

Transit Division Performance Measurements



Fiscal Year 2016-17
First 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 (ACCESS), a shared-ride program available for people unable to use the regular fixed-route bus service because of functional limitations. Fixed-route bus service operated by OCTA is referred to as directly-operated fixed-route (DOFR) service, while 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.

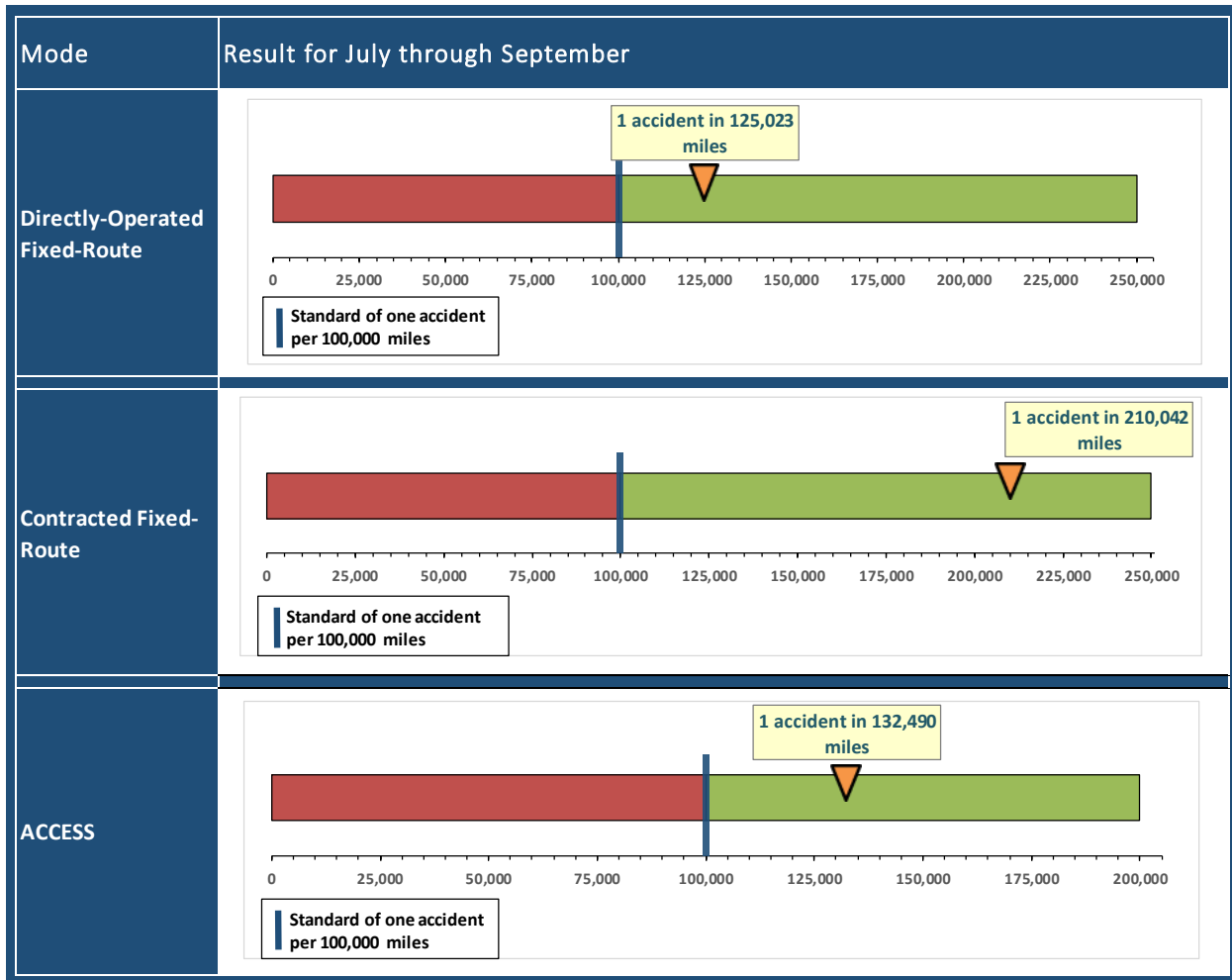
This report tracks transit system safety, courtesy, and reliability in the areas of preventable vehicle accidents, customer complaints, on-time performance (OTP), and miles between road calls (MBRC). Along with these metrics, industry-standard measurements are tracked to assess OCTA transit operations;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

Safety: Preventable Vehicle Accidents

Preventable vehicle accidents are counts of incidents concerning physical contact between vehicles used for public transit and other vehicles, objects, or pedestrians, where a coach operator failed to do everything reasonable to prevent the accident. The safety standard for DOFR, CFR, and ACCESS services is no more than one vehicle accident per 100,000 miles.

All three modes of services exceeded the safety standard in the first quarter.

Safety is a top priority in the delivery of public transit services. Efforts to include education, campaigns, oversight, and process improvements, are carried out daily to ensure the focus on safety is maintained.

