



# Information Item

**Date: November 3, 2014**

To: Mayor and City Council  
From: Edward F. King, Director of Transit Services  
Subject: Fiscal Year 2014 Big Blue Bus Service Performance Report

## **Introduction**

The following summary and attached report provide details on the first Big Blue Bus (BBB) Service Performance Year End Report.

## **Background**

In 2013, staff developed planning standards and guidelines for BBB service using existing BBB policy and industry best practices. These guidelines, titled “Big Blue Bus Service, Design, Performance and Evaluations Guidelines,” recommend bus route and service performance metrics, a reporting calendar and structure, 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 of any new service that is proposed. Pursuant to the September 24, 2013 staff report and subsequent action taken by City Council, the following summarize the performance for all BBB routes during Fiscal Year 2013-14.

## **Discussion**

All BBB routes have been ranked by performance on page 2 in the Service Performance Year End Report. BBB ridership for the fiscal year ending July 31, 2014 totaled 18,817,489. The total ridership reflects a 2.6% reduction from the prior year. This correlates to the reduction in the total number of operating service hours programmed and the service changes implemented during the year. These adjustments

were made to offset the conditions created by inefficiencies. Efforts to balance the addition of new service hours were implemented to reduce overcrowding. More route/trip running time and recovery time were added for service that did not meet on-time performance standards.

Using the new guidelines, staff made service adjustments to several routes during the year based upon new procedures implemented in operations and in operations planning. This included the designation of a route management supervisor to track and compile on-time performance data and route schedule adherence in order to provide reliable and accurate data to the operations planning section for consideration in route and schedule analysis and review. In addition, an On-Time Performance (OTP) working group was established to collaborate on various strategies to address schedule reliability and service quality issues. Routes 3, 7 and Rapid 3 and Rapid 7 consistently recorded the worst on-time performance during the year. Therefore, service adjustments were made on these routes.

In a typical year, service changes for poor performing routes (bottom quarter percentile) would have been recommended and implemented with some type of action or modification. However, staff resources were focused on the Expo integration planning study. When timing of changes and analysis were taken into consideration, some route and schedule modifications were not recommended due to investment in operating expenditures for the short term before Expo integration begins. Planning and operations staff have focused upon the ongoing Comprehensive Operational Analysis (COA) of all BBB service as a result of the upcoming integration of BBB service with the Expo Light Rail line and are currently finalizing recommendations based upon customer and community input. These recommendations will be presented in a study session to the Council in December.

Service improvements undertaken during the year include:

- Route 1: Additional running time to improve schedule reliability
- Route 3: Additional running time and additional trips to improve schedule and address overcrowding
- Rapid 3: Additional running time and more trips in peak periods
- Route 7: Additional running time and more trips
- Rapid 7: Additional running time and more trips Eastbound
- Route 9 (4): Interlined Routes 9 and 4 to improve schedule reliability and added more running time to help performance
- Route 11: Eliminated route due to poor ridership performance and duplication of service with other BBB routes

There will be minimal recommended changes for the February and June 2015 service changes in light of the Phase I implementation (August 2015) of Expo integration service changes.

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

**Attachment:** Fiscal Year 2013-14 Year-End Performance Report



## **FY2013-14 Year End Performance Report**

### Introduction and Summary

Important changes that occurred during the year were the addition of added running time to Lines 1, 3, 7, 9, Rapid 3, and Rapid 7 to improve on-time performance, the elimination of Route 11 due to poor performance and redundancy with other BBB and Metro Routes, the temporary removal of the Sunset Ride from the AET campus of Santa Monica College while it was undergoing reconstruction, bus stop consolidation, the elimination of unique, and/or low performing trips on several routes, and the beginning of implementation of the bus stop improvement program.

The tables on the following pages illustrate various measures beginning with an overall route performance ranking, followed by specific measures of the performance of each route.

