

Bus Operations Performance Measurements



Fiscal Year 2017-18
Fourth Quarter Report

About This Report

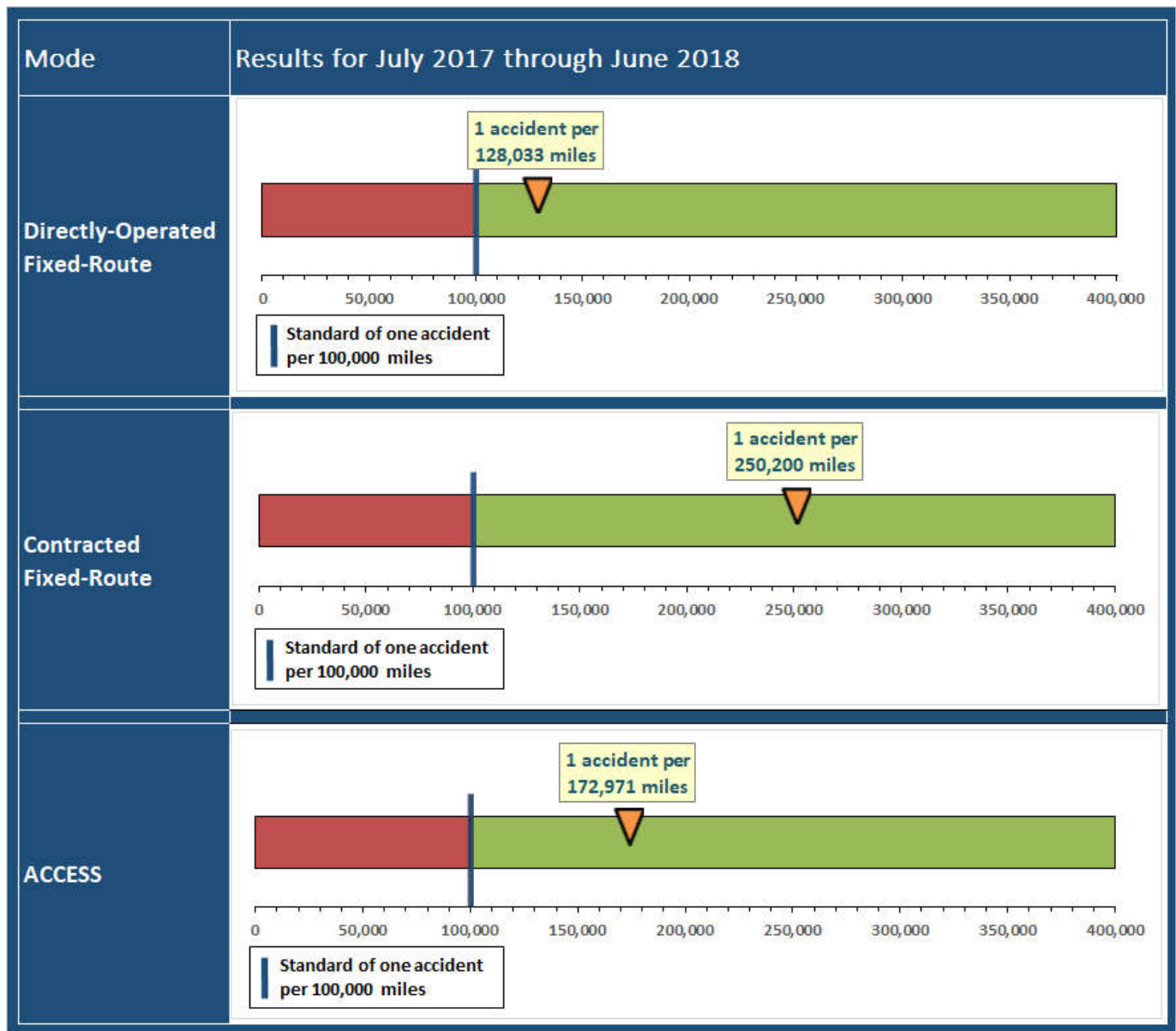
The Orange County Transportation Authority (OCTA) operates a countywide network of local, community, rail connector, and express bus routes serving over 5,000 bus stops. OCTA also operates federally-mandated paratransit service (OC ACCESS), a shared-ride program available for people unable to use the regular OC Bus service because of functional limitations. OC Bus service operated by OCTA is referred to as directly-operated fixed-route (DOFR) service, while OC Bus routes operated under contract are referred to as contracted fixed-route (CFR) service. The OC ACCESS program is a contract-operated demand-response service mandated 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

Preventable vehicle accidents are counts 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. Safety is the top priority in the delivery of public transit services. The safety standard for DOFR, CFR, and OC ACCESS services is no more than one vehicle accident per 100,000 miles.

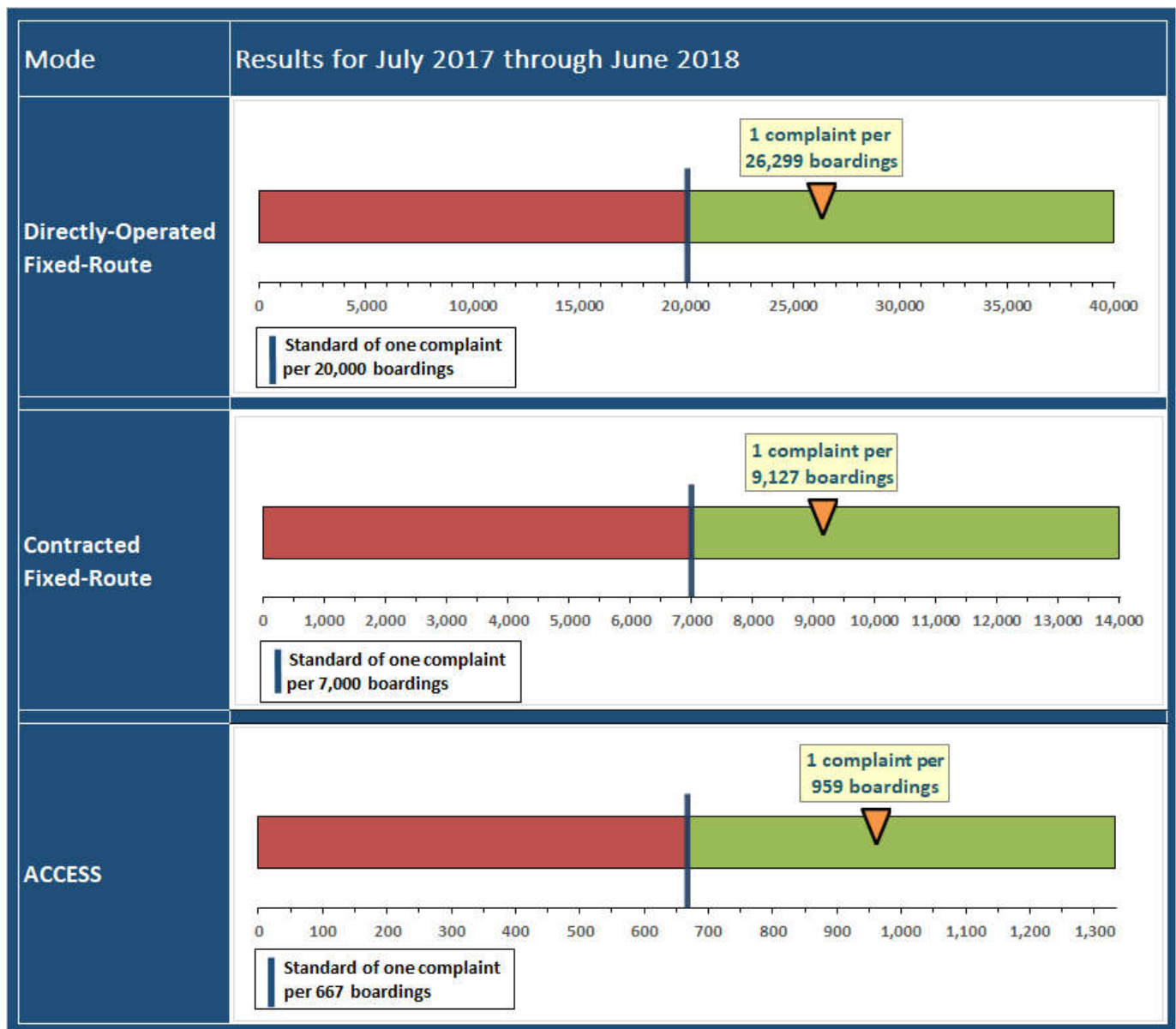
All modes of service exceeded the safety standard through the fourth quarter of fiscal year (FY) 2017-18 with less than one accident per 100,000 boardings.



