Information Item

Date: October 25, 2016

To: Mayor and City Council

From: Edward F. King, Director of Transit Services

Subject: Fiscal Year 2015-16 Big Blue Bus Year End Performance Report

Introduction

Fiscal Year 2015-16 was marked by momentous adaptation of our service to meet the needs of a changing transportation marketplace within the City of Santa Monica and throughout the Big Blue Bus (BBB) service area. The most visible change in the public transportation landscape was, of course, the extension of the Expo Line to downtown Santa Monica, which has had a direct and very visible impact on mobility patterns in the City and regionally. In addition, growth in active transportation, introduction of bike share, first and last mile focus, the growth and acceptance of Uber and Lyft, advancements in autonomous vehicle technology, and other disruptive forces all contributed to dynamic shifts in how people think about their mobility needs here in Santa Monica and throughout the region. The following summary and attached report provide details on Big Blue Bus (BBB) service performance for FY2015-16 within the framework of a rapidly changing physical and cultural environment.

Background

In September 2013, City Council approved the Big Blue Bus service evaluation guidelines, titled "Big Blue Bus Service, Design, Performance and Evaluation Guidelines" that provided detailed recommendations for bus route and service performance metrics, a reporting calendar, and standardized methods for evaluating bus service and bus service proposals to ensure that all services are evaluated regularly for efficiency, cost effectiveness, and overall viability. Pursuant to the September 24, 2013 staff report and

subsequent action by Council, the following summarizes the performance for all BBB routes during Fiscal Year 2015-16.

Discussion

BBB ridership for the fiscal year ending July 31, 2016 totaled 16,576,944. Like all transit systems throughout LA County (including Metro) and the United States, ridership was down compared to the prior year-end. It is important to note that BBB measures ridership through the National Transit Data (NTD) Ridership methodology, which is a requirement for FTA funding. NTD sampling is conducted 3 times per week, with 4 trips measured each day or a total of 12 trips per week. Therefore, less than .001% of the total trips BBB provides are measured annually through NTD. However, ridership is also measured through our fare collection system (Genfare fare boxes), and through the Automatic Passenger Counters (APCs) that are on every BBB bus. When measuring the ridership for monthly and quarterly reporting, staff utilizes the Genfare fare box and APC numbers as they are more accurate indicators of true ridership on our system. The fare collection system numbers are also compared to the revenue numbers monthly and annually to ensure a variance that is within industry best practice and BBB's technical specification requirements when the fare collection system was purchased in December of 2015.

According to fare box and APC data, Big Blue Bus carried 16,576,944 passengers in FY2015-2016, a 4.6% reduction. Using the NTD data, BBB ridership was down 11.6% compared to the previous year's ridership of 18,748,868.

The reduction in ridership is reflective of several factors. There were significant changes to many BBB routes and schedules, and there was an inevitable loss of some riders to Expo Phase II since its opening in May of 2016. The Expo line parallels some of the traditionally well-performing east-west corridors, and those were expected to lose ridership. There were also other broader factors at work that are having a general impact on public transit use. These include lower gas prices, the rise of transportation network companies such as Uber and Lyft, and the more than 600,000 motor vehicle licenses

issued to undocumented immigrants in 2015, accounting for nearly half of all new licenses issued.

In FY 2015-2016 considerable adaptations to service were made to reflect the extension of the Expo light rail to downtown Santa Monica.

At the beginning of FY 2015-2016, Big Blue Bus served five rail stations: two on the Expo Line which at that time terminated in Culver City; one on the Purple Line; Aviation Station on the Green Line; and Union Station, the regional rail hub. The Expo Phase II extension added seven new stations to the service area. With the implementation of bus stops at the seven new stations, rail connection stops have increased from 1% to 3% of all bus stops, and initial counts after the opening of Expo Phase II point to 15% of all BBB passengers now making rail connections. This is more than double the number of passengers connecting to BBB from rail prior to the Expo extension.

Acting on a plan titled the "Evolution of Blue" (approved by Council on April 28, 2015), BBB added 230 new ADA accessible bus stops on 40 directional route miles of bus service on six new lines, all connecting to Expo Phase II stations. BBB eliminated service on five other low performing or duplicative lines, and made significant changes on most of the remaining 14 lines. The changes reflect an effort to reconfigure the bus system to better connect Santa Monica and the surrounding area to the Expo Line, while preserving connectivity for existing customers.

The Evolution of Blue plan was implemented in four stages, over four service changes, to minimize impacts on passengers. The first stage was completed with the August 23rd, 2015 service change. The second was completed February 20th, 2016. The third and fourth stages occurred in June and August 2016 after the opening of the light rail line in May 2016.

These changes are reflected in the table on page 3 of the attached report, which identifies six new routes, five routes that were eliminated, and 10 routes that were adjusted.

All BBB routes have been measured against seven performance metrics. Those are: passengers per vehicle revenue hour, passengers per vehicle revenue mile, on time performance, total ridership, fare box recovery rate, operating cost per passenger and maximum load factor. The routes are then ranked by overall performance, which is illustrated in a table on page 11 of the report. Discussion and recommendations are provided that are intended to address the shortcomings of routes performing below expectations, including elimination of the lowest-ranked route, Route 4 (San Vicente and Carlyle).