### Route Performance Ranking

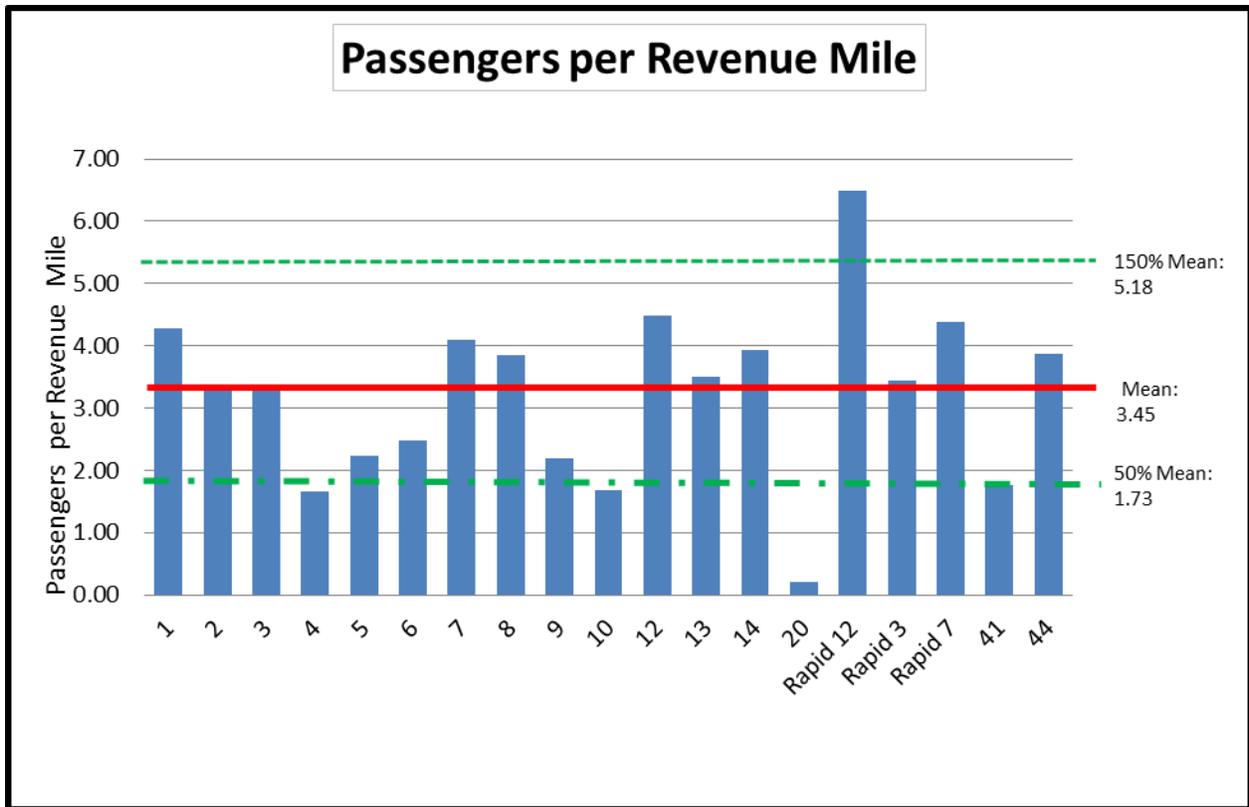
The Route Performance Ranking measures efficiency of service using four measures: passengers per revenue hour, passengers per revenue mile, farebox recovery, and cost per passengers. It does not measure the overall head count of people carried on the route, but instead focuses on which routes are able to carry the greatest number of people for the least amount of resources expended. Three of Big Blue Bus' Rapid routes -- the Rapid 12, Rapid 7, and Rapid 3 lines - carried over 17% of riders and were BBB's top performers, ranking numbers one through three.

The following pages contain illustrations of seven route based performance measures. Routes that fall below or above 50% of system average are reviewed for what changes may be needed.

