City of Santa Monica

Information Item

Date: October 20, 2015

To: Mayor and City Council

From: Edward F. King, Director of Transit Services

Subject: Fiscal Year 2014-15 Big Blue Bus Year End Performance Report

Introduction

The following summary and attached report provide details on the Big Blue Bus (BBB) service performance for FY2014-15.

Background

The City Council approved the Big Blue Bus service evaluation guidelines, titled "Big Blue Bus Service, Design, Performance and Evaluations 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 2014-15.

Discussion

BBB ridership for the fiscal year ending July 31, 2015 totaled 18,748,869. The total ridership reflects a 0.3% reduction from the prior year and a leveling off and reversal of a five-year trend of somewhat larger ridership losses.

All BBB routes have been measured against seven performance metrics, and then ranked by overall performance, which is illustrated in a table on page 9 of the report.

The report identifies six routes that are performing below acceptable levels on one or more measures. These routes are 4, 6, 3M, 13, 20, and 41. Discussion and recommendations are provided that are intended to address the shortcomings of these routes. There have also been notable improvements in route performance, specifically in the area of buses remaining on time.

The report also contains discussion of major changes at Big Blue Bus in FY2015. Big Blue Bus has instituted a five-part program to improve service quality, service reliability and customer service. The program includes improved service reliability, increased service on Routes 3, Rapid 3, 7 and Rapid 7, commencement of the bus stop improvement program to increase presence and customer service at all stops, introduction of the award-winning transit guide, the Little Blue Book, and division of the longest route (Route 3) into two routes for increased service reliability.

The introduction of the Little Blue Book, a printed transit guide, is of particular note as it is BBB's newest customer-serving tool. Awarded the 2015 AdWheel Award for print media by the American Public Transportation Association, the Little Blue Book is a simple bilingual, English-Spanish, tool that connects Big Blue Bus customers to their landscape and helps them get to where they want to go. By providing a well-designed bilingual guide, BBB has reached critical audiences, including customers without adequate access to or sufficient knowledge of online or technological resources, Spanish language speakers, the visually impaired and tourists/occasional riders.

The remaining four components of the five-part program address service and bus stop amenities. In a typical year, service changes for poor performing routes (bottom quarter percentile) would have been recommended and implemented. However, service adjustments to all of the poor performing routes were approved by Council on April 28, 2015 and are currently underway. Areas where routes have impending changes according to the Evolution of Blue plan are noted in the report.

The Evolution of Blue plan is being implemented in four stages, over four service changes, to minimize impacts on passengers. The first stage was completed with August 23rd, 2015 service change. The second will be completed February 20th, 2016. The third and fourth stages are tentatively set for June and August of 2016 and are somewhat dependent on the successful opening of the Expo Phase II rail project.

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

Attachment: Fiscal Year 2014-15 Year-End Performance Report

FY2014-15 Year End Performance Report

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Introduction

At the close of each fiscal year, Big Blue Bus conducts an annual review of ridership and efficiency on a route by route basis. This process helps to identify routes and schedules that are performing below average when compared against a variety of metrics, and also to shed light on where additional resources may need to be allocated due to increasing ridership.

The information on the following pages summarizes the major trends and changes at Big Blue Bus in FY2015, and the impacts that these trends and changes have had on the system on a route by route basis.

Overall Ridership

Big Blue Bus carried 18,748,869 passengers in FY2014-2015, a 0.3% reduction from the year prior. This minimal reduction in ridership represents the beginning of a historic trend from a pattern of ridership losses that extended for the last five years. Ridership peaked in FY2010 at 22,350,252, and this is the first year since FY2011 that ridership losses were less than one percent.