While overall ridership is down from FY2015 to FY2016, the majority of Big Blue Bus routes are expected to see growth in ridership as Expo Phase II matures. LA Metro has announced a doubling of peak rail capacity on Expo in December 2016, bringing more potential BBB riders to the service area, and the total count of rail to bus transfer riders grows each week. There is a greater opportunity than ever before to serve passengers using rail to travel throughout the County and beyond. In addition, BBB has been actively developing new markets for mobility including corporate passes modeled on the successful BruinGo and Santa Monica College models. The first of these, St. John's Hospital, launched earlier this year. Staff will be meeting with several other public and private entities over the coming months to develop programs for their staff or students to move them out of their cars and onto public transit. In addition to fixed route service, staff is also exploring ways to improve traditional and new demand-response service (which currently includes the Dial-A-Ride program and Blue @ Night, our late night demand-response last-mile service from Expo) with the help of technology partners.)

There have also been notable improvements in service reliability. After the significant improvements achieved in FY2015, Big Blue Bus has continued the focus on service reliability and its critical relationship to attracting passengers by implementing new

standard operating procedures where congestion is unpredictable, yet still frequently occurs. Through this effort and continued pursuit of higher pre-paid fare boardings (both through the regional TAP fare collection system and through upgrade of our fareboxes) BBB was able to increase on time performance from 69% in July of 2015 to 80% in June of 2016.

With the Evolution of Blue plan now implemented, BBB will continue to adapt and execute its strategic plan through a process of not only continuous improvement of service to existing riders but also identifying and capturing new riders, while continuing to identify ways in which we can meet the evolving mobility needs of the community.

Prepared by: Edward F. King, Director of Transit Services

Attachment: Fiscal Year 2015-2016 Year-End Performance Report

Year-End Performance Report

Contents

Introduction

FY2015-2016 was one of the most eventful years in the history of Big Blue Bus. Marked by the opening of the Expo Line in May 2016, the fiscal year was one of adapting to a changing transportation marketplace. The most significant changes in the public transit arena include the extension of the Expo Line, the completion of the Wilshire Bus Rapid Transit lane in Los Angeles, and the extension of the Gold Line to Azusa. In addition, growth in active transportation, introduction of bike share, first and last mile focus, the growth and acceptance of Uber and Lyft, advancements in autonomous vehicle technology, and other forces all contributed to dynamic shifts in how people think about their mobility needs.

Response to the Expo Extension

At the beginning of FY 2015-16, Big Blue Bus served five rail stations, including Culver City and 7th & Metro stations on the Expo Line, the Wilshire & Western station on the Purple Line, Aviation Station on the Green Line, and Union Station, the regional rail hub. While bus stops at these stations made up only 1% of all BBB stops, those stops accounted for 7% of the total passenger traffic on BBB. With the implementation of bus stops at the seven new stations, rail connection stops now account for 3% of all bus stops, and initial counts after the opening of Expo Phase II point to 15% of all BBB passengers now making rail connections.

With the addition of the new stations on Expo Phase II, BBB now serves twelve rail stations. Together they present an opportunity to connect many new riders to BBB services. Acting on a plan titled the "Evolution of Blue" (approved by Council in April 2015), BBB added 230 new ADA accessible bus stops on 40 directional route miles of bus service on six new lines, all connecting to Expo Phase II stations. BBB eliminated service on five other low performing or duplicative lines, and made significant changes on most of the remaining 14 lines. The changes reflect an effort to reconfigure the bus system to better connect Santa Monica and the surrounding area to the Expo Line, while preserving connectivity for existing customers.

All of this change represents a significant investment for BBB and a dramatic alteration of services and expectations for the community. Change is never easy, and rather than attempt to deliver all of these alterations on the day Expo Phase II opened, BBB divided this process into four phases to ease the community into the transition.

Beginning in August of 2015, and concluding shortly after Expo Phase II opened, the four phase plan included some new bus lines running to as yet inoperative rail stations in early 2016. While this strategy hurt the ridership performance for FY2016, it was a conscious tradeoff made for the benefit of long term ridership growth. Phasing the changes eased the way for existing riders, and opened the door for potential new riders who were researching transportation options in early 2016 when Expo Phase II was receiving the most press coverage.

Overall Ridership

Big Blue Bus measures ridership through the National Transit Data Ridership methodology to ensure that FTA funding is provided, through our fare collection system (Genfare fare boxes), and through the Automatic Passenger Counters (APCs) that are on every BBB bus. When measuring the ridership for monthly and quarterly reporting, staff utilizes the Genfare fare box and APC numbers as they are more accurate indicators of true ridership on our system. The fare collection system numbers are also compared to the revenue numbers monthly and annually to ensure a variance that is within industry best practice and BBB's technical specification requirements when the fare collection system was purchased in December of 2015. NTD sampling is conducted 3 times per week, with 4 trips measured each day or a total of 12 trips per week. Therefore, less than .001% of the total trips BBB provides are measured annually through NTD.

Big Blue Bus carried 16,576,944 passengers in FY2015-2016, a 4.6% reduction when measured through the fare collection system and APCs, and an 11.6% reduction when measured through the NTD sampling methodology from the year prior. This reduction in ridership reflects multiple intersecting forces at work including change to BBB routes and schedules, lower gas prices, the rise of TNC's like Uber and Lyft, loss of riders to Expo Phase II, and the more than 600,000 motor vehicle licenses issued to undocumented immigrants in 2015, accounting for nearly half of all new licenses issued.