**Route Performance Ranking\* (ranked with best performing route first)**

Ranking	Route Number	Route Name
1	Rapid 12	UCLA/Westwood to Expo
2	Rapid 7	Pico Blvd
3	Rapid 3	Lincoln Corridor
4	7	Pico Blvd
5	12	Westwood & Palms
6	1	Santa Monica Blvd
7	14	Bundy Drive & Centinela Avenue
8	8	Ocean Park Blvd
9	13	Cheviot Hills
10	3	Lincoln Blvd & Montana Avenue
11	44	Sunset Ride Airport & Bundy to Pico & 20th
12	10	Freeway Express
13	2	Wilshire Blvd
14	5	Olympic Blvd
15	9	Pacific Palisades
16	6	SMC Commuter
17	4	San Vicente Blvd & Carlyle Ave
18	41	Crosstown Ride 14th & Pearl to 20th & Montana
19	20	Expo Culver City

\* Routes are composite ranked using a four factor index. The four factors include: Passengers per Revenue Hour, Passengers per revenue Mile, Farebox Recovery and Cost per Passenger.



### Discussion & Recommendations

The values for Routes 4, 10, 20 and 41 fall below 50% of the system average for passengers per revenue mile. For three of those routes -- the 4, 20 and 41 -- this measure illustrates the low efficiency of the routes. The three routes together carried just 2% of annual riders.

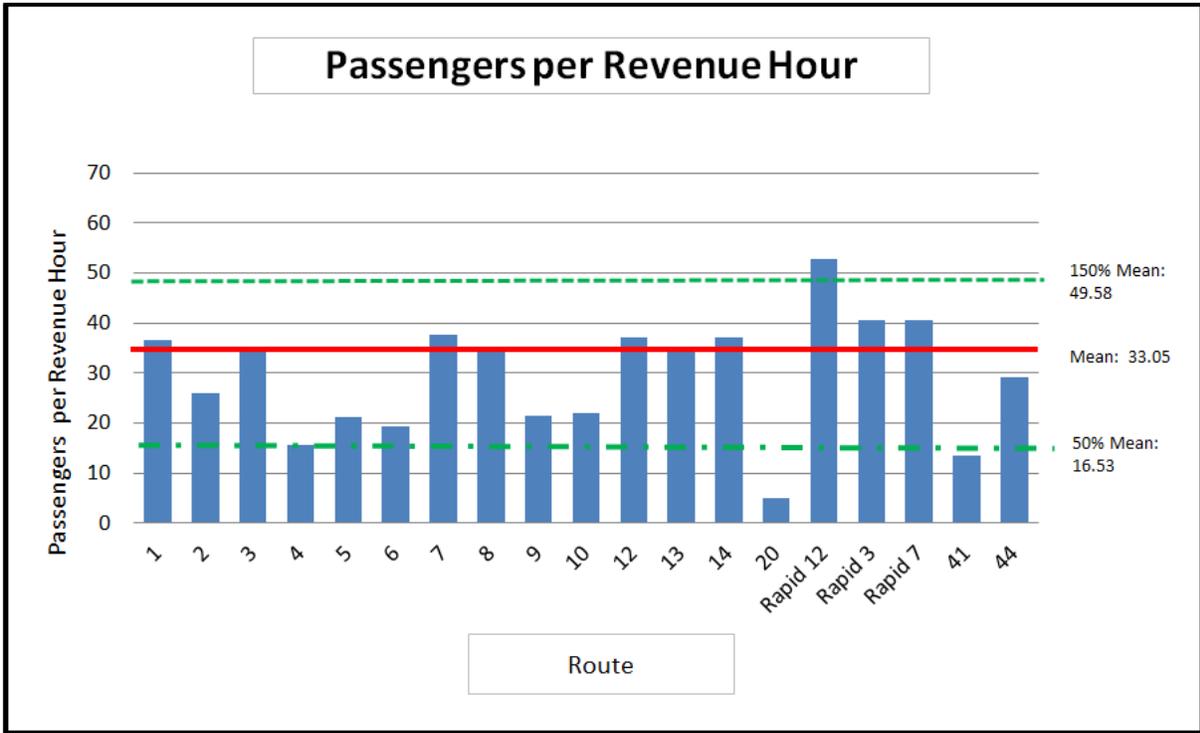
Route 4 – This route is expected to be substantially altered in the service plan for Expo in light of its poor performance. Given the immediacy of the Expo Service planning process, there is no recommendation for short term changes to this route.

