

Transit Division Performance Measurements



Fiscal Year 2017-18
Third Quarter Report

About This Report

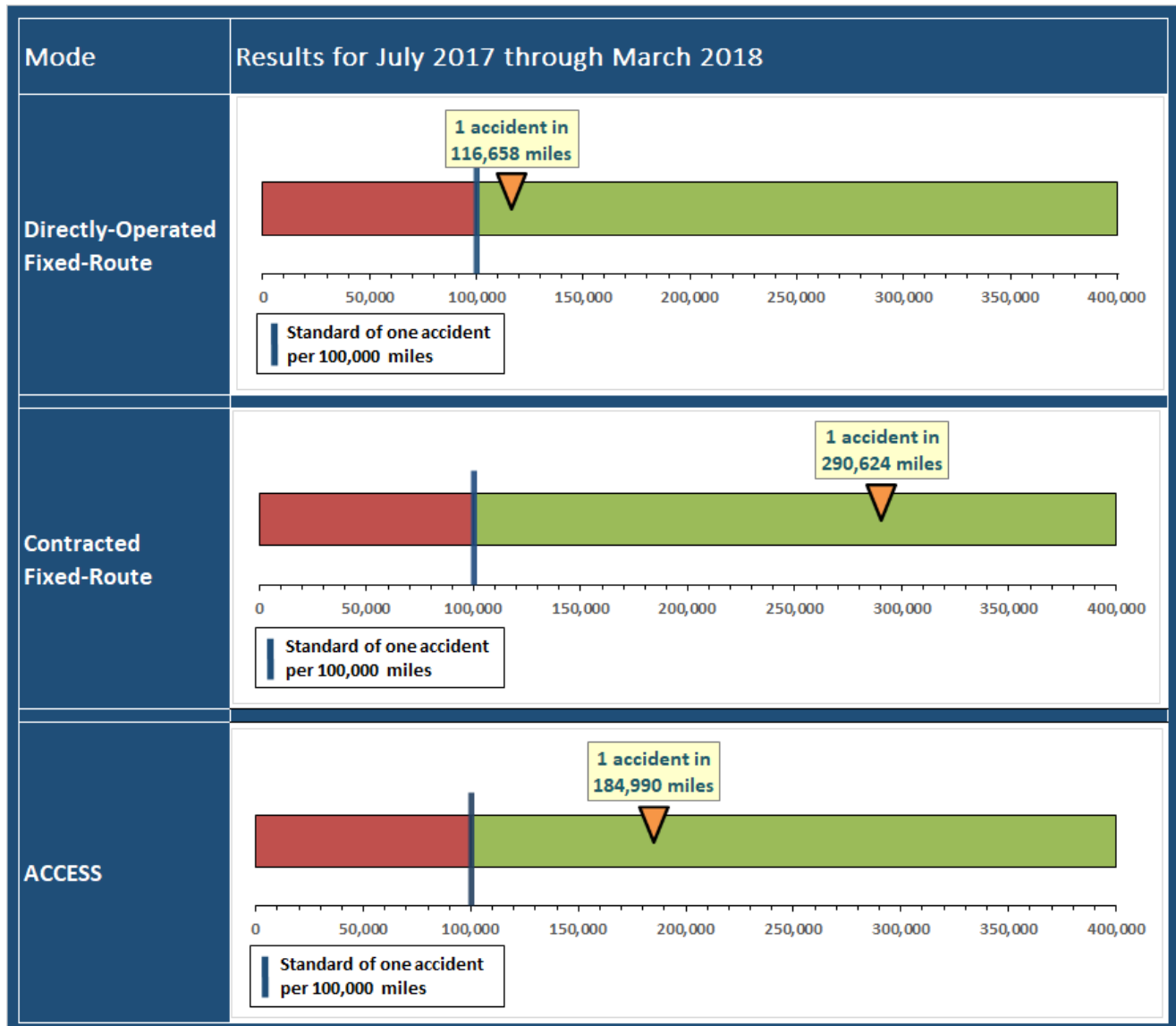
The Orange County Transportation Authority (OCTA) operates a countywide network of local, community, rail connector, and express bus routes serving over 5,000 bus stops known as OC Bus. OCTA also operates federally-mandated paratransit service known as OC ACCESS, a shared-ride program available for people 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 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, which includes DOFR and CFR, respectively, and OC ACCESS services.

Safety: Preventable Vehicle Accidents

Preventable vehicle accidents are counts of incidents concerning physical contact occurring 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 ACCESS services is no more than one vehicle accident per 100,000 miles.

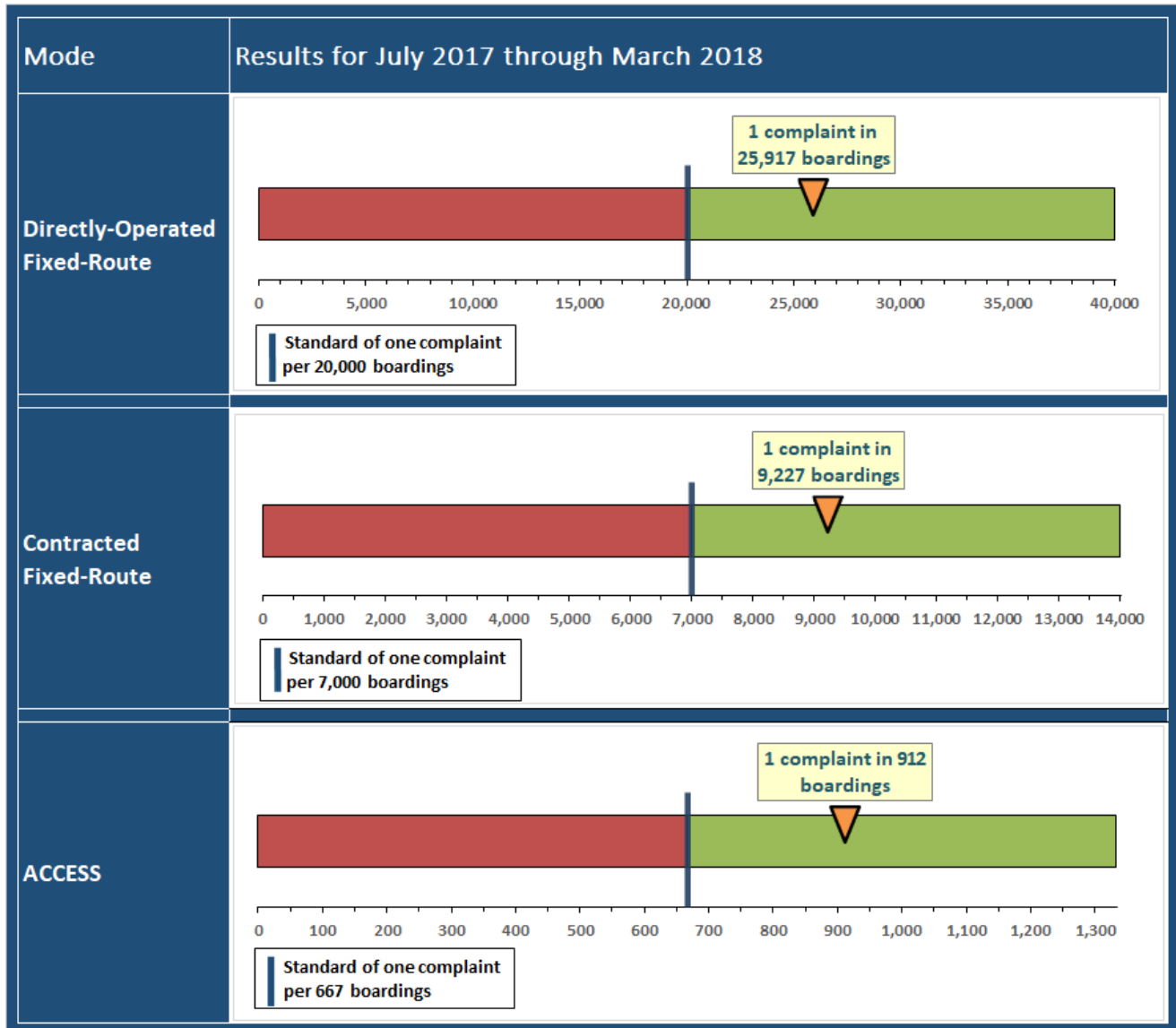
All modes of service exceeded the safety standard through the third quarter of fiscal year (FY) 2017-18 with less than one accident per 100,000 boardings.



