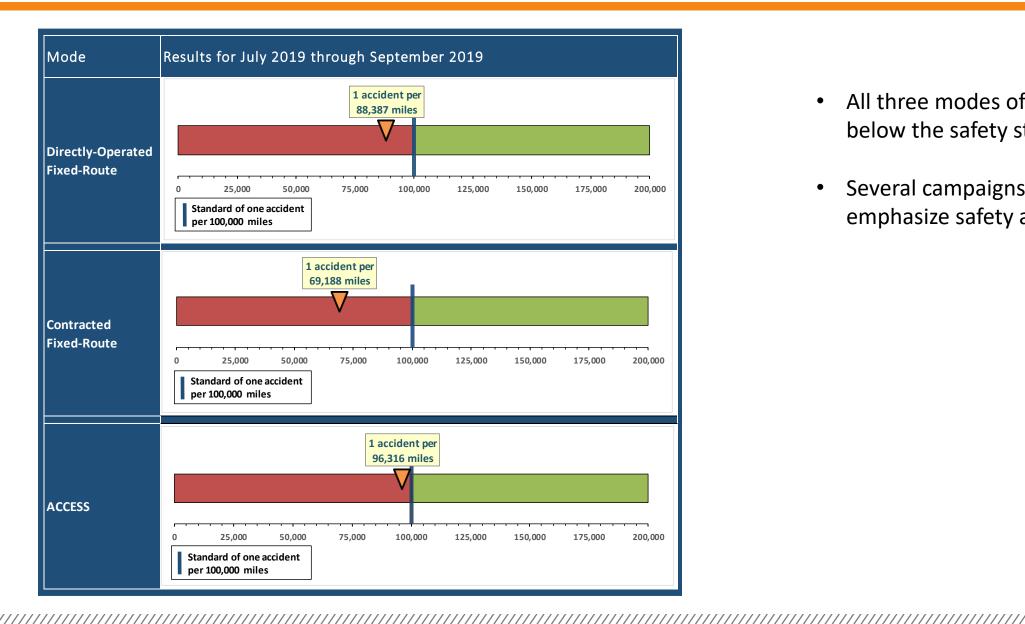
First Quarter Fiscal Year 2019-20



Performance Measurements

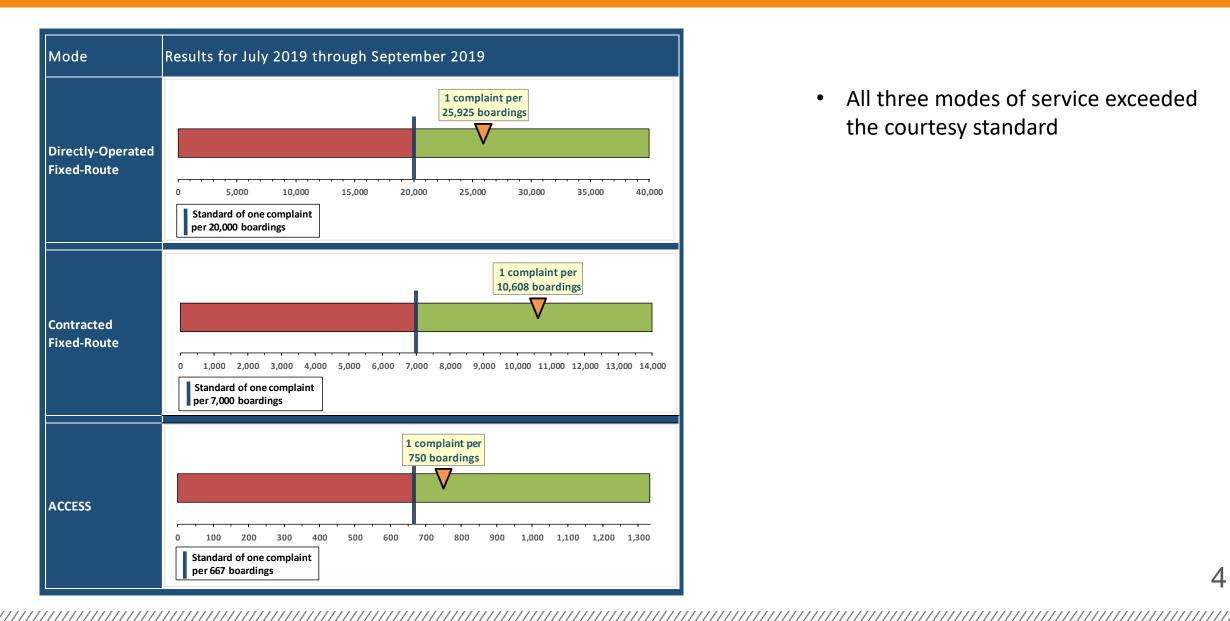
- Safety Preventable Vehicle Accidents
- Courtesy Customer Complaints
- Reliability On-Time Performance (OTP) and Miles Between Road Calls (MBRC)
- Ridership and Productivity
- Farebox Recovery Ratio (FRR)
- Operating Cost per Revenue Vehicle Hour (RVH)
- Performance by Route





