

Bus Operations Performance Measurements Report



Third Quarter
Fiscal Year 2018-19

About This Report

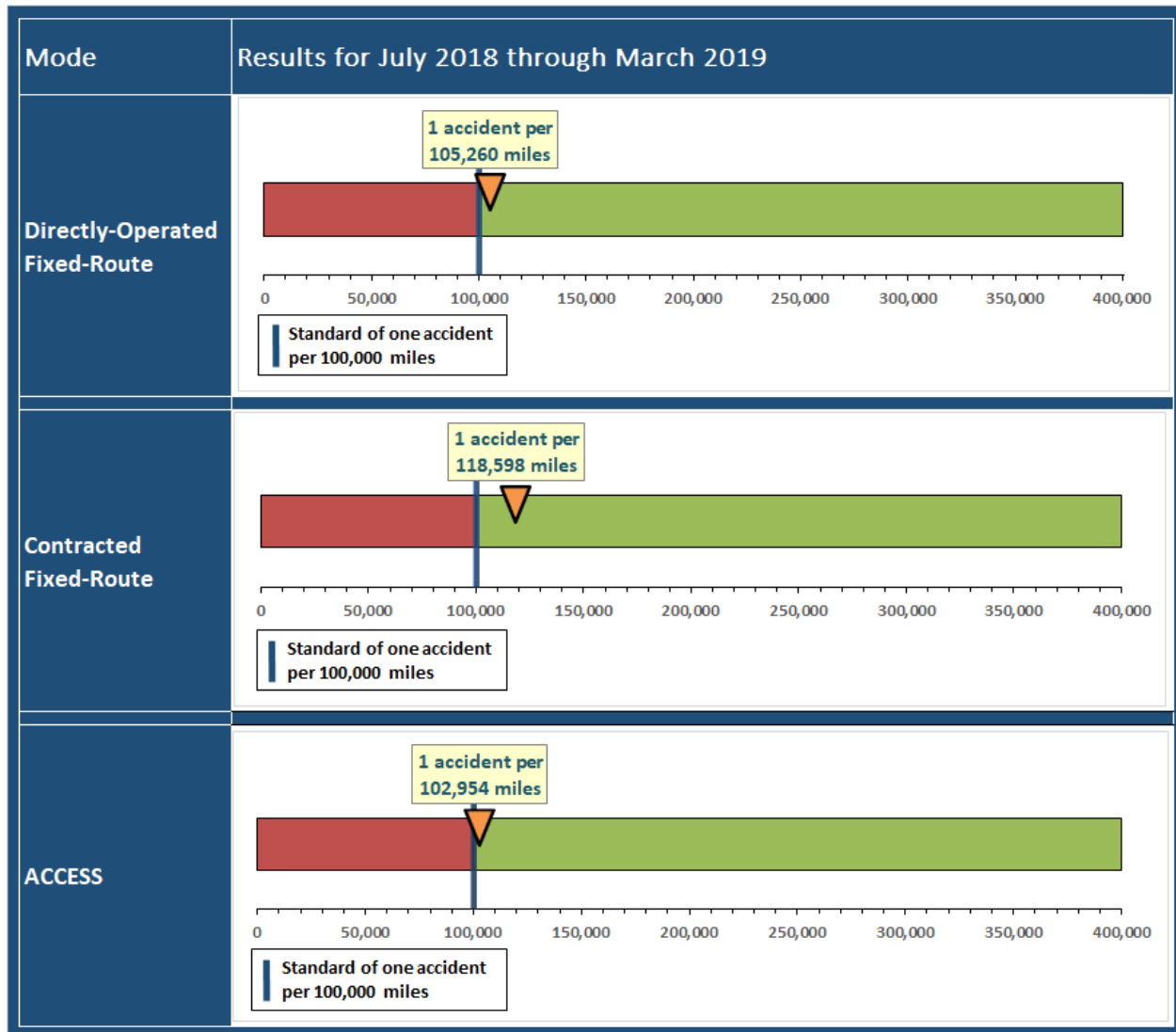
The Orange County Transportation Authority (OCTA) operates a countywide network of over 60 routes including local, community, rail connector, and express bus routes serving over 5,000 bus stops known as OC Bus. OCTA also operates paratransit service (OC ACCESS), a shared-ride program available for people 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 three 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 the number of 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.

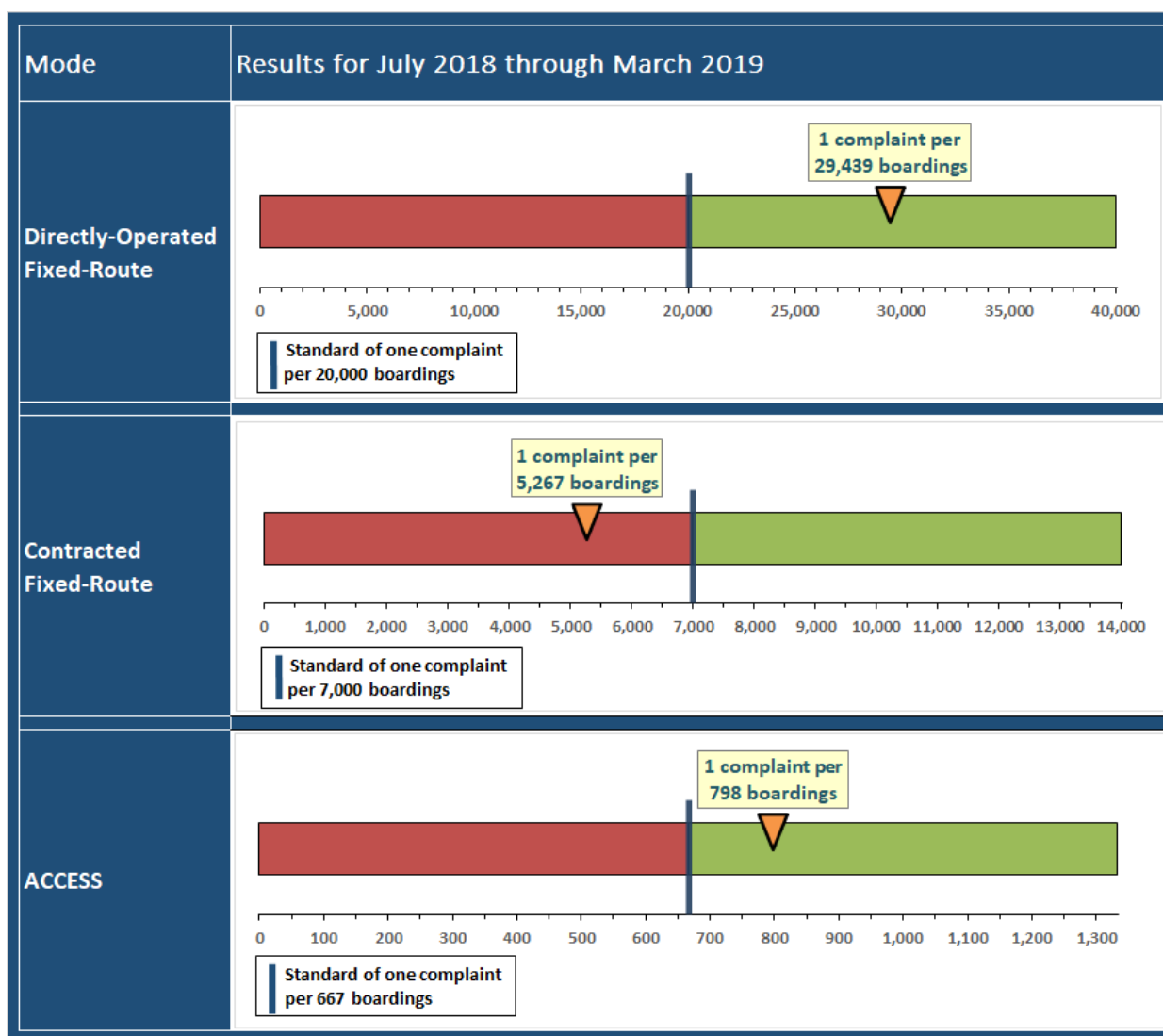
All modes of service exceeded the safety standard through the third quarter of fiscal year (FY) 2018-19 with less than one accident per 100,000 miles.