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 third 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 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 third quarter of FY 2017-18, systemwide fixed-route OTP was 84.5 percent, which is within one half percent of the standard; a 0.4 percent increase over last quarter and a 1.5 percent improvement over the same quarter last year. OTP for the OC Bus service operated by OCTA improved by one-half of a percent from 84.6 percent to 85.1 percent, one tenth above the standard. The OTP for contracted OC Bus service also improved slightly by two-tenths of a percent compared to last quarter, ending the quarter at 83.6 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 timepoint observations, along with communication and retraining provided to the coach operators of low-performing routes. The OTP for OC ACCESS service was maintained at a rate three tenths above the standard at 94.3 percent.

OTP-Timepoint Conversion Project

This project involves the geographic relocation of OTP timepoints from the middle of the intersection to the specific stop. In an effort to improve the management of coach operator performance with respect to schedule adherence, staff launched an OTP timepoint conversion pilot. This effort is intended only to improve OTP data collection. Timepoints are designated locations along a route used to control the spacing of vehicles and are points used by transit agencies to define the scheduled time a bus arrives or departs. These are the locations OCTA tracks OTP through automated vehicle location technology (AVL), which is part of the on-board communication system.

Until now, timepoints have generally been located at intersections and are geographically positioned in the middle of the intersection nearest to the stop. The system records the time a bus crosses the intersection. The issue with this approach is that the bus has already departed a near-side stop, or has yet to reach a far-side stop. In both cases, the data generated could be a false report of early or late departures. To address this issue, OCTA is in the process of relocating (converting) the timepoints from the middle of the intersection to the bus stop site. The successful relocation of timepoints to the actual stop will minimize, if not eliminate, the inaccuracies associated with the data currently received for both early and late arrivals and allow OCTA to effectively manage coach operator performance.



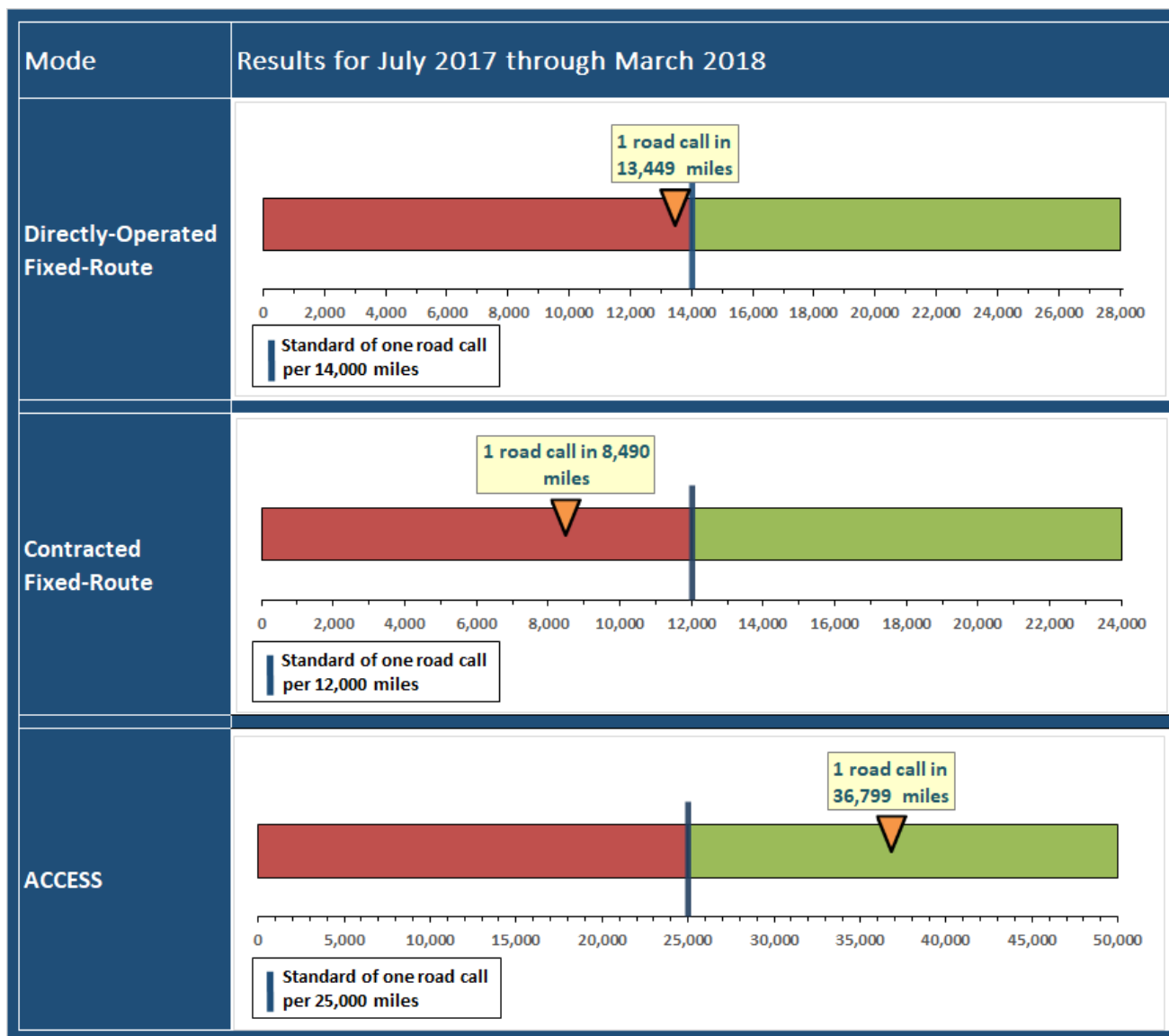
Reliability: Miles Between Road Calls

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 result in delays to service, with a few exceptions. The standard adopted by OCTA for DOFR 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 third quarter of FY 2017-18, OC Bus services improved, but did not meet the standard for MBRC. OCTA-operated OC Bus service averaged 13,449 vehicle miles between road calls, an increase of 4.6 percent over the previous quarter. This increase reflects the impact of seasonal variations and the continued work with the manufacturer to address warranty-related coolant sensor failures on the new buses. To date, the coolant sensors on all 173 new buses have been replaced.

OC Bus service delivered by the contractor improved by 4.3 percent over the last quarter, but remains below the standard with 8,490 vehicle MBRC. The contractor's corporate management team continues to analyze road calls and service interruptions in an effort to improve MBRC failures. Further, the addition of a full-time maintenance trainer and a quality control inspector are other actions taken by the contractor to improve vehicle MBRC and decrease service interruptions. Immediate results of these actions show road call mileage is steadily increasing, currently tracking over 10,000 miles for April.