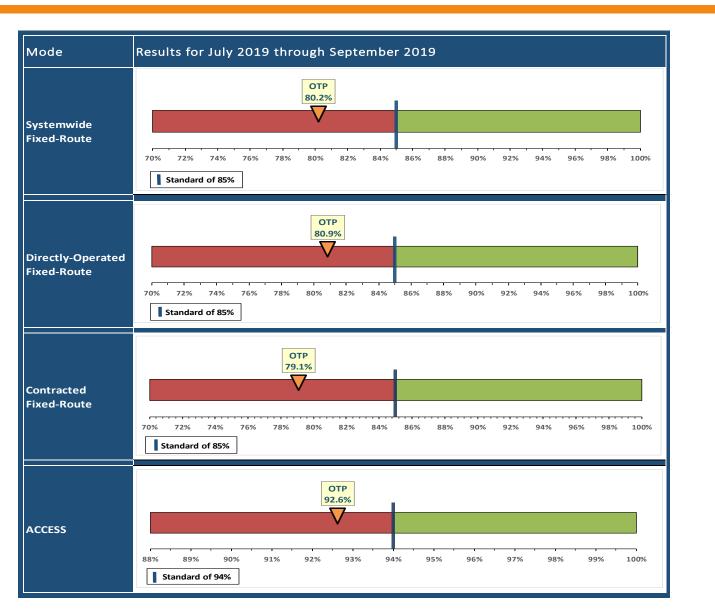
- All three modes of service were • below the safety standard
- Several campaigns are in place to ٠ emphasize safety awareness

Courtesy



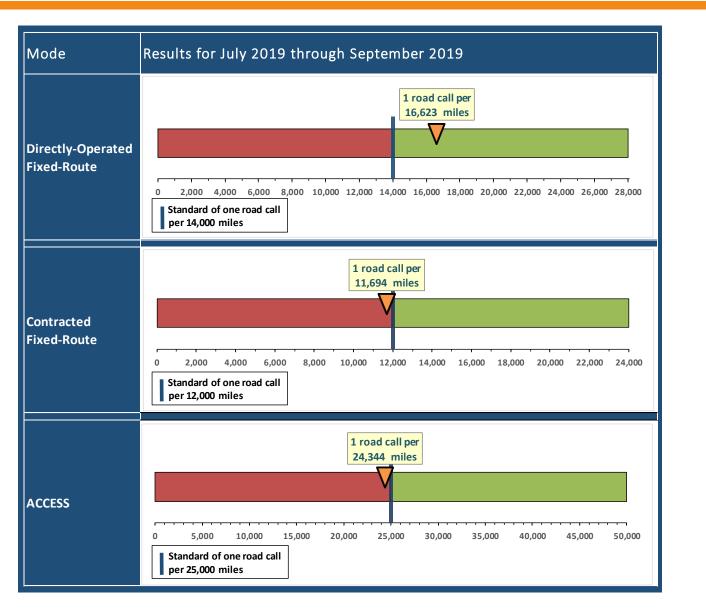
All three modes of service exceeded • the courtesy standard

Reliability-OTP



- Systemwide fixed-route service was
 4.8 percent below the standard
- Directly-operated fixed-route (DOFR) service was 4.1 percent below the standard
- Contracted fixed-route (CFR) service was 5.9 percent below the standard
- OC ACCESS service was 1.4 percent below the standard
- Contributing factors include school traffic, increase in road improvement projects, Coach Operator shortage (DOFR and OC ACCESS)