This beginning of a reversal is attributable to recovery from the recession, reallocation of service away from low performing areas, and improvements in the overall service quality. There were also outside influences that impacted ridership at BBB, as well as at Metro, the other Municipal Operators and the industry as a whole. These included lower gasoline prices which incentivized more single occupancy auto trips, a significant increase in automobile sales and more employment opportunities in the region. Together, the confluence of these forces have shaped ridership at Big Blue Bus and more recently have begun to bring more people back to the Big Blue Bus system. Big Blue Bus' loss of 0.3% ridership for the year is largely consistent with the American Public Transit Association's findings of a loss of 1.4% ridership on public transit bus over the same period nationally.

Service Reliability

Perhaps the biggest change at Big Blue Bus in FY2015 was the increased focus on service reliability, and its critical relationship to attracting passengers. BBB executed a five point program to change the passenger experience. Following are the changes and the results.

- **Dealing with Congestion** – In FY2015, Big Blue Bus increased running time across the system, resulting in an average 4.8% increase in running time per service mile.
- **Bus Stop Spacing** – BBB removed 62 bus stops in FY2015 and re-spaced stops in an effort to implement more consistent spacing for faster speed and better reliability. This has increased average stop spacing by 6% on local routes and 3% on Rapid routes.
- **TAP Fare Payment Integration** – Introduced in spring 2015, TAP rides swelled to nearly 200,000 in the month of June 2015. TAP boarding is faster and more efficient than cash boarding, saving an average of 18-20 seconds per boarding.
- **On time Performance** – Through the changes above and better route management, BBB improved system wide to 70.1% on time in FY2015 from 65.9% on time in FY2014.
- **NextBus** – Regardless of whether buses are on time, passengers like to know exactly when the next bus is coming. NextBus software began broadcasting the real time arrival times of all BBB buses to anyone with a smart phone at the end of FY2015.

FY2015 – System Change Highlights

FY 2015 was a year to get many of the system basics in place before embarking on the most dramatic system change ever contemplated at Big Blue Bus, the Evolution of Blue – Integration with the Expo Phase II project.

Important changes that occurred during FY2015 included not only the service reliability strategies noted above, but also the following:

- More service on BBB's most crowded Routes including Route 3, Rapid 3, Route 7 and Rapid 7
- The bus stop improvement project which included seating, lighting, printed information and real time information at select stops across the system
- The award winning Little Blue Book, with information on all BBB routes in one pocket sized guide.

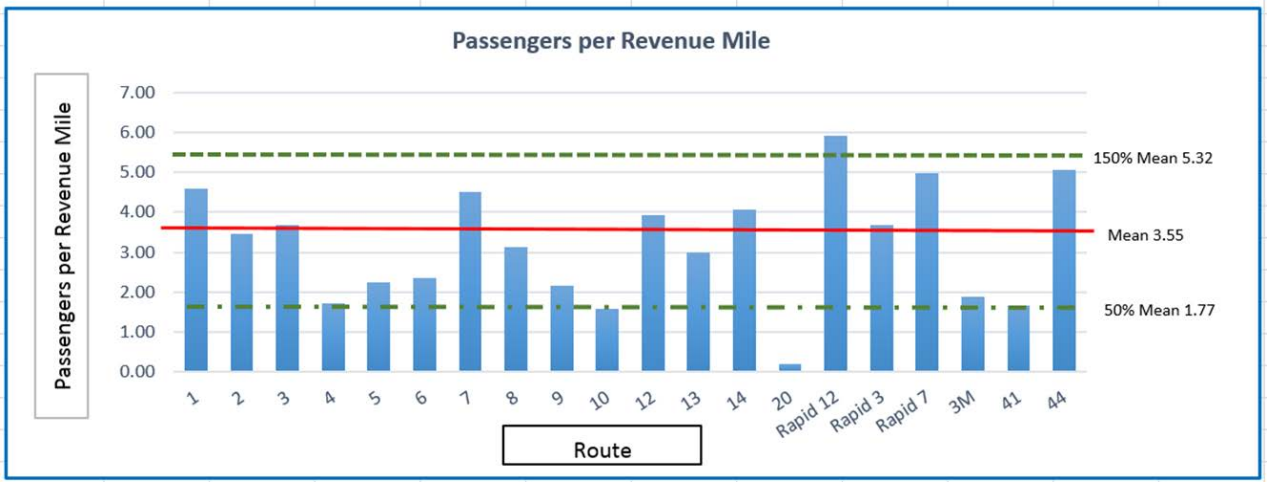
- Breaking BBB's longest route, Route 3, into two routes for better service reliability on both sections.