Courtesy: Customer Complaints

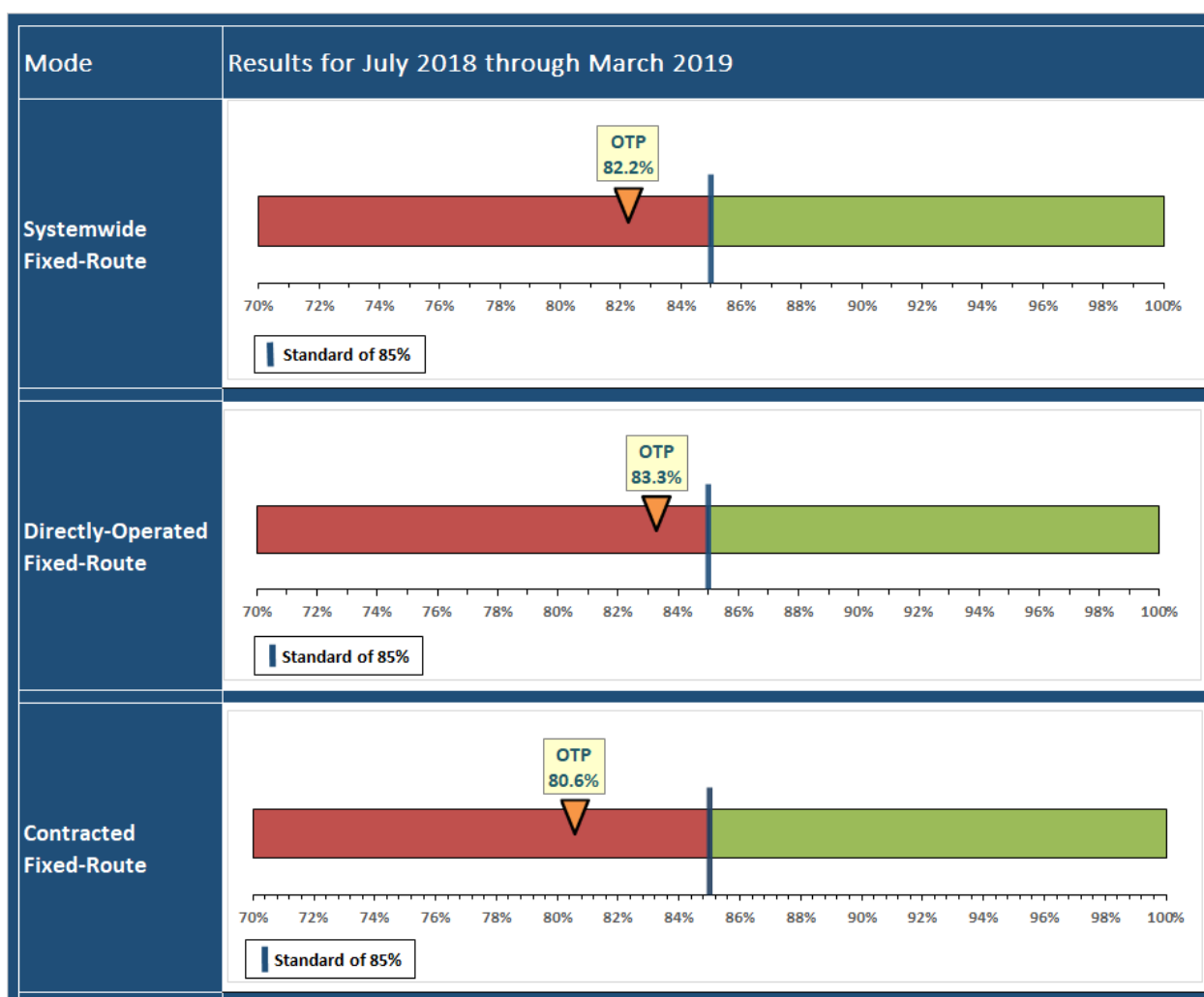
OCTA strives to achieve the highest level of customer satisfaction in delivery of the OC Bus services. The performance standard for customer satisfaction is courtesy as measured by the number of valid complaints received. Customer complaints are counts of incidents when a rider reports dissatisfaction 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 third quarter of FY 2018-19, DOFR OC Bus service and OC ACCESS service exceeded the courtesy standard with less than one complaint per 20,000, and 667 boardings, respectively. The number of valid complaints received for CFR OC Bus service exceeded the one complaint allowed per 7,000 boardings. The rise in valid complaints is directly attributed to the loss of service (driver shortage) related to the implementation of the February 2019 Service Bid.



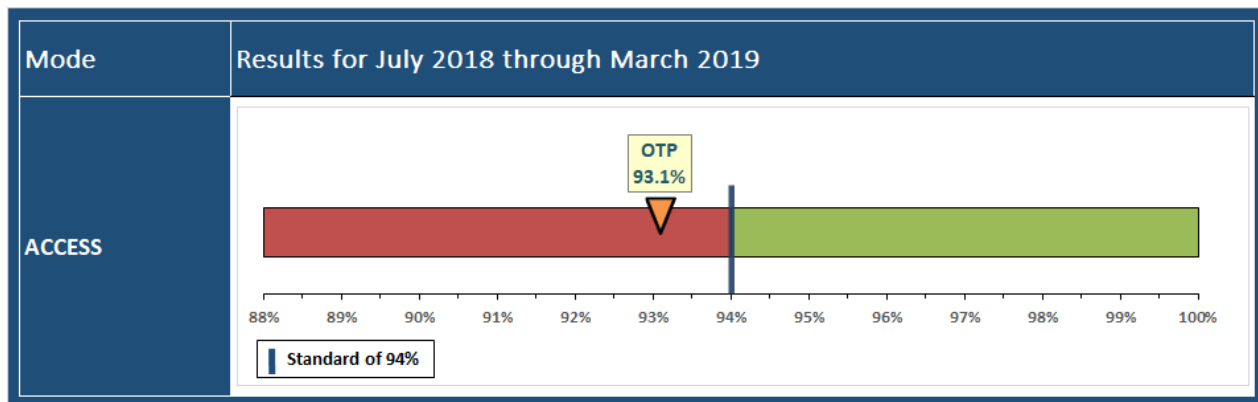
Reliability: On-Time Performance

Reliability is vital to a successful transportation network. Reliability for OCTA is measured in part by on-time performance (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 departures 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.



Through the third quarter of FY 2018-19, systemwide fixed-route OTP was 82.2 percent, 2.8 percent below the standard. This marks a 0.2 percent increase from the previous quarter and a 2.3 percent drop from the same quarter last year. OTP for the DOFR OC Bus service completed the third quarter at 83.3 percent, 0.4 percent higher than last quarter and 1.8 percent lower than the same quarter last year.

The OTP for the CFR OC Bus service slightly dropped by 0.1 percent compared to last quarter and fell by 3.0 percent compared the same quarter last year. The OTP for CFR did not improve at the same rate as DOFR, likely due to the cascading impacts of the lost service resulting from the February 2019 Service Change. During the third quarter of FY 2018-19, before the service change, the OTP for CFR was 82.7 percent, 2.0 percent higher than reported last quarter. After the February 2019 Service Change through the remainder of the quarter, the OTP dropped to 78.5 percent.



The OTP for OC ACCESS service ended the quarter at 93.1 percent, 0.9 percent below the standard. The OC ACCESS OTP dropped by 0.2 percent from last quarter and 1.2 percent from the 94.3 percent reported during the same period last year.

During the third quarter, the contract operator experienced higher than normal absenteeism and operator shortage. Corrective actions to address these issues include:

- Continuing working with contractor on routing improvements to/from high trip generators
- Work to improve trip negotiations to address overbooking at certain times of the day (i.e. top of the hour has most trips)
- Contractor has hired a Dedicated Recruiter to help stimulate operator hiring