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. No change is recommended as this route exceeds system averages on other measures.

Route 20 -- Connects the downtowns of Santa Monica and Culver City. This route is expected to be eliminated with Expo Phase 2 since it is replaced by the rail line.

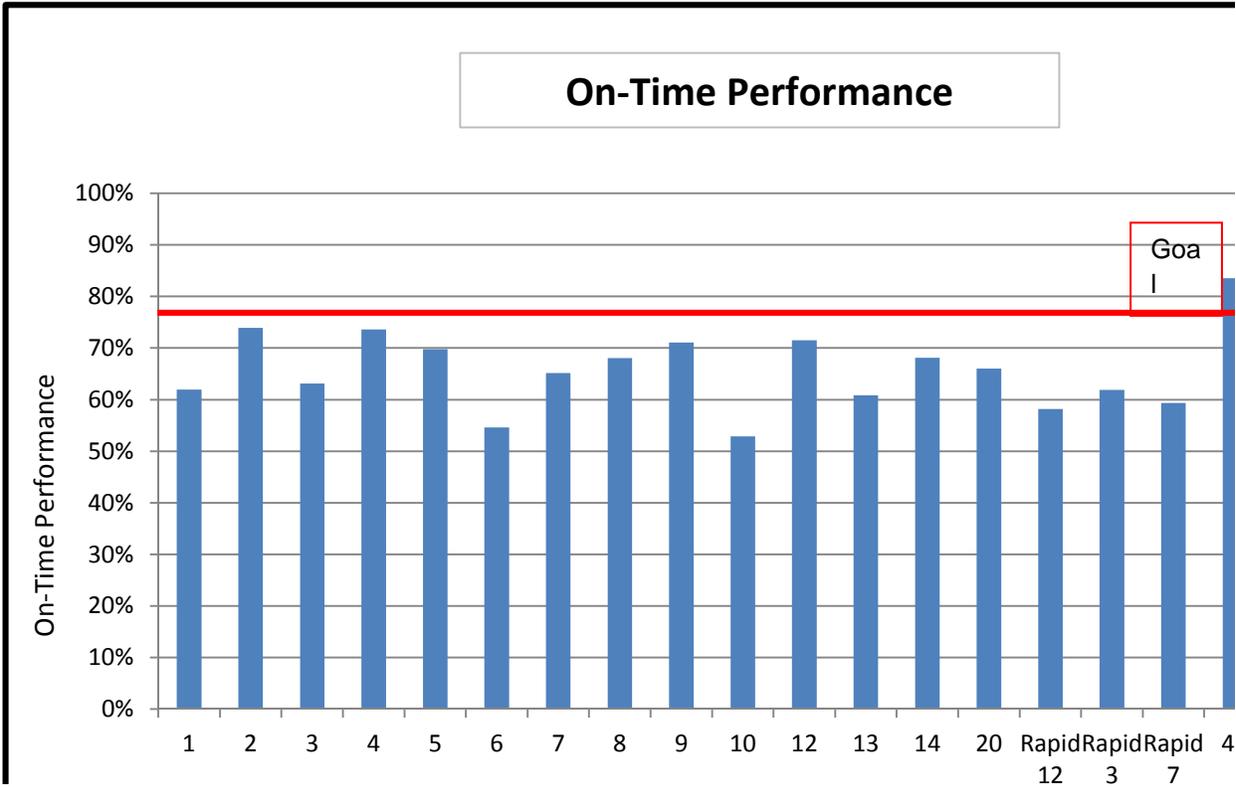
Route 41 – This route is expected to see dramatic increases in passenger loads as a result of the arrival of Expo as it will connect Santa Monica College and the new 17<sup>th</sup> Street Expo Station.

