

**Metro**Los Angeles County
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metro.net**EXECUTIVE MANAGEMENT COMMITTEE
MARCH 20, 2014****SUBJECT: INNOVATIVE WAYS TO IMPROVE THE CUSTOMER EXPERIENCE
FOR THE METRO BUS AND RAIL SYSTEM****ACTION: RECEIVE AND FILE STATUS REPORT****RECOMMENDATION**

Receive and file status report on a "top 10" list of innovative ways to use technology to improve the customer experience and improve customer access to the Metro Bus and Rail System.

ISSUE

At the January 2014 meeting, the Board directed staff to develop a list of ten or more innovative ways to use technology to enhance the customer experience and improve customer access to the Metro Bus and Rail System, including an evaluation of how these innovations would advance Metro's strategic goals and improve customer service. This report is a response to the motion. The report also provides highlights of staff's efforts and progress to improve the experience for Metro Bus and Rail System customers since the last update in November 2013.

DISCUSSION

The January 2014 motion (see Attachment A), introduced by Supervisor Knabe, builds on the July 2013 Transit Customer-Oriented Technology motion (see Attachment B) introduced by Mayor Garcetti and Director Dupont-Walker. The January 2014 motion is distinct from the prior motion in that it requests a top 10 (or more) list of innovations/technologies for improving the customer experience/customer access and calls for staff to also consider ideas that go beyond the items previously identified in the July 2013 motion.

Given some of the common objectives in the two motions, staff's goal is to meet the objectives of both motions while addressing them in one larger combined effort. Therefore this report addresses elements of both motions, including identifying a top list of innovations/technologies to improve the customer experience/customer access. A number of these technology innovations will enable Metro to improve service and communication with persons with disabilities or who have limited English proficiency.

In order to identify a top 10 (or more) list, a Metro task force (including multiple Metro departments) was charged with generating a list of innovative ideas for improving the experience for Metro Bus and Rail System customers. The task force identified many ideas. The top ideas were determined by considering a number of factors, including: 1) contribution to the agency goal of improving customer service by maximizing customer convenience and ridership; 2) readiness to deploy; and 3) amount of additional funding required.

The following is a preliminary list of the highest priority ideas/initiatives:

	IDEA/INITIATIVE	BENEFIT	STATUS	ROUGH ORDER MAGNITUDE COST	FUNDED or NOT
1	Install approximately 16 interactive customer information kiosks (similar to giant iPads) in Union Station and other high traffic Metro stations.	Provides self-service information for customers such as next trip times, service alerts, trip plans, system maps, emergency evacuation information, etc. Will provide information in English, Spanish and other languages consistent with Metro's Language Assistance Plan.	In progress; being carried forward for Union Station.	\$1.1M	Partially Funded; balance is recommended in the FY 2015 budget proposal
2	Develop basic mobile app for use with TAP system . The app will be text based and can be used on any phone, but with limited capabilities (e.g., customers can purchase a fare product for immediate use by texting on their phones).	Improves customer convenience for up to 80% of Metro customers by allowing them to purchase fare products by using the text feature on their mobile phones.	In progress; will start with pilot deployment in March 2014.	\$50K	Funded

	IDEA/INITIATIVE	BENEFIT	STATUS	ROUGH ORDER MAGNITUDE COST	FUNDED or NOT
3	Develop advanced mobile app for use with TAP system . The advanced app will be designed for smart phones equipped with a feature called "near field communication" (NFC).	Improves customer convenience for up to 30% of Metro customers with NFC capable smart phones by allowing them to use their phones to purchase fare products (e.g., monthly pass) and tap onto the system.	Investigating options.	\$600K	Not Funded; is recommended in the FY 2015 budget proposal
4	Conduct a pilot program to evaluate providing Wi-Fi on buses and rail cars .	Customer convenience and helps address the "digital divide" between those individuals who have internet access and those who do not.	Investigating technical options.	\$2K per vehicle (bus or rail car); plus \$50 per month per vehicle	Not Funded
5	Provide cellular phone coverage in rail tunnels .	Customer convenience and safety; allows use of mobile phones in tunnels.	In progress.	No net cost to Metro; contractor paid by fees collected from cellular providers	N/A
6	Provide Wi-Fi coverage at major bus and rail stations .	Customer convenience - allows customers to use Wi-Fi capable devices to connect to the internet.	In progress for Union Station.	TBD	No cost for Union Station; other stations to be negotiated