BBB's existing riders were disrupted by route changes and social forces at work, and new riders that will be generated by rail transfers had yet to take their place. The disruptive condition caused by the bus route changes will subside, and it is hoped that the new routes will generate ridership sufficient to replace the lost riders.

The larger shifts in the transportation marketplace have been suppressing bus transit ridership both regionally and nationally. An analysis of eighteen local transit systems in Los Angeles County identified reductions in bus ridership for seven quarters in a row through the first quarter of FY2016, and these trends have continued through the remaining three quarters of FY2016. National trends also show year over year reductions in bus ridership for thirteen quarters in a row. The regional and national bus ridership declines have yet to be fully

understood. BBB is participating in the regional and national conversation to uncover what can be done to reverse this ridership loss trend.

Percent Change in Boardings - LA County Operators (FY14Q3-FY16Q1)

Transit Operators	FY14Q3	FY14Q4	FY15Q1	FY15Q2	FY15Q3	FY15Q4	FY16Q1
Long Beach Transit	2.4%	-2.0%	0.7%	-4.1%	-5.4%	-5.8%	-8.9%
Montebello Bus Lines	-1.4%	-4.2%	-5.4%	-4.4%	-5.4%	-9.1%	-5.6%
Gardena Transp. Dept	1.0%	-4.5%	-1.3%	-2.2%	3.9%	-0.4%	-2.1%
AVTA	2.5%	2.8%	0.0%	-1.1%	-6.1%	-12.4%	-15.8%
LADOT	-0.6%	-4.8%	-8.4%	-6.8%	-6.3%	-6.4%	1.0%
Santa Clarita Transit	-3.0%	-2.1%	-1.4%	-1.3%	-2.9%	-7.9%	-7.5%
Foothill Transit	3.5%	4.1%	3.9%	3.1%	-0.1%	-4.6%	-6.7%
Norwalk Transit	-7.9%	-8.6%	-14.4%	-16.4%	-8.0%	-9.1%	-10.5%
Redondo Beach Transit	2.9%	0.1%	-1.0%	1.8%	1.8%	0.9%	2.7%
Culver City Municipal	-0.5%	-3.3%	-3.1%	-1.6%	-1.1%	-2.7%	-3.3%
Commerce Municipal	-3.0%	-10.8%	-5.1%	-8.7%	-2.7%	-0.4%	1.9%
Santa Monica's BBB	-6.9%	-8.2%	-8.0%	-7.0%	-3.1%	-5.9%	-3.5%
Torrance Transit	4.9%	-0.8%	3.4%	-3.9%	3.4%	0.2%	-3.9%
Burbank Bus	-10.2%	-13.1%	-9.2%	-5.7%	-1.9%	-0.5%	5.6%
Monterey Park	4.8%	3.5%	7.6%	-0.3%	-11.4%	-15.0%	-13.0%
Glendale Beeline	-2.1%	-3.6%	9.7%	10.1%	6.9%	9.6%	4.0%
Metro Bus	0.4%	-2.3%	-4.8%	-5.4%	-5.1%	-5.4%	-4.3%
All Transit Operators (Except Metro)	-0.5%	-3.2%	-3.2%	-3.9%	-3.5%	-5.6%	-4.6%
Metrolink	-3.7%	-2.6%	1.4%	0.0%	-0.3%	0.8%	

Service Reliability

After significant improvements achieved in FY2015, Big Blue Bus has continued the focus on service reliability, and its critical relationship to attracting passengers, by implementing new standard operating procedures where congestion is unpredictable, yet still frequently occurs. Through this effort and continued pursuit of higher pre-paid fare boardings, BBB was able to increase on time performance from 69% in July of 2015 to 80% in June of 2016.

FY2016 – System Change Highlights

As was noted in previous sections, FY 2016 was a year of dramatic route changes, which can be divided into three categories, new routes, adjusted routes, and eliminated routes.

New Routes		Adjusted Routes		Eliminated Routes	
No.	**Name**	**No.**	**Name**	**No.**	**Name**
15	Barrington Ave	**1**	Main St & Santa Monica Blvd	**4**	San Vicente Blvd & Carlyle Ave
16	Wilshire Blvd/Bundy Drive – Marina Del Rey	**5**	Olympic Blvd – Century City	**6**	SMC Commuter
17	UCLA – VA Medical Center – Palms	**7**	Pico Blvd	**12**	UCLA Westwood - Palms
18	UCLA – Abbott Kinney – Marina Del Rey (incorporating former 3M Montana Ave)	**Rapid 7**	Pico Blvd	**13**	Cheviot Hills
42	SMC Station – SMC – Montana	**8**	UCLA/Westwood & Ocean Park Blvd	**Rapid 20**	Expo Culver City – Santa Monica
43	26th Street & San Vicente Blvd	**9**	Pacific Palisades		
		Rapid 12	UCLA/Westwood & Overland Ave		
		14	Bundy Drive & Centinela Ave		
		41	SMC Station – SMC – Montana		
		44	17th Street Station – SMC – Ocean Park		

New BBB Routes and Route Segments

Big Blue Bus introduced over 40 directional route miles of new Expo Phase II serving bus routes in FY2016. A directional route mile refers to one mile of bus travel in one direction along a route. Following is a list of new routes and new route segments that have been introduced during FY2016.

Route 14 Brentwood to Playa Vista – Existing route on Bundy and Centinela which originally terminated at Culver Blvd was extended to Playa Vista connecting The Campus at Playa Vista (Yahoo, Google, You Tube) with the Expo Phase II Station at Bundy Drive.