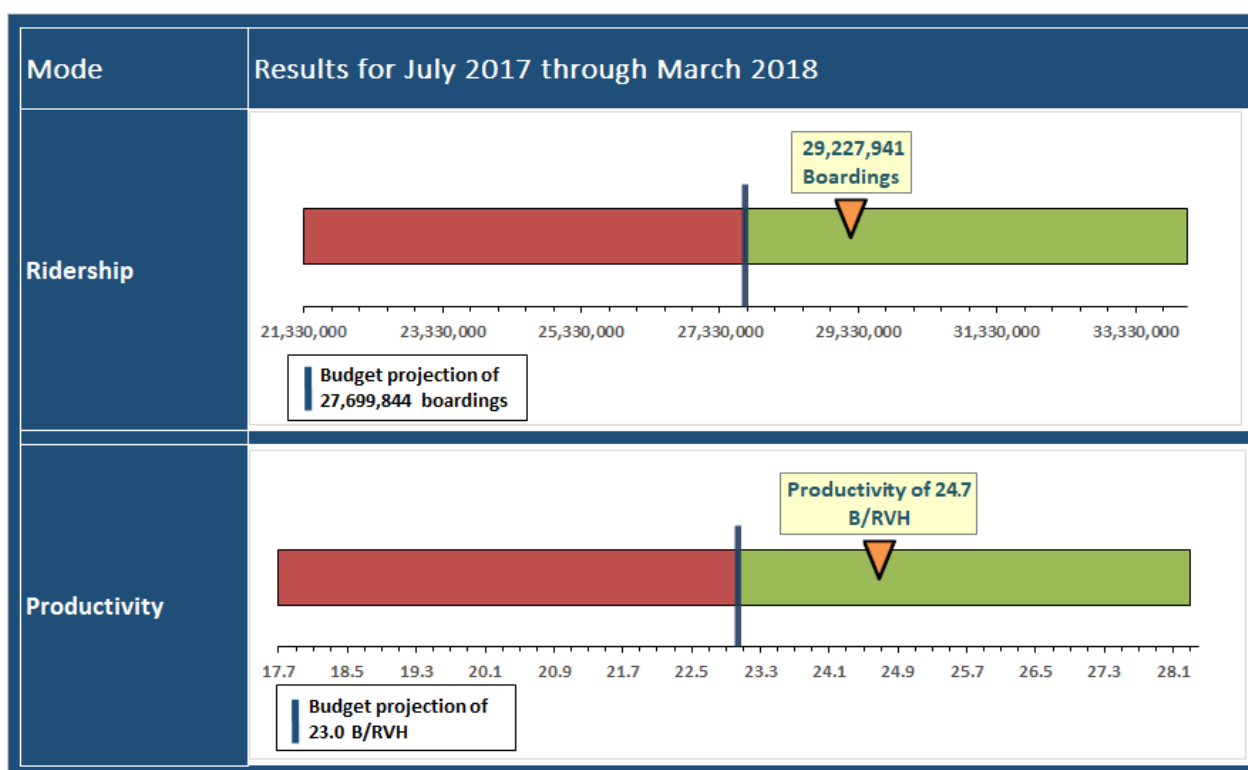
The MBRC for OC ACCESS service came in at 36,799 miles, exceeding the standard.



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. RVH is any sixty-minute increment of time that a vehicle is available for passengers within the scheduled hours of service, not including deadheading 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.

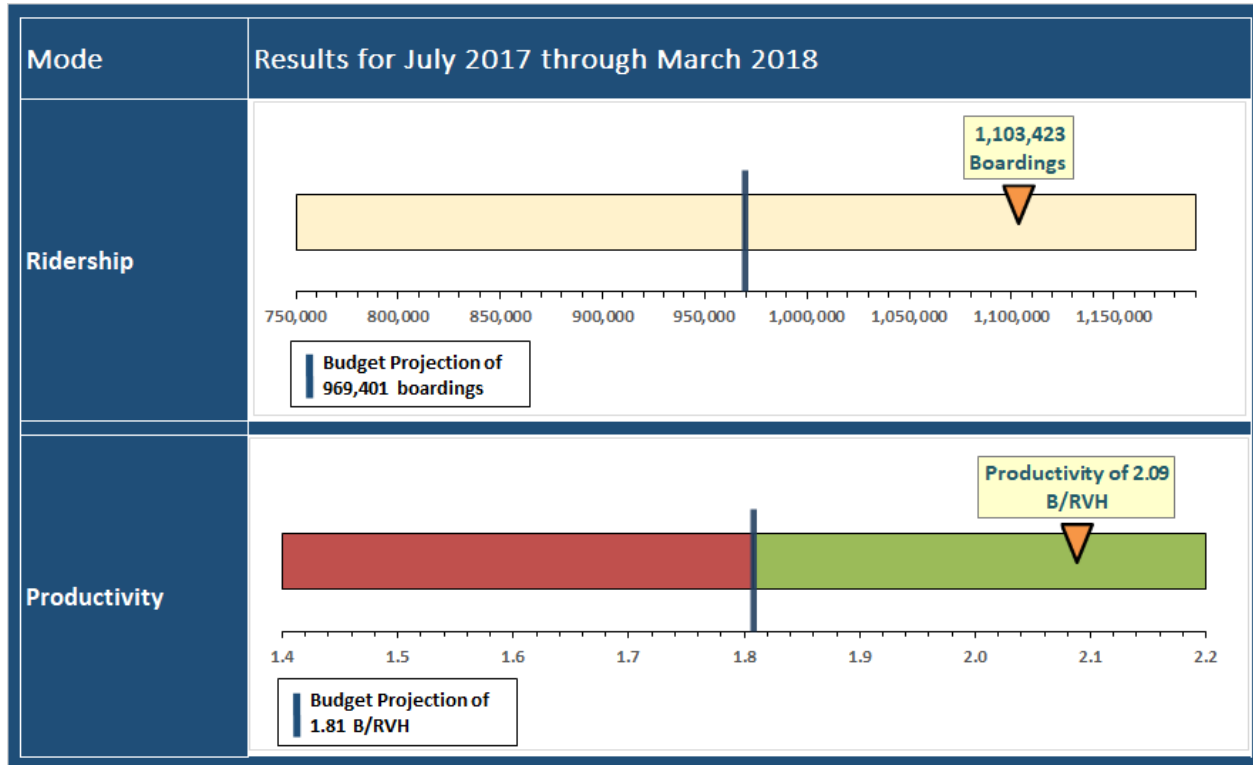
Through the third quarter of FY 2017-18, ridership and productivity for OC Bus service continue to exceed the budgeted projection as ridership appears to have stabilized. Ridership was 5.5 percent higher than projected, and productivity was 7.4 percent higher. The actions taken as part of the OC Bus 360° plan, primarily in October 2016, continue to have a positive impact on the ridership and productivity trend.



Ridership and Productivity – OC ACCESS

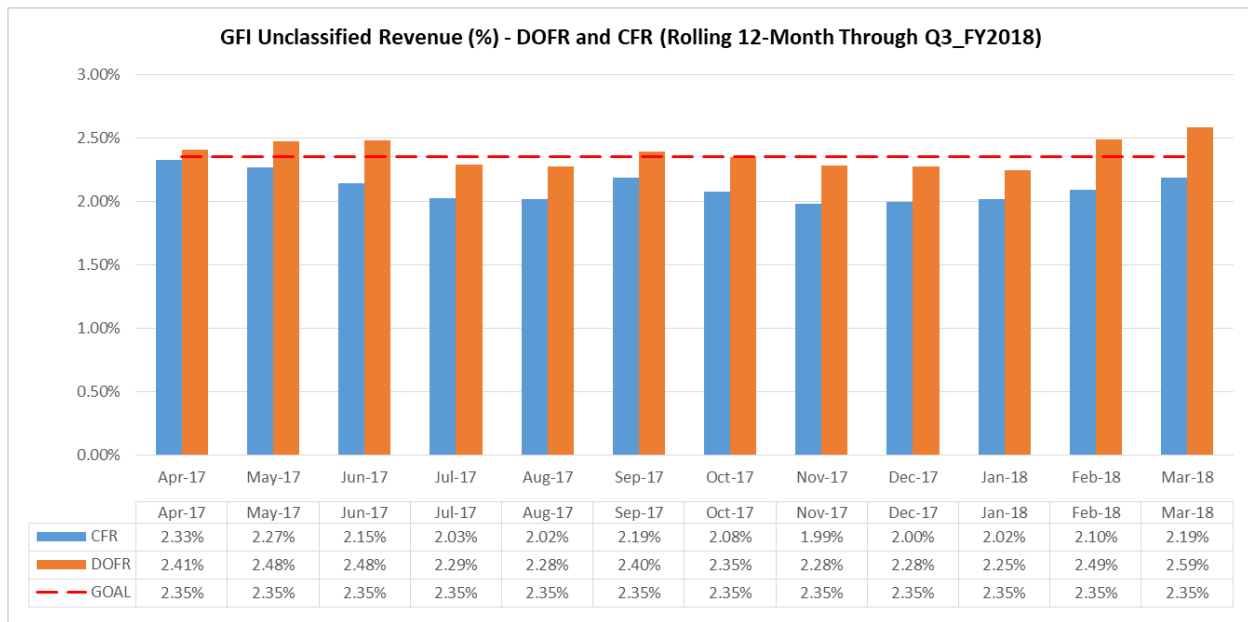
(Primary Service Provider and Supplemental Taxi)

Through the third 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. Over the third quarter of FY 2017-18, the average unclassified revenue reported for the OC Bus service operated by OCTA was 2.44 percent, exceeding the threshold of 2.35 percent. To address this increase, training campaigns will be conducted at the Santa Ana and Garden Grove bases to review/remind operators to avoid unclassified revenue through better use of the farebox. The average unclassified revenue for contracted OC Bus service during the third quarter was 2.10, a slight increase over last quarter, but still well below the standard.