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

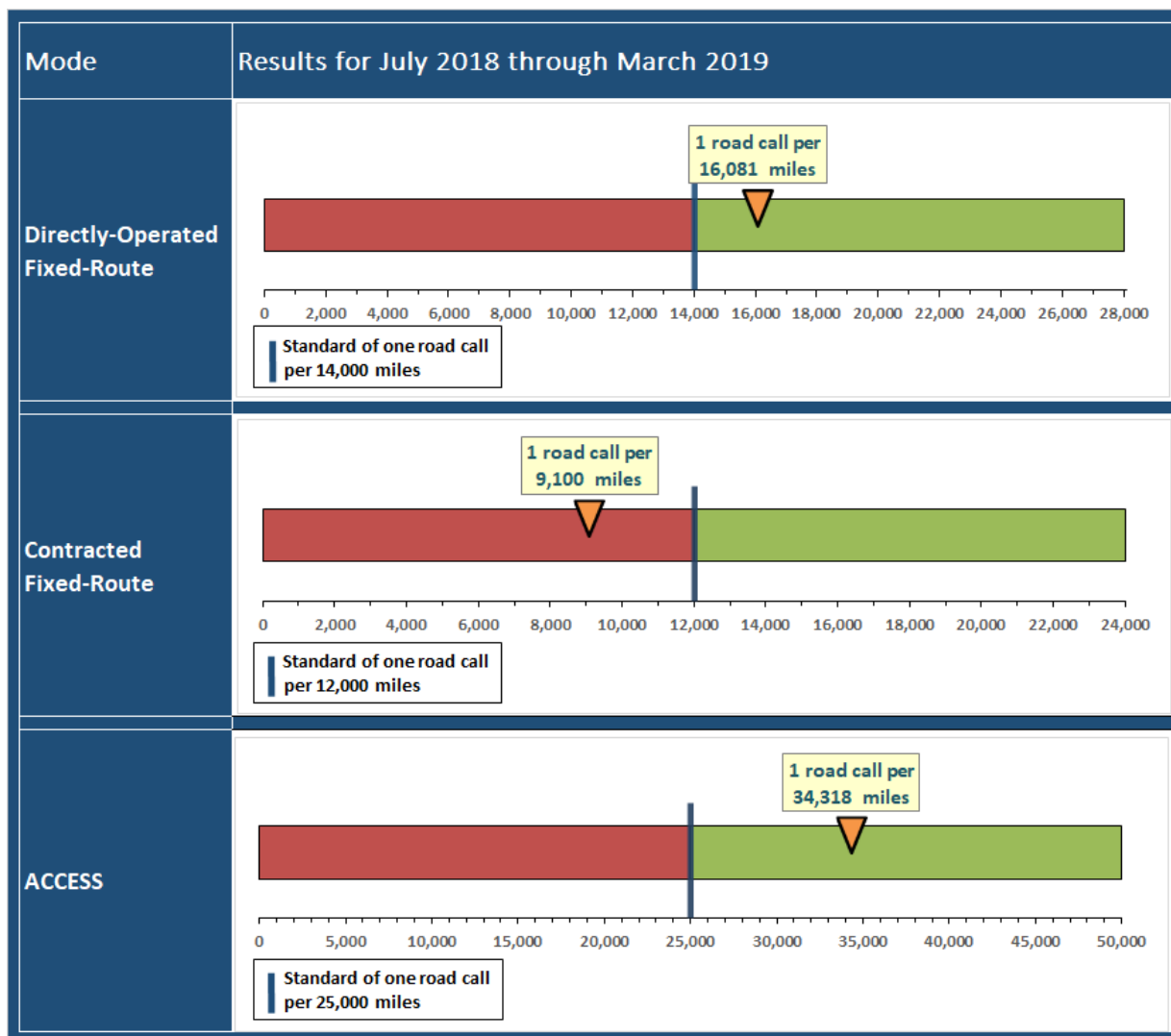
Reliability: Miles Between Road Calls

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. Valid mechanical road calls usually cause a delay or cancellation in 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 third quarter of FY 2018-19, OC Bus services showed steady performance in this measure. DOFR OC Bus service performed above standard, averaging 16,081 vehicle MBRC, a drop of 1.7 percent from last quarter, but a 19.6 percent increase over the third quarter of last year. The increase in MBRC is credited partially to a midlife engine replacement campaign that was completed in December 2018. In addition, the continued work with the vehicle manufacturer to address warranty-related failures continues to help reduce road calls.

MBRC for the CFR OC Bus service was below standard at 9,100 MBRC through the third quarter of FY 2018-19. This is an 11.1 percent improvement compared to the 8,189 MBRC reported last quarter and 7.1 percent higher than the same quarter last year. Key drivers for the improvement included the implementation of additional maintenance training and the use of a more rigorous quality control process to improve vehicle repair procedures. The positive trend for MBRC for CFR OC Bus service is expected to continue through the fourth quarter with the continued corporate staff presence in the maintenance shop, and the recent hire of a maintenance manager.

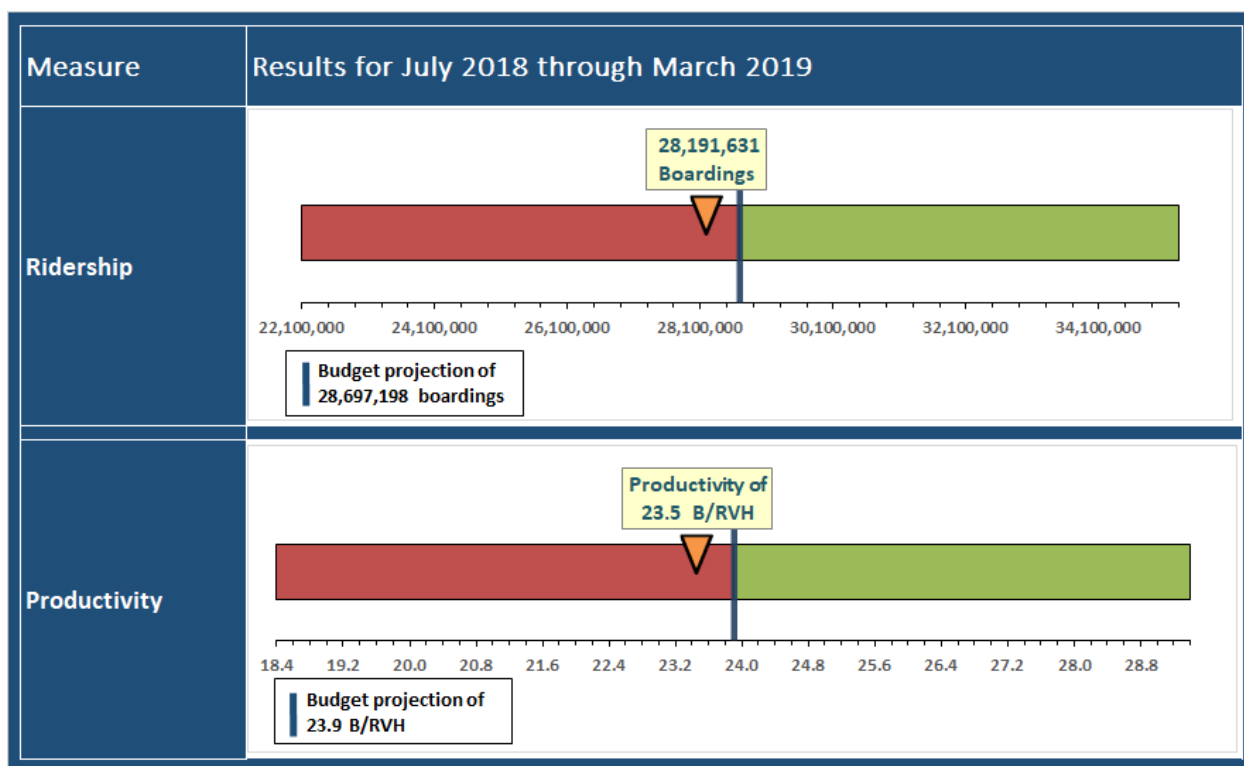
The MBRC for OC ACCESS service exceeded the standard, with 34,318 miles between road calls.



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.

The FY 2018-19 approved budget was developed with the assumption that boardings would decrease by 2.3 percent from FY 2017-18 actuals. Through the third quarter of FY 2018-19, both ridership and productivity for OC Bus service was lower than expected. The drop in ridership during the third quarter is largely attributed to two factors, rain and lost service.



Daily ridership data and research have shown that adverse weather conditions, such as rain, have a negative impact on transit ridership. "Rain" days are designated as such depending on the amount of rainfall (exceeding one-tenth of an inch), the time (morning, afternoon, night), and the duration. During the third quarter of FY 2018-19, there were 22 days of rain. During the third quarter of last year, there were only 14 days. On rainy weekdays during the third quarter of FY 2018-19, ridership was down by 15.6 percent compared to non-rainy days. On rainy weekdays during the same quarter last year, the difference was only 5.1 percent. The table below includes a comparison of the rain impact on average daily ridership based by day type (e.g., weekday).

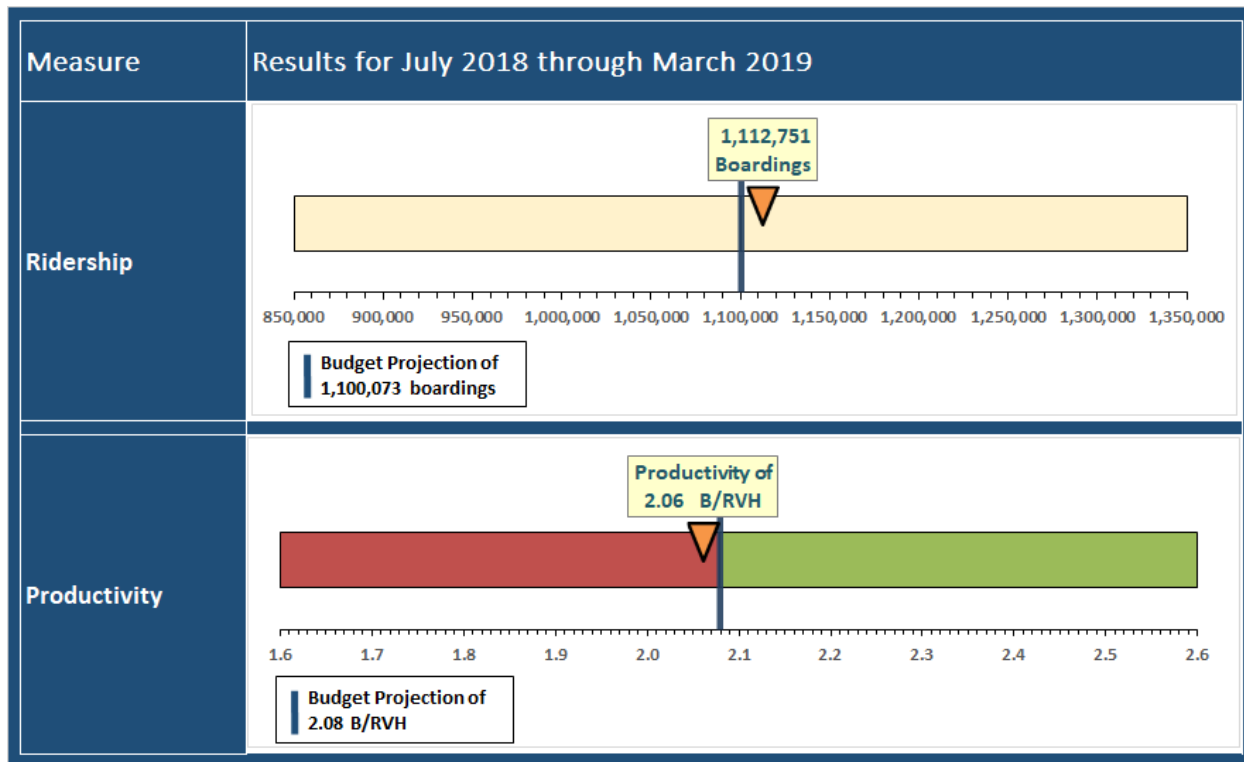
Day of Week	Quarter 3 - FY 2018-19			Quarter 3 - FY 2017-18		
	Average "Rain" Day	Average "Non-Rain" Day	Δ (%)	Average "Rain" Day	Average "Non-Rain" Day	Δ (%)
Weekday	100,587	119,127	-15.6%	117,366	123,648	-5.1%
Saturday	50,666	69,009	-26.6%	62,874	69,432	-9.4%
Sunday	45,910	53,239	-13.8%	46,746	55,707	-16.1%

On February 10, 2019, the second of three bus service changes occurring each fiscal year was implemented. OC Bus schedules and routes are adjusted at that time. This is also an opportunity for drivers to change the routes that they drive. For the February 2019 Bus Service Change, First Transit, Inc. (First Transit), the contracted fixed-route provider, changed the way in which it scheduled and deployed its drivers. This change increased the number of coach operator assignments that needed to be filled. This, coupled with a labor shortage, resulted in a significant number of missed trips and the loss of the daily ridership on those missed trips.