	IDEA/INITIATIVE	BENEFIT	STATUS	ROUGH ORDER MAGNITUDE COST	FUNDED or NOT
7	Implement software (termed "video analytics") to analyze security video in real-time and identify anomalies such as individuals slipping through fare gates, leaving packages, etc.	Improve safety; reduce fare evasion.	In progress; pilot to be conducted at two stations.	\$1.3M	Funded
8	Add real-time wheelchair availability and bike rack space availability , respectively, to next bus arrival information.	Allows customers using wheelchairs and bicycles to make informed decisions when waiting for a bus.	Not started.	\$200K	Not Funded
9	Display projected bus arrival times by installing electronic signage at high volume bus shelters. Also includes push to listen technology so visually impaired individuals can receive information.	Customer convenience – allows customers to make informed decisions based on when the next bus is coming.	In progress for Patsaouras Plaza.	\$7500 per shelter plus infrastructure costs	Funded for Patsaouras Plaza
10	Add approximate real-time passenger load volumes to next bus information.	Allows customers to make informed decisions based on when the next bus is coming and whether they are likely to get a seat.	Not started.	\$300K	Not Funded

	IDEA/INITIATIVE	BENEFIT	STATUS	ROUGH ORDER MAGNITUDE COST	FUNDED or NOT
11	Create multilingual instructional videos and expand outreach to senior citizens to help customers know how to use our transit system.	Improve customer confidence on using our transit system; attract new riders. Provides assistance to groups with limited English proficiency.	New videos not started; outreach to senior citizens being done on smaller scale.	\$150K one-time cost plus \$525K per year	Not Funded
12	Enhance existing Metro mobile/web apps (metro.net, taptogo.net, 511, trip planner) to make improvements.	Improve customer information to make informed decisions; make apps and websites easier to use; better address multi-modal travel.	All in progress.	\$450K	Funded
13	Investigate having Metro contribute data to traffic information apps that gather traffic condition information from the public on an "opt in" basis.	Congestion relief; allows public to make more informed decisions on travel based on real-time traffic conditions.	Investigating.	TBD	Not Funded
14	Investigate options for providing the ability to talk to an agent from a ticket vending machine or adjacent kiosk via live video feed	Customer convenience; would allow immediate help to individuals that experience difficulty when using TVMs.	Investigating.	TBD	Not Funded
15	Investigate creating a social network for existing destination discount program. Expand business and associated discounts from the current few hundred to potentially thousands of locations county-wide.	Would make TAP card more valuable to customers by providing discounts similar to AAA club cards. Customers would see participating locations popup on the map of their mobile app as they travel.	Investigating.	TBD	Not Funded

Union Station will be used as a model to showcase new customer-oriented technology. Staff is targeting to complete the deployment of the technology by May 2014. The technology planned for the station includes Wi-Fi, four interactive kiosks in the East Portal as part of a large totem being installed, and electronic signs in the bus bay totems/markers in Patsaouras Plaza displaying next bus arrival times. This new technology will showcase improved communications with persons who have limited English proficiency and the disabled community.

Staff will continue to work on initiatives that are already funded. Over and above the items mentioned for Union Station, some of the target milestones in the upcoming quarter include: deployment of the 511 mobile application; implementation of the new version of the trip planner software; deployment of the text-based mobile app for use with the TAP system; and new, more intuitive ticket vending machine screen flows.

In addition, staff is continuing its efforts to identify new ways to further enhance the Metro customer experience for all riders, and attract new customers. Ongoing and future outreach efforts to solicit new ideas include: customer surveys; sharing ideas with peer transit agencies; researching related material available through the American Public Transportation Association and the Transit Research Board; seeking ideas from private sector technology/marketing firms; and reaching out to academic institutions.

Staff is also contracting with a specialized consultant to contribute best practices industry knowledge of customer-facing technology. The firm will perform a gap analysis of Metro's programs versus best practices in this area including communicating with the disabled community and our limited English proficient customers. Then, using all of the research performed through staff's outreach efforts and the consultant's expertise, the consultant will develop a technology-based investment strategy with the goal of ensuring that Metro is a model for positive customer experience in the transportation industry.

NEXT STEPS

Gather any feedback from the Board of Directors in March 2014 meetings regarding the top initiatives. Staff will work with OMB on any budget impacts from the feedback received.