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 and may need additional trips. This issue is currently under review.



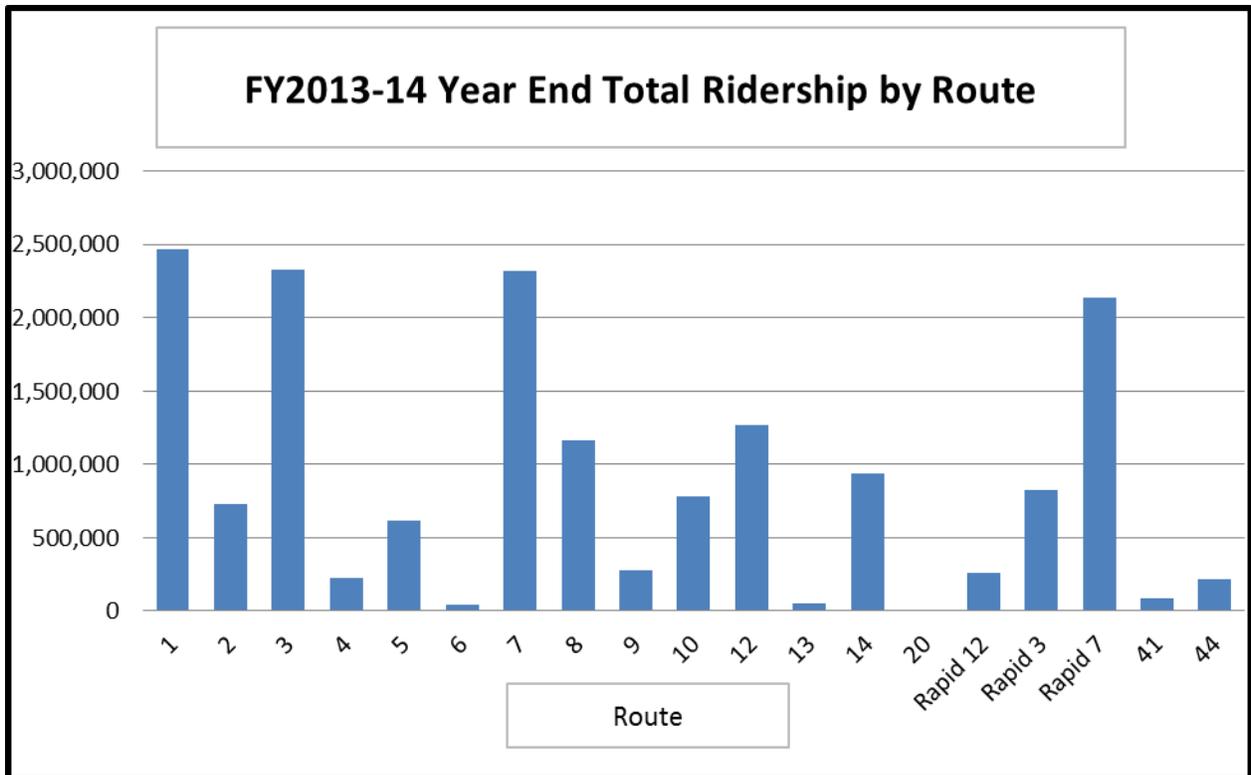
Discussion & Recommendations

The values for Routes 4, 20 and 41 fall below 50% of the system average for passengers per revenue hour. See previous section for recommendations regarding these routes.



