



Information Item

Date: December 12, 2012

To: Mayor and City Council

From: Edward F. King, Director of Transit Services
Jory Wolf, Chief Information Officer

Subject: Update on Big Blue Bus Technology Projects

Introduction

The following is an update on the of technology projects that Big Blue Bus (BBB) has undertaken and completed over the last nine months, as well as planned projects for the rest of this fiscal year. Staff has made significant progress in identifying achievable, affordable technology projects that will improve efficiencies and customer convenience.

Background

A number of significant technology projects that impact service delivery and customer information were initiated over the past 11 years. Staff has recently completed an in-depth re-evaluation of the proposed projects including a re-examination of costs and potential revenues. In the case of the digital advertising project, (Council Information Item dated [May 23, 2012](#)), the project was determined to be infeasible due to the complexity of maintaining and operating exterior digital ad signs on the sides of buses, the difficulty that other transit systems encountered selling digital ad space, and the poor vendor response received to the City's Request for Proposal issued in March, 2012 to solicit a consultant to establish the program. Other projects have been evaluated for affordability, efficiency and customer convenience.

Discussion

The following projects are those that met or exceeded the City's criteria for improving customer service, managing efficiency and replacing outdated software due to vendor upgrades that have been offered as part of BBB's ongoing maintenance agreements.

Operator Management System

In February of 2012, BBB implemented a new Operator Management System for improved management and tracking of bus operator to route assignments, operator certifications, operator qualifications, training, timekeeping and payroll. The system also tracks on-time performance, records incidents and accidents, enhances staging and queuing of transit vehicles in the yard, and provides biometric sign-in terminals for operator tracking.

Trapeze TransitMaster Upgrade

BBB now consistently uses metrics provided by the TransitMaster (TM) system to evaluate service efficiencies, costs, ridership and route productivity. The system was recently upgraded to the latest version available from the vendor. Additional training is being provided to operations staff to utilize the system software and reporting that is available to manage daily operations, measure service effectiveness and improve route productivity. The new upgrade also allows dispatch staff to post relevant operations information on digital monitors in the dispatch/communications room and Drivers' Ready Room.

New Fare Collection System

One of the more exciting projects that will soon launch is BBB's new fare collection system that includes the latest market farebox technology, replacing the antiquated 14-year old farebox system. The system will include new fareboxes on the BBB fleet, new back office infrastructure, ticket vending machines (TVM), new vaults for BBB revenue room, new reporting capabilities and open architecture that will allow integration with other fare technology that includes mobile ticketing (through a smartphone) and other

fare media (Transit Access Pass [TAP]) from partner transit agencies. Staff is working with L.A. Metro, Santa Monica College, UCLA, and other City departments to ensure that BBB fare media, parking media, other fare media, and student ID's can be used with the new system. Phase I work currently underway includes design and engineering, development of new fare tables and system interoperability with other BBB and City technology. System deployment is scheduled for February 2014.

BBB Website

The new BBB website has been up for almost 60 days. Although the new site is much improved from the old, there are some wrinkles that are being ironed out to improve customer information and accessibility to schedule information. The areas that are being improved include streamlining the functionality of the Route Wizard, using responsive design to advance compatibility with mobile devices, replacing route schedules that are in PDF format with dynamically generated schedules and updating of content to provide relevant information on detours and stop closures as well as other service issues.

Next Steps

There are a number of efforts that will soon launch and further enhance customer service and improve interfaces with BBB information.

Interactive Voice Response (IVR): Internal testing for the IVR is underway. The IVR system will allow a customer to call in and obtain real-time bus schedule arrival information for a specific stop or terminal via an automated system with the option to speak with a customer service representative during operating hours. Messages will be available in English and Spanish. It is anticipated that the IVR system will be deployed in the third quarter of the fiscal year.

Mobile Applications (Mobile App): The Mobile App launch has been delayed in order to resolve the problems that have been encountered with Route Wizard. Staff is working with Trapeze on the resolution of this and it is anticipated that a soft launch will take

place during the beginning of the fourth quarter of the fiscal year. Originally it was scheduled to launch with the deployment of the new bus shelters, however the bus shelter project has been delayed due to cost and issues associated with the photovoltaic power arrays. The Mobile App will allow customers with a smartphone to access real-time schedule information on any BBB route.

Real Time Schedule Electronic Information Signs at Bus Stops: There have been significant delays in the project schedule for the deployment of real time signs at bus stops due to the overall revisions with project scope for the bus stop redevelopment project and the sign-photovoltaic array interface. First, the bus stop redevelopment project proposals came in significantly over budget last fall. The RFP has been rewritten to ensure clarity. Secondly, when the testing of the new electronic signs was conducted, specifically the integration with the photovoltaic array, the system did not perform to standard and did not meet the technical specification requirements. Staff from ISD, BBB and Public Works is working collaboratively to determine next steps. The RFP for the bus stop redevelopment project should be re-released before the end of the calendar year.

Summary

There has been steady progress on many BBB technology projects that were under development or planned over the last several years. Realistic work plans, timelines and budgets have been developed for project implementation and for sustaining future operating/maintenance expenses. Although some applications and projects that were promised to customers several years ago have yet to be deployed, the products will be launched when they have been thoroughly vetted with BBB partners and other City departments that will assist with project support and ongoing maintenance.

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