



**Customer Service and Operations Committee**

**Board Information Item IV-B**

**April 9, 2015**

**NEPP Quarterly Update**

Washington Metropolitan Area Transit Authority  
**Board Action/Information Summary**

Action  Information

MEAD Number:  
201323

Resolution:  
 Yes  No

**TITLE:**

New Electronic Payments Program (NEPP)

**PRESENTATION SUMMARY:**

Provide the Customer Service and Operations Committee an update on the New Electronic Payments Program (NEPP) activities.

**PURPOSE:**

Update the Customer Service and Operations Committee on progress of the New Electronic Payments Program (NEPP) Pilot.

**DESCRIPTION:**

The New Electronic Payments Program (NEPP) 18-month pilot program began in February 2014. The pilot system will include new devices at 10 rail stations and on 50 buses. Two parking exit lanes intended for inclusion with the rail stations and buses are now planned for implementation later in the pilot period after additional software revisions are received and fully tested. NEPP will replace the existing fare system for rail, bus and parking with improved modern technology. The pilot phase testing began February 23, 2015.

**Key Highlights:**

Key Highlights:

- System testing with installed rail gates equipment, bus readers and software equipment has been completed, documented and reviewed.
- Following training of WMATA employees, the test pilot was launched with minimal problems during the first weeks.

**Background and History:**

The NEPP program is designed to replace fare collection systems for bus, rail, parking and access services including central data systems, fare gates, ticket vending machines and card readers. This complete replacement of the fare collection system will enhance reliability and provide better customer service. This modern, next generation system will deliver operational benefits and opportunities to keep pace with changing fare systems technology.

The NEPP program is being implemented in phases with a test pilot program that will

conclude in June 2015. System-wide transition is targeted to begin in 2017 with opportunities for an earlier start being pursued.

## **Discussion:**

### **Pilot Start Date:**

The pilot scope includes new faregates at 10 rail stations, new payment targets onboard 50 buses and at two parking lanes to validate select technical performance measures and identify operational areas for review in the future development.

A number of important areas required more time to complete than anticipated which resulted in the pilot phase start date moving to February 23, 2015.

- Software for bus readers and faregates required additional updates to ensure accurate and complete processing. The software update included a finalization of bank card acceptance.
- System testing, review and documentation took longer than planned. Resolving questions and confirming understanding of testing to ensure an appropriate review of this critical activity.
- Final review and definition of success criteria details along with establishing the processes to measure, monitor and report findings.
- Success criteria was further refined to ensure an appropriate evaluation of the system is provided of time required for customers to pass through the fare gates and transactions to be processed.

### **Pilot Phase Operations:**

Operations have been going generally well with devices and central system operating as expected. A few device malfunctions have been encountered, but so far these are exceptions are within the limits of testing parameters. Faregate and bus transactions are generally being received and processed by the devices and central systems within the required time parameters with expected accuracy and completeness. In addition to the participant transactions controlled tests are performed on the devices and all activity is reviewed and assessed weekly. Transactions and operations are reviewed to identify any exceptions for further analysis. All activity is summarized with any exceptions identified to measure overall results against the success criteria. So far no significant issues have been identified.

### **Parking Systems Delayed:**

Shady Grove and Suitland parking garages were selected for the pilot phase parking lanes. As noted in the December 2014 committee update there were a number of issues with the software upgrade required from the existing parking provider that delayed the parking device testing and implementation. We have continued to work with the provider and test updates received, but have not yet found the software to be acceptable for implementation. The latest release is being tested in the test lab environment and if determined acceptable the software will then move to field trials prior to implementing with the other pilot systems. When available for implementation, parking will be tested for the remainder of the pilot phase. Pilot participants are being informed of status and developments with the parking software.

## Pilot Test Participants

More than 3,000 pilot phase participants were recruited through a variety of methods including materials in stations and on buses, email invitations to registered SmarTrip® card users, individual recruitment at rail stations and bus stops and a dedicated registration website. Interested participants were selected based on questionnaires completed in the application process to achieve a diverse participant population. This sample closely reflects the overall customer base. A communications plan that includes an incentive component has been developed to solicit feedback from the recruits and encourage their participation in the pilot, ensuring we receive a varied data sample to evaluate equipment, software, integration and the user experience. We have also prepared a website, email address and dedicated phone line for the participants so the NEPP team can quickly respond to any issue they may have during the pilot.

While 3,000 participants registered to participate in the pilot phase currently only approximately 400 have activated their accounts and are participating. No specific cause for the low participation rate is yet identified. Anecdotal customer feedback from those not participating include the lack of Smart Benefits integration and lack of station pairing which matches their current travel pattern. A number of actions have been undertaken to engage the remainder of the existing participant pool as well as recruit additional volunteers including:

- Asking existing pool participants why they have not yet activated their Metro payment pilot status
- Distributing recruitment materials to those on the participant waiting list
- Developing additional incentives – accelerated monetary bonus for activation and participation
- Updating website information, opened site to additional participants
- Refreshing pilot station marketing graphics.