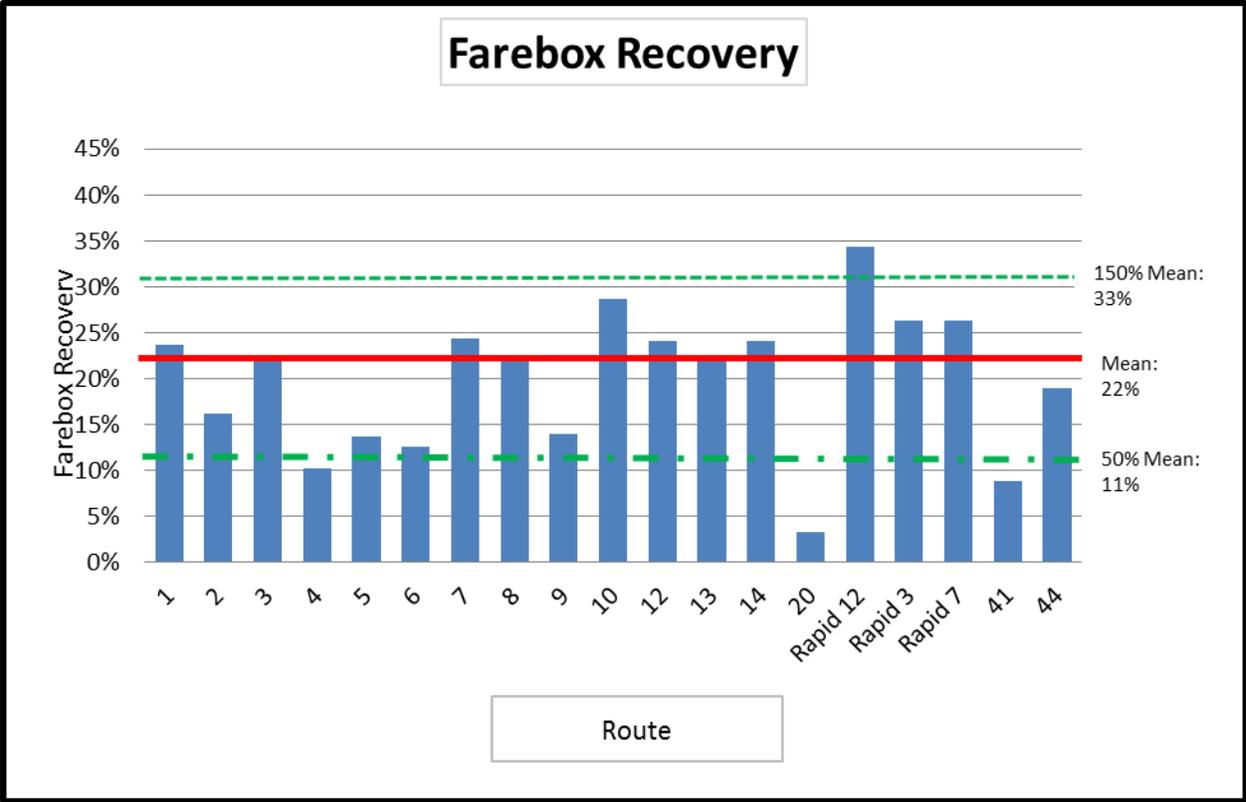
Discussion and Recommendations

Big Blue Bus spent much of FY2013-2014 working on improving on-time performance, which improved from 67.19% in July of 2013 to 70.6% in July of 2014. This improvement was hard won and there is much room left for continued work in this area. Big Blue Bus is continuously analyzing the lowest performing routes for ways to improve their on-time performance including retiming, elimination of little used bus stops, rerouting, and signal prioritization.