Route 15 West Los Angeles to Brentwood – NEW route servicing the Barrington Avenue corridor from the Bundy Expo Station north to Sunset Blvd. Key destinations include University High,

Wilshire office towers near Barrington, US Social Security Administration, Brentwood School, Archer School, and Brentwood Village.

Route 16 Wilshire Blvd/Bundy Drive/Marina Del Rey – NEW route from Brentwood to the Marina bisecting Santa Monica on a broad diagonal creating many new connections. Key destinations include Bergamot Station, AET campus and Main campus of Santa Monica College, Venice High School, Watergarden, Ocean Park, Culver City East, Glencoe Ave, and Marina Del Rey.

Route 17 UCLA/VA Medical Center/Palms – NEW route from UCLA to Culver City Station via the VA Campus, Little Osaka and Palms. Key destinations include UCLA, Westwood Village, the VA campus, Little Osaka, UCLA housing on lower Sawtelle, and Expo stations at Sepulveda, Palms, and Culver City.

Route 18 UCLA/Abbott Kinney/Marina Del Rey – NEW route which includes the former route 3M from downtown Santa Monica to UCLA via Montana Ave. To create the 18, the 3M was extended southward through Venice to Marina Del Rey via Fourth Street, and the Rose Ave and Abbott Kinney commercial districts terminating on the Marina peninsula. Key destinations include UCLA, Westwood Village, the Veterans Administration, Brentwood, Montana Avenue, downtown Santa Monica, Abbott Kinney Blvd, and Marina Del Rey.

Route 42 SMC/17th Street Station – NEW route which creates a one-way counterclockwise route to match and complement the one way clockwise crosstown route 41 which runs from Montana Avenue to Pico Blvd via 14th and 20th Streets. Key destinations include Saint John's Hospital, SMC Main Campus, UCLA Medical Center, Montana Avenue, and the 17th Street Station.

Route 43 26th Street & San Vicente Blvd – NEW peak only route that connect Bergamot station and the Santa Monica College AET Campus as well as the North of Montana neighborhood and Paul Revere Middle School.

Route 44 Extension to 17th Street Station – Existing route that connects Bundy Campus to Main Campus is now extended to 17th Street Station.

Route Based Performance

On the following pages, Big Blue Bus routes are measured against seven different performance metrics. Values for each route are then compared against system averages. Routes that fall below 50% of average, or above 150% of average are examined for possible service improvements or corrections.

Routes are measured by the following metrics:

- Passengers per Revenue Mile
- Passengers per Revenue Hour
- On Time Performance
- Total Ridership by Route
- Fare box Recovery
- Cost per Passenger
- Passenger Load Factor

The presence of so many new and altered routes makes the examination of metrics a more complicated matter for FY2016. New routes typically perform very poorly for the first several months and often need a full year before riders discover them and their ridership profile matures.

Given that so many of the routes are new or profoundly altered, there is considerable low performance illustrated on the following pages that is not necessarily indicative of situations that call for correction. The performance in the first half of FY2017 is seen as critical to understanding which routes may be in need of further alteration in route or schedule.
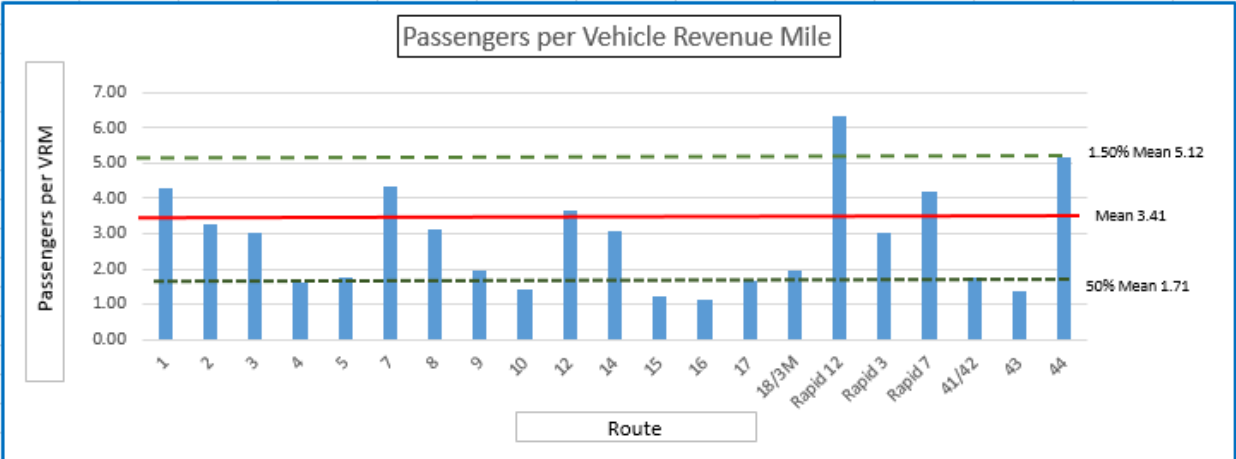
Passengers per Vehicle Revenue Mile Discussion & Recommendation

This metric measures the number of passengers boarding on average for each revenue mile travelled. The values for Routes 4, 5, 10, 15, 16, 17, 41/42, & 43 fall below 50% of the system average for passengers per vehicle revenue mile, and the value for Rapid 12 falls above 150% of the system average.