Courtesy: Customer Complaints

Customer complaints are counts of incidents when a rider reports dissatisfaction with the service. The standard adopted by OCTA for OC Bus service operated by OCTA is no more than one customer complaint per 20,000 boardings; the standard for contracted 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 fourth quarter of FY 2017-18, all modes of service exceeded the courtesy standard with less than one complaint per 20,000, 7,000, and 667 boardings, respectively.



Reliability: On-Time Performance

OTP is a measure of performance evaluating a revenue vehicle's adherence to a planned schedule. For OC Bus service, a trip is considered on-time if it departs the time-point 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 as long as the vehicle arrives within a 30-minute window. The OC ACCESS OTP standard is 94 percent.

Through the fourth quarter of FY 2017-18, systemwide fixed-route OTP was 84.6 percent, which is within one half percent of the standard and a 0.1 percent improvement over the previous quarter and a 1.2 percent improvement over the same quarter last year. OTP for the OC Bus service operated by OCTA improved by two-tenths of a percent from 85.1 percent to 85.3 percent, three-tenths above the standard. The OTP for contracted OC Bus service dropped slightly by one-tenth of a percent compared to last quarter, ending the quarter at 83.5 percent.

OCTA staff continues to work with the contractor to perform route-level analysis in an effort to identify opportunities for performance improvement. This analysis includes on-board evaluations, on-site time point observations, along with communication and retraining provided to coach operators of low-performing routes.

The OTP for OC ACCESS service was maintained at a rate four-tenths of a percent above the standard at 94.4 percent.



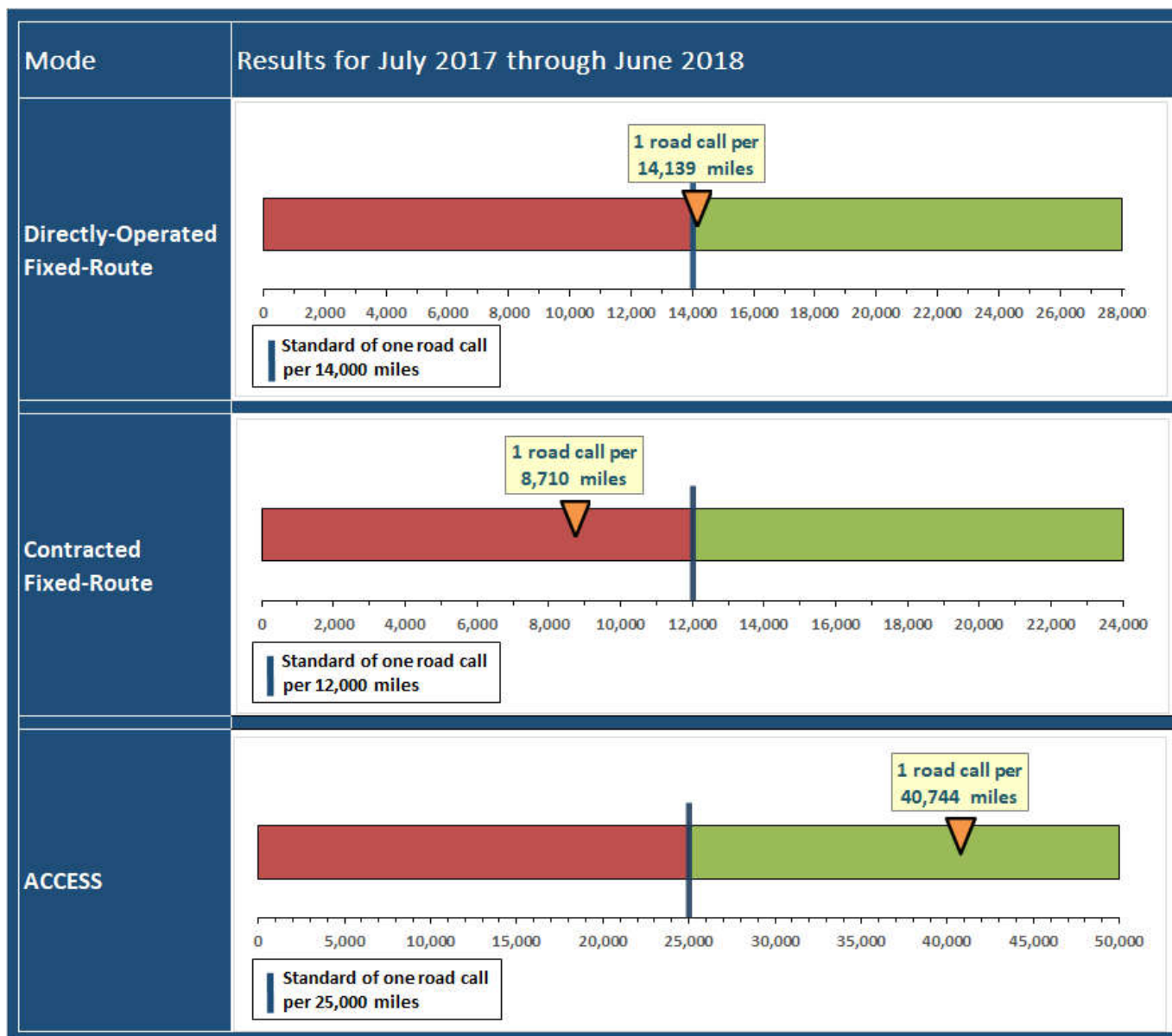
Reliability: Miles Between Road Calls

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 in service. The standard adopted by OCTA for OC Bus service operated by OCTA is 14,000 MBRC; the standard for OC Bus service operated by the contractor is 12,000 MBRC; and the contractual standard for OC ACCESS is 25,000 MBRC.

Through the fourth quarter of FY 2017-18, OC Bus services continue to improve in this performance measure. OCTA-operated OC Bus service averaged 14,139 vehicle MBRC, just above standard. This rate of reliability can be attributed to seasonal variations and continued work with the vehicle manufacturer to address warranty-related failures.

OC Bus service delivered by the contractor improved by 2.6 percent over the last quarter, but remains below the standard with 8,710 vehicle MBRC. The contractor's corporate management team has temporarily assigned regional maintenance managers to assist local managers with road calls and service interruptions in an effort to reduce failures and improve road call mileage. The efforts of the recently hired maintenance trainer and quality control inspector has had a positive impact on improving vehicle MBRC mileage standards. Though below standard, the contractor has increased the MBRC for the fifth consecutive quarter, a 12.1 percent increase over the third quarter of FY 2016-17.

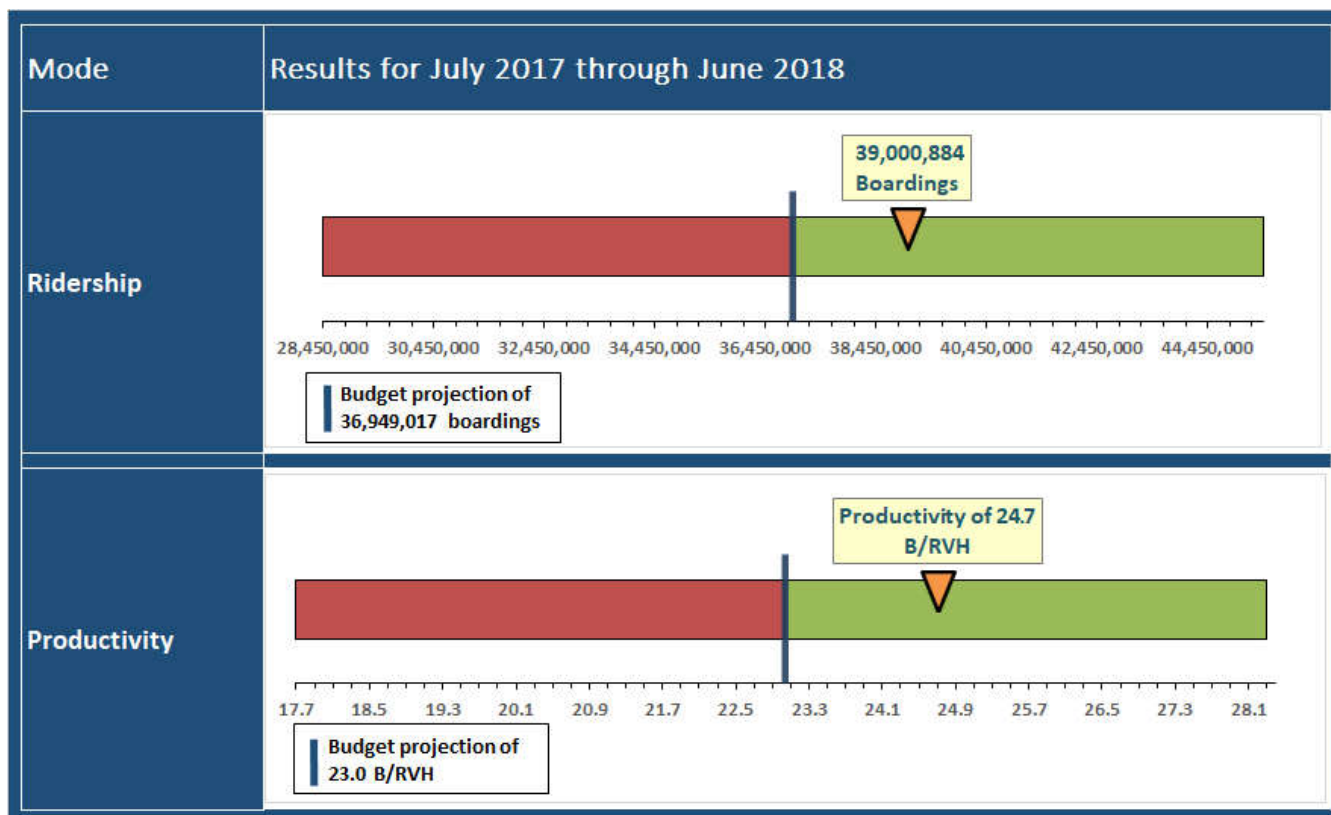
The MBRC for OC ACCESS service came in at 40,744 miles, exceeding the standard.