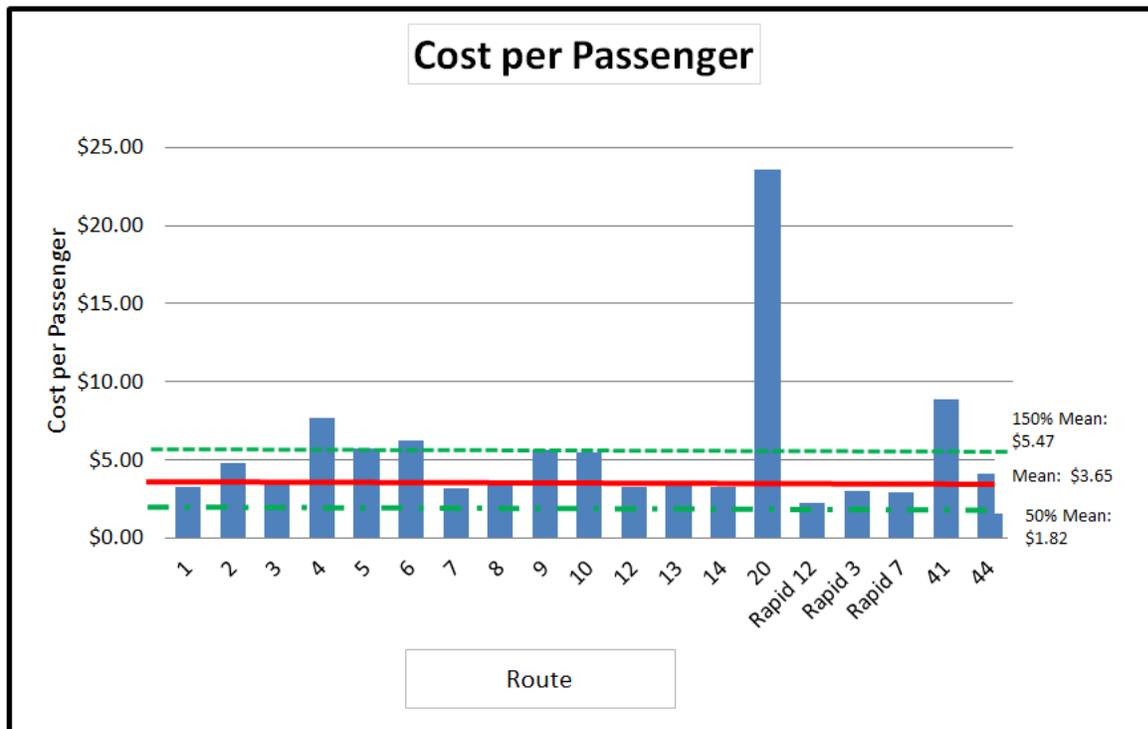
### Discussion & Recommendations

The bulk of Big Blue Bus passengers ride just four routes: 1, 3, 7 and Rapid 7. Together those routes carry 55% of all passengers that ride Big Blue Bus on any given day. While total ridership was down by 2.6% for the fiscal year, the decrease was commensurate with a corresponding reduction in revenue service hours of 2.7%.



Discussion & Recommendations

The same three routes -- 4, 20, and 41 -- that were identified in other performance measures as weak performers also are noted here on the Farebox Recovery table. Needed changes to these routes have already been addressed earlier in this report.