Reliability-MBRC

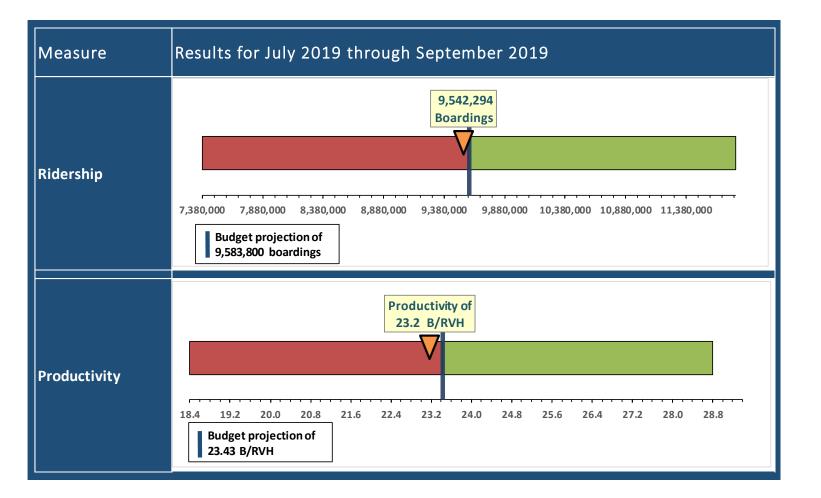


• DOFR exceeded the MBRC standard

- CFR and OC ACCESS did not meet the standard
- Staff continue to work with contractors on continuous improvement

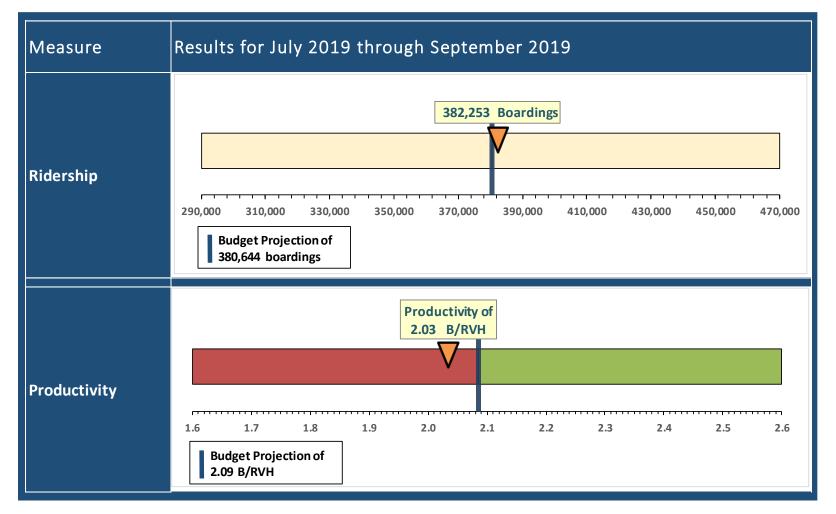
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Fixed-Route-Ridership and Productivity



 Fixed-route service was below the budget projection for ridership and productivity

OC ACCESS-Ridership and Productivity



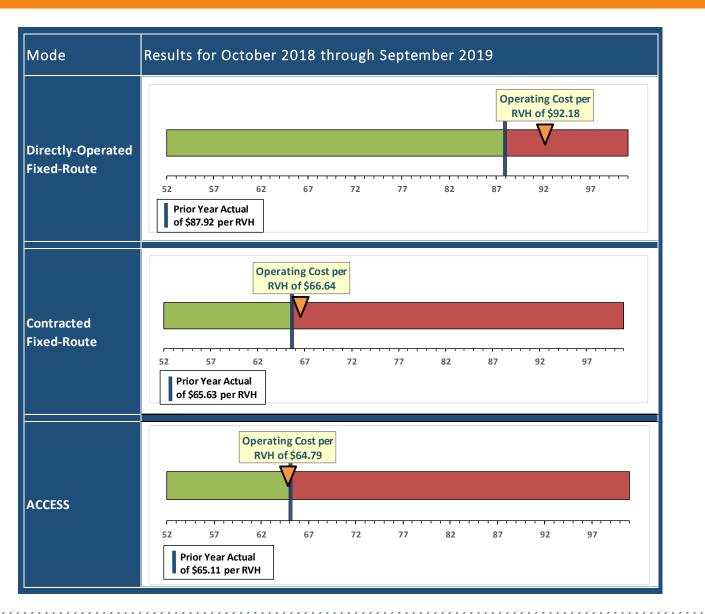
- OC ACCESS service exceeded budget projection for ridership.
- Productivity is 2.9 percent below the budgeted projections.