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. An RVH is any sixty-minute increment of time that a vehicle is available for passengers within the scheduled hours of service, excluding deadhead or recovery time at the route terminal. Boardings per RVH (B/RVH) is calculated by taking the boardings and dividing it by the number of RVH operated.

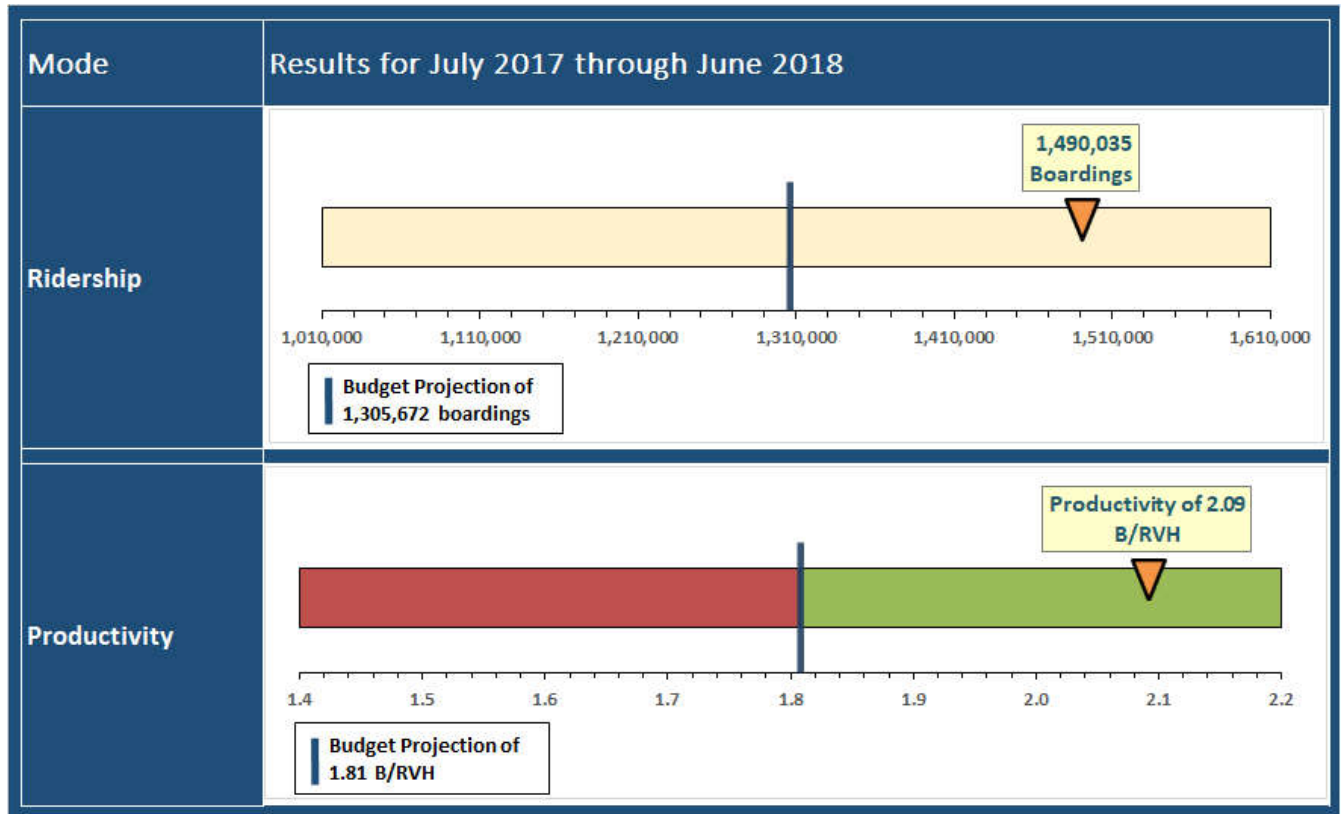
Through the fourth quarter of FY 2017-18, ridership and productivity for OC Bus service exceeded the budgeted projection, indicating a more stabilized ridership than last year. Ridership and productivity levels remained steady at 5.6 percent and 7.4 percent higher than projected, primarily due to the actions taken as part of the OC Bus 360° Plan, including service changes and implementation of the Santa Ana college pass program.



Ridership and Productivity – ACCESS

(Primary Service Provider and Supplemental Taxi)

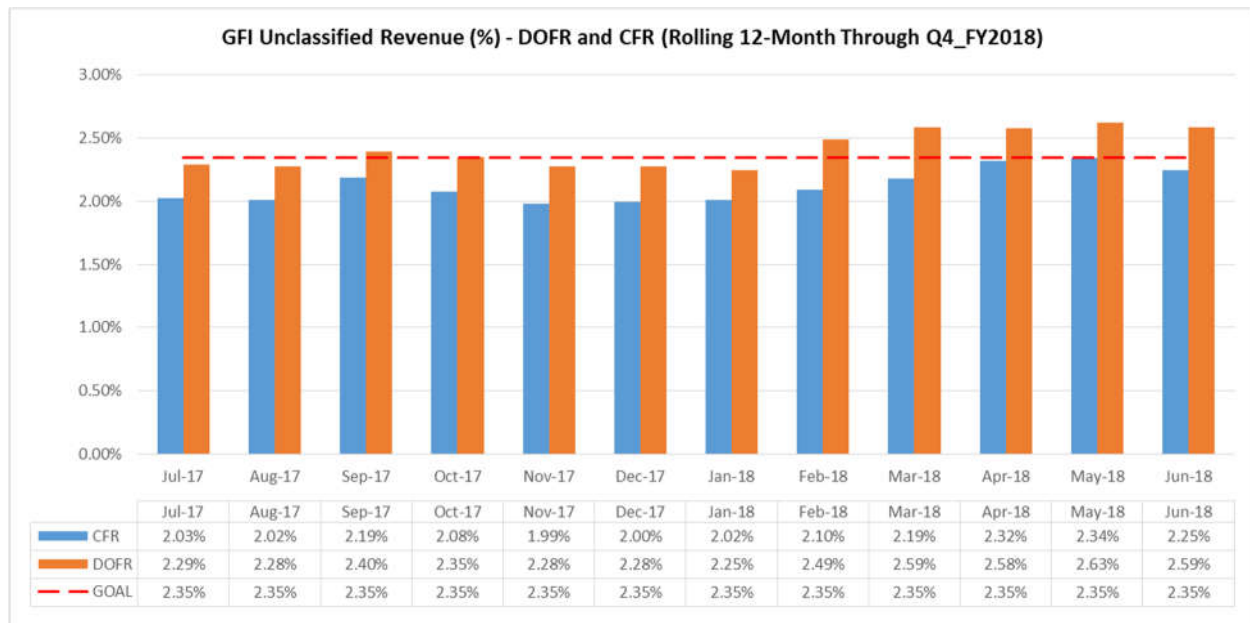
Through the fourth quarter of FY 2017-18, ridership and productivity for OC ACCESS service continue to exceed projections.