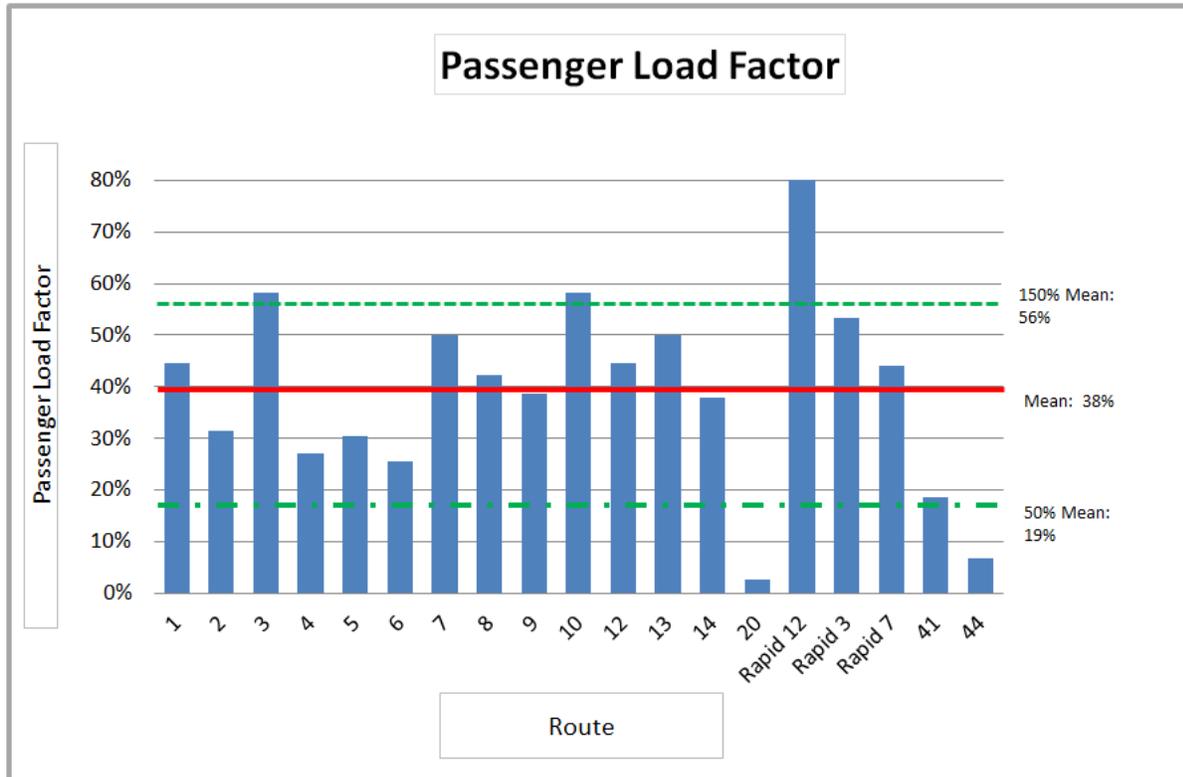
### Discussion & Recommendations

In addition to routes 4, 20 and 41, the Cost Per Passenger table identifies a larger number of routes as subpar (having a cost per passenger of 50% higher than average or more), including routes 5, 6, 9, & 10.

Routes 5 & 6 – These routes are marginal performers, and are expected to be reduced and or altered in the Expo service plan for greater efficiency.

Route 9 -- In most categories, this route is a moderate performer, with the exception of the Cost per Passenger metric. With a strong connection to the Expo Station, it is hoped that Big Blue Bus can build on the strengths of this route and develop a stronger ridership base.

Route 10 – While this route has a high Cost per Passenger, this is offset by the higher base fare of \$2, which enables the route to perform above average in the Farebox Recovery category. It is not considered a weak performer overall as a result.



### Discussion & Recommendations

Passenger Load Factor measures the percentage of seats filled on average on each route. Routes 3, 10, and Rapid 12 all perform at or above 150% of the system average and are all subject to some limited overloading at times. Individual trips that suffer overloads are routinely identified and addressed where resources permit. A decision was made recently to purchase and deploy more articulated buses in an effort to address these overload conditions.

## Summary

The majority of Big Blue Bus routes performed within acceptable levels on most performance measures in FY 2013-2014. Big Blue Bus currently has three chronically low performing routes: 4, 20 and 41. The imminent arrival of the Expo Rail Line is an opportunity to make adjustments to those routes that either support their development into stable and sustainable routes, or move the resources to other routes.

While overall ridership is down slightly from the year before, the reduction is in alignment with the reduction in vehicle revenue hours as was explained previously in this report. Since the conclusion of the 2013-2014 fiscal year, the Big Blue Bus system has resumed running the same amount of vehicle revenue hours that it did in FY 2012-2013 and the passenger loads are expected to rebound accordingly. The majority of Big Blue Bus routes are expected to see continued growth as on-time performance improves, real time information comes online, and service improvements are implemented.

**Prepared by:** Timothy McCormick, Transit Planning Administrator