Contractor Performance: Fixed-Route

Through the third 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. The incentives paid to date, a total of \$69,500, reflect the outstanding performance related to safety and courtesy. To date this FY, the total penalties charged to the contractor is \$356,119, which indicate that improvements are still needed with respect to reliability. Of note is the recent trend of increasing 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's corporate management is tracking this and analyzing all possible causes, which include road calls, service interruptions, and manpower shortages. The net penalty paid by the Contractor in the third quarter of FY 2017-18 was \$153,724. The total net penalty paid by the Contractor to date for the FY is \$286,619.

Table 1: Performance Categories	FY18 Q1	FY18 Q2	FY18 Q3	FY18 Q4	FYTD 18
On-Time Performance	\$ (1,000)	\$ (2,000)	\$ -		\$ (3,000)
Valid Complaints: Per 7,000 boardings	\$ 8,900	\$ 9,300	\$ 11,300		\$ 29,500
Unreported Accident	\$ (15,000)	\$ (10,000)	\$ (20,000)		\$ (45,000)
Accident Frequency Ratio	\$ 15,000	\$ 15,000	\$ 10,000		\$ 40,000
Key Positions	\$ -	\$ -	\$ (10,101)		\$ (10,101)
CHP Terminal Inspections	\$ -	\$ -	\$ -		\$ -
Reports	\$ -	\$ -	\$ -		\$ -
Preventive Maintenance	\$ (26,900)	\$ (9,095)	\$ (57,723)		\$ (93,718)
Road Calls	\$ (12,700)	\$ (12,100)	\$ (7,200)		\$ (32,000)
Vehicle Damage: Per vehicle per day	\$ -	\$ -	\$ -		\$ -
Missed Trips	\$ (40,000)	\$ (52,000)	\$ (80,000)		\$ (172,000)
Prior Periods Adjustment	\$ (300)	\$ -	\$ -		\$ (300)
Total	\$ (72,000)	\$ (60,895)	\$ (153,724)	\$ -	\$ (286,619)

Contractor Performance: ACCESS

(Primary Service Provider and Supplemental Taxi)

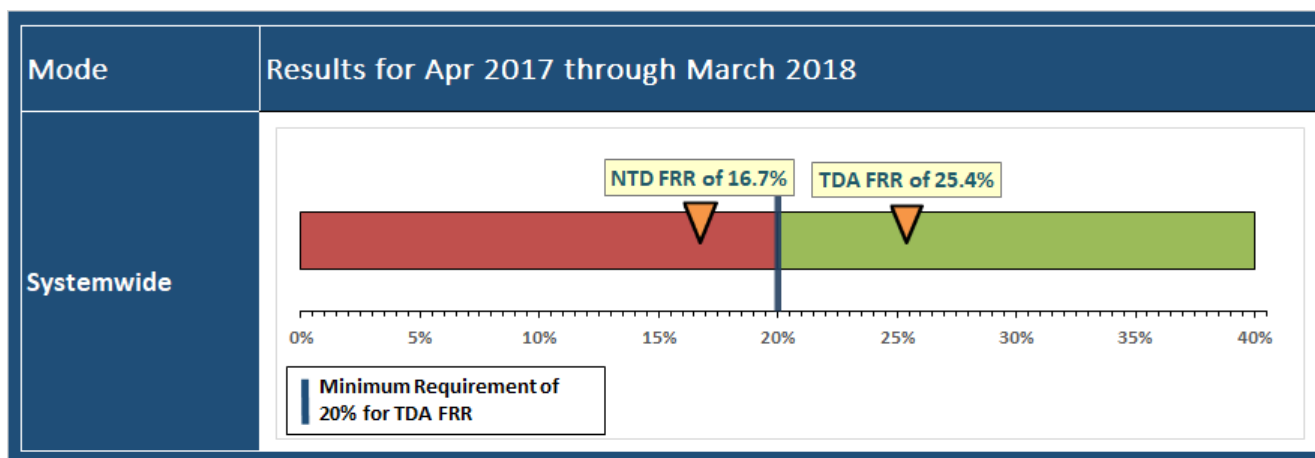
As presented in this report, the overall performance of the contractor providing ACCESS service through the third quarter of FY 2017-18 is above standard for all measures. Table 2 below lists, by quarter, the penalties assessed to the ACCESS Service Contractor as established in the agreement. For the third quarter of FY 2017-18, there were no incentives awarded to the contractor, but \$16,100 of penalties were assessed for customer comments, call center hold times, and excessively late trips. The total net penalty paid by the ACCESS Contractor to date for the FY is \$63,300.

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)		\$ (20,000)
Excessively Late Trips	\$ -	\$ (25,000)	\$ (10,000)		\$ (35,000)
Missed Trips	\$ -	\$ -	\$ -		\$ -
Unreported Accident	\$ (5,000)	\$ -	\$ -		\$ (5,000)
Preventive Maintenance	\$ -	\$ (2,200)	\$ -		\$ (2,200)
Road calls	\$ -	\$ -	\$ -		\$ -
Reports	\$ -	\$ -	\$ -		\$ -
Key Positions	\$ -	\$ -	\$ -		\$ -
CHP Terminal Inspections	\$ -	\$ -	\$ -		\$ -
Vehicle Damage	\$ -	\$ -	\$ -		\$ -
Prior Periods Adjustment	\$ -	\$ -	\$ -		\$ -
Total	\$ (5,000)	\$ (42,200)	\$ (16,100)	\$ -	\$ (63,300)

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 April 2017 through March 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 25.4 percent.