Route 4 San Vicente - This route was eliminated during the fiscal year due to poor performance.

Route 5 Santa Monica to Century City/Palms Station Expo Line - This route is an existing route that was extended to Palms Station in August 2015. That extension to a non-operative station hurt productivity due to the absence of passenger activity at the station between August 2015 and May 2016. Since the Expo Phase II opening, Palms Station has become the highest westbound boarding location on this route, and the productivity of this route is expected to improve markedly in FY2017.

Rapid 10 Freeway Express - This route lost the highest percentage of ridership of all BBB routes when Expo Phase II opened, due to its route running parallel to Expo from Santa Monica to Downtown Los Angeles. Prior to Expo Phase II, Rapid 10 carried an average of 2478 weekday passengers. Following the opening of Expo, ridership quickly declined to an average of 1290 weekday passengers, losing 48% of the weekday ridership nearly instantly. This route is being examined for how it can be run more efficiently and will be monitored ongoing for the continued impacts on ridership.

Routes 15, 16, 17, 42, and 43 - All of these routes are new routes introduced during this fiscal year, and all are underperforming. They will be monitored in FY2017 to ensure that they are building a sufficient ridership base, or recommended for removal or alteration.

Route 41 – 17th Street Station/SMC - This route serves the SMC main campus and the Expo Station at 17th Street and has historically been a low performer. However, initial results of the impact of the Expo line are promising, and it appears that this route may perform significantly better on the strength of the SMC main campus to 17th Street station connection. While many students are walking to the station and back, initial counts reveal that approximately one third of station bound SMC students are using BBB for that journey.

Rapid 12 Palms to UCLA/Westwood - This route had the highest passengers per vehicle revenue mile and as a result received a substantial increase in frequency at the end of FY2016 in response to the high ridership noted.

Passengers per Vehicle Revenue Hour
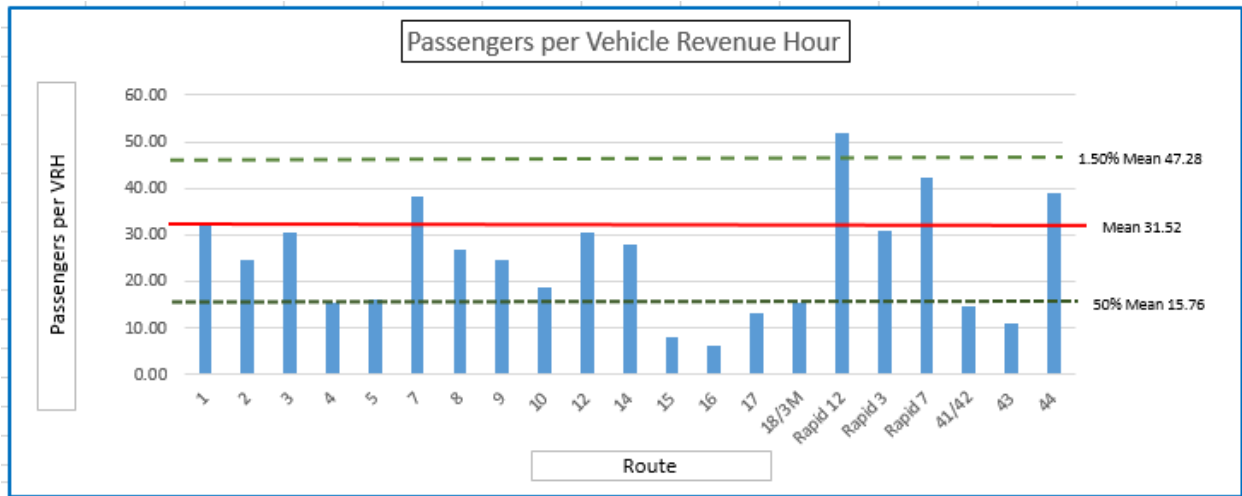
## Passengers per Revenue Hour Discussion & Recommendation

This metric measures the average number of passengers boarding for each revenue hour of service. The results for this metric and the causes behind those results closely mirror those of Passengers per Vehicle Revenue Mile shown on the prior page. The values for Routes 4, 5, 15, 16, 17, 18, 41/42, & 43 fall below 50% of the system average for passengers per revenue hour and Rapid 12 falls above 150% of the system average.

Only two route performance results differ significantly from those shown on the Passengers per Revenue Vehicle Mile. Route 10 performs within acceptable limits of the system average for this metric, and route 18 (formerly 3M) falls below 50% of the system average for this metric. Route 18 is a new route that is substantially different from the former Route 3M and it is expected to gain riders from the Expo opening. As such, it falls into association with the new routes that have yet to establish ridership patterns. Finally, this metric has been impacted by the number of additional revenue service hours that staff implemented in FY14-15 to improve service reliability and schedule adherence.