Unclassified Revenue

Unclassified revenue, as reported here, is the revenue collected on all OCTA bus service that is not properly recorded through the farebox. This can occur a variety of ways, but predominantly it is the result of an overpayment of fare or the incorrect input of fare information by the operator. The OCTA monthly standard or threshold for unclassified revenue is 2.35 percent or less. In the chart below, the monthly unclassified revenue for the last 12 months is presented by operator type.

As indicated in the chart, there is an observable increase in the percentage of unclassified revenue for all OC Bus service. Over the fourth quarter of FY 2017-18, the average unclassified revenue reported for the OC Bus service operated by OCTA was 2.60 percent, exceeding the threshold of 2.35 percent. The average unclassified revenue for contracted OC Bus service during the fourth quarter was 2.30, a significant increase over last quarter, but still within the standard. Increases are also evident for CFR unclassified revenue.



Contractor Performance: Fixed-Route

Through the fourth quarter of FY 2017-18, the performance of contracted OC Bus service was above standard for the measures of safety and courtesy. With respect to reliability, the performance of the contractor is below standard, but steadily improving.

Table 1 below provides the penalties and incentives assessed to the contractor, by quarter, for FY 2017-18. The incentives paid to date, a total of \$88,900, reflect the outstanding performance related to safety and courtesy. For the fourth quarter, the total penalties charged to the contractor was \$64,056, a 61 percent decrease from the last quarter, indicating some improvements overall. The total penalties charged to the contractor for this fiscal year is \$410,074.

Of note is the recent trend of increased missed trips. A missed trip is a scheduled trip that did not operate for a variety of reasons, including operator absence, vehicle failure, dispatch error, traffic, accident, or other unforeseen reason. The contractor corporate management is tracking this and analyzing all possible causes, which includes road calls, service interruptions, and manpower shortages. The net penalty paid by the contractor in the fourth quarter of FY 2017-18 is \$34,555. The total net penalty paid by the fixed-route contractor to date for the fiscal year is \$321,174.

Note: A credit adjustment of \$10,101 in June 2018 was made for Waiver of a Penalty assessed in March 2018 for Maintenance Manager position vacancy in excess of 30 days.

Table 1: Performance Categories	FY18 Q1	FY18 Q2	FY18 Q3	FY18 Q4	FYTD 18
On-Time Performance	\$ (1,000)	\$ (2,000)	\$ -	\$ (1,000)	\$ (4,000)
Valid Complaints: Per 7,000 boardings	\$ 8,900	\$ 9,300	\$ 11,300	\$ 9,400	\$ 38,900
Unreported Accident	\$ (15,000)	\$ (10,000)	\$ (20,000)	\$ -	\$ (45,000)
Accident Frequency Ratio	\$ 15,000	\$ 15,000	\$ 10,000	\$ 10,000	\$ 50,000
Key Positions	\$ -	\$ -	\$ (10,101)	\$ (5,272)	\$ (15,373)
CHP Terminal Inspections	\$ -	\$ -	\$ -	\$ -	\$ -
Reports	\$ -	\$ -	\$ -	\$ -	\$ -
Preventive Maintenance	\$ (26,900)	\$ (9,095)	\$ (57,723)	\$ (11,484)	\$ (105,202)
Road Calls	\$ (12,700)	\$ (12,100)	\$ (7,200)	\$ (6,300)	\$ (38,300)
Vehicle Damage: Per vehicle per day	\$ -	\$ -	\$ -	\$ -	\$ -
Missed Trips	\$ (40,000)	\$ (52,000)	\$ (80,000)	\$ (40,000)	\$ (212,000)
Prior Periods Adjustment - Valid Complaints	\$ (100)	\$ -	\$ -	\$ -	\$ (100)
Prior Periods Adjustment - Road Calls	\$ (200)	\$ -	\$ -	\$ -	\$ (200)
Waiver Adjustment - Key Positions	\$ -	\$ -	\$ -	\$ 10,101	\$ 10,101
Total	\$ (72,000)	\$ (60,895)	\$ (153,724)	\$ (34,555)	\$ (321,174)

Contractor Performance: OC ACCESS

(Primary Service Provider and Supplemental Taxi)

As presented in this report, the overall performance of the contractor providing OC ACCESS service through the fourth quarter of FY 2017-18 is above standard for all measures. Table 2 below lists, by quarter, the penalties assessed to the OC ACCESS contractor as established in the agreement. For the fourth quarter of FY 2017-18, there were no incentives awarded to the contractor, but \$10,000 of penalties were assessed for call center hold times and excessively late trips. The total net penalty paid by the OC ACCESS contractor to date for the fiscal year is \$73,300.

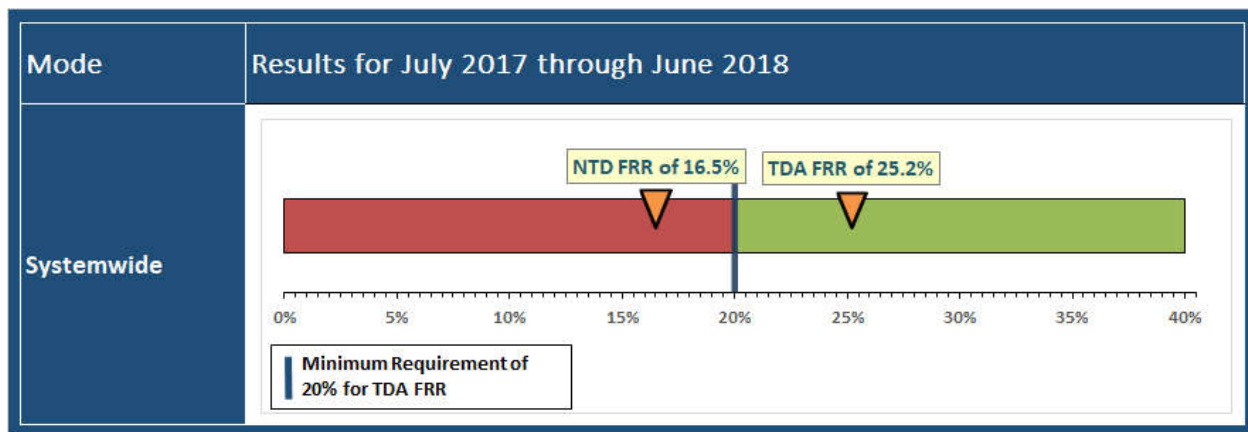
Table 2: Performance Categories	FY18 Q1	FY18 Q2	FY18 Q3	FY18 Q4	FYTD 18
Passenger Productivity	\$ -	\$ -	\$ -	\$ -	\$ -
On-Time Performance	\$ -	\$ -	\$ -	\$ -	\$ -
Customer Comments	\$ -	\$ -	\$ (1,100)	\$ -	\$ (1,100)
Call Center Hold Times	\$ -	\$ (15,000)	\$ (5,000)	\$ (5,000)	\$ (25,000)
Excessively Late Trips	\$ -	\$ (25,000)	\$ (10,000)	\$ (5,000)	\$ (40,000)
Missed Trips	\$ -	\$ -	\$ -	\$ -	\$ -
Unreported Accident	\$ (5,000)	\$ -	\$ -	\$ -	\$ (5,000)
Preventive Maintenance	\$ -	\$ (2,200)	\$ -	\$ -	\$ (2,200)
Road calls	\$ -	\$ -	\$ -	\$ -	\$ -
Reports	\$ -	\$ -	\$ -	\$ -	\$ -
Key Positions	\$ -	\$ -	\$ -	\$ -	\$ -
CHP Terminal Inspections	\$ -	\$ -	\$ -	\$ -	\$ -
Vehicle Damage	\$ -	\$ -	\$ -	\$ -	\$ -
Total	\$ (5,000)	\$ (42,200)	\$ (16,100)	\$ (10,000)	\$ (73,300)

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 minimize seasonal fluctuations, data shown below reflects actuals over the last 12 months from July 2017 through June 2018.

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 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 25.2 percent.