Ridership and Productivity – OC ACCESS

(Primary Service Provider and Supplemental Taxi)

Through the third quarter of FY 2018-19, the ridership and productivity trends for OC ACCESS continue to indicate increasing demand for this service. Ridership for the quarter exceeded budgeted projections by 1.2 percent. Productivity is 1 percent below the budgeted projection.



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 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.

Through the third quarter of FY 2018-19, the overall performance of the contracted OC Bus service as determined by the performance categories outlined in the contract was above standard for the measure of safety; however, courtesy and reliability were below standard.

Table 1 provides the penalties and incentives assessed to the contractor, by quarter, for FY 2018-19. The incentives earned through the third quarter total \$16,500 and reflect good performance related to courtesy. Through the third quarter of FY 2018-19, the total penalties assessed to the contractor total \$2,548,190, of which \$2,117,466 was assessed from January through March. These assessed penalties, particularly for the missed trips, were largely due to the changes implemented by First Transit for the February 2019 Service Change.

Table 1:	Performance Categories	FY19 Q1	FY19 Q2	FY19 Q3	FY19 Q4	FYTD 19
Penalties	On-Time Performance	\$ (7,000)	\$ (9,000)	\$ (9,000)		\$ (25,000)
	Valid Complaints: Per 7,000 boardings	\$ (2,900)	\$ -	\$ (54,400)		\$ (57,300)
	Unreported Accident	\$ (20,000)	\$ (20,000)	\$ (110,000)		\$ (150,000)
	Accident Frequency Ratio	\$ -	\$ -	\$ (5,000)		\$ (5,000)
	Key Positions	\$ -	\$ (29,000)	\$ -		\$ (29,000)
	CHP Terminal Inspections	\$ -	\$ -	\$ -		\$ -
	Reports	\$ -	\$ -	\$ -		\$ -
	Preventive Maintenance	\$ (137,841)	\$ (36,683)	\$ (16,766)		\$ (191,290)
	Road Calls	\$ (14,300)	\$ (7,000)	\$ (300)		\$ (21,600)
	Vehicle Damage: Per vehicle per day	\$ -	\$ -	\$ -		\$ -
	Missed Trips	\$ (80,000)	\$ (67,000)	\$ (1,922,000)		\$ (2,069,000)
	Total	\$ (262,041)	\$ (168,683)	\$ (2,117,466)		\$ (2,548,190)
Incentives	On-Time Performance	\$ -	\$ -	\$ -		\$ -
	Valid Complaints: Per 7,000 boardings	\$ 3,200	\$ 9,000	\$ 4,300		\$ 16,500
	Accident Frequency Ratio	\$ -	\$ -	\$ -		\$ -
	Total	\$ 3,200	\$ 9,000	\$ 4,300		\$ 16,500
Prior Periods Adjustment	Road Calls	\$ (100)	\$ -	\$ -		\$ (100)
	Key Position	\$ -	\$ 25,182	\$ -		\$ 25,182
	Total	\$ (100)	\$ 25,182	\$ -		\$ 25,082
All	Total	\$ (258,941)	\$ (134,501)	\$ (2,113,166)		\$ (2,506,608)

Contractor Performance: OC ACCESS

(Primary Service Provider and Supplemental Taxi)

Per Agreement No. C-2-1865 between OCTA and MV Transportation, Inc. (MV), additional measures are tracked to ensure the 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.

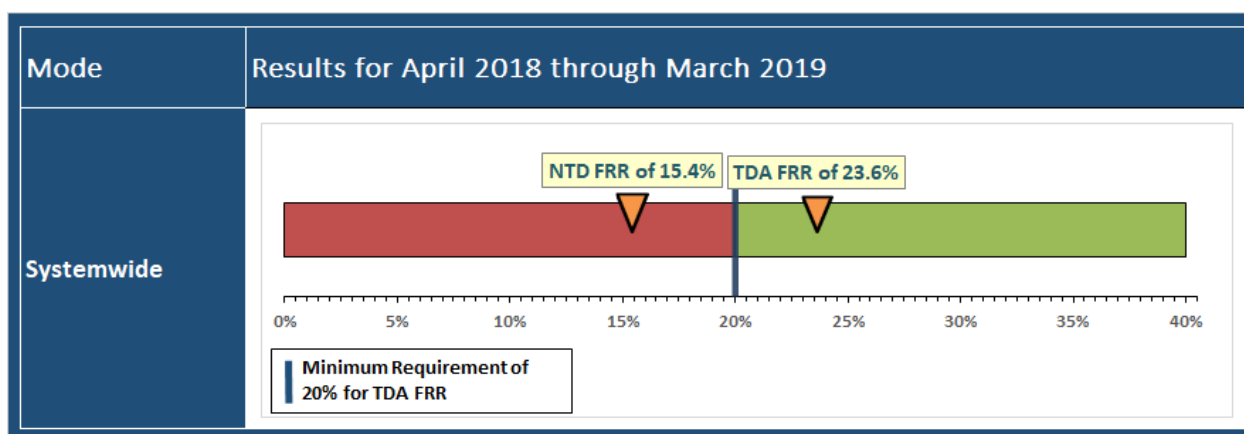
As presented in this report, the overall performance of the contractor providing OC ACCESS service through the third quarter of FY 2018-19 is above standard for all measures except OTP. Table 2 below lists, by quarter, the penalties and incentives assessed to the OC ACCESS contractor as established in the agreement. Through the third quarter, there were no incentives awarded to the contractor, but \$260,825 in penalties were assessed. Since the last reporting period, penalties were assessed for OTP, customer comments, call center hold times, excessively late trips, and missed trips.

Table 2: Performance Categories		FY19 Q1	FY19 Q2	FY19 Q3	FY19 Q4	FYTD 19
Penalties	Passenger Productivity	\$ -	\$ (10,000)	\$ -		\$ (10,000)
	On-Time Performance	\$ (10,000)	\$ (20,000)	\$ (10,000)		\$ (40,000)
	Customer Comments	\$ -	\$ (3,800)	\$ (300)		\$ (4,100)
	Call Center Hold Times	\$ (33,000)	\$ (33,000)	\$ (32,000)		\$ (98,000)
	Excessively Late Trips	\$ (10,000)	\$ (30,000)	\$ (30,000)		\$ (70,000)
	Missed Trips	\$ (5,000)	\$ (10,000)	\$ (5,000)		\$ (20,000)
	Unreported Accident	\$ -	\$ (5,000)	\$ -		\$ (5,000)
	Preventive Maintenance	\$ (13,725)	\$ -	\$ -		\$ (13,725)
	Road calls	\$ -	\$ -	\$ -		\$ -
	Reports	\$ -	\$ -	\$ -		\$ -
	Key Positions	\$ -	\$ -	\$ -		\$ -
	CHP Terminal Inspections	\$ -	\$ -	\$ -		\$ -
	Vehicle Damage	\$ -	\$ -	\$ -		\$ -
	Total	\$ (71,725)	\$ (111,800)	\$ (77,300)		\$ (260,825)
Incentives	Passenger Productivity	\$ -	\$ -	\$ -		\$ -
	On-Time Performance	\$ -	\$ -	\$ -		\$ -
	Excessively Late Trips	\$ -	\$ -	\$ -		\$ -
	Missed Trips	\$ -	\$ -	\$ -		\$ -
	Total	\$ -	\$ -	\$ -		\$ -
Prior Periods	Customer Comments	\$ 1,100	\$ -	\$ -		\$ 1,100
Adjustment	Total	\$ 1,100	\$ -	\$ -		\$ 1,100
All	Total	\$ (70,625)	\$ (111,800)	\$ (77,300)		\$ (259,725)

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 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 April 2018 through March 2019.