Farebox Recovery Ratio

Mode	Results	for Oct	ober 201	8 throug	sh Septer	nber 201	19		
Systemwide		5% imum Requir for TDA FRR	10% ement of	D FRR of 14.6	5% TDA FRI 20%	R of 23.0%	30%	35%	40%

- NTD FRR was 5.4 percent under the standard, and
- TDA FRR exceeded the standard by 3 percent

Cost per RVH



- DOFR operating cost increased
 4.8 percent from the prior year actuals
- CFR operating cost increased 1.5 percent from the prior year actuals
- OC ACCESS operating cost decreased 0.5 percent from the prior year actuals

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Performance: Local Routes

Route	Farebox	Subsidy per Boarding	Boardings	BoardVSH	VSH	40 FT	32 FT	60 FT	Route	Farebox		lbsidy per arding	Boardings	BoardVSH	VSH	40 FT	32 FT	60 FT
021	7.1%	\$ 12.21	15,893	8.14	1,952	-	2	-	029	14.8%	\$	5.08	446,735	25.30	17,659	1	-	12
529	6.7%	11.75	83,195	12.81	6,494	10	-	-	025	16.1%	\$	5.07	94,775	17.04	5,563	5	-	-
001	6.9%	11.08	143,152	12.55	11,410	9	-	-	026	14.8%	\$	5.04	107,688	16.84	6,395	4	-	-
085	9.5%	10.16	18,749	9.22	2,033	2	-	-	543	14.6%	\$	4.87	223,172	26.72	8,352	10	-	-
076	8.3%	9.74	22,577	13.64	1,655	2	-	-	071	15.9%	\$	4.87	180,981	17.95	10,082	8	-	-
087	8.9%	9.48	17,617	10.16	1,733	-	2	-	057	16.1%	\$	4.61	503,749	31.84	15,824	4	-	11
083	9.8%	7.94	150,226	17.35	8,659	10	-	-	047	17.5%	\$	4.44	537,532	27.33	19,667	17	-	-
024	12.0%	7.27	29,951	12.97	2,309	3	-	-	070	18.2%	\$	4.29	226,777	21.29	10,653	15	-	-
091	14.5%	6.83	98,653	13.32	7,404	8	-	-	035	17.3%	\$	4.14	202,737	22.06	9,192	13	-	-
086	12.2%	6.66	37,263	13.58	2,745	3	-	-	060	16.4%	\$	4.11	478,217	30.05	15,912	14	-	-
082	15.9%	6.58	16,458	16.11	1,022	2	-	-	053	17.3%	\$	4.06	346,458	31.79	10,898	11	-	-
560	11.6%	6.51	184,337	21.37	8,627	13	-	-	030	18.1%	\$	3.90	172,817	21.34	8,098	7	-	-
079	12.2%	6.40	99,816	14.01	7,126	6	-	-	053X	18.5%	\$	3.81	170,392	29.35	5,806	6	-	-
056	11.4%	6.26	104,525	20.75	5,037	5	-	-	038	19.4%	\$	3.72	257,121	23.17	11,095	12	-	-
090	14.9%	6.15	80,024	14.83	5,396	5	-	-	033	17.4%	\$	3.69	99,036	22.44	4,413	3	-	-
037	12.8%	5.79	267,499	23.62	11,324	13	-	-	043	19.6%	\$	3.64	541,891	32.38	16,736	14	-	-
072	13.5%	5.65	126,063	22.09	5,708	6	-	-	046	20.2%	\$	3.63	159,191	22.64	7,031	6	-	-
059	14.8%	5.63	137,058	16.55	8,283	11	-	-	057X	20.1%	\$	3.62	266,645	30.94	8,619	2	-	6
055	14.8%	5.58	329,218	22.45	14,664	14	-	-	066	21.5%	\$	3.29	516,134	34.46	14,978	12	-	- 1
054	13.5%	5.51	304,439	23.64	12,876	14	-	-	042	21.2%	\$	3.13	379,456	26.67	14,230	15	-	-
050	12.4%	5.50	321,436	23.29	13,800	10	-	1	064	21.2%	\$	3.02	386,898	39.19	9,872	9	-	-
089	16.8%	5.11	90,813	16.71	5,435	5	-	-	064X	22.3%	\$	2.78	155,524	37.41	4,157	3	-]