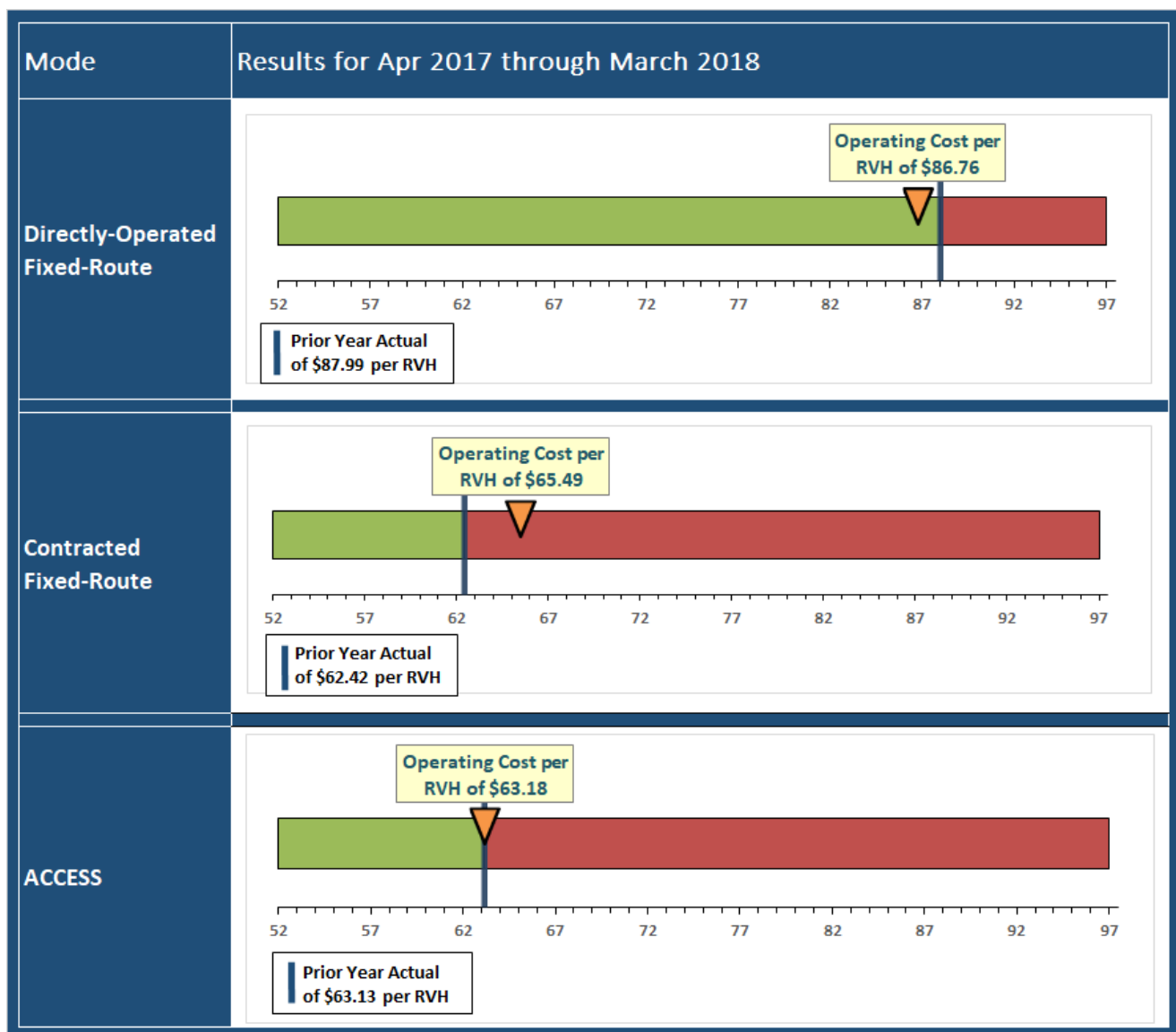
Note:

- 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, including the reporting period. OC Bus service operated by OCTA was delivered at a lower cost per RVH than the same 12-month period of the prior year. OC ACCESS Service was almost identical to the prior year. Contracted OC Bus service has a 4.9 percent increase in cost per RVH. This increase in cost per RVH was primarily associated with the increase in the contracted rate as included in the agreement with First Transit, Inc., 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 also implemented in June and October 2016 and February 2018. All 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 third 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 (Sort by Subsidy per Boarding)
Fiscal Year 2017-18 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
021	N	9.0%	\$ 11.47	\$ 6.07	\$ 4.11	\$ 1.29	\$ 1.00	51,700	\$ 106.54	\$ 65.27	\$ 7.78	9.53	5,424	2	-	-
001	S	9.3%	9.64	5.70	3.46	0.48	0.94	452,585	138.58	86.95	8.34	13.73	32,974	8	-	-
153	N	10.9%	8.98	5.09	3.36	0.53	1.03	93,711	97.98	63.80	7.77	10.34	9,065	2	-	-
178	C	9.8%	8.89	4.84	3.20	0.85	0.87	88,375	100.87	64.54	7.91	11.33	7,800	2	-	-
076	C	10.6%	8.53	4.88	2.96	0.69	0.93	72,969	130.26	80.86	11.08	14.85	4,915	2	-	-
085	S	12.1%	8.43	4.59	3.11	0.73	1.06	68,608	98.77	63.80	7.97	11.28	6,083	2	-	-
087	S	13.1%	7.65	4.11	2.78	0.76	1.04	65,999	100.13	64.18	6.78	12.63	5,226	2	-	-
167	C	11.4%	7.58	4.10	2.71	0.77	0.87	140,569	98.74	63.79	8.29	12.84	10,944	4	-	-
177	S	14.7%	7.25	3.96	2.62	0.67	1.13	75,079	98.15	63.89	7.63	12.73	5,897	2	-	-
086	C	13.5%	6.64	3.58	2.43	0.63	0.93	118,526	98.50	63.85	7.60	14.18	8,360	3	-	-
083	C	13.9%	6.57	3.83	2.32	0.42	0.99	501,791	138.24	86.61	7.68	19.37	25,912	9	-	-
079	C	11.5%	6.38	3.52	2.39	0.47	1.02	317,155	98.46	63.76	8.66	14.74	21,513	6	-	-
024	N	14.9%	6.26	3.47	2.35	0.44	1.02	95,354	97.69	63.64	7.81	14.28	6,677	1	-	-
091	S	18.2%	5.70	3.10	2.10	0.50	1.16	301,245	100.20	63.96	6.90	15.77	19,101	7	-	-
143	N	16.3%	5.70	3.22	2.13	0.35	1.04	143,816	98.16	63.75	8.67	15.37	9,356	2	-	-
560	C	15.1%	5.64	3.17	1.92	0.55	0.91	590,329	139.43	86.70	11.75	23.24	25,404	13	-	-
090	S	18.1%	5.62	2.91	1.97	0.74	1.08	237,186	105.36	64.85	6.90	17.68	13,413	8	-	-
072	C	16.6%	5.38	3.13	1.90	0.35	1.00	360,559	130.63	81.26	10.39	21.65	16,654	5	-	-
056	N	15.5%	5.36	3.12	1.89	0.35	1.02	307,350	131.08	81.25	12.22	22.12	13,893	4	-	-
071	N	17.2%	5.28	2.90	1.96	0.42	1.01	512,884	99.31	64.01	7.93	16.92	30,309	8	-	-
050	N	15.9%	5.21	2.99	1.81	0.41	0.91	899,420	136.13	84.55	11.90	23.86	37,703	2	-	9
037	N	16.7%	5.19	3.03	1.83	0.33	0.97	806,538	149.16	92.78	11.13	25.56	31,559	10	-	-
129	N	18.3%	5.18	2.87	1.90	0.41	1.07	162,865	104.59	64.78	7.77	17.91	9,092	2	-	-
059	C	17.9%	5.16	2.75	1.86	0.55	1.01	411,277	104.86	64.69	8.42	18.68	22,022	9	-	-
150	C	18.6%	5.14	2.69	1.78	0.67	1.02	136,992	101.44	64.07	10.01	18.48	7,413	3	-	-
054	N	17.1%	5.11	2.97	1.80	0.34	0.98	905,090	138.28	85.85	12.23	24.07	37,604	14	-	-
055	C	18.8%	5.08	2.92	1.77	0.39	1.08	1,000,292	134.69	83.68	11.89	23.33	42,880	13	-	-
026	N	17.4%	4.94	2.74	1.85	0.35	0.97	329,941	99.16	63.77	9.84	17.83	18,506	4	-	-
089	S	19.5%	4.78	2.61	1.77	0.40	1.06	268,234	99.58	63.84	7.80	18.34	14,628	5	-	-
025	N	20.1%	4.61	2.49	1.69	0.43	1.05	309,055	99.38	63.97	8.22	18.99	16,275	5	-	-
082	S	24.5%	4.51	2.08	1.41	1.02	1.13	73,563	109.95	65.82	7.68	23.81	3,090	3	-	-
029	N	20.1%	4.28	2.45	1.49	0.34	0.99	1,486,456	137.97	85.76	11.77	27.99	53,098	14	-	5
030	N	19.2%	4.26	2.32	1.57	0.37	0.93	493,800	98.36	63.84	7.60	20.38	24,224	7	-	-
543	N	20.5%	4.14	2.37	1.43	0.34	0.98	842,084	137.84	85.90	11.86	28.84	29,203	10	-	-
047	C	21.5%	4.14	2.38	1.45	0.31	1.05	1,609,517	136.99	85.12	12.07	28.09	57,294	19	-	-
070	C	21.8%	4.06	2.15	1.46	0.45	1.01	710,890	103.83	64.84	8.31	22.48	31,625	12	-	-
033	N	20.7%	3.89	2.08	1.41	0.40	0.91	294,453	98.63	63.82	7.98	22.43	13,128	6	-	-
035	N	21.7%	3.86	2.01	1.36	0.49	0.93	626,986	103.69	64.58	8.58	24.10	26,016	12	-	-
057	C	21.7%	3.81	2.17	1.32	0.32	0.97	1,573,217	149.47	92.98	12.98	33.52	46,937	8	-	7
046	N	24.2%	3.64	1.87	1.27	0.50	1.00	487,082	98.90	63.84	8.53	23.89	20,389	10	-	-
053X	C	22.5%	3.59	2.10	1.27	0.22	0.98	484,526	123.20	76.31	11.78	28.32	17,107	6	-	-
043	N	24.2%	3.44	1.99	1.21	0.24	1.02	1,584,877	141.59	87.80	13.09	33.52	47,287	10	-	5
060	C	22.3%	3.37	1.98	1.20	0.19	0.91	1,478,856	133.84	83.20	11.69	32.77	45,134	12	-	-
053	C	24.0%	3.31	1.89	1.15	0.27	0.96	1,081,248	136.88	84.87	14.66	34.17	31,647	10	-	-
038	N	24.8%	3.23	1.71	1.16	0.36	0.95	877,265	100.27	64.12	8.19	26.29	33,368	14	-	-
057X	C	25.2%	3.17	1.77	1.07	0.33	0.96	857,605	123.48	76.61	10.98	32.47	26,411	5	-	4
066	C	26.6%	2.98	1.72	1.04	0.22	1.00	1,567,579	134.52	83.52	12.63	35.83	43,749	15	-	-
042	N	26.7%	2.79	1.52	1.03	0.24	0.93	1,197,986	100.21	64.08	8.98	28.89	41,471	13	-	-
064	C	27.5%	2.66	1.54	0.94	0.18	0.94	1,203,419	136.22	84.54	14.03	39.83	30,211	9	-	-
064X	C	29.8%	2.39	1.39	0.84	0.16	0.95	474,320	123.24	76.36	11.72	38.77	12,233	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 (Sort by Subsidy per Boarding)
Fiscal Year 2017-18 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	1.8%	\$ 46.24	\$ 19.91	\$ 18.15	\$ 8.18	\$ 0.69	13,679	\$ 105.80	\$ 62.42	\$ 6.18	2.73	5,012	-	4	-
721	N	5.0%	41.62	23.54	13.53	4.55	1.93	16,495	202.53	128.47	7.69	5.19	3,176	3	-	-
213	N	2.4%	35.22	14.00	12.77	8.45	0.67	11,829	122.45	66.06	6.98	4.46	2,651	4	-	-
701	C	6.3%	31.11	16.81	9.66	4.64	1.95	16,163	242.13	153.23	10.04	8.52	1,897	3	-	-
794	C	12.9%	28.61	12.00	10.94	5.67	3.40	23,523	159.48	96.81	6.05	6.05	3,885	4	-	-
206	C	5.1%	24.43	8.83	8.05	7.55	0.90	9,934	135.77	74.76	6.80	7.63	1,302	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 (Sort by Subsidy per Boarding)
Fiscal Year 2017-18 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	4.7%	20.92	\$ 7.80	\$ 7.80	\$ 5.32	\$ 0.76	20,357	\$ 129.68	\$ 70.58	\$ 12.13	7.93	2,568	4	-	-
480	C	11.0%	9.41	3.50	3.50	2.41	0.86	20,718	126.89	69.52	10.94	16.15	1,283	2	-	-
472	C	13.2%	8.59	2.86	2.86	2.87	0.87	26,156	122.99	68.84	10.00	18.69	1,400	3	-	-
453	N	12.6%	8.41	3.11	3.11	2.19	0.90	22,852	131.04	70.03	19.85	18.41	1,241	2	-	-
462	C	13.7%	7.36	2.84	2.84	1.68	0.90	24,812	122.78	68.38	17.23	18.64	1,331	1	-	-
473	C	14.1%	7.30	2.53	2.53	2.24	0.83	33,433	129.64	69.50	12.07	22.04	1,517	3	-	-