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 or system goals. 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
- ✓ Farebox Recovery
- ✓ Cost per Passenger
- ✓ Passenger Load Factor



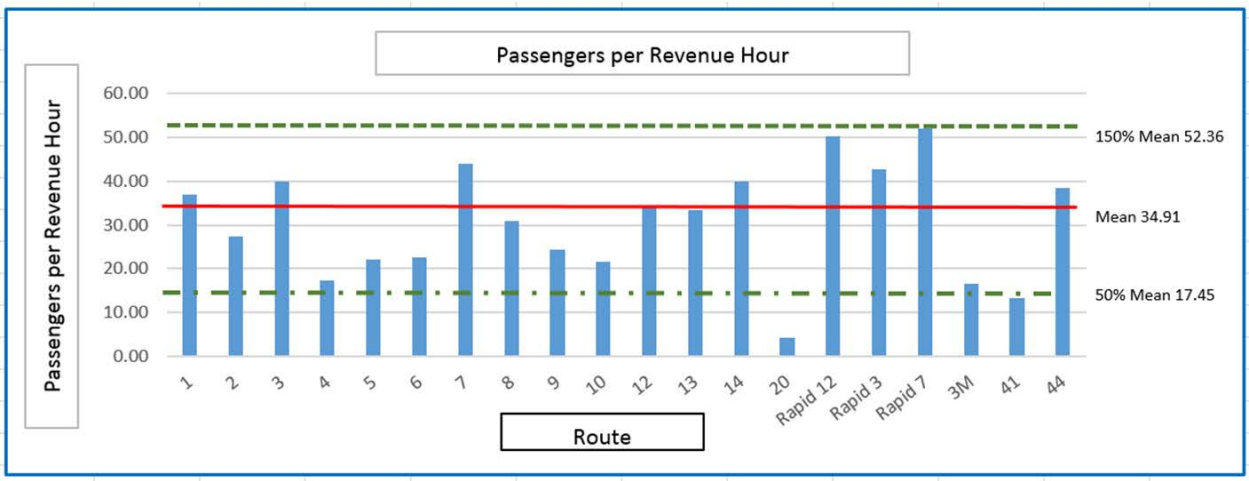
Passengers per Revenue Mile Discussion & Recommendation

This metric measures the number of passengers boarding on average for each revenue mile travelled. The values for Routes 10 & 20 fall below 50% of the system average for passengers per revenue mile, and the value for Rapid 12 falls above 150% of the system average.

Route 10 - Santa Monica to Los Angeles Express. This route performs at less than 50% of system average for Passengers per Revenue Mile. This is not attributable to weak ridership, but instead to long trips on the freeway without any seat turnover. This route exceeds system averages on other measures.

Line 20 - Connects the downtowns of Santa Monica and Culver City. This route was eliminated subsequent to the end of the fiscal year in August 2015 due to poor performance and duplication with Expo Phase II.

Rapid 12 - The only route to exceed 150% of system average on this measure is Rapid 12. This is an indication that at certain times this route may be overloading. Additional trips will be added to the Route to address the capacity issue in June of 2016.