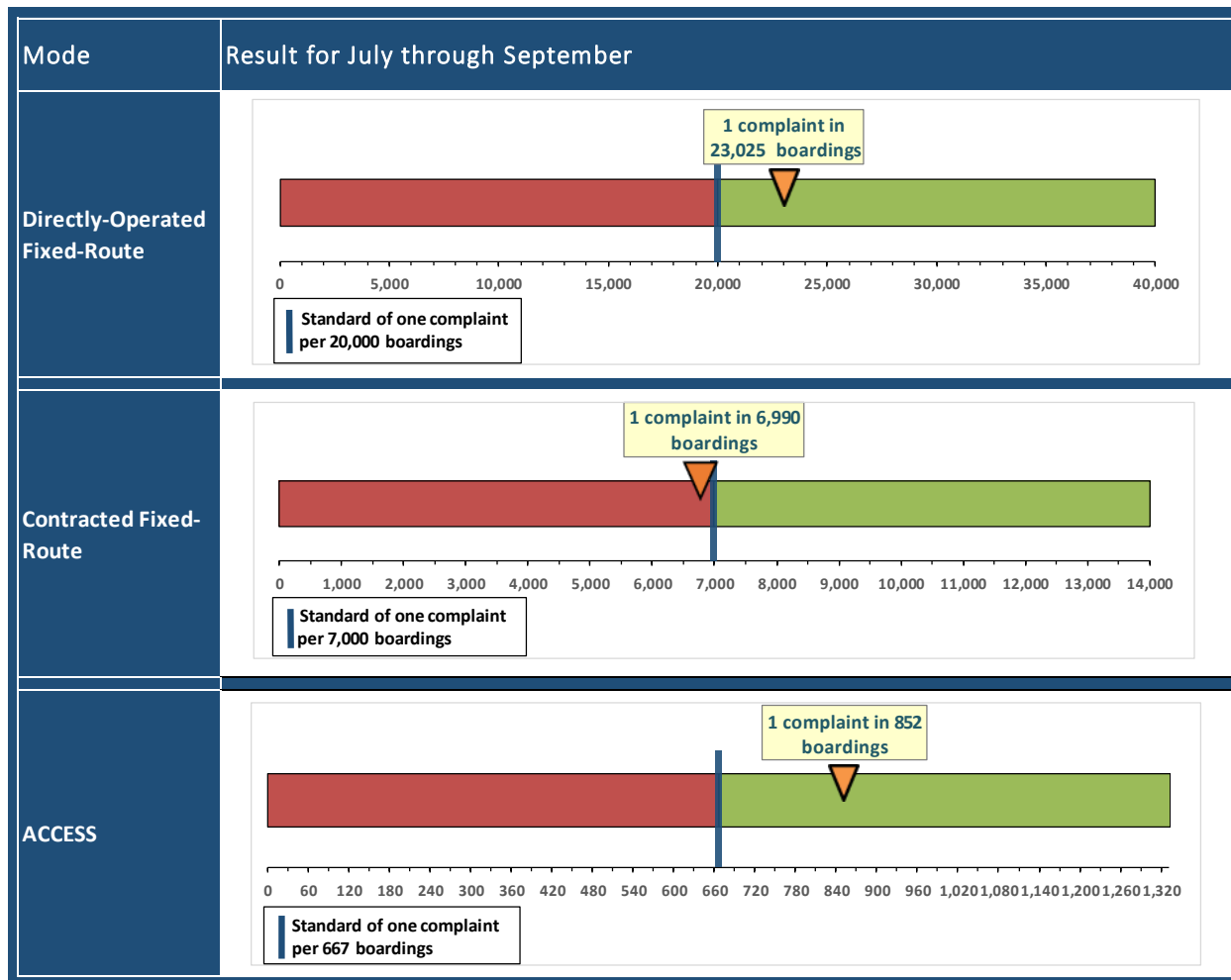


Courtesy: Customer Complaints

Customer complaints are counts of incidents when a rider reports dissatisfaction with the service. The standard adopted by OCTA for DOFR service is no more than one customer complaint per 20,000 boardings; the contractual standard for CFR service is no more than one complaint per 7,000 boardings; and the contractual standard for ACCESS is no more than one complaint per 667 boardings.

Both DOFR and ACCESS services exceeded the courtesy standard in the first quarter while CFR service was within one percent of the standard.

For CFR service, the contractor reviews customer comments with OCTA staff weekly to identify areas for improvement and review progress on an action plan developed to address complaints received. In addition, route-level analysis is conducted to better understand where specific improvements can be made, including the use of ride-alongs and spot checks at time points. As a result of these efforts, the number of customer complaints for CFR service has decreased steadily since the start of the contract.



Reliability: On-Time Performance

OTP is a measure of performance evaluating a revenue vehicle's adherence to a planned schedule. For fixed-route 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 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 ACCESS OTP standard is 94 percent.

DOFR service exceeded the standard; CFR and ACCESS services were within one percent of the standard.