FRR, based on the National Transit Database 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 is 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 23.6 percent, a drop of 0.3 percent from the previous quarter and a 1.9 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

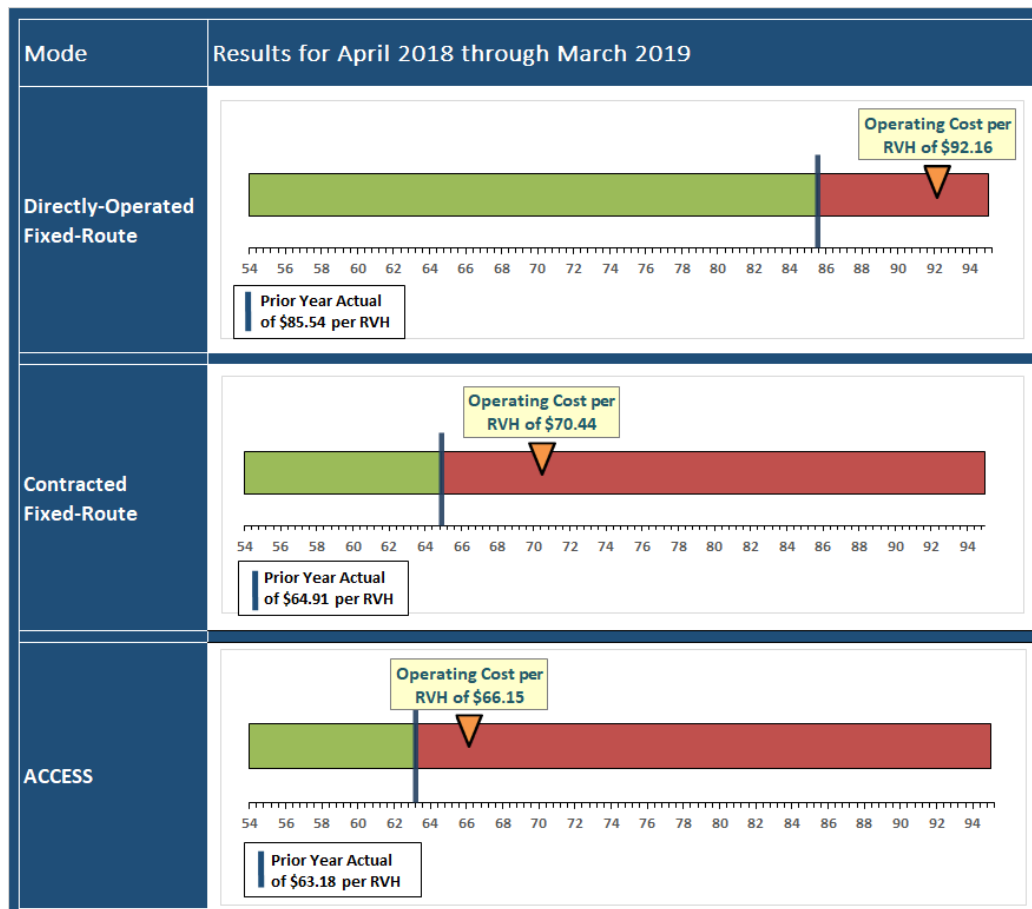
Operating Cost per Revenue Vehicle Hour

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, with a 7.7 percent increase in DOFR, an 8.5 percent increase in CFR, and a 4.7 percent increase in OC ACCESS. The increase in DOFR was primarily due to the execution of the new labor agreement for coach operators, including a signing bonus that was expensed in May 2018, along with a salary increase. In addition, costs were impacted by:

- A 44.8 percent of the total increase in DOFR cost and a 61.8 percent of the total increase in CFR cost were associated with a higher than expected compressed natural gas rate since July 2018.
- The receipt of Alternative Fuel Tax Credit in March 2018, but not received in March 2019 which lowered costs by 2.1 percent in 2018.

Other factors that contributed to the increase in CFR and OC ACCESS cost per RVH included the increase in the contracted rates as included in First Transit and MV agreements for each new fiscal year. An increase in gasoline prices also contributed to the increase in OC ACCESS cost.



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 third quarter in FY 2018-19. 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 that operates 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 routes (*these are not included on the following charts*) such as OC Fair Express.
- **Routes 700 to 799:** Inter-county Express bus service that operates on weekdays only at peak times and connects riders over long distances to destinations outside of Orange County, often using freeways to access destinations.



OCTA Operating Statistics By Route for Local and Community Services (Sorted by Subsidy per Boarding)
Fiscal Year 2018-19 Through Q3

Route	Zone	Farebox	Subsidy per Boarding	Direct Subsidy	Indirect Subsidy	"Capital Subsidy" Per Boarding	Revenue per Boarding	Boardings	CostVSH	Direct CostVSH	CostVSM	BoardVSH	VSH	Bus Count			
														40 FT	32 FT	60 FT	60 FT
021	N	7.8%	\$ 13.32	\$ 7.53	\$ 4.62	\$ 1.17	\$ 1.03	48,001	\$ 113.97	\$ 70.95	\$ 8.51	8.65	5,550	1	2	-	-
529	C	8.1%	12.66	7.09	4.51	1.06	1.02	41,123	150.11	97.23	13.03	11.89	3,457	6	4	-	-
085	S	8.9%	12.30	7.02	4.31	0.97	1.11	51,800	106.09	68.78	8.64	8.53	6,075	2	-	-	-
087	S	8.6%	11.49	6.58	4.04	0.87	1.00	49,529	111.81	70.46	7.45	9.63	5,146	-	2	-	-
001	S	7.8%	11.35	6.63	4.22	0.50	0.92	416,854	151.05	96.67	9.22	12.84	32,469	6	-	-	-
076	C	9.7%	10.21	5.77	3.67	0.77	1.01	64,766	137.78	87.16	11.74	13.18	4,915	2	-	-	-
153	N	10.3%	10.15	5.98	3.59	0.58	1.10	86,493	104.92	86.49	8.58	9.82	8,805	2	-	-	-
178	C	11.1%	9.53	5.49	3.30	0.74	1.10	67,662	105.44	68.61	8.49	10.66	6,346	2	-	-	-
177	S	13.1%	8.45	4.86	2.92	0.67	1.17	63,533	105.12	68.59	8.16	11.75	5,408	-	2	-	-
083	C	11.8%	7.67	4.35	2.77	0.55	0.96	485,932	146.06	93.35	8.07	18.10	25,747	10	-	-	-
086	C	13.2%	7.66	4.31	2.65	0.70	1.05	107,298	105.54	68.69	8.15	13.17	8,148	3	-	-	-
091	S	14.5%	7.38	4.19	2.57	0.62	1.15	294,325	107.00	69.20	7.43	13.53	21,755	8	-	-	-
167	C	14.2%	7.21	4.09	2.46	0.66	1.08	151,385	105.17	68.51	8.86	13.78	10,983	4	-	-	-
024	N	15.8%	6.83	3.74	2.30	0.79	1.14	95,541	105.26	68.60	8.22	14.66	6,517	3	-	-	-
090	S	15.9%	6.75	3.72	2.28	0.75	1.13	245,944	109.80	69.88	7.33	15.38	15,991	6	-	-	-
129	N	15.6%	6.51	3.74	2.25	0.52	1.11	144,579	106.71	68.89	8.84	15.04	9,613	2	-	-	-
050	N	12.9%	6.30	3.61	2.29	0.40	0.88	911,318	153.55	97.38	13.21	22.65	40,227	11	-	-	-
143	N	15.3%	6.28	3.70	2.22	0.36	1.07	137,869	104.93	68.43	9.28	15.01	9,183	2	-	-	-
056	N	13.2%	6.25	3.64	2.32	0.29	0.90	311,420	141.64	89.56	13.43	20.63	15,093	4	-	-	-
079	C	15.5%	6.22	3.57	2.19	0.46	1.05	329,207	105.20	68.49	9.27	15.43	21,331	6	-	-	-
089	S	15.7%	6.06	3.44	2.11	0.51	1.03	260,285	105.60	68.67	8.49	16.02	16,245	5	-	-	-
082	S	19.7%	6.05	3.00	1.84	0.21	1.19	62,063	119.02	72.20	8.42	19.76	3,141	3	-	-	-
059	C	16.2%	6.03	3.36	2.06	0.61	1.04	412,988	109.14	69.46	9.72	16.89	24,449	11	-	-	-
560	C	15.0%	5.99	3.33	2.12	0.54	0.96	581,906	147.55	93.49	12.74	23.04	25,257	6	7	-	-
055	C	16.6%	5.84	3.31	2.11	0.42	1.08	960,332	143.95	91.11	12.85	22.16	43,344	18	-	-	-
054	N	15.6%	5.69	3.19	2.03	0.47	0.96	896,235	143.31	90.73	12.94	23.19	38,655	17	-	-	-
150	C	18.6%	5.68	3.08	1.85	0.75	1.13	132,991	108.80	69.22	10.73	17.94	7,413	4	-	-	-
072	C	15.9%	5.67	3.22	2.05	0.40	1.00	373,686	138.42	87.73	11.18	22.11	16,899	6	-	-	-
025	N	17.0%	5.63	3.17	1.95	0.51	1.05	277,116	106.41	68.86	8.84	17.25	16,065	5	-	-	-
071	N	16.8%	5.47	3.15	1.93	0.39	1.03	516,277	105.79	68.76	8.45	17.32	29,802	8	-	-	-
037	N	15.9%	5.41	3.07	1.95	0.39	0.95	812,982	144.60	91.61	11.76	24.22	33,563	14	-	-	-
026	N	17.1%	5.21	3.02	1.86	0.33	1.01	332,272	106.85	68.78	10.52	18.15	18,303	4	-	-	-
029	N	16.8%	4.96	2.86	1.82	0.28	0.95	1,419,505	143.83	91.12	12.35	25.57	55,511	5	-	7	-
030	N	17.9%	4.62	2.65	1.63	0.34	0.93	486,112	105.24	68.64	8.13	20.19	24,078	6	-	-	-
047	C	19.7%	4.59	2.62	1.66	0.31	1.05	1,561,032	143.03	90.50	12.78	26.83	58,175	20	-	-	-
035	N	18.6%	4.51	2.48	1.52	0.51	0.92	600,386	108.62	69.32	9.49	22.08	27,195	12	-	-	-
543	N	19.1%	4.39	2.48	1.57	0.34	0.96	717,851	144.95	91.80	13.07	28.93	24,811	6	4	-	-
070	C	20.5%	4.37	2.44	1.50	0.43	1.01	693,580	110.52	69.96	9.00	22.35	31,039	12	-	-	-
033	N	18.4%	4.34	2.49	1.53	0.32	0.91	282,492	105.61	68.65	8.56	21.47	13,160	4	-	-	-
057	C	20.2%	4.23	2.39	1.52	0.32	0.99	1,475,067	150.07	95.04	14.10	30.58	48,236	8	-	4	-
060	C	19.5%	4.06	2.34	1.49	0.23	0.93	1,423,189	143.47	90.93	12.43	30.19	47,147	16	-	-	-
046	N	22.1%	3.93	2.20	1.35	0.38	1.01	477,819	105.92	68.71	9.17	23.23	20,567	7	-	-	-
053X	C	21.4%	3.92	2.22	1.41	0.29	0.99	489,585	130.34	82.24	12.66	28.19	17,369	6	-	-	-
038	N	21.1%	3.83	2.13	1.31	0.39	0.92	806,877	108.26	69.30	8.87	24.90	32,404	14	-	-	-
053	C	21.0%	3.81	2.18	1.38	0.25	0.95	1,055,662	146.96	92.83	15.71	32.59	32,390	10	-	-	-
043	N	22.0%	3.77	2.16	1.37	0.24	1.00	1,569,211	140.22	88.53	14.02	30.98	50,658	13	-	-	-
057X	C	25.0%	3.43	1.91	1.21	0.31	1.04	834,269	130.45	82.36	12.29	31.37	26,595	5	-	2	-
066	C	24.4%	3.31	1.90	1.21	0.20	1.00	1,514,939	141.42	89.35	14.02	34.41	44,030	12	-	-	-
042	N	23.0%	3.28	1.86	1.14	0.28	0.89	1,142,729	106.90	68.93	9.60	27.49	41,575	13	-	-	-
064	C	24.5%	2.97	1.71	1.09	0.17	0.91	1,151,068	142.32	89.90	14.69	38.48	29,913	7	-	-	-
064X	C	26.6%	2.72	1.55	0.99	0.18	0.92	462,038	130.41	82.30	12.43	37.70	12,255	3	-	-	-