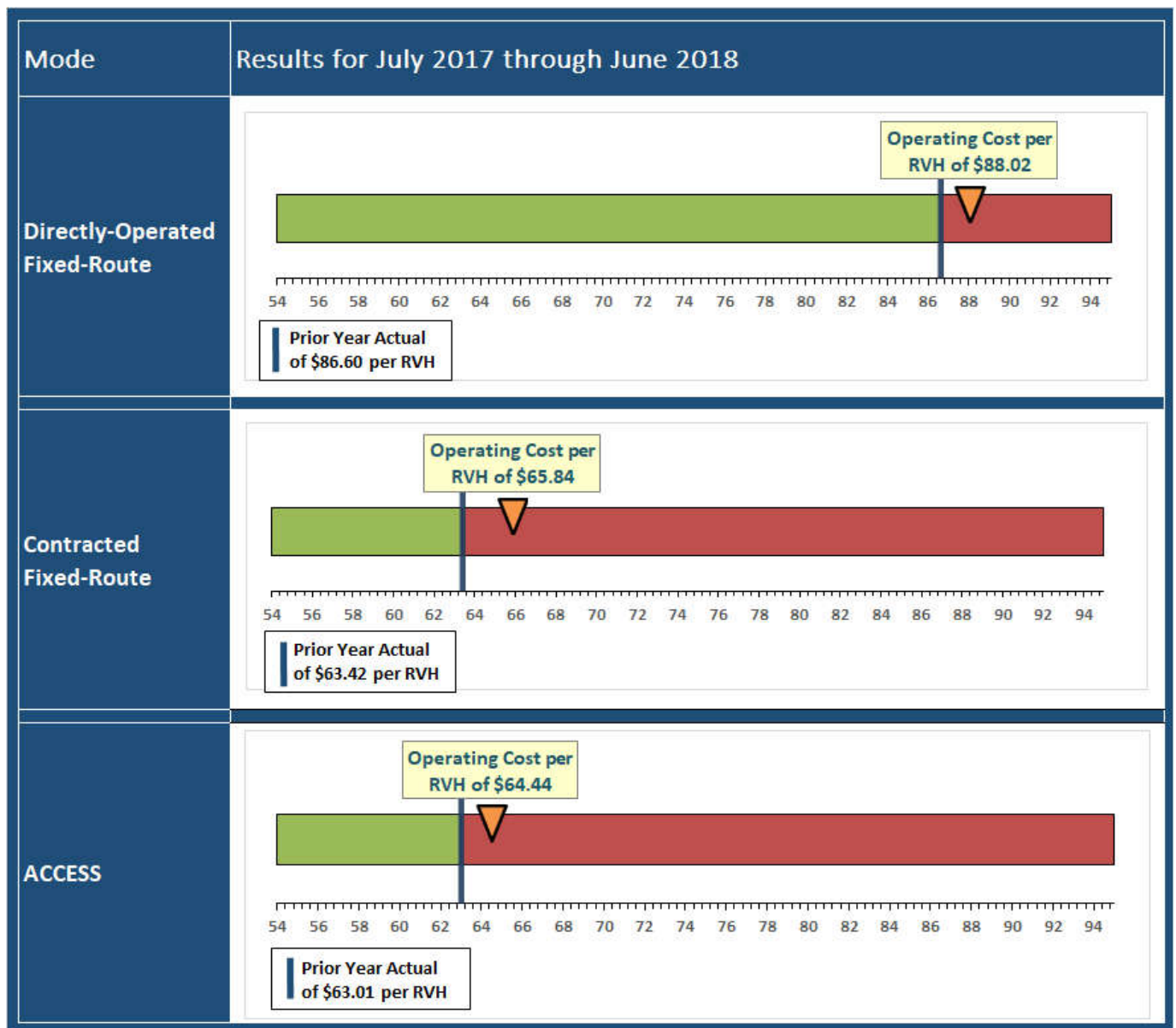
Note:

- 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 1.64 percent increase in DOFR, 3.82 percent increase in CFR, and 2.27 percent increase in OC ACCESS. The increase in DOFR was primarily due to the execution of the new Coach Operator labor contract. A signing bonus was expensed in May 2018, along with a salary increase. The increases in CFR and OC ACCESS cost per RVH were primarily associated with the increase in the contracted rates as included in First Transit, Inc., agreement and MV Transportation, Inc., agreement for FY 2017-18.



Performance Evaluation by Route

Continuing efforts are underway to better understand and address ridership trends. The OC Bus 360° Plan, approved by the Board of Directors in March 2016 and under implementation for nearly two years, included several strategies to stimulate fixed-route ridership. These strategies include targeted marketing, a discounted summer youth pass, development of a mobile ticketing application, re-branding the fixed-route fleet, and improved travel time through the use of express-type service on local routes. Major route adjustments were implemented in June and October 2016 and February 2018. All of the adjustments to date under the plan were developed on the basis of route-level performance. Staff continues to monitor the impact of these adjustments on ridership and productivity and consider other strategies to further improve service 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 fourth quarter in FY 2017-18. 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 on the last page of this report. Route types are grouped by route numbers as follows:

- Routes 1 to 99: Local routes
- Routes 100 to 199: Community routes
- Routes 200 to 299: Intra-county express routes
- Routes 400 to 499: Stationlink routes
- Routes 500 to 599: Bravo! routes
- Routes 600 to 699: Seasonal routes (these are not included on the following charts)
- Routes 700 to 799: Inter-county express routes



OCTA Operating Statistics By Route for Local and Community Services (Sorted by Subsidy per Boarding)
Fiscal Year 2017-18 Through Q4

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
021	N	8.8%	\$ 12.03	\$ 6.45	\$ 4.37	\$ 1.21	\$ 1.04	68,642	\$ 112.00	\$ 66.80	\$ 8.19	9.44	7,268	2	-	-
001	S	9.0%	10.14	6.02	3.65	0.47	0.96	599,309	145.16	89.53	8.74	13.67	43,833	8	-	-
153	N	10.5%	9.56	5.43	3.58	0.55	1.06	122,263	102.51	64.96	8.20	10.18	12,005	2	-	-
178	C	9.7%	9.19	5.04	3.33	0.82	0.83	111,870	104.44	65.45	8.23	11.26	9,938	2	-	-
085	S	11.5%	9.12	4.99	3.38	0.75	1.09	89,102	103.63	65.09	8.38	10.66	8,127	2	-	-
076	C	10.4%	9.04	5.20	3.15	0.69	0.97	96,466	136.73	83.50	11.63	14.68	6,570	2	-	-
087	S	12.3%	8.27	4.47	3.03	0.77	1.05	86,133	105.48	65.60	7.13	12.34	6,982	2	-	-
167	C	11.3%	7.78	4.24	2.80	0.74	0.90	190,854	103.32	65.01	8.68	13.03	14,651	4	-	-
177	S	14.4%	7.46	4.09	2.70	0.67	1.15	99,809	102.62	65.04	7.97	12.94	7,714	2	-	-
083	C	13.4%	6.92	4.04	2.45	0.43	1.00	665,879	144.27	88.92	8.02	19.26	34,579	9	-	-
086	C	13.4%	6.90	3.74	2.53	0.63	0.97	158,155	103.19	65.08	7.96	14.24	11,104	3	-	-
024	N	14.4%	6.63	3.71	2.52	0.40	1.05	125,134	102.47	64.90	8.16	14.08	8,887	1	-	-
079	C	11.4%	6.61	3.66	2.48	0.47	0.79	426,041	103.12	64.98	9.07	14.88	28,639	6	-	-
091	S	16.9%	6.31	3.45	2.34	0.52	1.17	400,943	105.74	65.53	7.30	15.21	26,368	7	-	-
090	S	17.0%	6.18	3.23	2.19	0.76	1.11	317,579	110.28	66.35	7.27	16.90	18,794	8	-	-
143	N	15.9%	5.94	3.37	2.22	0.35	1.06	191,804	102.81	64.94	9.06	15.47	12,397	2	-	-
560	C	14.7%	5.88	3.32	2.01	0.55	0.92	792,135	145.80	89.18	12.37	23.34	33,934	13	-	-
056	N	14.7%	5.72	3.35	2.03	0.34	0.93	417,477	139.02	84.67	13.01	22.06	18,926	4	-	-
050	N	15.2%	5.58	3.21	1.95	0.42	0.92	1,212,735	143.71	87.63	12.55	23.64	51,302	2	-	9
072	C	16.4%	5.54	3.24	1.96	0.34	1.02	488,008	136.54	83.50	10.87	21.94	22,247	5	-	-
129	N	17.7%	5.45	3.05	2.01	0.39	1.09	213,709	109.81	66.15	8.17	17.85	11,975	2	-	-
059	C	17.2%	5.44	2.92	1.98	0.54	1.02	553,389	110.55	66.23	8.95	18.66	29,660	9	-	-
071	N	17.0%	5.43	2.99	2.03	0.41	1.03	691,740	103.93	65.23	8.30	17.18	40,262	8	-	-
150	C	17.9%	5.39	2.86	1.89	0.64	1.03	182,567	106.54	65.42	10.51	18.42	9,910	3	-	-
054	N	16.6%	5.34	3.11	1.88	0.35	0.99	1,215,901	144.77	88.40	12.81	24.19	50,269	14	-	-
037	N	16.5%	5.32	3.11	1.89	0.32	0.99	1,088,412	154.00	94.20	11.61	25.74	42,284	10	-	-
055	C	18.3%	5.29	3.06	1.86	0.37	1.10	1,337,085	140.63	85.88	12.43	23.35	57,255	13	-	-
026	N	16.9%	5.21	2.90	1.97	0.34	1.09	437,170	104.19	65.06	10.30	17.78	24,582	4	-	-
089	S	18.6%	5.15	2.82	1.81	0.42	1.08	360,959	104.53	65.20	8.25	17.99	20,062	5	-	-
025	N	19.3%	4.90	2.66	1.81	0.43	1.07	407,727	104.13	65.22	8.61	18.80	21,684	5	-	-
082	S	23.5%	4.79	2.25	1.52	1.02	1.16	97,722	116.00	67.53	8.13	23.56	4,148	3	-	-
029	N	19.3%	4.54	2.61	1.58	0.35	1.00	1,995,323	144.51	88.31	12.34	27.84	71,676	14	-	5
030	N	18.8%	4.45	2.43	1.65	0.37	0.95	661,896	103.05	65.08	7.96	20.50	32,281	7	-	-
047	C	20.8%	4.34	2.51	1.52	0.31	1.06	2,144,506	142.53	87.08	12.59	28.00	76,595	19	-	-
070	C	21.2%	4.23	2.26	1.53	0.44	1.02	949,918	108.76	66.18	8.73	22.63	41,973	12	-	-
543	N	20.4%	4.21	2.42	1.46	0.33	0.99	1,101,385	143.11	87.83	12.41	29.37	37,502	10	-	-
033	N	20.4%	4.06	2.17	1.47	0.42	0.93	396,578	103.51	65.10	8.36	22.67	17,494	6	-	-
035	N	21.2%	4.03	2.11	1.43	0.49	0.95	839,582	108.95	65.97	9.00	24.29	34,968	12	-	-
057	C	21.1%	4.00	2.29	1.39	0.32	0.98	2,089,962	156.86	95.98	13.69	33.69	62,032	8	-	7
046	N	23.4%	3.84	1.99	1.35	0.50	1.02	649,197	103.72	65.11	8.95	23.83	27,239	10	-	-
053X	C	21.9%	3.78	2.20	1.34	0.24	0.99	652,238	128.94	78.53	12.35	28.47	22,908	6	-	-
043	N	23.6%	3.61	2.09	1.27	0.25	1.03	2,128,050	148.66	90.63	13.73	33.87	62,834	10	-	5
060	C	21.3%	3.60	2.12	1.29	0.19	0.92	1,970,743	140.28	85.70	12.24	32.39	60,835	12	-	-
053	C	23.2%	3.49	2.01	1.22	0.26	0.97	1,448,882	143.67	87.54	15.40	34.14	42,445	10	-	-
038	N	23.7%	3.44	1.83	1.24	0.37	0.96	1,164,297	105.18	65.43	8.59	26.13	44,551	14	-	-
057X	C	24.4%	3.33	1.87	1.13	0.33	0.97	1,138,702	129.07	78.73	11.55	32.46	35,082	5	-	4
066	C	26.0%	3.12	1.80	1.09	0.23	1.01	2,099,020	140.81	85.99	13.28	36.15	58,060	15	-	-
042	N	25.8%	2.95	1.61	1.09	0.25	0.94	1,595,631	104.99	65.34	9.42	28.83	55,340	13	-	-
064	C	26.9%	2.76	1.61	0.97	0.18	0.95	1,607,929	141.86	86.57	14.60	40.15	40,052	9	-	-
064X	C	28.9%	2.50	1.46	0.88	0.16	0.96	638,208	128.94	78.55	12.25	39.07	16,335	3	-	-