Passengers per Revenue Hour Discussion & Recommendation

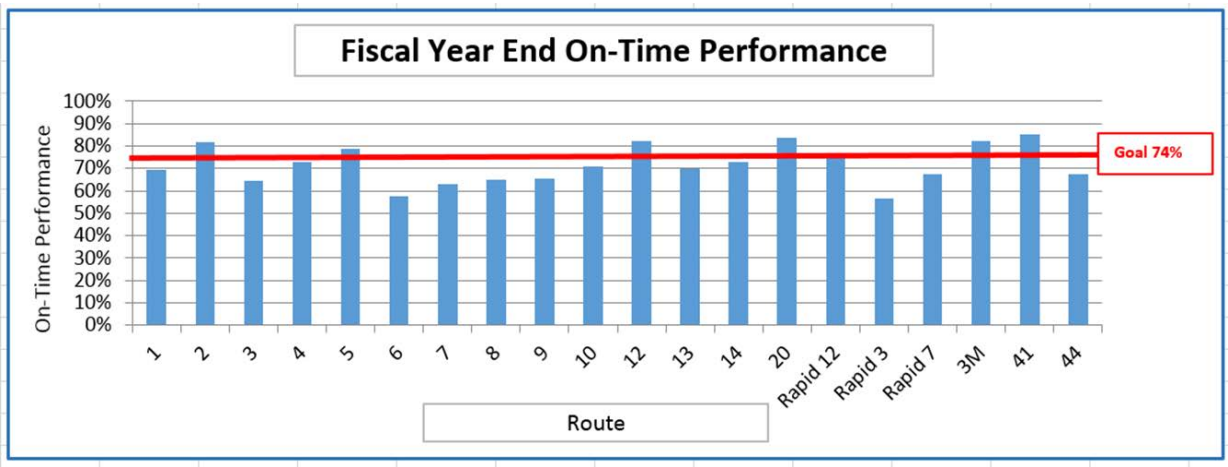
This measure is similar to Passengers per Revenue Mile and measures the number of passengers boarding on average for each revenue hour of service. The values for Route 20 and 41 fall below 50% of the system average for passengers per revenue hour and no routes fall above 150% of the system average.

Several popular routes fall above the system mean including:

- Route 1 Santa Monica Blvd, which connects Venice to UCLA via downtown Santa Monica
- Routes 3 and Rapid 3, which service Lincoln Blvd between downtown Santa Monica, LAX and Aviation Station on the Green Line
- Routes 7 and Rapid 7 which connect downtown Santa Monica to Rimpau Transit Center and the end of the Purple Line
- Route 14 which serviced Bundy and Centinela between Mar Vista and Sunset Blvd in FY2015 and has since been extended to Playa Vista
- Route 44 which connects the main SMC Campus to the Airport Campus via Ocean Park Blvd. This route will be extended to 17th Street Station in June of 2016.

Route 41 – This route will become the planned primary connection between Santa Monica College and the 17th St/SMC Expo Line Station. As such, it is expected to see substantial ridership increases when the Expo rail line opens.

Route 20 – Eliminated in August 2015 and discussed on the prior page.