Fiscal Year End FY2015-16 On-Time Performance
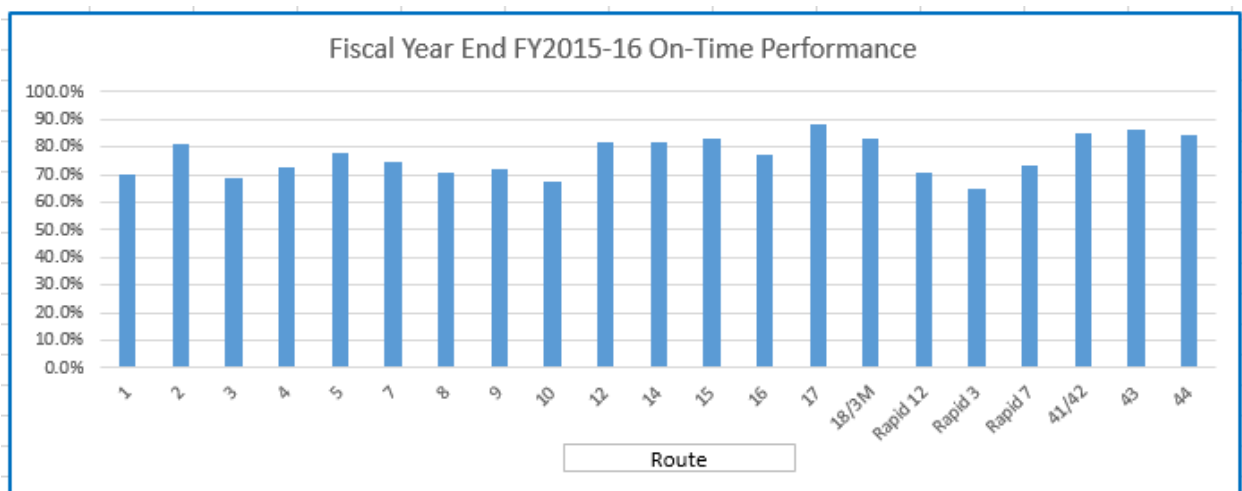
On Time Performance Discussion and Recommendation

Big Blue Bus ended FY2016 with a system wide on time performance of 80% for the month of June 2016, a full ten points above the level achieved at the end of FY2015, and Big Blue Bus continues to conduct analysis on routes with lower on time performance to achieve further gains. BBB is also pursuing long term general strategies such as signal prioritization, more pre-paid fares, bus rapid transit lanes, and driver training to help the entire system move more quickly. Our average on time performance for all of FY2015-16 was 74%, a 3.9% increase of the FY 2014-15 average of 70.1%.
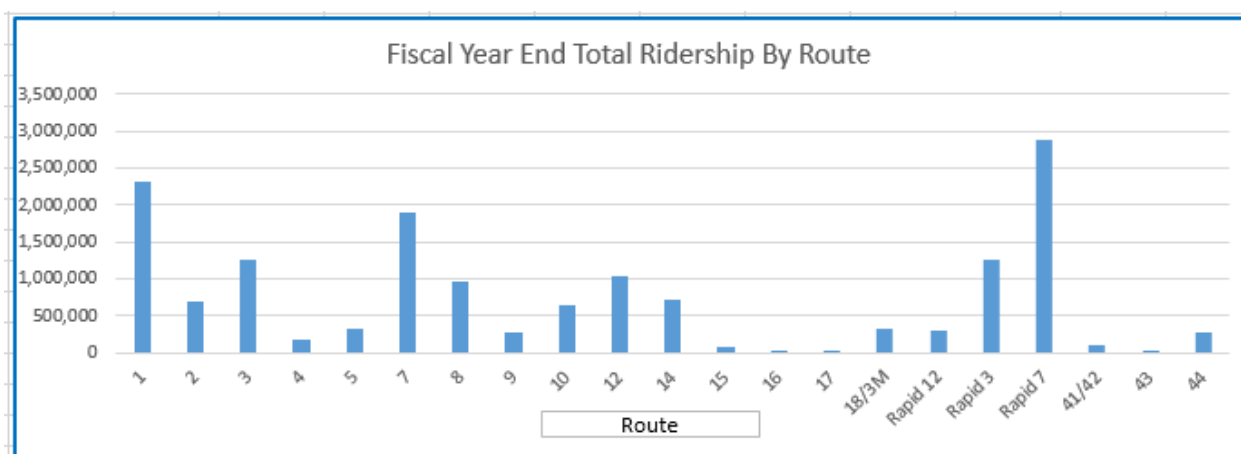

Total Annual Ridership by Route Discussion & Recommendation

Given the diversity of Big Blue Bus routes and schedules, and the divergent costs associated with each route, total ridership figures for routes are not compared to an average. Big Blue Bus's top five passenger carrying routes (Route 1, 3, Rapid 3, 7 and Rapid 7) carried 63% of all BBB passengers. Last year, the top five routes carried 47% of all BBB passengers. This increase in the dependence on top performing routes is due to the low ridership on BBB's newest routes, and the continued high demand for bus service on the Lincoln, Pico, and Santa Monica Blvd corridors.

Increases in service on Rapid 7 have led to a shift of riders from Route 7 to Rapid 7. The introduction of competing service on Expo Phase II has contributed to an overall reduction of ridership on the Pico corridor of approximately 15% after Expo Phase II opening.

A similar dynamic in terms of the shift from local service to Rapid service is also happening on the Lincoln corridor with increases in Rapid 3 service attracting many of the riders away from the local route 3 service.