(1) Total bus count (508) 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 2017-18 Through Q4

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
211	C	2.0%	\$ 46.97	\$ 20.41	\$ 18.60	\$ 7.96	\$ 0.79	17,637	\$ 108.95	\$ 61.86	\$ 6.37	2.74	6,443	-	-	4
721	N	4.9%	43.25	24.54	14.10	4.61	1.97	21,715	214.01	133.69	8.13	5.27	4,122	3	-	-
213	N	2.6%	35.51	14.27	13.01	8.23	0.74	16,204	128.16	66.12	7.30	4.57	3,543	4	-	-
701	C	7.2%	30.41	16.54	9.50	4.37	2.01	22,902	253.36	157.84	10.51	9.03	2,536	3	-	-
794	C	15.7%	26.55	11.14	10.16	5.25	3.95	31,734	163.83	96.22	6.20	6.49	4,891	4	-	-
206	C	5.2%	24.56	8.97	8.18	7.41	0.95	13,502	140.40	74.32	7.05	7.76	1,740	3	-	-

(1) Total bus count (508) 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 2017-18 Through Q4

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
463	C	4.7%	\$ 21.84	\$ 8.21	\$ 8.21	\$ 5.42	\$ 0.81	26,124	\$ 135.18	\$ 71.14	\$ 12.77	7.85	3,329	4	-	-
480	C	10.4%	10.15	3.83	3.83	2.49	0.89	26,776	133.59	70.46	11.51	15.62	1,715	2	-	-
453	N	12.1%	8.83	3.32	3.32	2.19	0.91	30,387	138.24	71.10	20.92	18.33	1,658	2	-	-
472	C	13.4%	8.53	2.88	2.88	2.76	0.90	36,263	129.20	69.62	10.51	19.38	1,871	3	-	-
473	C	14.0%	7.41	2.61	2.61	2.19	0.85	45,613	136.64	70.45	12.72	22.49	2,028	3	-	-
462	C	13.9%	7.17	2.86	2.86	1.45	0.93	34,440	126.76	68.58	18.04	19.08	1,805	1	-	-

(1) Total bus count (508) is based on PM weekday equipment requirements.
(2) Routes 212, 216, 411, 430, 454 and 490 removed due to elimination of the routes during October and February service change. This accounts for roughly 35K boardings and 3.6K RVH in FY 2018.
(3) 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 2017-18 Through Q4