The pilot phase requirement of 480,000 completed transactions anticipated 2,000 active users throughout the pilot period. With only about 400 active users total transactions are not meeting required levels. To generate additional transactions to we are expanding the testing activity conducted by project team members. Through these efforts we expect to ensure at least 480,000 transactions are completed during the pilot phase.

## Pilot Phase NFC Phone Usage:

We recently learned that the “Softcard” Near Field Communication (NFC) phone application being used for testing in the pilot phase will no longer be available for use after March 31, 2015 due to an industry acquisition of the company. This independent software had been selected for testing during the pilot as one of several applications available linking an NFC phone to a customer bank card allowing the customer to pay with by tapping their phone to the card reader. While this development is disappointing, we understand changes are an expected part of this new payment environment we are pursuing. We are reviewing the alternatives to determine how another application provider may be used in our pilot phase.

## Equity Analysis:

In development of system practices to serve our broad range of customers, we have begun planning a study to identify impacts of the new electronic payment program on

un/underbanked customers. The study will better inform us on this specific community so we can take appropriate action as necessary. Development of a survey instrument and methodology is underway. This study is being coordinated through the Equal Opportunity Office using current ridership data as well as existing survey results. The contractor report is to be received by the end of May.

**Benefits/Financial Analysis:**

The initial program objectives and analysis developed for the NEPP program is being reviewed and updated to reflect current costs and considerations of the ongoing project efforts. The objective is to provide an updated calculation of the cost (by fiscal year) associated with collecting transit fare revenue for WMATA’s bus and rail transit service. The purpose for determining the cost of collecting revenue is to evaluate the potential savings resulting from implementation of the NEPP. This work is underway now and is expected to be available in May.

**Regional Provider Development:**

WMATA continues to provide NEPP updates at the bi-weekly regional conference calls and quarterly in-person meetings. Committees are being formed to address common areas of development. Accenture has been meeting with NVTC on plans for defining specific requirements for individual agencies in early 2015. The identified retail network provider presented information and held a discussion with Regional providers in the regular quarterly meeting at the end of February.

**Technology Change - NEPP will be an Account based system:**

A significant change with the NEPP is the transition to an account based system structure replacing the existing “card based” system.

In the legacy payment system, customer account value was stored on a SmarTrip® card or on paper tickets. The devices calculated fares and communicated the new balance back to the payment method. Because the card stored balances, registration of a SmarTrip® card was not mandatory.

Metro Payment Pilot (MPP) cards or pilot devices such as contactless bank cards or NFC equipped phones do not store any customer information or make any calculations. Instead, all customer information is stored in the Central Data System. When an MPP card or contactless bank card is tapped on a pilot device, the device associates the card ID number with the customer account (in the case of the MPP) or bank account (in the case of a credit or debit card). The transaction is completed within the system and the result is reported back to the device and the payment method.

**FUNDING IMPACT:**

This is an information item so no other funding impact defined	
Project Manager:	Tom Randall
Project Department/Office:	DGMO/NEPP

**TIMELINE:**

<b>Previous Actions</b>	January 2014 - Award to Accenture February 2014 - Notice to Proceed issued June 2014 - Update to Customer Service & Operations Committee September 2014 - Update to Customer Service & Operations Committee December 2014 – Update to Customer Service & Operations Committee February 2015 - Commenced pilot program with customers utilizing new devices at 10 test gates and 50 buses. Integrate parking systems when available.
<b>Anticipated actions after presentation</b>	June 2015 - Pilot time frame ends; decision on pilot acceptance July 2015 - Update to Customer Service & Operations Committee

**RECOMMENDATION:**

No Action required, information only.



Washington Metropolitan Area Transit Authority

# Update on New Electronics Payment Program

Customer Service and Operations Committee  
April 9, 2015



# Pilot Testing

- Kickoff
  - February 23
  - 90 days, 480K transactions
- Scope
  - Rail – 1 faregate @ 10 stations
  - Bus – 50 “branded” buses
  - Parking – delayed
- Participants
  - 3,000 packets mailed
  - About 400 active users activated





# Customer Participation

- Customer Experience
  - Minimal added queuing at faregates
  - Faregate and bus devices working as planned
  - 1,000 daily transactions
  - 400 active patrons
- Actions to increase transactions
  - Engaged waiting list
  - Contacting non-active volunteers
  - Expanded recruitment
  - Offering accelerated incentives
  - Expand testing volumes





# Pilot Phase Measures

- System response time
  - Faregate throughput
  - Bus Validator response time
- System Operations
  - Uptime, processing, transaction accuracy
- Transaction Volume
  - Limited pool of volunteers
  - Lagging expected transaction volumes
- Additional initiatives in place and developing



# Next Steps

- Expand transaction volume
- Gather participant feedback
- Monitor Pilot
  - Pilot Phase Measures
  - Evaluate system, devices
- Equity Analysis: Cash customers





## Next Steps(cont'd)

- Continue Regional Provider alignment and support
- Next phase planning
- Update Summary Program Assessment
  - Program Goals and Benefits
  - Financials





# Project Timetable