Farebox Recovery Rate
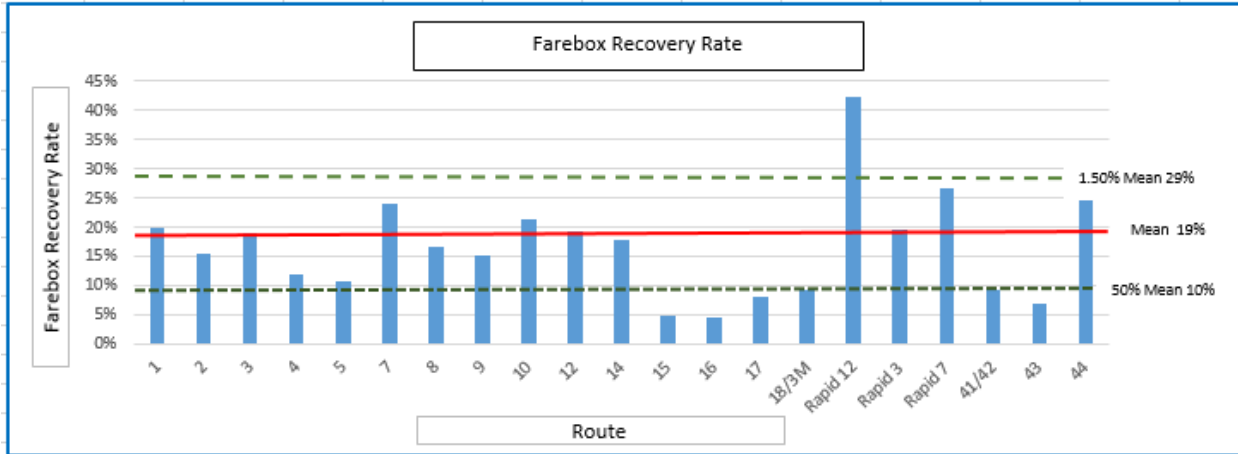
Fare box Recovery Ratio Discussion & Recommendation

The Fare box Recovery Rate chart illustrates the ratio between the revenue received on a particular route and the costs associated with running that route, expressed as a percentage. The system wide mean (19%) is calculated from all hours of service. The values for routes 15, 16, 17, 18 (formerly 3M), 41/42 and 43 fall below 50% of the system average, and only Rapid 12 falls above 150% of the average.

With the exception of route 41, all other routes falling below 50% of the system average are new routes introduced in FY2016. As such, they are expected to increase their fare box recovery as they develop a ridership base.


Operating Cost per Passenger by Route
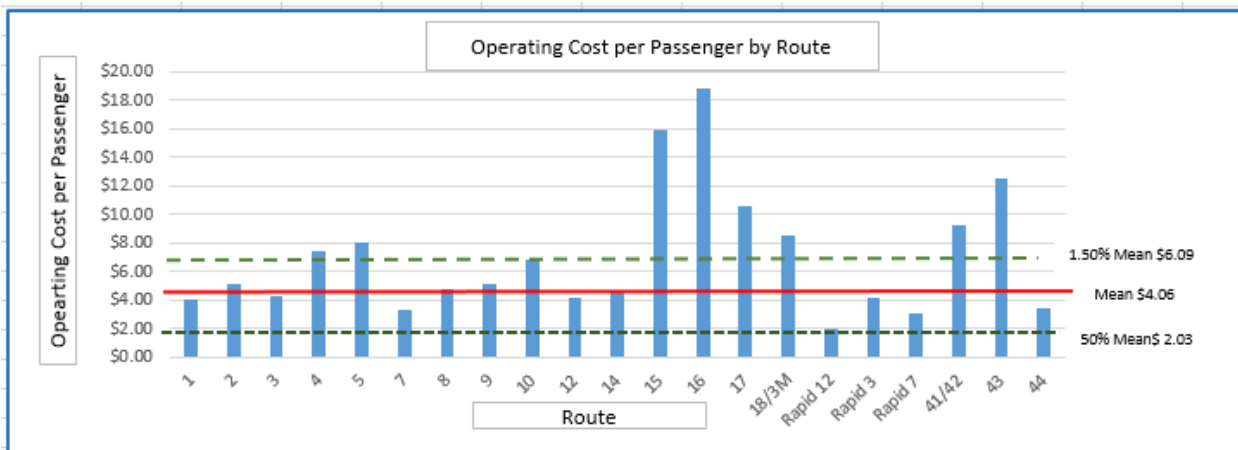
Operating Cost per Passenger Discussion & Recommendation

This metric notes the average cost for carrying a single passenger on each route. Routes 4, 5, 15, 16, 17, 18/3M, 41/42, and 43 all have a cost per passenger that exceeds 150% of the system average and no routes have a cost per passenger that is less than 50% of the system average.

As had been noted earlier, Route 4 was eliminated in FY2016. Routes 15, 16, 17, 18, 42 and 43 are new routes and are expected to reduce their per passenger costs as ridership develops. The extremely high per passenger cost is an unfortunate part of route introduction, when full

