## Showcase

TRIME

## Tri-County Metropolitan Transportation District of Oregon

Innovative e-fare system in Portland-Vancouver Metropolitan Area

When it comes to cutting-edge technology, Tri-County Metropolitan Transportation District of Oregon (TriMet) rises to the top as one of the most progressive agencies in the country. Perhaps that is why they chose INIT as their partner to supply and implement a regional, multi-media e-fare system in the Portland-Vancouver metropolitan area.

#### TriMet / C-TRAN / C-VAN / Portland Streetcar

init

The Future of Mobility

First-ever virtual transit fare card

Open payment

Multi-client structure

Region-wide project

MAX

Integrated ITS & e-fare systems

# Integrated and innovative e-fare system.



TriMet has a reputation for being a thought leader in innovative ideas for public transit. In 2005, TriMet was the first agency in the world to release data to the public for the development of third-party transit apps. This action prompted numerous other transit districts across the country to open their data to developers as well.

When the agency went out for bid for an advanced fleet management and real-time passenger information system in 2009, INIT's Intermodal Transport Control System (ITCS) won out as the most modern and flexible solution.

After the success of that project, the agency marked another milestone by becoming the first in the US to implement mobile ticketing across bus and rail. The mobile ticketing launch was followed in 2014 by the contract with INIT for the implementation of an open payments and smart card e-fare system. In 2017, the Hop Fastpass<sup>®</sup> e-fare system was successfully launched. A few short months afterwards, another milestone was announced. Through a partnership with Google, TriMet beta launched the world's first accountbased regional virtual transit fare card within Google Pay<sup>™</sup>. Since 2019, many additions were made to the system, including the ability to pay through Android Pay<sup>™</sup>, Apple Pay<sup>®</sup>, and Samsung Pay<sup>®</sup>.

In 2020, the Clark County Public Transit Benefit Area (C-TRAN) paratransit service, C-VAN, was added to the system, allowing riders to enjoy safer accessibility to transit through contactless tap-and-go fares. In the future, smaller surrounding agencies can be easily added to experience all the benefits of a best-in-class fare collection system without the high cost of setup or long-term project management.

## > The task

Implementing a state-of-the-art electronic fare system is challenging – even for innovators. The project required a solution that would seamlessly integrate with TriMet's ITS system and infrastructure, and have 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, automate clearing of revenues and secure individual fare and revenue data.

Open Application Programming Interfaces (API) and thirdparty system integration were also critical to the success of the entire system. This component would help ease the challenging task of connecting the agency with retail partners and suppliers, and would provide passengers with outlets to purchase the media and utilize the new fare system. TriMet chose INIT for the e-fare project in the Portland-Vancouver region because INIT is the only ITS provider that combines the complete range of ITS requirements into one fully integrated system.

## > The solution

The scope of the TriMet-led e-fare project included the implementation of an open payments fare structure that allows regional ridership across three agencies and two states. Through a partnership with Google, TriMet launched the world's first account-based regional virtual transit fare card within Google Pay. Riders can pay for fares using a contactless bank card, mobile wallet such as Android Pay, Apple Pay or Google Pay, as well as with a virtual smart card within Google Pay and Apple Wallet. TriMet, INIT, and moovel worked to enable this ground-breaking development. They simply tap their phone on any of the 1,100 INIT validators and hop on board the Portland Streetcar, C-TRAN buses, including The Vine, TriMet's buses, MAX light rail and WES Commuter Rail.

INIT's back-end processing software, MOBILEvario, serves as the core intelligence for the account-based and open payment fare system. It manages and processes fares in real-time, recognizes and processes revenue sharing, as well as manages accounts and automates reconciliations for all three agencies. Off-line processing is another added benefit of the INIT system. In the event of a network outage, fare payments can still be processed ensuring revenues are not lost.

#### Fare capping

With the Hop system, TriMet instituted fare capping – a structure which automatically offers riders the lowest possible fare for their journeys. For example, once the equivalent of a day pass is earned – normally after two trips in a day – the rider will not pay for the third or subsequent trips no matter how many times they ride. The same is true for the cost of a monthly pass. Fare capping relieves the rider of having to figure out the "right" fare, provides peace of mind that they are not paying too much, and delivers incentive and accessibility to all passengers.

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Fare capping introduces an equity-based incentive to frequent transit use. It eliminates the burdensome upfront cost of purchasing monthly passes, replacing it with smart, hassle-free, payas-you-go infrastructure.

Rhyan Schaub, Director of Fare Revenue and Administrative Services, TriMet

PORTLAND

REETC

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We are excited to extend the benefits of the Hop Fastpass<sup>®</sup> to our paratransit customers. No-touch payments are safe, easy and efficient for everyone.

Shawn M. Donaghy, CEO, C-TRAN



PROXmobile supports all forms of mobile payment including smart cards, mobile tickets, bank cards and NFC phones.

#### **Contactless for Paratransit**

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### > The results

As TriMet continues to blaze new trails in public transit, the Portland-Vancouver metropolitan area will reap the advantages. Riders will benefit from more convenience and pricing equity, as well as the opportunity to easily use contactless bank and smart cards, and mobile phones to pay fares. The result is a smoother and more economically managed transit network, increased mobility and better transportation services. As a result of the new e-fare project, TriMet is now the first US-based customer to benefit from a fully integrated operations management, real-time passenger information and e-fare system from INIT.



# | The project at a glance

#### **BY THE NUMBERS**

1<sup>st</sup> ever virtual transit card

3 transportation providers

800 fixed route buses

300 on-demand vehicles

16 trams

1,100 proximity fare readers

1 million smart cards

1 comprehensive back-end processing software

#### **ABOUT TRIMET**

TriMet provides bus, light rail, and commuter rail service in the Portland metro area. Their transportation options connect people with their community, while easing traffic congestion and reducing air pollution – making the region a better place to live.

#### TASK

- Implement EMV and account-based smart card electronic fare system
- Integrate with existing ITS system and infrastructure
- Provide a comprehensive back-office clearing and processing system
- Deliver Open Application Programming Interfaces (API) and third-party system integration
- Ensure multi-client capability for extension to other agencies

#### **SOLUTION**

Fully integrated fleet management, real-time passenger information and electronic fare collection system.

#### BENEFITS

- Better operational management through integrated operations and fare management structure
- More fare payment options through smart cards, mobile tickets, bank cards and NFC phones
- Greater security and pricing equity for passengers
- Incorporated functionality with driver terminals and fare processing

If you would like to know more about this project and featured INIT products, please contact us at sales@initusa.com. We look forward to hearing from you.

More than 1,400 transport providers worldwide rely on our comprehensive solutions to support them with their daily tasks

- Planning & Dispatching
- Ticketing & Fare Management
- Operations Control & Real-Time Passenger Information
- Analyzing & Optimizing

Moreover, public transit agencies can also master all requirements of electromobility and set up a single sign-on mobility platform using our modular solutions. A robust package of operational services completes the INIT offer.

INIT is the worldwide leading supplier of integrated ITS, planning, dispatching and fare collection systems for buses and trains. For more than 40 years, we have been assisting public transit agencies in making public transit more attractive, reliable and more efficient.

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