Expo DAILY

NEW FARE media gives a comprehensive look at rider patterns.

Photos by TriMet

A Smart Solution for Portland

TriMet is using new fare collection technology to enchance connections and rider experiences

WHEN IT COMES TO cutting-edge technology, TriMet rises to the top as one of the most progressive agencies in the country. As it looked for a mobile ticketing solution. The agency became the first in the U.S. to implement mobile ticketing across bus and rail. The inertia of the mobile ticketing launch was followed in 2014 by the contract with Init for the implementation of an open payment and smart card e-fare system.

The TriMet project required a solution that would seamlessly integrate with its already existing ITS systems and infrastructure, as well as ensure multi-client capability. This aspect was needed to provide access for other agencies to join the e-fare structure in the future. Another requirement included the necessity for a comprehensive back-office system that could define individual agency parameters, while at the same time protect the exchange of important data.

Open application programming interfaces (API) and third-party

TRIMET'S FARE solution can be shared with other agencies to create a regional fare media.

system integration were also critical to the success of the entire system. These components would help ease the arduous task of connecting the agency with retail partners and suppliers, and would provide passengers with outlets to purchase the media to utilize the new fare system.

TriMet's e-fare project includes the implementation of ID-based smart cards and an open payment fare structure for the use of bank cards.

With ID-based smart cards, the card is linked to a rider's account where their information and subsequent fare calculations are processed. The rider's identification and payment information are safely stored in the back-office system.

The use of ID-based cards will benefit TriMet planners by providing a more comprehensive view of anonymous riding patterns. This data will help the agency tailor services around high-usage times and locations. ID-based smart cards will reduce boarding times and use of cash fares, as well as improve operational performance.

In addition to ID-based smart cards, Init will implement an open payment fare structure for TriMet using the EMV (Europay, Master-Card, Visa) contactless payment standard. Using Init's proximity readers, a bank card is tapped on the terminal which then communicates the transaction in real-time with Init's back-office system, Mobilevario. All forms of mobile payment will be accepted at the fare readers.

Once implemented, the system will integrate with several third-party systems and include open API. These interfaces will be made available to external partners, including an extensive retail network. This will give TriMet's passengers the ability to

open new or top up existing accounts through several hundred retail stores conveniently located throughout the city.

Another open interface will give the agency access to a powerful CRM solution, and yet another will provide access to third-party ticket vending machines. In total, there will be eight open APIs serving more than a dozen integration projects.

The systems are multi-client capable, so other transportation providers can be added for a region-wide fare structure. TriMet is considering extending the system to the Portland

Streetcar and Vancouver, Washington, where it could incorporate transportation services provided by the Clark County Public Transit Benefit Area Authority (C-TRAN).

TriMet is a trail blazer and the city of Portland reaps the benefits. The result will be a smoother, economically managed transit network and increased transportation services. **MT**

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