Opportunities to improve OTP are included in each service change in response to feedback from customers, coach operators, and the ongoing evaluation of OTP for each route. Systemwide, the 85 percent OTP standard was attained.

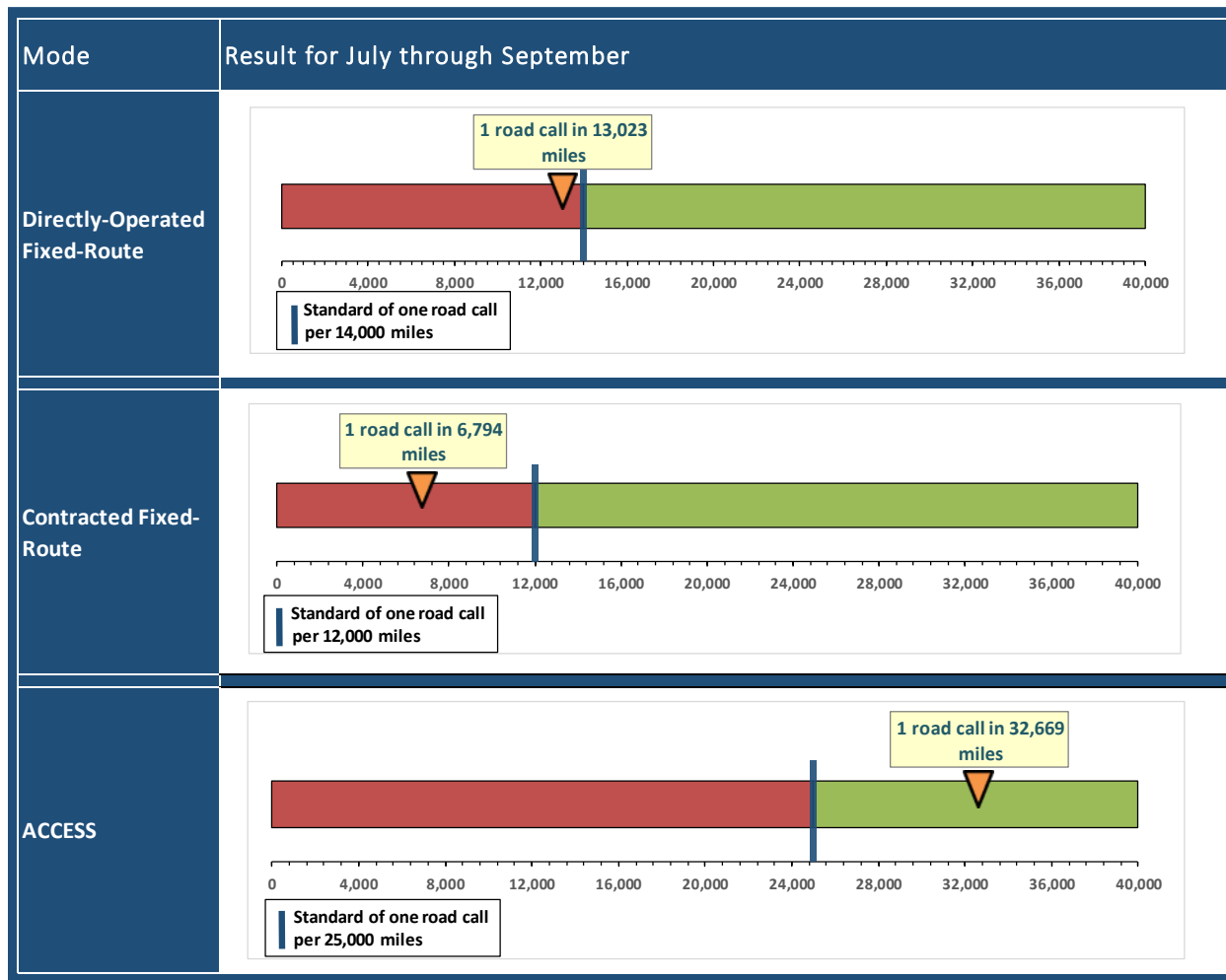


Reliability: Miles Between Road Calls

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 DOFR service is 14,000 MBRC; the contractual standard for CFR service is 12,000 MBRC; and the contractual standard for ACCESS is 5,000 MBRC.

In the first quarter, DOFR service was within seven percent of the standard with 13,023 MBRC while CFR service completed the quarter with 6,794 MBRC. ACCESS service exceeded the standard with 32,669 MBRC.