(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 (Sort by Boardings)
Fiscal Year 2017-18 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
047	C	21.5%	\$ 4.14	\$ 2.38	\$ 1.45	\$ 0.31	\$ 1.05	1,609,517	\$ 136.99	\$ 85.12	\$ 12.07	28.09	57,294	19	-	-
043	N	24.2%	3.44	1.99	1.21	0.24	1.02	1,584,877	141.59	87.80	13.09	33.52	47,287	10	-	5
057	C	21.7%	3.81	2.17	1.32	0.32	0.97	1,573,217	149.47	92.98	12.98	33.52	46,937	8	-	7
066	C	26.6%	2.98	1.72	1.04	0.22	1.00	1,567,579	134.52	83.52	12.63	35.83	43,749	15	-	-
029	N	20.1%	4.28	2.45	1.49	0.34	0.99	1,486,456	137.97	85.76	11.77	27.99	53,098	14	-	5
060	C	22.3%	3.37	1.98	1.20	0.19	0.91	1,478,856	133.84	83.20	11.69	32.77	45,134	12	-	-
064	C	27.5%	2.66	1.54	0.94	0.18	0.94	1,203,419	136.22	84.54	14.03	39.83	30,211	9	-	-
042	N	26.7%	2.79	1.52	1.03	0.24	0.93	1,197,986	100.21	64.08	8.98	28.89	41,471	13	-	-
053	C	24.0%	3.31	1.89	1.15	0.27	0.96	1,081,248	136.88	84.87	14.66	34.17	31,647	10	-	-
055	C	18.8%	5.08	2.92	1.77	0.39	1.08	1,000,292	134.69	83.68	11.89	23.33	42,880	13	-	-
054	N	17.1%	5.11	2.97	1.80	0.34	0.98	905,090	138.28	85.85	12.23	24.07	37,604	14	-	-
050	N	15.9%	5.21	2.99	1.81	0.41	0.91	899,420	136.13	84.55	11.90	23.86	37,703	2	-	9
038	N	24.8%	3.23	1.71	1.16	0.36	0.95	877,265	100.27	64.12	8.19	26.29	33,368	14	-	-
057X	C	25.2%	3.17	1.77	1.07	0.33	0.96	857,605	123.48	76.61	10.98	32.47	26,411	5	-	4
543	N	20.5%	4.14	2.37	1.43	0.34	0.98	842,084	137.84	85.90	11.86	28.84	29,203	10	-	-
037	N	16.7%	5.19	3.03	1.83	0.33	0.97	806,538	149.16	92.78	11.13	25.56	31,559	10	-	-
070	C	21.8%	4.06	2.15	1.46	0.45	1.01	710,890	103.83	64.84	8.31	22.48	31,625	12	-	-
035	N	21.7%	3.86	2.01	1.36	0.49	0.93	626,986	103.69	64.58	8.58	24.10	26,016	12	-	-
560	C	15.1%	5.64	3.17	1.92	0.55	0.91	590,329	139.43	86.70	11.75	23.24	25,404	13	-	-
071	N	17.2%	5.28	2.90	1.96	0.42	1.01	512,884	99.31	64.01	7.93	16.92	30,309	8	-	-
083	C	13.9%	6.57	3.83	2.32	0.42	0.99	501,791	138.24	86.61	7.68	19.37	25,912	9	-	-
030	N	19.2%	4.26	2.32	1.57	0.37	0.93	493,800	98.36	63.84	7.60	20.38	24,224	7	-	-
046	N	24.2%	3.64	1.87	1.27	0.50	1.00	487,082	98.90	63.84	8.53	23.89	20,389	10	-	-
053X	C	22.5%	3.59	2.10	1.27	0.22	0.98	484,526	123.20	76.31	11.78	28.32	17,107	6	-	-
064X	C	29.8%	2.39	1.39	0.84	0.16	0.95	474,320	123.24	76.36	11.72	38.77	12,233	3	-	-
001	S	9.3%	9.64	5.70	3.46	0.48	0.94	452,585	138.58	86.95	8.34	13.73	32,974	8	-	-
059	C	17.9%	5.16	2.75	1.86	0.55	1.01	411,277	104.86	64.69	8.42	18.68	22,022	9	-	-
072	C	16.6%	5.38	3.13	1.90	0.35	1.00	360,559	130.63	81.26	10.39	21.65	16,654	5	-	-
026	N	17.4%	4.94	2.74	1.85	0.35	0.97	329,941	99.16	63.77	9.84	17.83	18,506	4	-	-
079	C	11.5%	6.38	3.52	2.39	0.47	0.77	317,155	98.46	63.76	8.66	14.74	21,513	6	-	-
025	N	20.1%	4.61	2.49	1.69	0.43	1.05	309,055	99.38	63.97	8.22	18.99	16,275	5	-	-
056	N	15.5%	5.36	3.12	1.89	0.35	0.92	307,350	131.08	81.25	12.22	22.12	13,893	4	-	-
091	S	18.2%	5.70	3.10	2.10	0.50	1.16	301,245	100.20	63.96	6.90	15.77	19,101	7	-	-
033	N	20.7%	3.89	2.08	1.41	0.40	0.91	294,453	98.63	63.82	7.98	22.43	13,128	6	-	-
089	S	19.5%	4.78	2.61	1.77	0.40	1.06	268,234	99.58	63.84	7.80	18.34	14,628	5	-	-
090	S	18.1%	5.62	2.91	1.97	0.74	1.08	237,186	105.36	64.85	6.90	17.68	13,413	8	-	-
129	N	18.3%	5.18	2.87	1.90	0.41	1.07	162,865	104.59	64.78	7.77	17.91	9,092	2	-	-
143	N	16.3%	5.70	3.22	2.13	0.35	1.04	143,816	98.16	63.75	8.67	15.37	9,356	2	-	-
167	C	11.4%	7.58	4.10	2.71	0.77	0.87	140,569	98.74	63.79	8.29	12.84	10,944	4	-	-
150	C	18.6%	5.14	2.69	1.78	0.67	1.02	136,992	101.44	64.07	10.01	18.48	7,413	3	-	-
086	C	13.5%	6.64	3.58	2.43	0.63	0.93	118,526	98.50	63.85	7.60	14.18	8,360	3	-	-
024	N	14.9%	6.26	3.47	2.35	0.44	1.02	95,354	97.69	63.64	7.81	14.28	6,677	1	-	-
153	N	10.9%	8.98	5.09	3.36	0.53	1.03	93,711	97.98	63.80	7.77	10.34	9,065	2	-	-
178	C	9.8%	8.89	4.84	3.20	0.85	0.87	88,375	100.87	64.54	7.91	11.33	7,800	2	-	-
177	S	14.7%	7.25	3.96	2.62	0.67	1.13	75,079	98.15	63.89	7.63	12.73	5,897	2	-	-
082	S	24.5%	4.51	2.08	1.41	1.02	1.13	73,563	109.95	65.82	7.68	23.81	3,090	3	-	-
076	C	10.6%	8.53	4.88	2.96	0.69	0.93	72,969	130.26	80.86	11.08	14.85	4,915	2	-	-
085	S	12.1%	8.43	4.59	3.11	0.73	1.06	68,608	98.77	63.80	7.97	11.28	6,083	2	-	-
087	S	13.1%	7.65	4.11	2.78	0.76	1.04	65,999	100.13	64.18	6.78	12.63	5,226	2	-	-
021	N	9.0%	11.47	6.07	4.11	1.29	1.00	51,700	106.54	65.27	7.78	9.53	5,424	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 (Sort by Boardings) Fiscal Year 2017-18 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	12.9%	\$ 28.61	\$ 12.00	\$ 10.94	\$ 5.67	\$ 3.40	23,523	\$ 159.48	\$ 96.81	\$ 6.05	6.05	3,885	4	-	-
721	N	5.0%	41.62	23.54	13.53	4.55	1.93	16,495	202.53	128.47	7.69	5.19	3,176	3	-	-
701	C	6.9%	31.11	16.81	9.66	4.64	1.95	16,163	242.13	153.23	10.04	8.52	1,897	3	-	-
211	C	1.8%	46.24	19.91	18.15	8.18	0.69	13,679	105.80	62.42	6.18	2.73	5,012	-	4	-
213	N	2.4%	35.22	14.00	12.77	8.45	0.67	11,829	122.45	66.06	6.98	4.46	2,651	4	-	-
206	C	5.1%	24.43	8.83	8.05	7.55	0.90	9,934	135.77	74.76	6.80	7.63	1,302	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 (Sort by Boardings) Fiscal Year 2017-18 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	14.1%	\$ 7.30	\$ 2.53	\$ 2.53	\$ 2.24	\$ 0.83	33,433	\$ 129.64	\$ 69.50	\$ 12.07	22.04	1,517	3	-	-
472	C	13.2%	8.59	2.86	2.86	2.87	0.87	26,156	122.99	68.84	10.00	18.69	1,400	3	-	-
462	C	13.7%	7.36	2.84	2.84	1.68	0.90	24,812	122.78	68.38	17.23	18.64	1,331	1	-	-
453	N	12.6%	8.41	3.11	3.11	2.19	0.90	22,852	131.04	70.03	19.85	18.41	1,241	2	-	-
480	C	11.0%	9.41	3.50	3.50	2.41	0.86	20,718	126.89	69.52	10.94	16.15	1,283	2	-	-
463	C	4.7%	20.92	7.80	7.80	5.32	0.76	20,357	129.68	70.58	12.13	7.93	2,568	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