service is provided and few riders appear. Routes 5 and 41 are not new routes, but were both substantially altered. They both are expected to receive a substantial number of passengers from Expo Phase II.
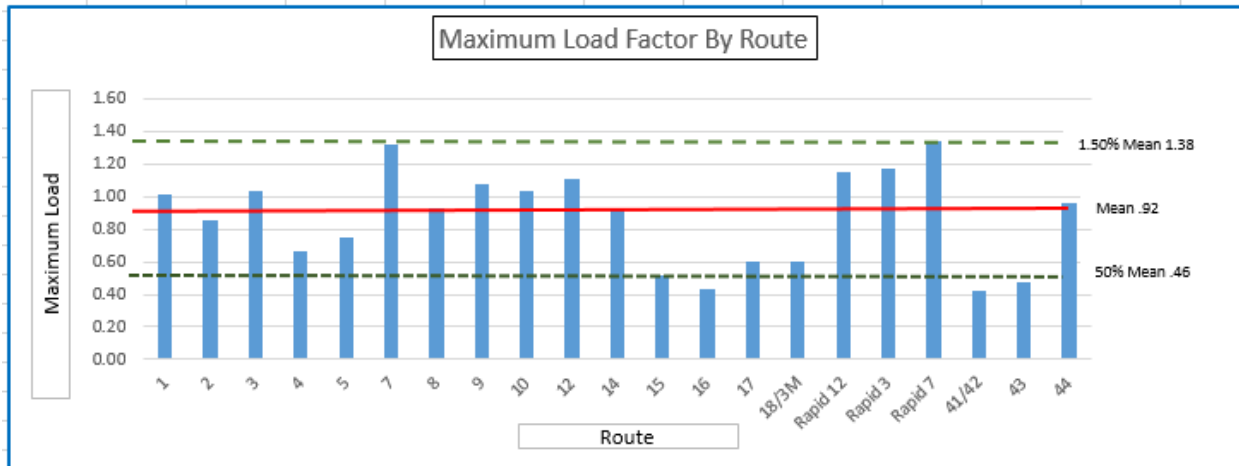
Load Factor Discussion & Recommendation

Maximum Load Factor measures the maximum average number of seats filled on each route. A factor of one means that on average every seat is filled. A load factor of 1.5 means that there are 50% more people than seats when the bus reaches maximum. The primary usefulness of this indicator is as an identifier of where more service is needed. Routes 16, 41/42 and 43 fall below 50% of the system average for passenger load factor and no routes fall above 150% of the system average, an indication that overloading was not a chronic problem anywhere in the system during FY2016.

Route Performance Ranking

The Route Performance Ranking shown below measures overall efficiency of service by blending the impact of four measures to judge and rank performance of all BBB Routes form Best to Worst in Efficiency;

- ✓ passengers per revenue hour
- ✓ passengers per revenue mile
- ✓ fare box recovery
- ✓ cost per passenger

The rankings for routes travelling the Pico, Lincoln, Westwood, and Santa Monica Blvd corridors in Fiscal Year 2016 were consistent with the rankings in Fiscal Year 2015, all finishing in the top third of routes. Route 44 continues to rise in the ranking, appearing at number 3 this year, after finishing 6th in FY2015 and 11th in FY2014. The lowest performing route in the rankings is Route 4, which was eliminated in FY2016. Several other of the low performing routes are new routes and as stated earlier, will require time to mature and develop a ridership base.

Ranking	Route Number	Route Name
1	Rapid 12	UCLA/Westwood to Expo
2	Rapid 7	Pico Blvd
3	44	Sunset Ride Airport & Bundy to Pico & 20th
4	7	Pico Blvd
5	3	Lincoln Blvd
6	1	Santa Monica Blvd
7	12	Westwood & Palms
8	Rapid 3	Lincoln Corridor
9	14	Bundy Dr & Centinela Ave
10	8	Ocean Park
11	2	Wilshire Blvd
12	9	Pacific Palisades
13	10	Freeway Express
14	16	Wilshire Blvd/Bundy Dr. - Marina del Rey
15	5	Olympic Blvd
16	18/3M	UCLA Abbot Kinney
17	41/42	Crosstown Ride 14th & Pearl to 20th & Montana
18	17	UCLA - VA Medical Center - Palms
19	15	Barrington Ave
20	43	26th Street & San Vicente Blvd
21	4	San Vicente Blvd & Carlyle Ave

Summary

The preceding pages illustrate the continued strength of Big Blue Bus service on our traditional major service corridors (Pico, Lincoln, Westwood, and Santa Monica Boulevards), and evidence that our second tier of boulevard routes (Bundy-Centinela and Wilshire Blvd) continue to be robust. The metrics identify rising performance in Route 44 connecting the SMC Main Campus, Bundy Campus and 17th Street Station. The new routes, 15, 16, 17, 18, 42 and 43 are all building ridership and will require several more months of activity before assessments can be made.

Not surprisingly, some routes that run parallel to Expo Phase II appear to have lost some ridership, notably route 7 and Rapid 7 on Pico Blvd, and Rapid 10, the Santa Monica to Los Angeles Express. The Pico routes have lost approximately 15% of their ridership, an amount that can be accommodated with minor service adjustments given their high frequency. However, the Rapid 10 has lost nearly half of its riders and may continue to lose more riders as traffic on I-10 continues to deteriorate due to downtown Los Angeles congestion.

While overall ridership is down from the FY2015 to FY2016, the majority of Big Blue Bus routes are expected to see growth in ridership as Expo Phase II matures. LA Metro has announced a doubling of peak rail capacity on Expo in December 2016, bringing more potential BBB riders to the service area, and the total count of rail to bus transfer riders grow each week.

FY2016 was a year of transformative changes taking place in the BBB system. These changes resulted in short term lowered ridership but together they form the basis for an opportunity for long term ridership growth. As Los Angeles traffic continues to worsen, BBB sees our role as growing ever more critical. Our challenge now is to go beyond the delivery of what has been offered in the past and to look to our constituents to help us understand how we can be relevant in their daily lives as their transportation choices broaden and change. BBB is rising to this challenge through surveying, communication, outreach, and innovation in a determined push to be part of the transportation future of Santa Monica. The Evolution of Blue, our plan to maximize the utility of Expo Phase II, is only the first step.