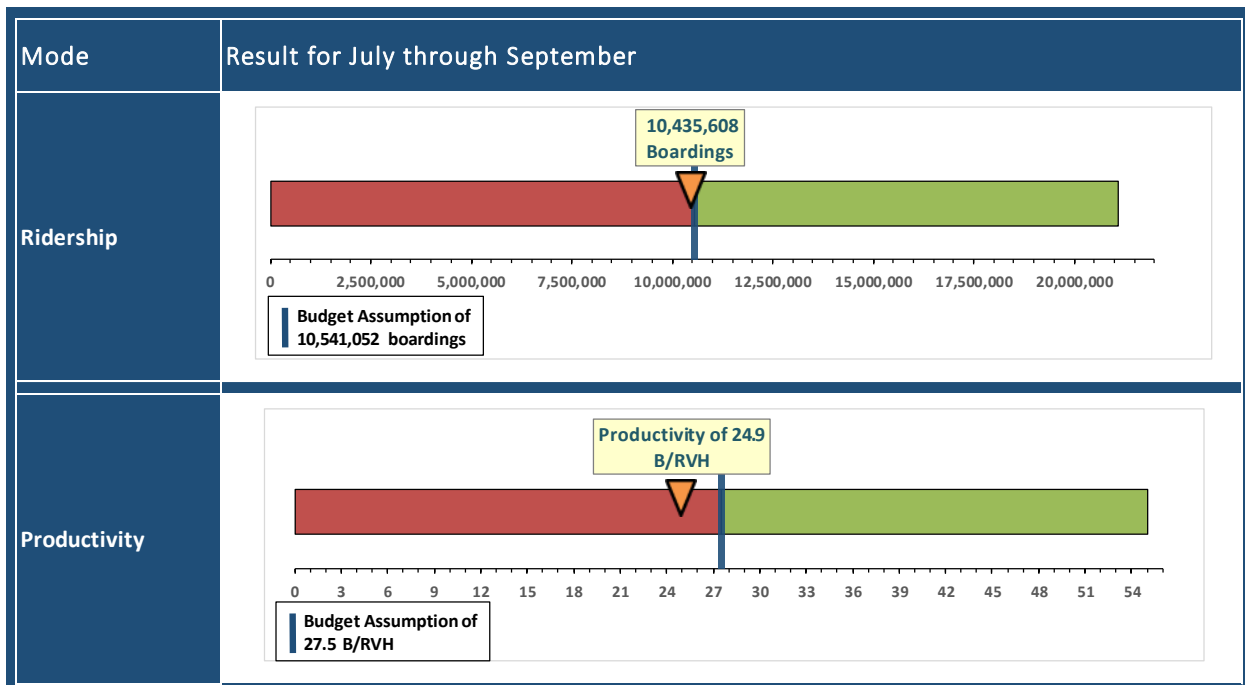
Overall, the majority of the fixed-route road calls were related to engine failures, electrical issues, and charging system failures. Generally, engine and transmission failures are indicative of the age of the fleet. The liquefied natural gas vehicles are currently in the process of being replaced, and new vehicle deliveries are scheduled to be completed by July 2017. The average age of these vehicles is 15 years.



Ridership and Productivity – Fixed-Route

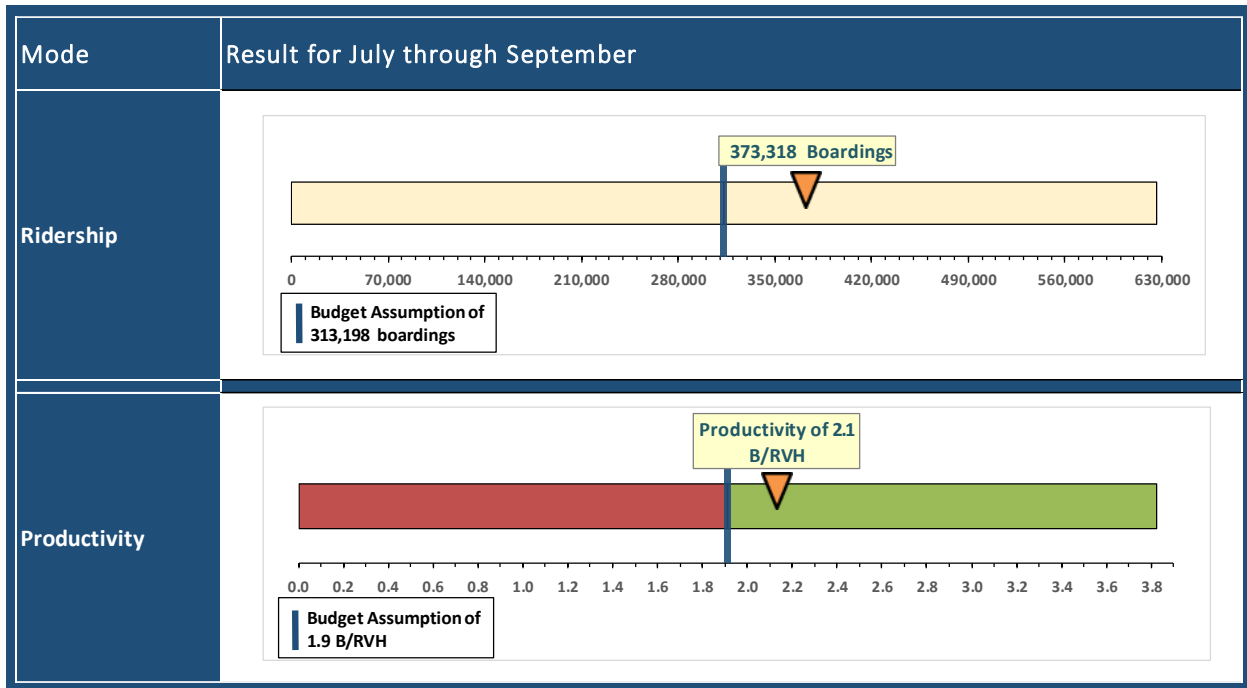
Ridership (or boardings) is the number of rides taken by passengers using public transit and is influenced by the weather, economy, and seasonal variations in demand. Productivity is an industry measure that counts the average number of boardings for each RVH that is provided. This metric is calculated by taking the boardings and dividing it by the number of RVH (B/RVH).