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
047	C	20.8%	\$ 4.34	\$ 2.51	\$ 1.52	\$ 0.31	\$ 1.06	2,144,506	\$ 142.53	\$ 87.08	\$ 12.59	28.00	76,595	19	-	-
043	N	23.6%	3.61	2.09	1.27	0.25	1.03	2,128,050	148.66	90.63	13.73	33.87	62,834	10	-	5
066	C	26.0%	3.12	1.80	1.09	0.23	1.01	2,099,020	140.81	85.99	13.28	36.15	58,060	15	-	-
057	C	21.1%	4.00	2.29	1.39	0.32	0.98	2,089,962	156.86	93.69	13.69	33.69	62,032	8	-	7
029	N	19.3%	4.54	2.61	1.58	0.35	1.00	1,995,323	144.51	88.31	12.34	27.84	71,676	14	-	5
060	C	21.3%	3.60	2.12	1.29	0.19	0.92	1,970,743	140.28	85.70	12.24	32.39	60,835	12	-	-
064	C	26.9%	2.76	1.61	0.97	0.18	0.95	1,907,929	141.86	86.57	14.60	40.15	40,052	9	-	-
042	N	25.8%	2.95	1.61	1.09	0.25	0.94	1,595,631	104.99	65.34	9.42	28.83	55,340	13	-	-
053	C	23.2%	3.49	2.01	1.22	0.26	0.97	1,448,882	143.67	87.54	15.40	34.14	42,445	10	-	-
055	C	18.3%	5.29	3.06	1.86	0.37	1.10	1,337,085	140.63	85.88	12.43	23.35	57,255	13	-	-
054	N	16.6%	5.34	3.11	1.88	0.35	0.99	1,215,901	144.77	88.40	12.81	24.19	50,269	14	-	-
050	N	15.2%	5.58	3.21	1.95	0.42	0.92	1,212,735	143.71	87.63	12.55	23.64	51,302	2	-	9
038	N	23.7%	3.44	1.83	1.24	0.37	0.96	1,164,297	105.18	65.43	8.59	26.13	44,551	14	-	-
057X	C	24.4%	3.33	1.87	1.13	0.33	0.97	1,138,702	129.07	78.73	11.55	32.46	35,082	5	-	4
543	N	20.4%	4.21	2.42	1.46	0.33	0.99	1,101,385	143.11	87.83	12.41	29.37	37,502	10	-	-
037	N	16.5%	5.32	3.11	1.89	0.32	0.99	1,088,412	154.00	94.20	11.61	25.74	42,284	10	-	-
070	C	21.2%	4.23	2.26	1.53	0.44	1.02	949,918	108.76	66.18	8.73	22.63	41,973	12	-	-
035	N	21.2%	4.03	2.11	1.43	0.49	0.95	839,582	108.95	65.97	9.00	24.29	34,568	12	-	-
560	N	14.7%	5.88	3.32	2.01	0.55	0.92	792,135	145.80	89.18	12.37	23.34	33,934	13	-	-
071	C	17.0%	5.43	2.99	2.03	0.41	1.03	691,740	103.93	65.23	8.30	17.18	40,262	8	-	-
083	C	13.4%	6.92	4.04	2.45	0.43	1.00	665,879	144.27	88.92	8.02	19.26	34,579	9	-	-
030	N	18.8%	4.45	2.43	1.65	0.37	0.95	661,896	103.05	65.08	7.96	20.50	32,281	7	-	-
053X	C	21.9%	3.78	2.20	1.34	0.24	0.99	652,238	128.94	78.53	12.35	28.47	22,908	6	-	-
046	N	23.4%	3.84	1.99	1.35	0.50	1.02	649,197	103.72	65.11	8.95	23.83	27,239	10	-	-
064X	C	28.9%	2.50	1.46	0.88	0.16	0.96	638,208	128.94	78.55	12.25	39.07	16,335	3	-	-
001	S	9.0%	10.14	6.02	3.65	0.47	0.96	599,309	145.16	89.53	8.74	13.67	43,833	8	-	-
059	C	17.2%	5.44	2.92	1.98	0.54	1.02	553,389	110.55	66.23	8.95	18.66	29,660	9	-	-
072	C	16.4%	5.54	3.24	1.96	0.34	1.02	488,008	136.54	83.50	10.87	21.94	22,247	5	-	-
026	N	16.9%	5.21	2.90	1.97	0.34	0.99	437,170	104.19	65.06	10.30	17.78	24,582	4	-	-
079	C	11.4%	6.61	3.66	2.48	0.47	0.79	426,041	103.12	64.98	9.07	14.88	28,639	6	-	-
056	N	14.7%	5.72	3.35	2.03	0.34	0.93	417,477	139.02	84.67	13.01	22.06	18,926	4	-	-
025	N	19.3%	4.90	2.66	1.81	0.43	1.07	407,727	104.13	65.22	8.61	18.80	21,684	5	-	-
091	S	16.9%	6.31	3.45	2.34	0.52	1.17	400,943	105.74	65.53	7.30	15.21	26,368	7	-	-
033	N	20.4%	4.06	2.17	1.47	0.42	0.93	396,578	103.51	65.10	8.36	22.67	17,494	6	-	-
089	S	18.6%	5.15	2.82	1.91	0.42	1.08	360,959	104.53	65.20	8.25	17.99	20,062	5	-	-
090	S	17.0%	6.18	3.23	2.19	0.76	1.11	317,579	110.28	66.35	7.27	16.90	18,794	8	-	-
129	N	17.7%	5.45	3.05	2.01	0.39	1.09	213,709	109.81	66.15	8.17	17.85	11,975	2	-	-
143	N	15.9%	5.94	3.37	2.22	0.35	1.06	191,804	102.81	64.94	9.06	15.47	12,397	2	-	-
167	C	11.3%	7.78	4.24	2.80	0.74	0.90	190,854	103.32	65.01	8.68	13.03	14,651	4	-	-
150	C	17.9%	5.39	2.86	1.89	0.64	1.03	182,567	106.54	65.42	10.51	18.42	9,910	3	-	-
086	C	13.4%	6.90	3.74	2.53	0.63	0.97	158,155	103.19	65.08	7.96	14.24	11,104	3	-	-
024	N	14.4%	6.63	3.71	2.52	0.40	1.05	125,134	102.47	64.90	8.16	14.08	8,887	1	-	-
153	N	10.5%	9.56	5.43	3.58	0.55	1.06	122,263	102.51	64.96	8.20	10.18	12,005	2	-	-
178	C	9.7%	9.19	5.04	3.33	0.82	0.90	111,870	104.44	65.45	8.23	11.26	9,938	2	-	-
177	S	14.4%	7.46	4.09	2.70	0.67	1.15	99,809	102.62	65.04	7.97	12.94	7,714	2	-	-
082	S	23.5%	4.79	2.25	1.52	1.02	1.16	97,722	116.00	67.53	8.13	23.56	4,148	3	-	-
076	C	10.4%	9.04	5.20	3.15	0.69	0.97	96,466	136.73	83.50	11.63	14.68	6,570	2	-	-
085	S	11.5%	9.12	4.99	3.38	0.75	1.09	89,102	103.63	65.09	8.38	10.96	8,127	2	-	-
087	S	12.3%	8.27	4.47	3.03	0.77	1.05	86,133	105.48	65.60	7.13	12.34	6,982	2	-	-
021	N	8.8%	12.03	6.45	4.37	1.21	1.04	68,642	112.00	66.80	8.19	9.44	7,268	2	-	-

(1) Total bus count (508) 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 2017-18 Through Q4

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	15.7%	\$ 26.55	\$ 11.14	\$ 10.16	\$ 5.25	\$ 3.95	31,734	\$ 163.83	\$ 96.22	\$ 6.20	6.49	4,891	4	-	-
701	C	7.2%	30.41	16.54	9.50	4.37	2.01	22,902	253.36	157.84	10.51	9.03	2,536	3	-	-
721	N	4.9%	43.25	24.54	14.10	4.61	1.97	21,715	214.01	133.69	8.13	5.27	4,122	3	-	-
211	C	2.0%	46.97	20.41	18.60	7.96	0.79	17,637	108.95	61.86	6.37	2.74	6,443	-	4	-
213	N	2.6%	35.51	14.27	13.01	8.23	0.74	16,204	128.16	66.12	7.30	4.57	3,543	4	-	-
206	C	5.2%	24.56	8.97	8.18	7.41	0.95	13,502	140.40	74.32	7.05	7.76	1,740	3	-	-

(1) Total bus count (508) 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 2017-18 Through Q4

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	14.0%	\$ 7.41	\$ 2.61	\$ 2.61	\$ 2.19	\$ 0.85	45,613	\$ 136.64	\$ 70.45	\$ 12.72	22.49	2,028	3	-	-
472	C	13.4%	8.53	2.88	2.89	2.76	0.90	36,263	129.20	69.62	10.51	19.38	1,871	3	-	-
462	C	13.9%	7.17	2.86	2.86	1.45	0.93	34,440	126.76	68.58	18.04	19.08	1,805	1	-	-
453	N	12.1%	8.83	3.32	3.32	2.19	0.91	30,387	138.24	71.10	20.92	18.33	1,658	2	-	-
480	C	10.4%	10.15	3.83	3.83	2.49	0.89	26,776	133.59	70.46	11.51	15.62	1,715	2	-	-
463	C	4.7%	21.84	8.21	8.21	5.42	0.81	26,124	135.18	71.14	12.77	7.85	3,329	4	-	-

(1) Total bus count (508) is based on PM weekday equipment requirements.

(2) Routes 212, 216, 411, 430, 454 and 490 removed due to elimination of the routes during October and February service change. This accounts for roughly 35K boardings and 3.6K RVH in FY 2018.

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

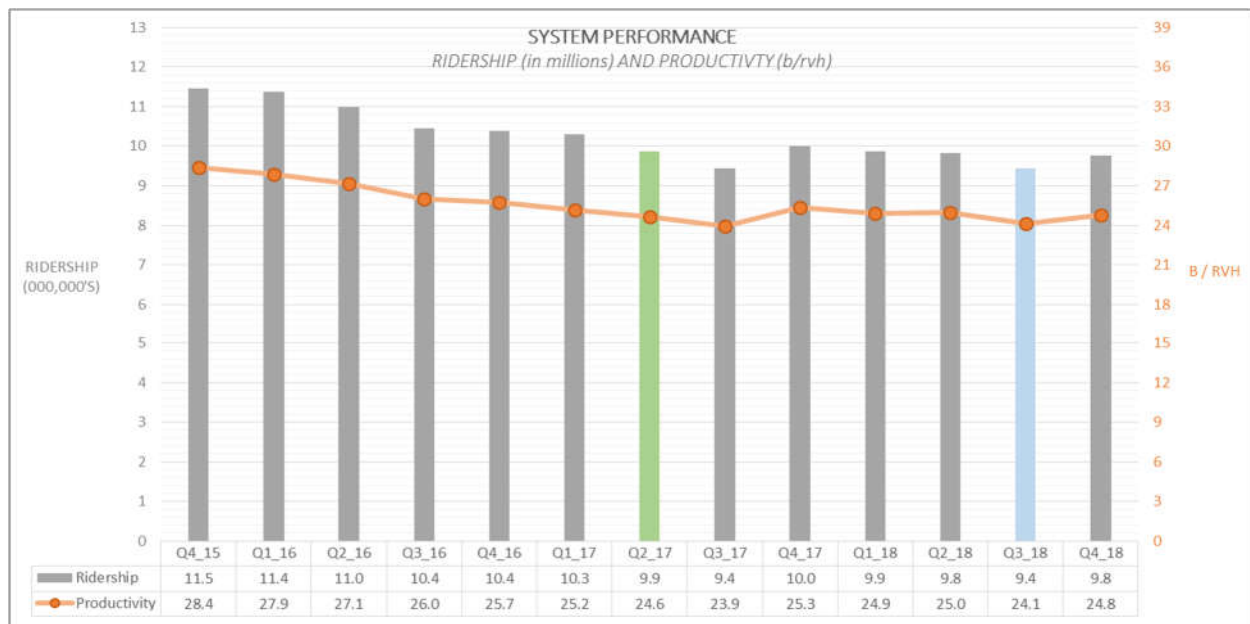
Route Reference Table

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	Los Alamitos - 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
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