VSH - vehicle service hour

BoardVSH - boardings per vehicle service hour

Performance: Community Routes

Route	Farebox	Subsidy per Boarding	Boardings	BoardVSH	VSH	40 FT	32 FT	60 FT
153	8.7%	\$ 9.71	27,777	9.31	2,984	2	-	-
178	9.2%	9.33	21,109	9.92	2,127	2	-	-
177	12.4%	7.49	21,752	12.02	1,809	-	2	-
167	12.2%	7.01	46,789	13.40	3,492	4	-	-
129	14.4%	6.03	50,036	14.19	3,527	2	-	-
143	13.8%	5.93	46,718	15.04	3,107	3	-	-
150	16.2%	5.70	42,140	16.84	2,502	4	-	-

Performance: Express/Stationlink Routes

Route	Farebox	Subsidy per Boarding	Boardings	BoardVSH	VSH	40 FT	32 FT	60 FT
213	2.7%	\$ 39.53	3,225	3.66	881	-	4	-
721	5.4%	38.88	5,822	6.06	960	3	-	-
211	3.6%	31.33	5,223	3.65	1,431	-	4	-
701	9.6%	25.94	6,670	10.44	639	3	-	-
206	5.7%	23.29	3,065	6.99	438	-	3	-
794	29.5%	18.84	7,533	7.49	1,006	4	-	-

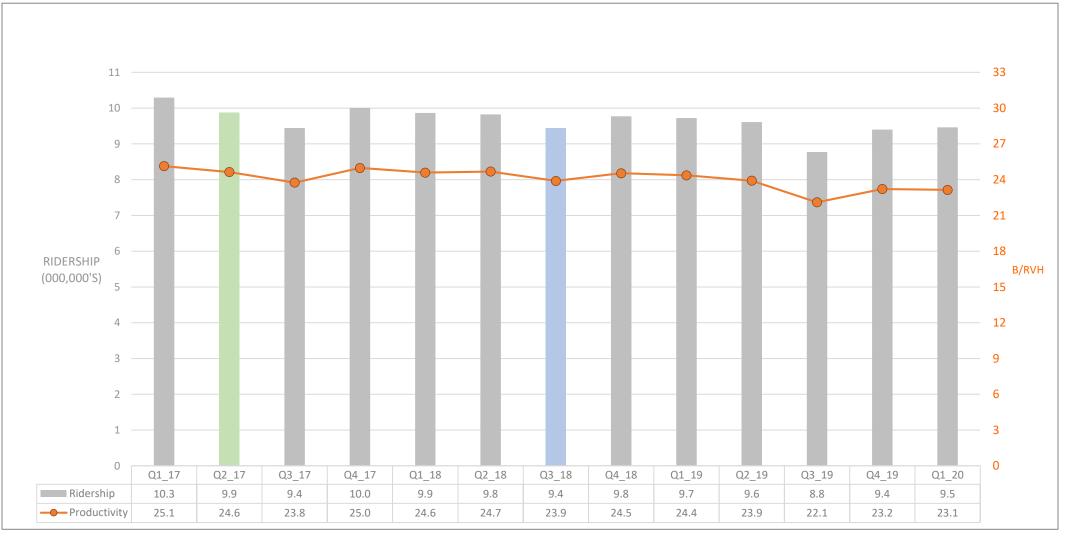
Route	Farebox	Subsidy per Boarding	Boardings	BoardVSH	VSH	40 FT	32 FT	60 FT
463	3.5%	\$ 31.04	4,655	6.14	758	4	-	-
472	9.9%	12.10	7,390	15.00	493	3	-	-
453	5.2%	10.92	6,612	14.32	462	1	-	-
480	8.5%	10.86	6,585	13.97	471	1	-	-
473	11.8%	9.78	9,491	20.00	475	3	-	-
462	13.1%	7.09	9,065	19.54	464	1	-	-