For the first quarter, ridership and productivity for total fixed-route service came in under the budget assumption. In an effort to meet community needs and increase ridership, the OC Bus 360° Plan was implemented in June 2016. The plan reallocates resources from low demand areas to those with higher demand, offering faster travel times to more customers. The plan projects to increase ridership by 1.3 million over three years.



Ridership and Productivity – ACCESS

For the first quarter, ridership and productivity for ACCESS service exceeded the budget assumption.

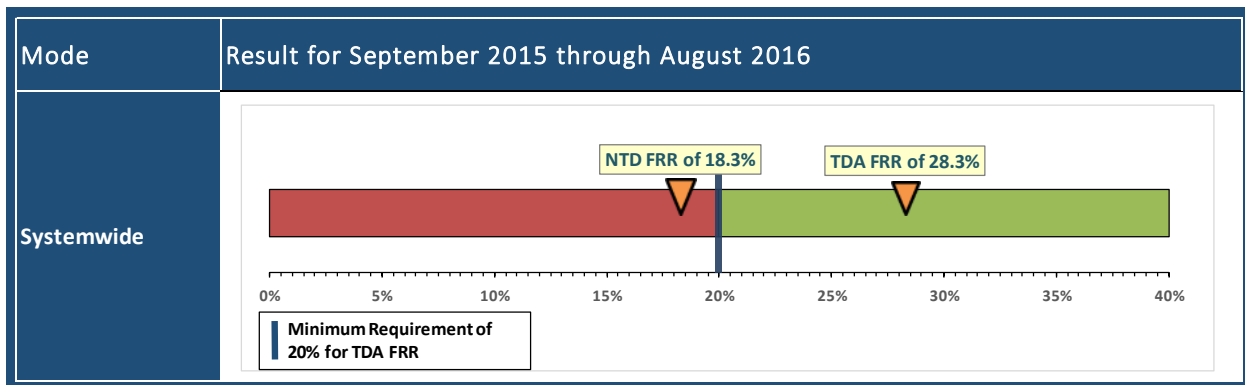


Farebox Recovery Ratio

FRR is a measure of the proportion of operating costs recovered by passenger fares, calculated by dividing the farebox revenue by total operating expenses. As part of the budget development process, a goal is established for each of the modes, as shown in the charts below. A minimum FRR of 20 percent for all service is required by the Transportation Development Act in order for transit agencies to receive their full share of 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 September 2015 through August 2016.

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), transit operators are 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" means any nonfederal 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 28.3 percent.