Major bus service changes approved under the OC 360° Bus Plan were implemented in October 2016 and February 2018. Provided below is a series of charts that show overall system performance over the last 13 quarters and the impact of the route adjustments implemented in October 2016 (marked by the green bar) and February 2018 (marked by the 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 overall plan and does not include the seasonal services operated by OCTA (e.g., OC Fair Express).

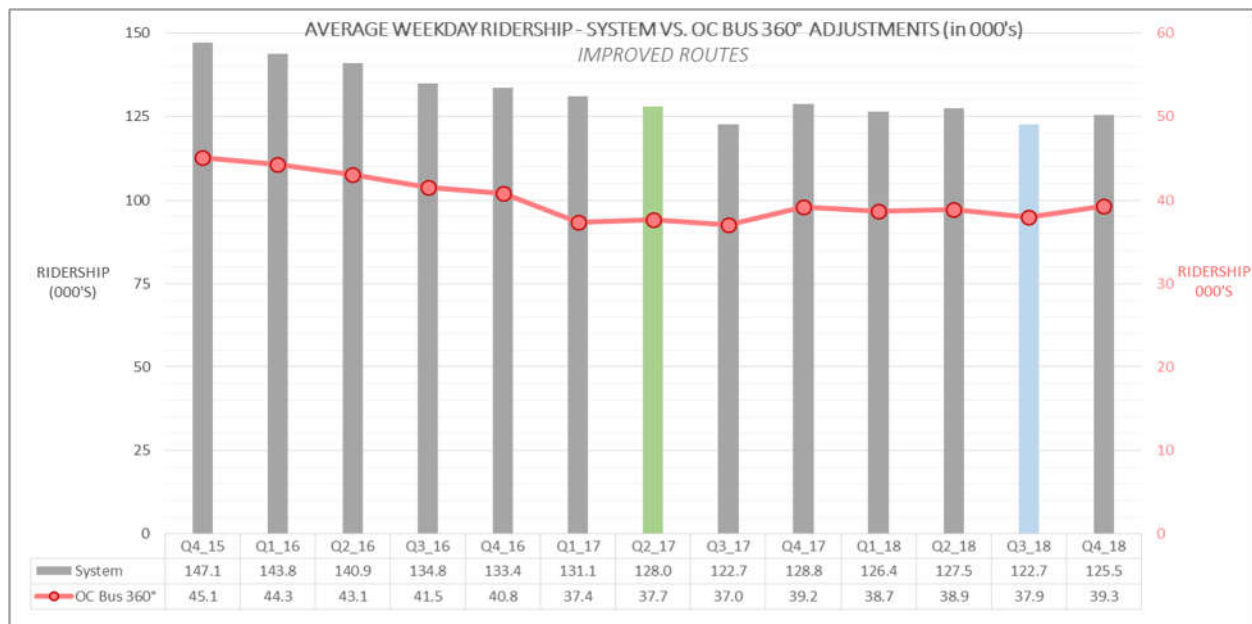
The trend of overall system ridership and productivity is provided on the following chart.



Ridership through the fourth quarter of FY 2017-18 continues to show a stabilizing ridership trend from the changes implemented in October 2016 through the February 2018 Service Change Program.

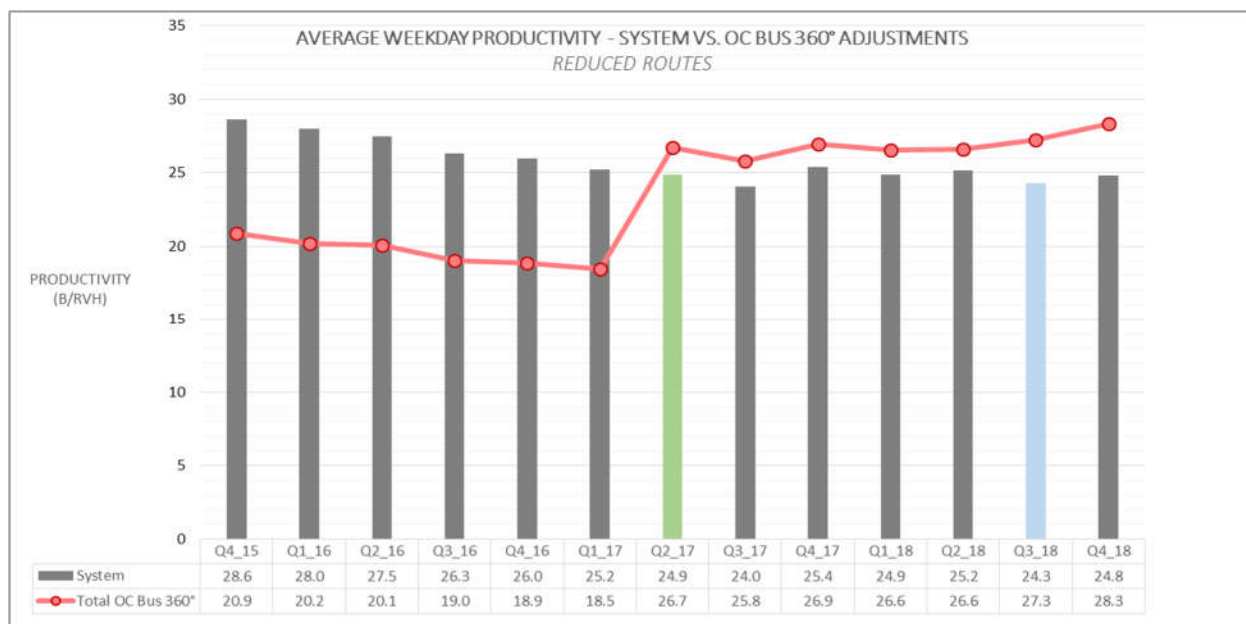
- Ridership was 3.4 percent higher than the previous quarter, but essentially 2.3 percent lower than the same quarter last FY.
- Productivity (orange line in chart) over the fourth quarter improved by 2.9 percent.

Overall, the adjustments implemented under the OC Bus 360° Plan are trending steadily. The following chart compares the system trend against the group of routes improved in October 2016 and February 2018.



- The system average for average weekday ridership during the fourth quarter was 125.5 thousand, a 2.3 percent increase compared to the previous quarter, but 2.6 percent lower than the same quarter last year.
- The improved routes collectively (October 2016 and February 2018 improvements) had 39,300 average weekday boardings over the quarter.
 - 3.7 percent higher than the 37,900 average weekday boardings reported the previous quarter, but
 - Slightly higher than the 39,200 boardings reported during the same quarter last year.
 - Trend is similar to systemwide average weekday ridership

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. In February 2018, more routes were reduced or eliminated to improve productivity. 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 fourth quarter of FY 2017-18, the collective reductions are yielding observable improvements in productivity compared to the system average.

- The system average for weekday productivity was just below 25 B/RVH at 24.8 but is drawing closer to the system average.
- The reduced services collectively had an average weekday productivity above 28 B/RVH, the highest in three years.
 - 6.4 percent higher than the second quarter (before the February 2018 service change); and
 - 5.3 percent higher than the same quarter last year.

Note: For the last reporting period, the February 2018 reductions were not included in this chart. As a result, OC Bus 360° number for the third quarter of FY 2017-18 varies in this report.

Next Steps

Staff will continue to work and collaborate to improve service reliability, with a focus on OTP and vehicle reliability.

Staff from the External Affairs, Operations, and Planning Divisions will continue to track the implementation of strategies under the OC Bus 360° Plan, including the launch of the OC FLEX service.