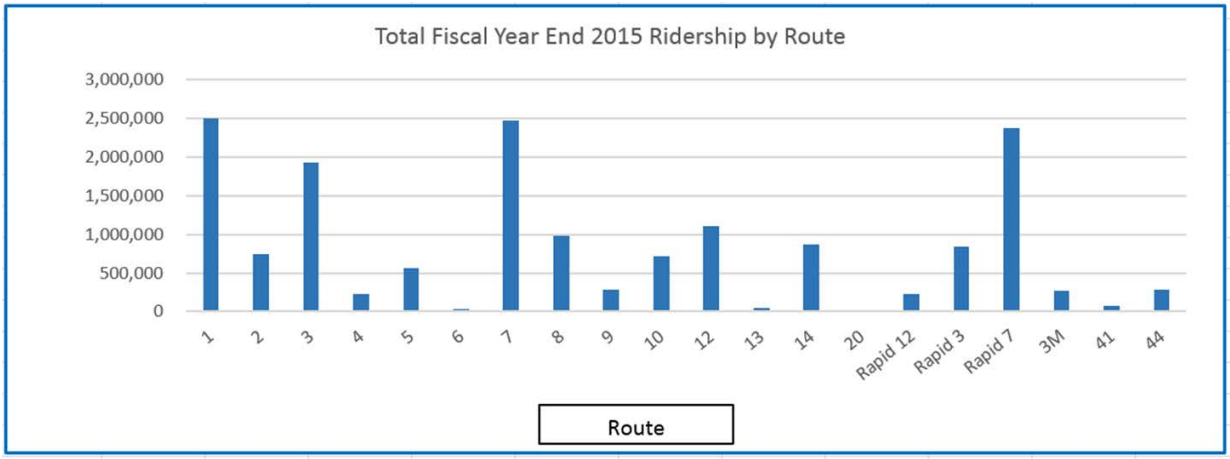


On Time Performance Discussion and Recommendation

Big Blue Bus spent much of FY2015 working on improving on time performance. On time performance is an illustration of the percent that the bus is between one minute early and five minutes late as it passes timepoints in the system. Routes are measured against the FY2015 BBB goal rather than a system average. At the end of FY2014, only one route (41) exceeded

BBB's on time performance goal. At the end of FY2015, six more routes had reached the goal, for a total of seven routes that had reached or exceeded the 74% goal as overall on time performance for the year increased to 70% for the system.

Big Blue Bus is analyzing the remaining lowest performing routes for ways to improve their on time performance including retiming, elimination of little used bus stops, rerouting, and signal prioritization.

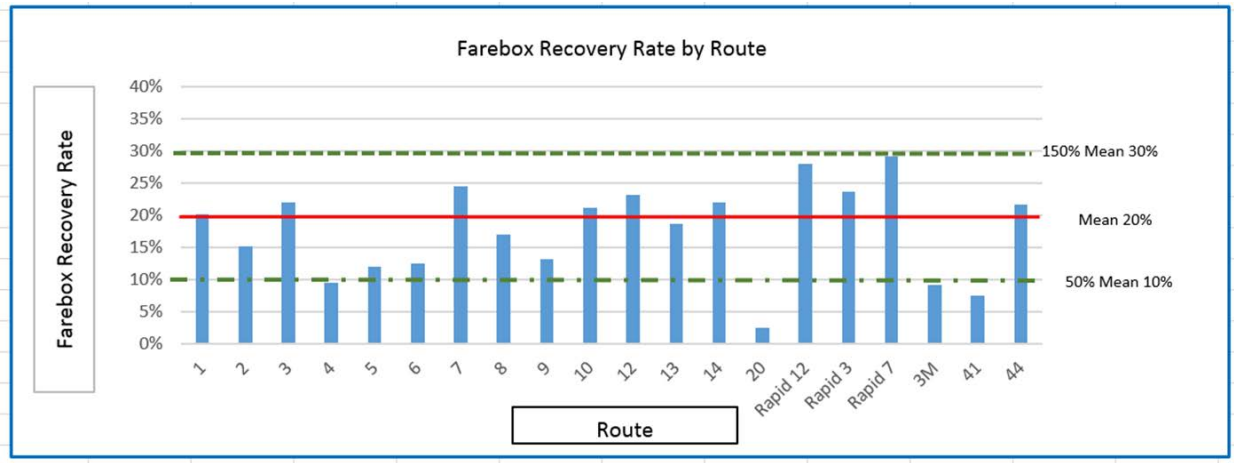


Total Annual Ridership by Route Discussion & Recommendation

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 and are only noted for comparison.

Big Blue Bus's top five ranked routes (Rapid 7, Rapid 12, 7, Rapid 3 & 3) carried 47% of all BBB passengers.