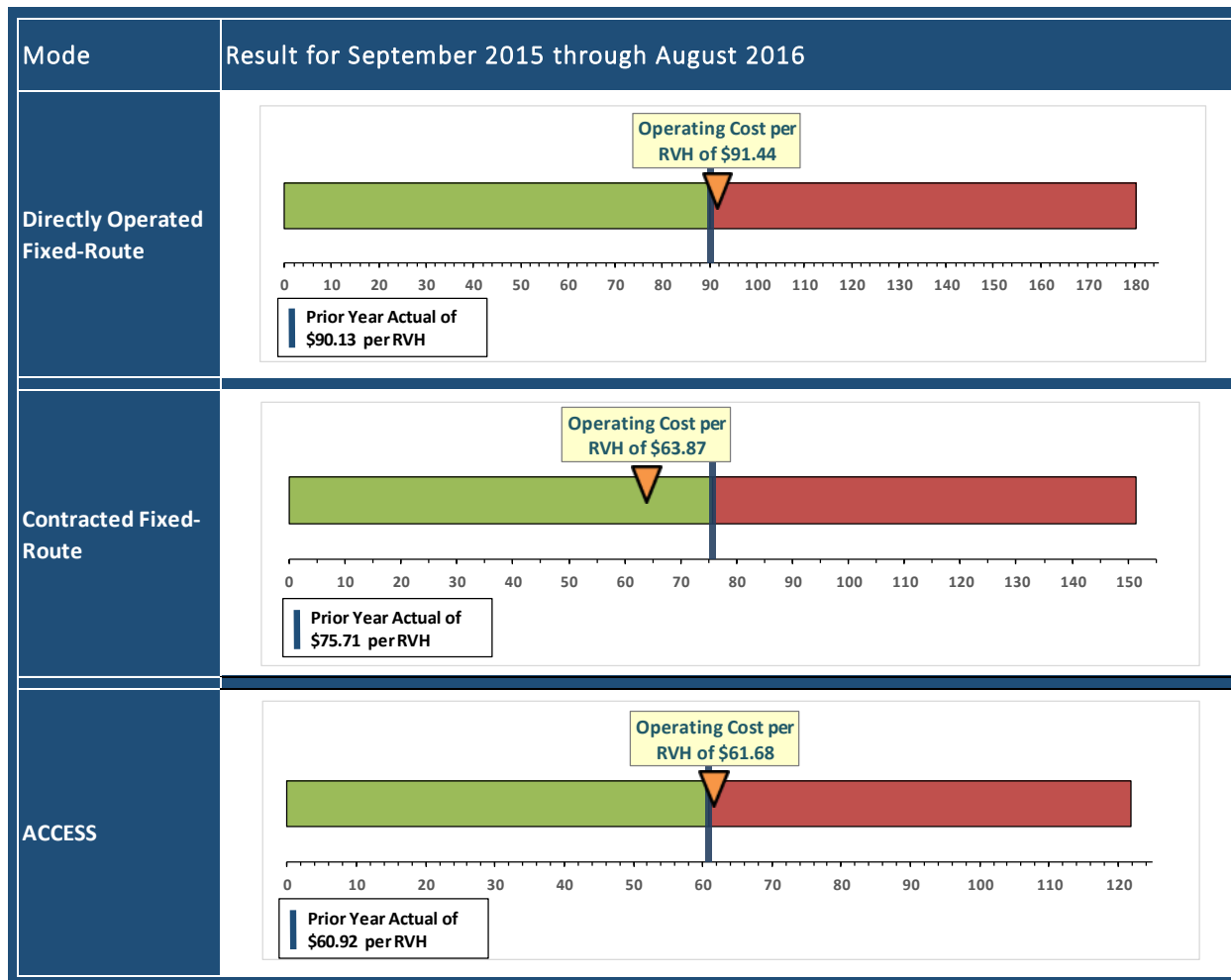
Note:

- 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, statistics below depict actuals over the last 12 months. The goals are based on actuals from the same time period from the prior year. CFR service exceeded the prior year actual while DOFR and ACCESS services were within one percent of the prior year actual.



Performance Evaluation by Productivity

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, identifies several strategies to stimulate fixed-route ridership, including 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. Additional route adjustments are currently under evaluation. These adjustments were developed after considering route-level performance. Most of these strategies were implemented in the June and October 2016 service changes. 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 service changes and service deployment.

The tables below summarize route-level performance through the first three months of fiscal year 2016-17. Please note routes with an asterisk are discontinued routes as of the October 2016 service change.

Local and Community Route	Revenue			On-Time Performance	Farebox Recovery Ratio	Subsidy per Boarding
	Boardings	Vehicle Hour	Productivity			
64	587,115	14,169	41.4	89.0%	32.1%	\$ 1.93
66	546,388	14,840	36.8	89.2%	31.2%	\$ 2.20
60	516,503	14,877	34.7	88.5%	26.6%	\$ 2.53
53	550,736	16,030	34.4	88.1%	28.5%	\$ 2.42
43	580,069	17,239	33.6	82.2%	29.3%	\$ 2.42
57	857,744	25,741	33.3	81.7%	27.4%	\$ 2.66
37	227,568	7,204	31.6	87.2%	26.3%	\$ 2.70
42	430,774	13,844	31.1	80.9%	30.8%	\$ 2.07
47	587,109	19,192	30.6	86.5%	26.2%	\$ 2.94
29	531,652	17,712	30.0	81.5%	25.3%	\$ 2.91
543	297,510	10,143	29.3	88.0%	23.5%	\$ 3.14
38	321,860	11,183	28.8	78.8%	30.3%	\$ 2.21
46	174,494	6,837	25.5	83.8%	28.0%	\$ 2.59
50	312,415	12,339	25.3	87.2%	18.7%	\$ 3.90
70	262,455	10,470	25.1	85.1%	19.7%	\$ 4.02
33	107,267	4,373	24.5	83.0%	24.4%	\$ 2.80
55	350,061	14,325	24.4	87.7%	22.0%	\$ 3.79
54	304,003	12,756	23.8	92.7%	18.7%	\$ 4.21
56	107,933	4,572	23.6	91.1%	18.8%	\$ 3.96
72	83,644	3,559	23.5	87.6%	20.6%	\$ 3.86
35	214,429	9,437	22.7	88.4%	17.5%	\$ 4.43
25	121,056	5,402	22.4	75.4%	25.8%	\$ 3.04
560	190,602	8,560	22.3	90.3%	16.5%	\$ 4.85
26	102,667	4,807	21.4	87.8%	23.4%	\$ 3.41