Staff will report back in July 2014 with a progress update on customer related technology initiatives as well as an update on the Metro's technology-based investment strategy for improving the customer experience. This will include consideration for communicating with the disabled community and our limited English proficient customers.

ATTACHMENTS

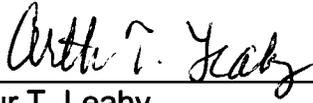
A – Supervisor Knabe motion on Innovative Ways to Improve Customer Access to the Metro Bus and Rail System

B – Mayor Garcetti and Director DuPont Walker motion on Transit Customer-Oriented Technology, Enhancements & Innovations

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MTA Board Meeting
December 5, 2013

MOTION BY
SUPERVISOR DON KNABE

**Innovative Ways to Improve Customer Access
to the Metro Bus and Rail System**

The next generation of technology improvements to the Metro Transit System must focus on enhancing customer access to the Metro Bus and Rail System. To do this, Metro must focus on innovative solutions that maximize customer convenience and ridership

In July, the Board directed staff to study numerous customer-oriented technology improvements with a first status report back this month to our EMC committee. That report was very promising, but I would like to see our staff take our technology innovation efforts a few steps further, not just to study what this Board specifically identifies, but to open the door for Metro staff to be proactive and identify more innovative technologies and strategies to broaden the discussion of what Metro can do to improve customer access to the Metro Bus and Rail System.

Challenging our staff to focus on an array of mobile applications and advanced technology solutions is vital to integrating a technology-based customer service focus into Metro's operations and capital program.

I, THEREFORE, MOVE THAT THE MTA BOARD:

Instruct the CEO to report back to the Board in March 2014, at a minimum to the **EMC** Committee and the full Board, with a "top ten" list of ten or more innovative ways to use technology to enhance the customer experience and improve customer access to the Metro bus and rail system, including an evaluation of how these innovations would advance Metro's strategic goals and improve customer service.

ATTACHMENT B

MOTION BY

MAYOR ERIC GARCETTI & DIRECTOR JACQUELYNE DUPONT WALKER

Transit Customer-Oriented, Technology, Enhancements & Innovations

July 25, 2013

The MTA needs to make a commitment to provide the highest level of customer-oriented service to the public.

This includes its diverse system users - representing all income levels and ages - that depend on transit service every day.

Emerging technology and innovation will help improve the customer experience when riding the MTA system.

Organizations such as American Public Transportation Association (APTA) constantly focus and discuss improved transit usage through technology and innovation.

Developing a technology based investment strategy will result in enhanced mobility, improved safety, reduced uncertainty and ultimately attract new riders.

Some examples of technology include smart mobile phone ticketing payments and real time "open-data" information for patrons.

As the installation of our Transit Access Pass (TAP) and gate-latching is well under way, the MTA should take advantage and explore new technological opportunities using this fare system.

The TAP system could also be a tool to maximize and provide a greater return on fare-policy and public investment once completed.

CONTINUED

WE THEREFORE MOVE that the MTA Board of Directors direct the CEO to:

Customer Service

- A. Report back on MTA's customer service complaint process, the estimated Average response times, and recommendations to improve customer service responses using new technology methods.
- B. Provide a detailed report on MTA's special processes and accommodations for senior-citizens and disabled transit riders who are adapting to newly adopted technology.
- C. Report back on the feasibility, with detailed costs, of installing an internet based customer "help-desk" at Union Station and other major transit stations.

Wireless Technology

- D. Provide a report on the status and implementation plan of the installation of "wireless" phone usage at all MTA bus and rail underground facilities
- E. Report on the feasibility including cost and timeline of implementing a wireless internet network on all MTA bus and rail lines similar to Amtrak "Wi-Fi" system.

Mobile Applications

- F. Report on the best practices for mobile applications that cover the following transit related functions:
 - 1. Ticketing and fare payments
 - 2. TAP enabled usage
 - 3. Traveler information technology for multi-modal transit travel

Fares & Revenues

- G. Provide a report on the feasibility of using TAP to maximize fare revenue.

Open Data

- H. Report back on MTA's current policy related to providing system data sets collected by MTA to third parties (including software developers) and the general public.
- I. Report back on items A-H as part of a technology based investment strategy by the December 2013 MTA Board meeting.