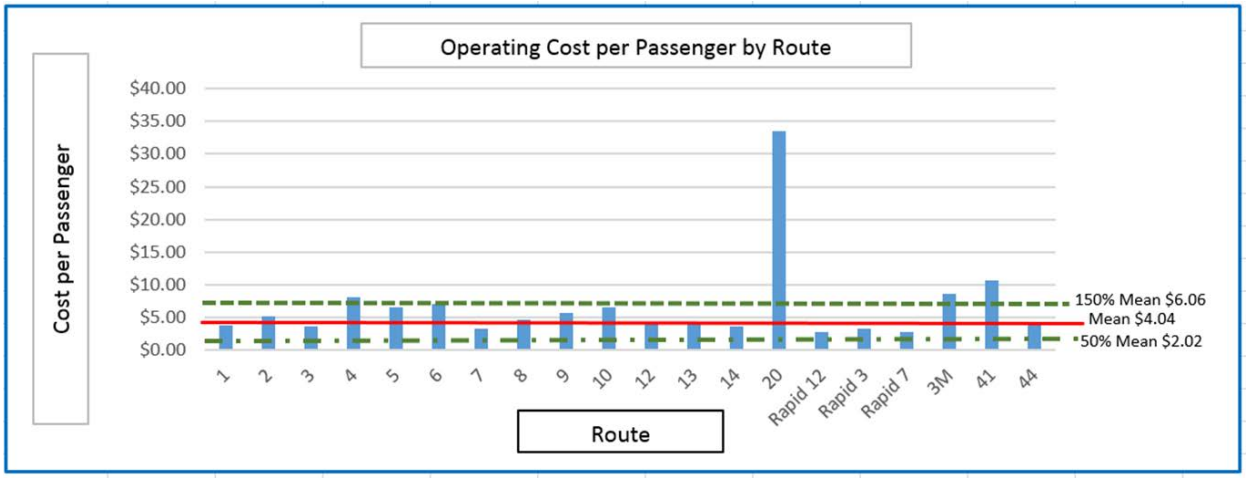
Due to poor performance and the desire to reallocate resources to high performing routes, routes 4, 6, 13 and 20 are slated for elimination under the Evolution of Blue plan. High performing segments from these routes will be included in new routes.



Farebox Recovery Ratio Discussion & Recommendation

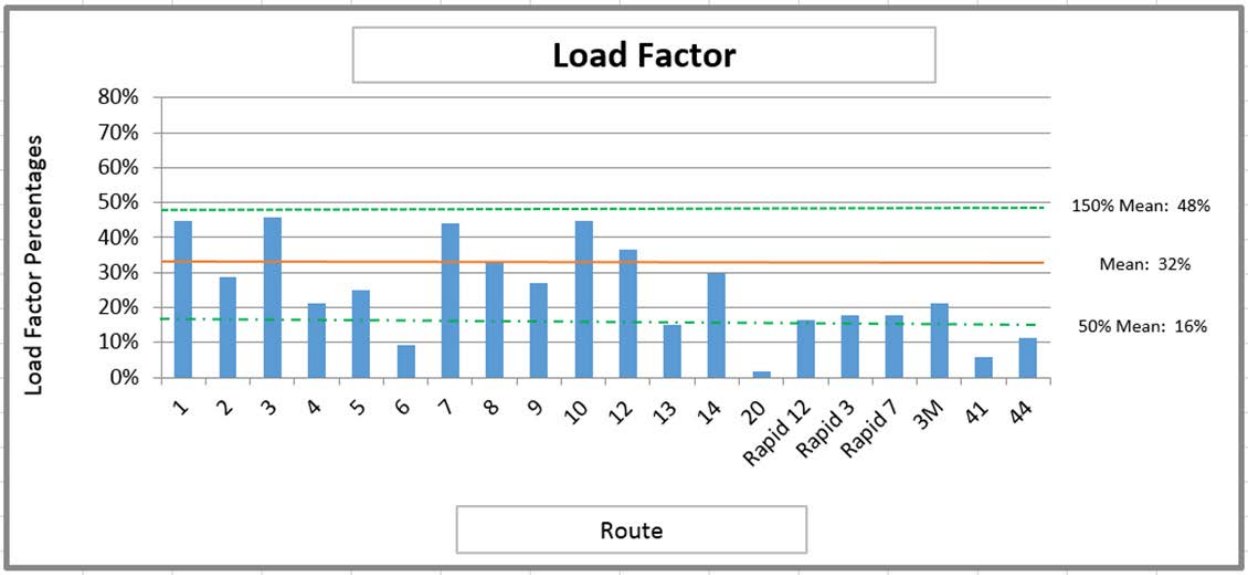
The Farebox Recovery Ratio chart illustrates the ratio between the revenue received on a particular route and the costs associated with running that route as a percentage. The values for routes 3M, 4, 20, and 41 fall below 50% of the system average, and no values fall above 150% of the average. As stated earlier in this report, routes 4 and 20 are slated for elimination and route 41 is expected to have a large ridership gain with Expo Phase II.