Local and Community Route (Continued)	Revenue			On-Time	Farebox	Subsidy per
	Boardings	Vehicle Hour	Productivity	Performance	Recovery Ratio	Boarding
83	177,661	8,622	20.6	91.5%	16.6%	\$ 4.93
89	98,693	4,801	20.6	85.0%	25.1%	\$ 3.23
30	155,593	8,151	19.1	84.9%	20.8%	\$ 3.75
71	155,763	8,382	18.6	72.9%	22.2%	\$ 3.71
59	142,986	7,782	18.4	84.2%	20.1%	\$ 4.12
90	77,912	4,515	17.3	80.0%	20.4%	\$ 4.38
150	41,267	2,497	16.5	85.4%	12.9%	\$ 7.18
24	37,233	2,270	16.4	84.6%	18.0%	\$ 4.97
129	61,024	3,722	16.4	89.0%	20.4%	\$ 4.40
143	50,640	3,186	15.9	83.6%	18.2%	\$ 4.73
91	98,764	6,260	15.8	84.9%	19.9%	\$ 4.81
76	26,109	1,659	15.7	79.8%	13.8%	\$ 6.35
79	90,537	6,047	15.0	92.8%	15.7%	\$ 5.13
1	166,210	11,606	14.3	68.3%	11.9%	\$ 7.26
86	40,492	2,832	14.3	85.1%	16.3%	\$ 5.23
167	45,700	3,316	13.8	86.5%	16.6%	\$ 5.57
82	34,177	2,580	13.2	90.2%	12.5%	\$ 7.77
178	36,034	2,770	13.0	83.3%	14.3%	\$ 6.07
87	25,082	1,952	12.8	93.7%	14.7%	\$ 6.05
153	39,006	3,127	12.5	88.9%	15.5%	\$ 5.88
177	24,506	1,996	12.3	94.3%	15.2%	\$ 6.29
20*	9,573	927	10.3	70.4%	12.5%	\$ 7.40
21	18,931	1,848	10.2	88.5%	10.8%	\$ 8.69
187*	13,209	1,422	9.3	89.0%	10.0%	\$ 9.41
85	43,188	4,686	9.2	92.1%	11.2%	\$ 9.08
175*	18,092	2,091	8.7	82.1%	8.4%	\$ 10.23
191*	37,693	5,398	7.0	80.1%	8.3%	\$ 12.97
188*	11,140	1,658	6.7	90.8%	7.4%	\$ 13.17
193*	4,884	837	5.8	93.2%	6.8%	\$ 15.43

Express routes generally carry riders traveling longer distances compared to those riding local or community routes. In addition to longer distances, there are not typically a significant number of riders boarding and alighting mid-route. These general travel characteristics usually result in lower route productivity even if passenger loads are close to total capacity.

Express Route	Boardings	Revenue		On-Time Performance	Farebox Recovery Ratio	Subsidy per Boarding
		Vehicle Hour	Productivity			
213	10,454	892	11.7	85.5%	11.3%	\$ 7.91
206	5,339	483	11.1	87.1%	9.6%	\$ 9.62
211	7,914	752	10.5	83.7%	10.1%	\$ 9.26
216	1,354	148	9.2	81.9%	5.2%	\$ 17.08
701	5,910	680	8.7	80.6%	9.9%	\$ 20.49
721	8,547	1,069	8.0	62.7%	7.6%	\$ 19.45
212	2,601	345	7.5	92.0%	6.7%	\$ 14.53
794	9,209	1,332	6.9	71.2%	28.3%	\$ 13.60
757*	1,829	456	4.0	82.9%	13.8%	\$ 23.72
758*	1,710	496	3.4	78.7%	10.6%	\$ 30.08

Stationlink routes are provided to ensure connections to employment centers for passengers commuting by rail. This is also known as “first mile-last mile” type service. Because these routes are typically short in both distance travelled and travel time, higher productivities can be realized, but total boardings are influenced by the density of the employment center surrounding the rail station within about a 15-minute attraction area, and the ability for the routes to serve employment centers that generate rail ridership.

Stationlink Route	Boardings	Revenue		On-Time Performance	Farebox Recovery Ratio	Subsidy per Boarding
		Vehicle Hour	Productivity			
453	9,313	399	23.4	90.9%	17.9%	\$ 4.26
454	12,287	540	22.8	91.3%	14.9%	\$ 4.89
472	8,730	464	18.8	91.5%	16.6%	\$ 5.01
473	9,239	513	18.0	95.1%	12.9%	\$ 6.10
462	9,130	510	17.9	83.1%	15.5%	\$ 5.32
480	5,127	417	12.3	92.3%	9.8%	\$ 8.55
463	5,573	582	9.6	88.3%	7.7%	\$ 12.17
411	1,389	167	8.3	92.9%	6.1%	\$ 15.23
464*	5,938	872	6.8	91.9%	5.6%	\$ 16.66
490	2,149	369	5.8	91.3%	4.4%	\$ 20.54
430	1,698	416	4.1	93.5%	3.3%	\$ 27.17