BUS OPERATIONS PERFORMANCE AND OC BUS 360°



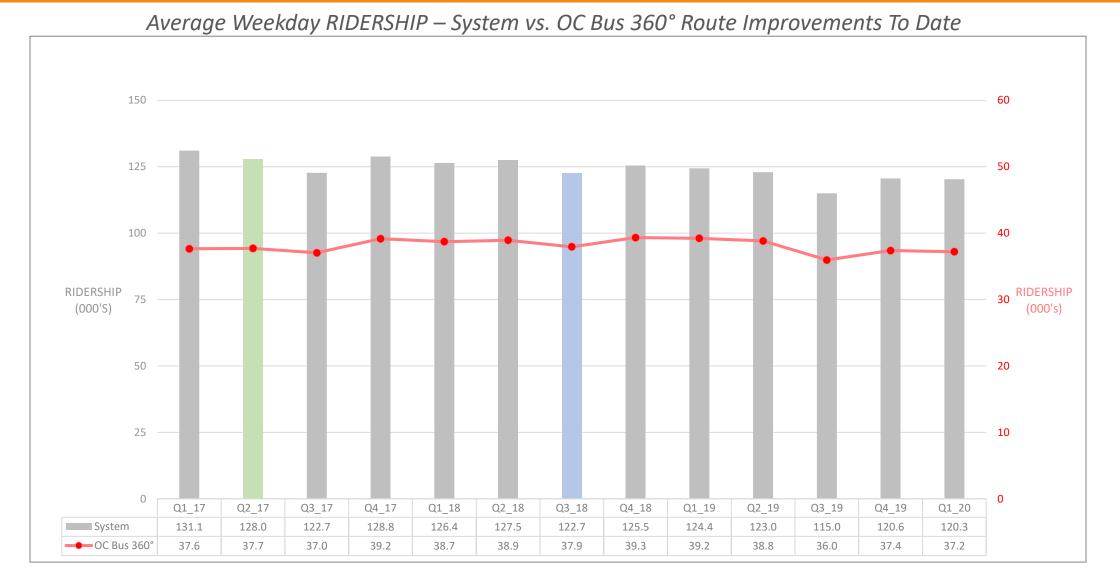
Performance: System-wide Trends

RIDERSHIP and PRODUCTIVITY: 13-Quarter Trend



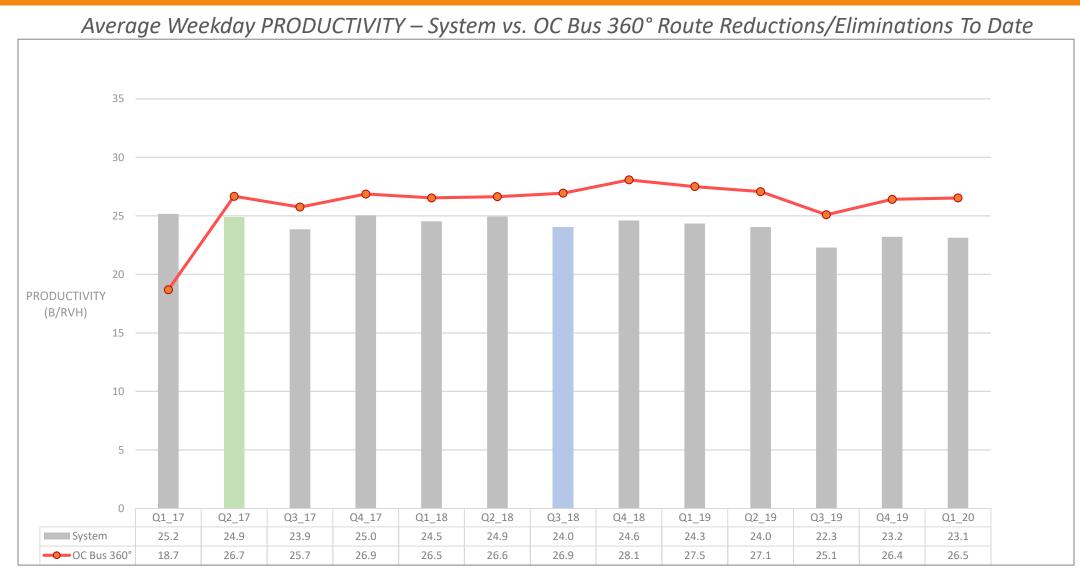
B/RVH - boardings per revenue vehicle hour

Performance: OC Bus 360° Improvements



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Performance: OC Bus 360° Reductions



B/RVH - boardings per revenue vehicle hour

Future Reports

March 12, 2020, Transit Committee

Second Quarter Bus Operations Performance Measurements Report