(1) Total bus count (429) is based on PM weekday equipment requirements.

(2) Bus count for routes 53X, 57X and 64X are estimated based on total route 53, 57 and 64 equipment requirements.

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



OCTA Operating Statistics By Route for Express Service (Sorted by Subsidy per Boarding)
Fiscal Year 2018-19 Through Q3

Route	Zone	Farebox	Subsidy per Boarding	Direct Subsidy	Indirect Subsidy	"Capital Subsidy" Per Boarding	Revenue per Boarding	Boardings	CostVSH	Direct CostVSH	CostVSM	BoardVSH	VSH	Bus Count		
														40 FT	32 FT	60 FT
211	C	1.9%	\$ 64.30	\$ 31.52	\$ 24.74	\$ 8.04	\$ 1.10	10,657	\$ 143.84	\$ 97.88	\$ 8.46	2.51	4,250	-	-	4
213	N	2.5%	47.23	21.99	17.26	7.98	1.00	10,737	163.43	103.42	9.54	4.06	2,644	-	-	4
721	N	4.7%	42.08	23.40	14.10	4.58	1.86	16,376	226.16	146.46	8.79	5.75	2,850	3	-	-
701	C	7.6%	30.60	16.39	9.88	4.33	2.16	17,338	259.91	168.06	10.83	9.14	1,897	3	-	-
206	C	4.3%	29.44	12.74	10.00	6.70	1.02	9,590	175.06	113.33	9.18	7.37	1,302	-	-	3
794	C	21.6%	25.92	12.16	9.54	4.22	5.98	23,719	219.86	153.60	8.23	7.94	2,986	4	-	-

(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.



OCTA Operating Statistics By Route for Stationlink Service (Sorted by Subsidy per Boarding)
Fiscal Year 2018-19 Through Q3

Route	Zone	Farebox	Subsidy per Boarding	Direct Subsidy	Indirect Subsidy	"Capital Subsidy" Per Boarding	Revenue per Boarding	Boardings	CostVSH	Direct CostVSH	CostVSM	BoardVSH	VSH	Bus Count		
														40 FT	32 FT	60 FT
463	C	4.0%	28.56	\$ 11.99	\$ 10.56	\$ 6.01	\$ 0.95	16,640	\$ 171.52	\$ 110.64	\$ 16.55	7.30	2,280	4	-	-
480	C	8.6%	12.34	5.25	4.63	2.46	0.93	20,316	172.25	111.01	14.76	15.94	1,275	2	-	-
472	C	10.3%	11.17	4.27	3.77	3.13	0.93	26,609	164.14	108.85	13.86	18.30	1,454	3	-	-
453	N	8.6%	11.13	4.73	4.16	2.24	0.84	22,370	176.66	111.88	16.57	18.15	1,233	2	-	-
473	C	13.4%	8.35	3.52	3.10	1.73	1.02	33,641	178.29	111.83	15.78	23.30	1,444	2	-	-
462	C	12.8%	7.61	3.57	3.14	0.90	0.99	27,927	159.74	107.34	22.66	20.76	1,346	1	-	-

(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.



OCTA Operating Statistics By Route for Local and Community Services (Sorted by Boardings)
Fiscal Year 2018-19 Through Q3