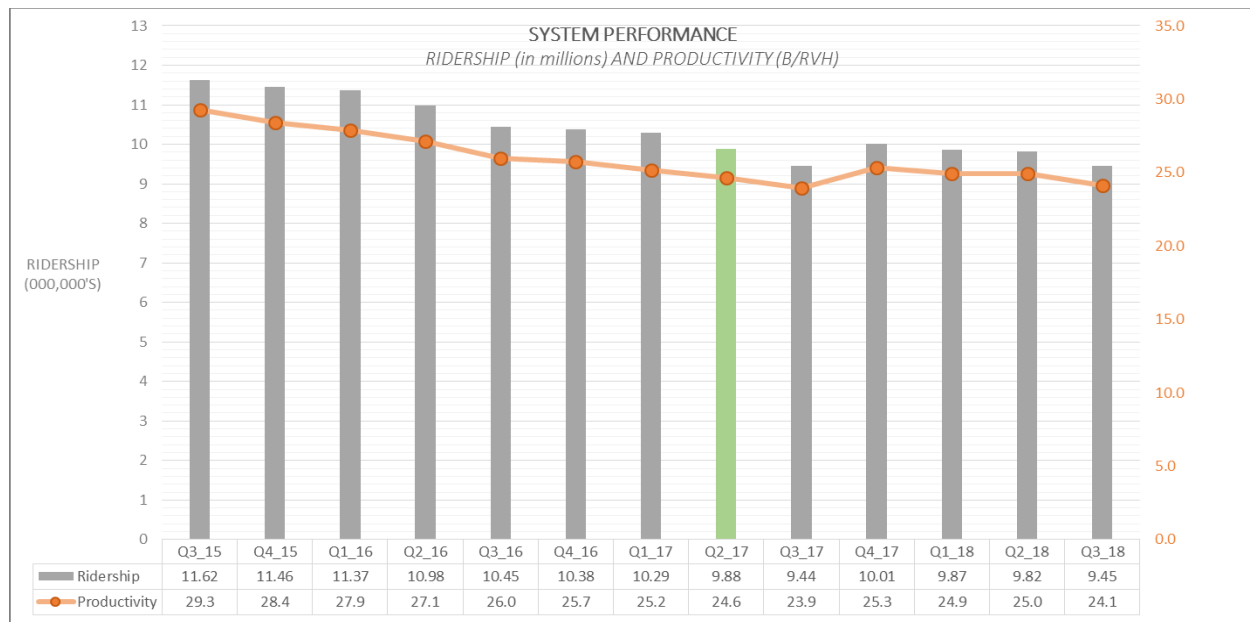
Table

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 OC 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 green bar on all charts*). 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).

