



Regional Fare Collection System Improvements Project

Request to authorize the City Manager, or his designee, to issue Requests for Proposals (RFP) for the regional fare collection system improvements project.

Summary

The City of Phoenix Public Transit Department (PTD), Valley Metro and its transit partners operate under the Valley Metro name which is comprised of 16 regional cities and towns within Maricopa County. Likewise, the existing fare collection system is regional and used by all jurisdictions in the Phoenix metro area. The fare collection system was implemented in 2007 and has exceeded its useful life. Also, technology has considerably advanced, and public demand for new ways to purchase fares significantly strengthens the need for a new fare collection system.

In recent years, fare collection systems across the nation have undergone substantial changes. Most major public transportation networks have introduced smartcards to their systems and other media options such as mobile applications. The smartcard program involves upgrading multiple facets of the current fare system including hardware and software, as well as modifying the fare policy, distribution, websites, and fare media. These fare collection instruments provide convenience for customers, fare media choice, stored value choices, faster boardings with tap technology, and eliminate wait times when purchasing tickets.

As regional leaders, the City of Phoenix and Valley Metro are charged with developing the new fare collection system. A series of regional workshops in 2015 and 2016, led by our consultant CH2M, provided discussion on smartcard distribution, mobile ticketing, media transition, reloadable smart cards, operations and procurement, and data processing. Based on the workshops, a new fare collection system will focus on obtaining better data on ridership and revenue reconciliation, clear and better controls over reduced fare and media distribution, expansion of the smartcard to the public, and development of mobile ticketing. In the public outreach efforts for Proposition 104 (Transportation 2050) the public input demonstrated a significant desire for improved fare purchasing options - specifically a mobile application and reloadable smart cards.

Project Objectives

Project objectives came primarily from the needs and shortcomings of the current system, regional workshop input, and the public. The project is focused heavily on the customer experience and the integration of a non-proprietary system. The new system must provide a technology friendly experience for the customer in addition to creating a more efficient and expandable system in the future. The following objectives serve as the guiding principles for the new regional fare collection system design.

1. Improved Fare Payment Options for Customers
 - a. Offer stored value, or electronic cash, to provide flexibility for occasional riders.
 - b. Enable innovative fares, including fare capping, time, and location-based products.
 - c. Explore new fare technologies, such as mobile phone ticketing and open architectures.
2. Improved Data Collection and Ridership/Revenue Reconciliation
 - a. Provide the capability to accurately correlate sales and usage data.
 - b. Provide more accurate ridership data.
 - c. Improve revenue reconciliation that is not dependent on manual process and reporting.
3. Increased Control Over Media Distribution and Reduced Fare Programs
 - a. Require reduced fare eligibility for reduced fares purchases at point of sale.
 - b. Control, reduce, or better determine fare evasion or misuse.
 - c. Reduce fare media costs where possible.
4. Explore Long Term Alternatives with Phased Implementation
 - a. Start with core improvements and expand.
 - b. Consider enhanced features with costs to prioritize improvements.
 - c. Require open architecture to facilitate adding features, components/hardware, and/or functionalities from third parties.

Procurement Information

The City of Phoenix, Valley Metro and regional transit partners are ready to move forward with the issuance of an initial RFP. The Public Transit Department will take the lead on the procurement of a new fare collection system with the scope of work and specifications developed through a regional collaboration. An initial RFP will be issued with the project broken down into two initial phases in order to introduce improvements in a cost effective, time efficient and customer friendly manner. A second RFP will be issued at a later date for Phase 3.

Phase 1 - Mobile Ticketing with Validators

A mobile app will be developed and be available to transit customers, with validation at rail stations and on buses using validators capable of reading barcodes from the mobile ticketing app.

Phase 2 - Smartcard Ticket Vending Machine (TVM) and Retail Network

Smartcards will be made available to the general public, including reduced fare customers, for the purchase of fare products. Account reload will be available through new TVMs, a retail network, and a website.

Phase 3 - Farebox Upgrade

Depending on the regional consensus and existing fare box life span, a second RFP will be issued at a later date for the purchase and installation of new fareboxes. New fare boxes would ultimately be for cash purchases of single rides only as mobile ticketing and smartcards would be the predominant methods to purchase fares.

Specifications for the new fare collection system are being developed to be included in the initial RFP. This will be a highly technical project and the depth of the specifications are key to evaluating proposals. An evaluation committee with regional makeup would be charged with evaluating the proposals with support from the consultant and a technical support team from Public Transit, Information Technology Services, and Valley Metro. Proposals are anticipated to be evaluated by the evaluation committee in the following general categories (listed in no particular order of priority): Qualifications of Team, Cost, Technical Solution and Project Approach.

The proposals will be submitted in such a manner to allow the region to pick and choose the elements of the fare collection system based on regional consensus on priorities and cost.

Preliminary Project Schedule

- January - June 2018: RFP development.
- July 2018 - March 2019: Procurement process and contract award.
- April 2019 - December 2020: Phase 1 design and development, manufacturing, installation and testing.
- December 2020: Phase 1 launch.
- June 2020: Phase 3 RFP Issuance.
- December 2021: Phase 2 and 3 launch.

Phase 2 would be implemented approximately one year after Phase 1, but design review and development of the smartcard program would begin upon award of the contract.

Financial Impact

The project will be funded with regional sales tax proceeds (Prop 400) and federal funds for public transit capital improvement projects.

Concurrence/Previous Council Action

On March 29, 2018, the Citizens Transportation Commission recommended Transportation and Infrastructure Subcommittee and City Council approval of this item by a vote of 10-0. The Transportation and Infrastructure Subcommittee recommended approval of this item by a vote of 3-0 on April 18, 2018.

Responsible Department

This item is submitted by Deputy City Manager Mario Paniagua and the Public Transit Department.