Route	Zone	Farebox	Subsidy per Boarding	Direct Subsidy	Indirect Subsidy	"Capital Subsidy" Per Boarding	Revenue per Boarding	Boardings	Cost/VSH	Direct Cost/VSH	Cost/VSM	Board/VSH	VSH	Bus Count		
														40 FT	32 FT	60 FT
043	N	22.0%	\$ 3.77	\$ 2.16	\$ 1.37	\$ 0.24	\$ 1.00	1,569,211	\$ 140.22	\$ 88.53	\$ 14.02	30.98	50,658	13	-	-
047	C	19.7%	4.59	2.62	1.66	0.31	1.05	1,561,032	143.03	90.50	12.78	26.83	58,175	20	-	-
066	C	24.4%	3.31	1.90	1.21	0.20	1.00	1,514,939	141.42	89.35	14.02	34.41	44,030	12	-	-
067	C	20.2%	4.23	2.39	1.52	0.32	0.99	1,475,067	150.07	95.04	14.10	30.58	48,236	8	-	4
060	C	19.5%	4.06	2.34	1.49	0.23	0.93	1,423,189	143.47	90.93	12.43	30.19	47,147	16	-	-
029	N	16.8%	4.96	2.86	1.82	0.28	0.95	1,419,505	143.83	91.12	12.35	25.57	55,511	5	-	7
064	C	24.5%	2.97	1.71	1.09	0.17	0.91	1,151,068	142.32	89.90	14.69	38.48	29,913	7	-	-
042	N	23.0%	3.28	1.86	1.14	0.28	0.89	1,142,729	106.90	68.93	9.60	27.49	41,575	13	-	-
053	C	21.0%	3.81	2.18	1.38	0.25	0.95	1,055,662	146.96	92.83	15.71	32.59	32,390	10	-	-
065	C	16.6%	5.84	3.31	2.11	0.42	1.08	960,332	143.95	91.11	12.85	22.16	43,344	18	-	-
050	N	12.9%	6.30	3.61	2.29	0.40	0.88	911,318	153.55	97.38	13.21	22.65	40,227	11	-	-
054	N	15.6%	5.69	3.19	2.03	0.47	0.96	896,235	143.31	90.73	12.94	23.19	38,655	17	-	-
057X	C	25.0%	3.43	1.91	1.21	0.31	1.04	834,269	130.45	82.36	12.29	31.37	26,595	5	-	2
037	N	15.9%	5.41	3.07	1.95	0.39	0.95	812,982	144.60	91.61	11.76	24.22	33,563	14	-	-
038	N	21.1%	3.83	2.13	1.31	0.39	0.92	806,877	108.26	69.30	8.87	24.90	32,404	14	-	-
543	N	19.1%	4.39	2.48	1.57	0.34	0.96	717,851	144.95	91.80	13.07	28.93	24,811	6	4	-
070	C	20.5%	4.37	2.44	1.50	0.43	1.01	693,590	110.52	69.96	9.00	22.35	31,039	12	-	-
035	N	18.6%	4.51	2.48	1.52	0.51	0.92	600,386	108.62	69.32	9.49	22.08	27,195	12	-	-
560	C	15.0%	5.99	3.33	2.12	0.54	0.96	581,906	147.55	93.49	12.74	23.04	25,257	6	7	-
071	N	16.8%	5.47	3.15	1.93	0.39	1.03	516,277	105.79	68.76	8.45	17.32	29,802	8	-	-
053X	C	21.4%	3.92	2.22	1.41	0.29	0.99	489,585	130.34	82.24	12.66	28.19	17,369	6	-	-
030	N	17.9%	4.62	2.65	1.63	0.34	0.93	486,112	105.92	68.64	8.13	20.19	24,078	6	-	-
046	N	22.1%	3.93	2.20	1.35	0.38	1.01	477,819	105.94	68.71	9.17	23.23	20,567	7	-	-
083	C	11.8%	7.67	4.35	2.77	0.55	0.96	465,932	146.06	93.35	8.07	18.10	25,747	10	-	-
064X	C	26.6%	2.72	1.55	0.99	0.18	0.92	462,038	130.41	82.30	12.43	37.70	12,255	3	-	-
001	S	7.8%	11.35	6.63	4.22	0.50	1.05	416,854	151.05	96.67	9.22	12.84	32,469	6	-	-
059	C	16.2%	6.03	3.36	2.06	0.61	1.04	412,988	109.14	69.46	9.72	16.89	24,449	11	-	-
072	C	15.9%	5.67	3.22	2.05	0.40	1.00	373,686	138.42	87.73	11.18	22.11	16,899	6	-	-
026	N	17.1%	5.21	3.02	1.86	0.33	1.01	332,272	106.85	68.78	10.52	18.15	18,303	4	-	-
079	C	15.5%	6.22	3.57	2.19	0.46	1.05	329,207	105.20	68.49	9.27	15.43	21,331	6	-	-
056	N	13.2%	6.25	3.64	2.32	0.29	0.90	311,420	141.64	89.56	13.43	20.63	15,093	4	-	-
081	S	14.5%	7.38	4.19	2.57	0.62	1.15	294,325	107.00	69.20	7.43	13.53	21,755	8	-	-
033	N	18.4%	4.34	2.49	1.53	0.32	0.91	282,492	105.61	68.65	8.56	21.47	13,160	4	-	-
025	N	17.0%	5.63	3.17	1.95	0.51	1.05	277,116	106.41	68.86	8.84	17.25	16,065	5	-	-
089	S	15.7%	6.06	3.44	2.11	0.51	1.03	260,285	105.60	68.67	8.49	16.02	16,245	5	-	-
090	S	15.9%	6.75	3.72	2.28	0.75	1.13	245,944	109.80	69.88	7.33	15.38	15,991	6	-	-
167	C	14.2%	7.21	4.09	2.46	0.66	1.08	151,385	105.17	68.51	8.86	13.78	10,983	4	-	-
129	N	15.6%	6.51	3.74	2.25	0.52	1.11	144,579	106.71	68.89	8.84	15.04	9,613	2	-	-
143	N	15.3%	6.28	3.70	2.22	0.36	1.07	137,869	104.93	68.43	9.28	15.01	9,183	2	-	-
150	C	18.6%	5.68	3.08	1.85	0.75	1.13	132,991	108.80	69.22	10.73	17.94	7,413	4	-	-
086	C	13.2%	7.66	4.31	2.65	0.70	1.05	107,298	105.54	68.69	8.15	13.17	8,148	3	-	-
024	N	15.8%	6.83	3.74	2.30	0.79	1.14	95,541	105.26	68.60	8.22	14.66	6,517	3	-	-
153	N	10.3%	10.15	5.98	3.59	0.58	1.10	86,493	104.92	68.49	8.58	9.82	8,805	2	-	-
178	C	11.1%	9.53	5.49	3.30	0.74	1.10	67,662	105.44	68.61	8.49	10.66	6,346	2	-	-
076	C	9.7%	10.21	5.77	3.67	0.77	1.01	64,766	137.78	87.16	11.74	13.18	4,915	2	-	-
177	S	13.1%	8.45	4.86	2.92	0.67	1.17	63,533	105.12	68.59	8.16	11.75	5,408	-	2	-
082	S	19.7%	6.05	3.00	1.84	1.21	1.19	62,063	119.02	72.20	8.42	19.76	3,141	3	-	-
085	S	8.9%	12.30	7.02	4.31	0.97	1.11	51,800	106.09	68.78	8.64	8.53	6,075	2	-	-
087	S	8.6%	11.49	6.58	4.04	0.87	1.00	49,529	111.81	70.46	7.45	9.63	5,146	-	2	-
021	N	7.8%	13.32	7.53	4.62	1.17	1.03	48,001	113.97	70.95	8.51	8.65	5,550	1	2	-
529	C	8.1%	12.66	7.09	4.51	1.06	1.02	41,123	150.11	97.23	13.03	11.89	3,457	6	4	-

(1) Total bus count (429) is based on PM weekday equipment requirements.

(2) Bus count for routes 53X, 57X and 64X are estimated based on total route 53, 57 and 64 equipment requirements.

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



OCTA Operating Statistics By Route for Express Service (Sorted by Boardings)
Fiscal Year 2018-19 Through Q3

Route	Zone	Farebox	Subsidy per Boarding	Direct Subsidy	Indirect Subsidy	"Capital Subsidy" Per Boarding	Revenue per Boarding	Boardings	CostVSH	Direct CostVSH	CostVSM	BoardVSH	VSH	Bus Count		
														40 FT	32 FT	60 FT
794	C	21.6%	\$ 25.92	\$ 12.16	\$ 9.54	\$ 4.22	\$ 5.98	23,719	\$ 219.86	\$ 153.60	\$ 8.23	7.94	2,986	4	-	-
701	C	7.6%	30.60	16.39	9.88	4.33	2.16	17,338	259.91	168.06	10.83	9.14	1,897	3	-	-
721	N	4.7%	42.08	23.40	14.10	4.58	1.86	16,376	226.16	146.46	8.79	5.75	2,850	3	-	-
213	N	2.5%	47.23	21.99	17.26	7.98	1.00	10,737	163.43	103.42	9.54	4.06	2,644	-	4	-
211	C	1.9%	64.30	31.52	24.74	8.04	1.10	10,657	143.84	97.88	8.46	2.51	4,250	-	4	-
206	C	4.3%	29.44	12.74	10.00	6.70	1.02	9,590	175.06	113.33	9.18	7.37	1,302	-	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.



OCTA Operating Statistics By Route for Stationlink Service (Sorted by Boardings)
Fiscal Year 2018-19 Through Q3

Route	Zone	Farebox	Subsidy per Boarding	Direct Subsidy	Indirect Subsidy	"Capital Subsidy" Per Boarding	Revenue per Boarding	Boardings	CostVSH	Direct CostVSH	CostVSM	BoardVSH	VSH	Bus Count		
														40 FT	32 FT	60 FT
473	C	13.4%	8.35	3.52	3.10	1.73	1.02	33,641	\$ 178.29	\$ 111.83	\$ 15.78	23.30	1,444	2	-	-
462	C	12.8%	7.61	3.57	3.14	0.90	0.99	27,927	159.74	107.34	22.66	20.76	1,346	1	-	-
472	C	10.3%	11.17	4.27	3.77	3.13	0.93	26,609	164.14	108.85	13.86	18.30	1,454	3	-	-
453	N	8.6%	11.13	4.73	4.16	2.24	0.84	22,370	176.66	111.88	26.57	18.15	1,233	2	-	-
480	C	8.6%	12.34	5.25	4.63	2.46	0.93	20,316	172.25	111.01	14.76	15.94	1,275	2	-	-
463	C	4.0%	28.56	11.99	10.56	6.01	0.95	16,640	171.52	110.64	16.55	7.30	2,280	4	-	-

(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.

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 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	Huntington Beach - Irvine	via McFadden Ave/ Walnut Ave	LOCAL
70	Sunset Beach - Tustin	via Edinger Ave	LOCAL
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/ Westminster Blvd	BRAVO
701	Huntington Beach - Los Angeles Express	via 405 Fwy/ 605 Fwy/ 105 Fwy/ 110 Fwy	EXPRESS BUS
721	Fullerton - Los Angeles Express	via 110 Fwy/ 91 Fwy	EXPRESS BUS
794	Riverside / Corona - South Coast Metro Express	via 91 Fwy/ 55 Fwy	EXPRESS BUS

OC Bus 360° Plan: Performance to Date

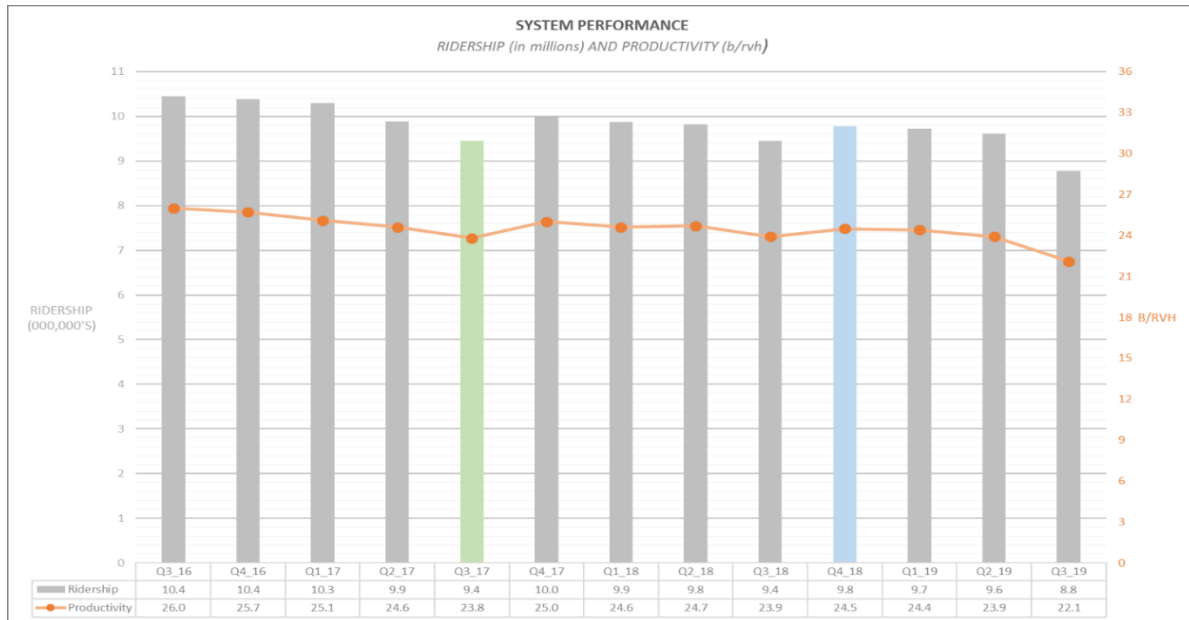
To address declining bus ridership, the OCTA Board of Directors (Board) endorsed a comprehensive action plan, known as the OC Bus 360° plan, in 2015. This effort included a comprehensive review of current and former rider perceptions, a peer review panel that reviewed OCTA's performance and plans, new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