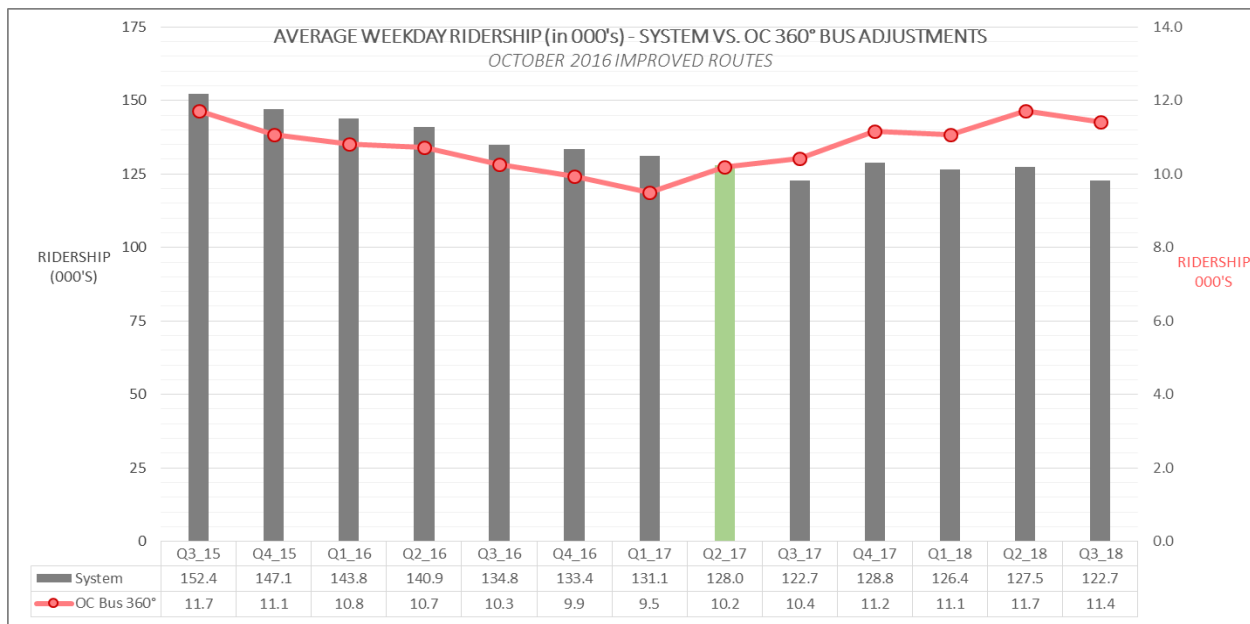
The trend of overall system ridership and productivity is provided on the following chart.



Ridership through the third quarter of FY 2017-18 indicates a stabilizing ridership trend since the October 2016 Service Change program.

- Ridership was 3.8 percent lower than the previous quarter, but essentially even when compared to the same quarter the last FY.
- Productivity (orange line in chart) over the third quarter dropped by 3.4 percent compared to last quarter, but seven tenths of a percent over the same quarter last year.

The adjustments implemented under the OC Bus 360° plan continue to trend favorably. The following chart compares the system trend against the group of routes improved under the OC Bus 360° plan. The performance on these specific routes, the red line on the chart, is slightly better than the system-wide trend with respect to average weekday ridership.

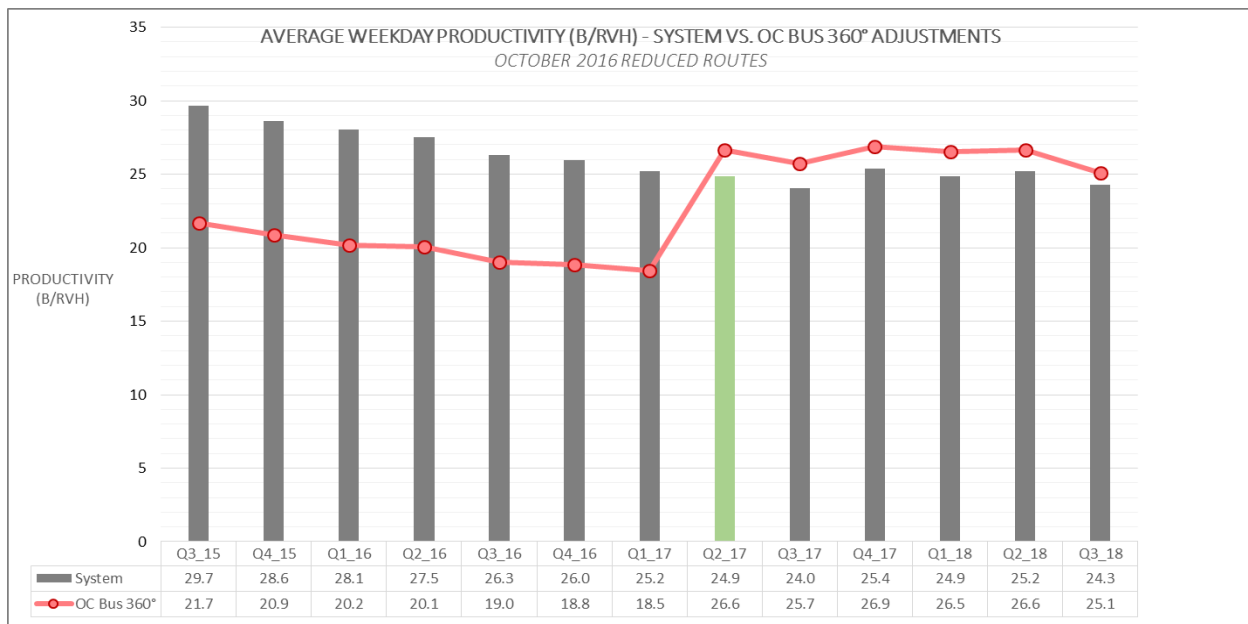


- The system average for average weekday ridership during the third quarter was 122.7 thousand, a 3.8 percent dip compared to the previous quarter and even compared to the same quarter last year.
- The improved routes collectively had 11,400 average weekday boardings over the quarter
 - 2.6 percent lower than the 11,700 average weekday boardings reported the previous quarter, but
 - 9.6 percent over the 10,400 boardings reported over the same quarter last year.

February 2018 Service Improvements

On February 11, 2018, OCTA implemented a series of improvements that included peak and evening frequency increases on eight routes. Before the changes, the quarterly average weekday ridership on these routes was 25,933, collectively. From the date of the change to the end of the quarter, the average weekday ridership was 26,990 for these routes, an increase of 4.1 percent. Future reports will reveal the cause of this increase which is inconclusive at this time since ridership increases seen after the February service change are consistent with previous year trends.

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. During the third quarter of FY 2017-18, the reduced services remain more efficient than prior to the changes. The following chart compares the system productivity trend against the productivity of the group of routes that were reduced/eliminated.



- Tracking the routes that were reduced, the average weekday productivity remains above 25 B/RVH, but is drawing closer to the system average.
 - The B/RVH on the collective set of reduced routes fell by 5.6 percent compared to last quarter and dropped by 2.3 percent when compared to the same quarter last year.

February 2018 Service Reductions

On February 11, 2018, OCTA implemented several route reductions and eliminations to improve route productivity. These changes included the discontinuation of three weekday services, elimination of trips with very low ridership on three weekday routes, and reduced peak and midday frequencies on five routes. Before February 11, the quarterly weekday productivity on these routes was 24.4 B/RVH. From the date of the changes to the end of the quarter, the average B/RVH for this group of routes increased to 27.5 B/RVH, an increase of 12.7 percent. As with the ridership increase, future reports will reveal the cause of this increase, which is inconclusive at this time since the productivity increases seen after the February service change are consistent with previous year trends.

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, Planning, and Transit Divisions will continue to track the implementation of strategies under the OC Bus 360° plan, including the service changes implemented in February 2018.