Route Reference Table

Route	Route Description	Main Street	Route Category
1	Long Beach - San Clemente	via Pacific Coast Hwy	LOCAL
20*	La Habra - Brea	via Imperial Hwy	LOCAL
21	Buena Park - Huntington Beach	via Valley View St/ Bolsa Chica Rd	LOCAL
24	Buena Park - Mall of Orange	via Malvern Ave/ Chapman Ave/ Tustin Ave	LOCAL
25	Fullerton - Huntington Beach	via Knott Ave/ Goldenwest St	LOCAL
26	Buena Park - Yorba Linda	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 - Huntington Beach	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	Orange - Seal Beach	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 - Newport Beach	via Anaheim Blvd/ Fairview St	LOCAL
50	Long Beach - Orange	via Katella Ave	LOCAL
53	Orange - 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	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	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 - Newport Beach	via Talbert Ave/ MacArthur Blvd	LOCAL
79	Tustin - Newport Beach	via Irvine Blvd/ Culver Dr/ University Ave	LOCAL
82	Mission Viejo - Rancho Santa Margarita	via Portola Pkwy/ Santa Margarita Pkwy/ Antonio Pkwy/ Crown Valley Pkwy	LOCAL
83	Anaheim - Laguna Hills	via 5 Fwy/ Main St	LOCAL
85	Mission Viejo - Dana Point	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	Lake Forest - 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	Mission Viejo - Laguna Hills	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 to Costa Mesa	via Fairview St/ Flower St	COMMUNITY
153	Brea - Orange	via Placentia Ave	COMMUNITY
167	Anaheim - Irvine	via Tustin Ave/ Hewes St/ Bryan Ave	COMMUNITY
175*	Irvine	via Yale Ave/ Campus Dr	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
187*	Laguna Hills - Dana Point	via El Toro Rd/ Aliso Creek Rd/ Niguel Rd	COMMUNITY
188*	Laguna Hills - Irvine	via Moulton Pkwy/ Irvine Center Dr/ Alton Pkwy/ Ridge Route	COMMUNITY
191*	Mission Viejo - San Clemente	via Rancho Viejo Rd/ Camino Capistrano/ El Camino Real	COMMUNITY
193*	Contracted Community	via Camino de los Mares/ Camino Vera Cruz/ Avenida Pico	COMMUNITY
206	Santa Ana Depot - Lake Forest	via 5 Fwy	EXPRESS BUS
211	Irvine - Seal Beach	via 405 Fwy	EXPRESS BUS
212	Irvine - San Juan Capistrano	via 405 Fwy	EXPRESS BUS
213	Brea - Fullerton - Placentia - Irvine	via 55 Fwy	EXPRESS BUS
216	Costa Mesa - San Juan Capistrano	via 405 Fwy	EXPRESS BUS
411	Anaheim Canyon Metrolink Station	via Coronado St/ La Palma Ave	STATIONLINK
430	Anaheim Amtrak Station - Anaheim	via Katella Ave/ Harbor Blvd/ Ball Rd	STATIONLINK
453	Orange Metrolink Station - Orange	via Chapman Ave/ Main St/ La Veta Ave	STATIONLINK
454	Orange Metrolink Station - The Block	via Chapman Ave/ Metropolitan Dr	STATIONLINK
462	Santa Ana Depot - Civic Center	via Santa Ana Blvd/ Civic Center Dr	STATIONLINK
463	Santa Ana Depot to Imperial Promenade	via Grand Ave	STATIONLINK
464*	Santa Ana Depot - Costa Mesa	via 5 Fwy/ 55 Fwy/ Sunflower Ave	STATIONLINK
472	Tustin Metrolink Station to Irvine	via Edinger Ave/ Red Hill Ave/ Campus Dr/ Jamboree Rd	STATIONLINK
473	Tustin Metrolink Station to UCI	via Edinger Ave/ Harvard Ave	STATIONLINK
480	Irvine Metrolink Station - Irvine Spectrum	via Alton Pkwy/ Bake Pkwy/ Lake Forest Dr	STATIONLINK
490	Laguna Niguel Train Station	via Crown Valley Pkwy/ Moulton Pkwy/ Aliso Viejo	STATIONLINK
543	Fullerton - Costa Mesa	via Harbor Blvd	BRAVO
560	Santa Ana to Long Beach	via 17th St/ Westminster Blvd	BRAVO
701	Los Angeles - Huntington Beach Express	via 405 Fwy/ 605 Fwy/ 105 Fwy/ 110 Fwy	EXPRESS BUS
721	Los Angeles - Fullerton Express	via 110 Fwy/ 91 Fwy	EXPRESS BUS
757*	Pomona - Santa Ana Express	via 57 Fwy	EXPRESS BUS
758*	Chino - Irvine Spectrum Express	via 57 Fwy/ 5 Fwy	EXPRESS BUS
794	Riverside / Corona to South Coast Metro Express	via 91 Fwy/ 55 Fwy	EXPRESS BUS