Extensive work was invested by OCTA 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

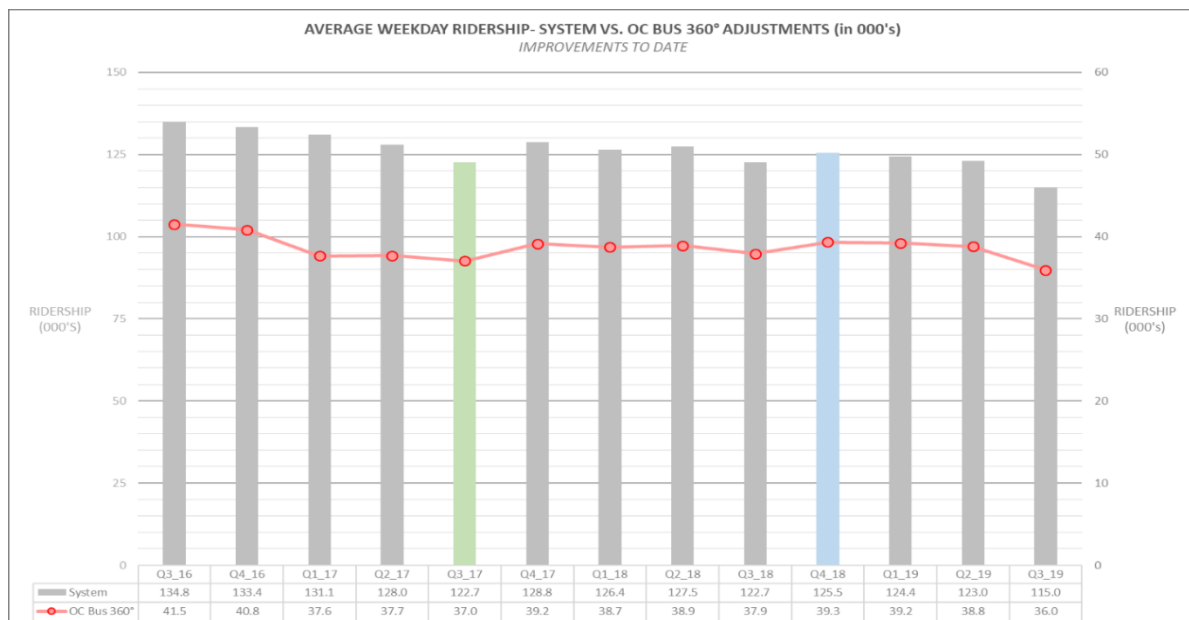
Of the series of approved bus service changes under the OC Bus 360° Plan, the changes implemented in October 2016 and February 2018 were the most significant; these have been tracked for overall OC Bus 360° plan impact. Provided below is a series of charts that show overall system performance over the 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 third quarter of FY 2018-19, ridership and productivity are down compared to last quarter and with respect to the quarterly trend since the October 2016 service change. Rain and lost service operated by the contractor were the primary factors for the drop in systemwide performance.

- Ridership was 8.3 percent lower than the previous quarter, and 6.3 percent lower than the same quarter last year.
- Productivity over the third quarter fell by 7.5 percent from last quarter and the same quarter last year.

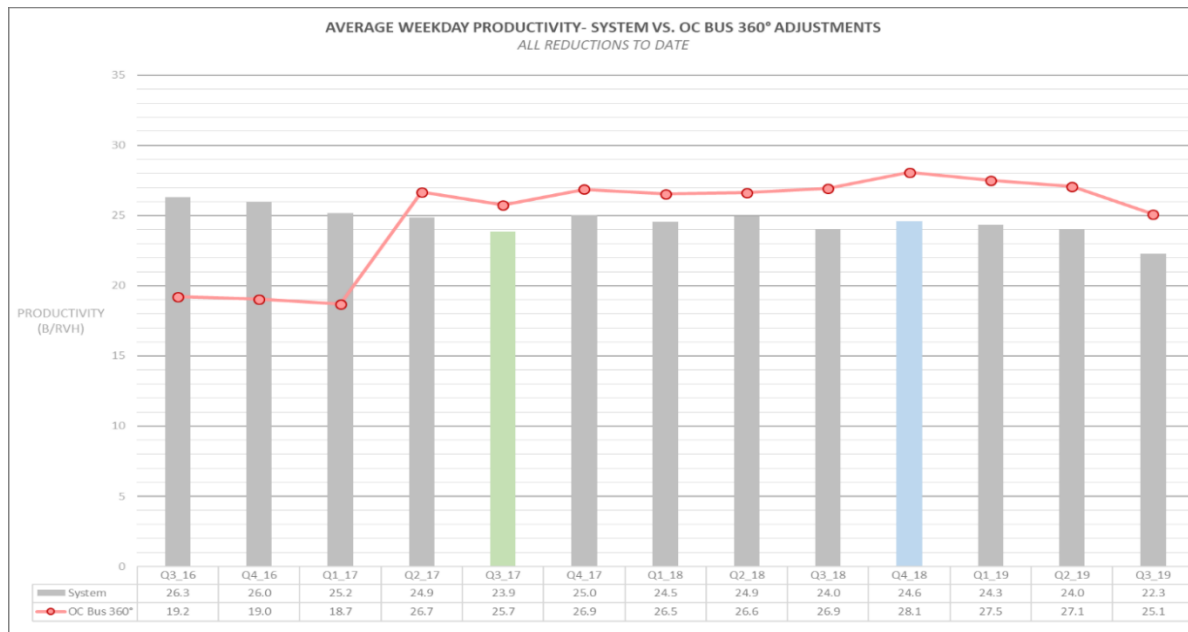
The impacts of the adjustments implemented under the OC Bus 360° plan are consistent with the systemwide trend. The following chart compares the system trend against the group of routes improved under the OC Bus 360° plan.



Comparing the results of the third quarter of FY 2018-19 with the third quarter of FY 2017-18, systemwide average weekday ridership fell by 6.5 percent, while the improved routes dropped more than 7.4 percent.

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 third quarter of FY 2018-19, productivity for the collective reductions remain above the system average, by 12.6 percent, but is trending similar to ridership, falling by 7.3 percent compared to last quarter and by 6.7 compared to the same quarter last year.

Other OC Bus 360° Initiatives

OC Flex Pilot Program

Through the first six months of operation, October 15, 2018 through March 31, 2019, the performance of the OC Flex microtransit pilot is favorable. Of the five Board-approved performance metrics, two have reached the respective targets, another is close to meeting the target, and the remaining two, though below their respective targets, are trending favorably (see chart below). The OC Flex team remains flexible to adjust the service as needed to meet the established performance targets, comprehensively evaluate the service concept along with meeting customer needs for the development of feasible recommendations as appropriate and look to attract new and existing transit riders.

Board Adopted Goals / Measures		Performance*	Goal Met?
Productivity <i>Boardings per Revenue Vehicle Hour</i>	6	1.7	X
Cost Effectiveness <i>Subsidy per Boarding</i>	\$9.00	\$41.12	X
Shared Rides <i>% of Bookings sharing a vehicle, including groups</i>	25%	23.2%	—
Connecting Transit Trips <i>% of transfer trips</i>	25%	29%	✓
Customer Satisfaction <i>% “likely”/“very likely” to recommend service</i>	85%	89%	✓

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

As of March 31, 2019, the College Pass Program has reported 1.89 million boardings with 10,939 unique participating students among participating colleges since August 2017. Ridership trends for the College Pass are generally positive, however, during Q3 ridership decreased for several months during this period – likely due to inclement weather, loss of service, and college spring break schedules.

Fullerton College is expected to join the college pass program in August 2019. During a recent Fullerton College election – with an unusually high turnout due to program’s presence on the ballot – 89 percent of student voters approved a three-year program that is free to students for the first year (paid by LCTOP and MSRC grants) and funded by low student fees the second and third year.

In May 2019, the student council government for Golden West College approved funds for the second and third years of the three-year college pass program, with the first year funding provided by LCTOP.

Implementation of the College Pass at Fullerton and Golden West colleges will begin this fall.