Route 3M is planned to be included as part of the new Line 18 in February 2016, which will extend to Venice as part of the Evolution of Blue plan. This is expected to increase ridership substantially on that corridor.



Operating Cost per Passenger Discussion & Recommendation

This metric notes the average cost for carrying a single passenger on each route. Lines 3M, 4, 20 and 41 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. Discussion of these routes that exceed 150% average cost can be found on the prior pages.



Load Factor Discussion & Recommendation

Passenger Load Factor measures the average percentage of seats filled on each route. No routes fall below 50% of the system average for passenger load factor and only Rapid 12 falls above 150% of the system average, which may indicate some overloading occurring.

Rapid 12 is slated to gain additional service to reduce any potential overloading in June 2016.

Route Performance Ranking

The Route Performance Ranking shown below measures overall efficiency of service by blending the impact of four measures to measure 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 ranking for most BBB routes in Fiscal Year 2015 was consistent with the ranking in Fiscal Year 2014, with the exception of Route 44 Campus Connector, which moved up from being ranked number 11 to number 6 out of 20 Routes.

Routes noted in the prior metric reports as being sub-average are noted with planned corrective action in the right hand column.

Route Performance Ranking* (ranked with best performing route first)			
Rank	Route #	Route Name	Planned Corrective Action
1	Rapid 7	Pico Blvd	
2	Rapid 12	UCLA/Westwood to Expo	
3	7	Pico Blvd	
4	Rapid 3	Lincoln Blvd	
5	3	Lincoln Blvd	
6	44	Campus Connector	
7	1	Santa Monica Blvd	
8	14	Bundy Dr & Centinela Avenue	
9	12	UCLA/Westwood to Expo	
10	13	Cheviot Hills	Eliminate Aug 2015
11	8	Ocean Park Blvd	
12	2	Wilshire Blvd	
13	9	Pacific Palisades	
14	10	Freeway Express	
15	5	Olympic Blvd	Expo to Century City connection
16	6	SMC Commuter	Eliminate August 2015
17	4	San Vicente Blvd & Carlyle Ave	Eliminate June 2016
18	3M	Montana/UCLA	Extend to Venice and connect to Expo
19	41	Crosstown	Planned SMC to Expo connection
20	20	Expo Culver City	Eliminate August 2015

Summary

The preceding pages identify several routes with sub-average performance. The Evolution of Blue plan, approved by Council in FY2015, contains corrective actions that address many of these performance issues. The elimination of four routes; 4, 6, 13 and 20, and the adjustments to Lines 3M, 5, and 41 are intended to correct most if not all of the sub-average performance identified.

While overall ridership is down slightly from the FY2014 to FY2015, the reduction from the prior year was slight. The majority of existing Big Blue Bus lines are expected to see growth as service reliability improves, and rail connectivity with Expo Phase II comes on line. Real time information is enabling passengers to better plan their trips, and corrective bus stop spacing and TAP integration are speeding travel times. Lastly, new bus routes being introduced that integrate neighborhoods to Expo Phase II are expected to cause a significant increase in ridership once the rail system begins passenger service.

FY2015 was a year of preparation for the transformative changes taking place in FY2016. Execution of the Evolution of Blue plan combined with continued monitoring of system

performance beckons a new era for Big Blue Bus and gives us the tools needed to continue to shape transit effectively.