

Burt A. Wilhelm, Vice President  
Integrated Solutions - US Emerging Payments  
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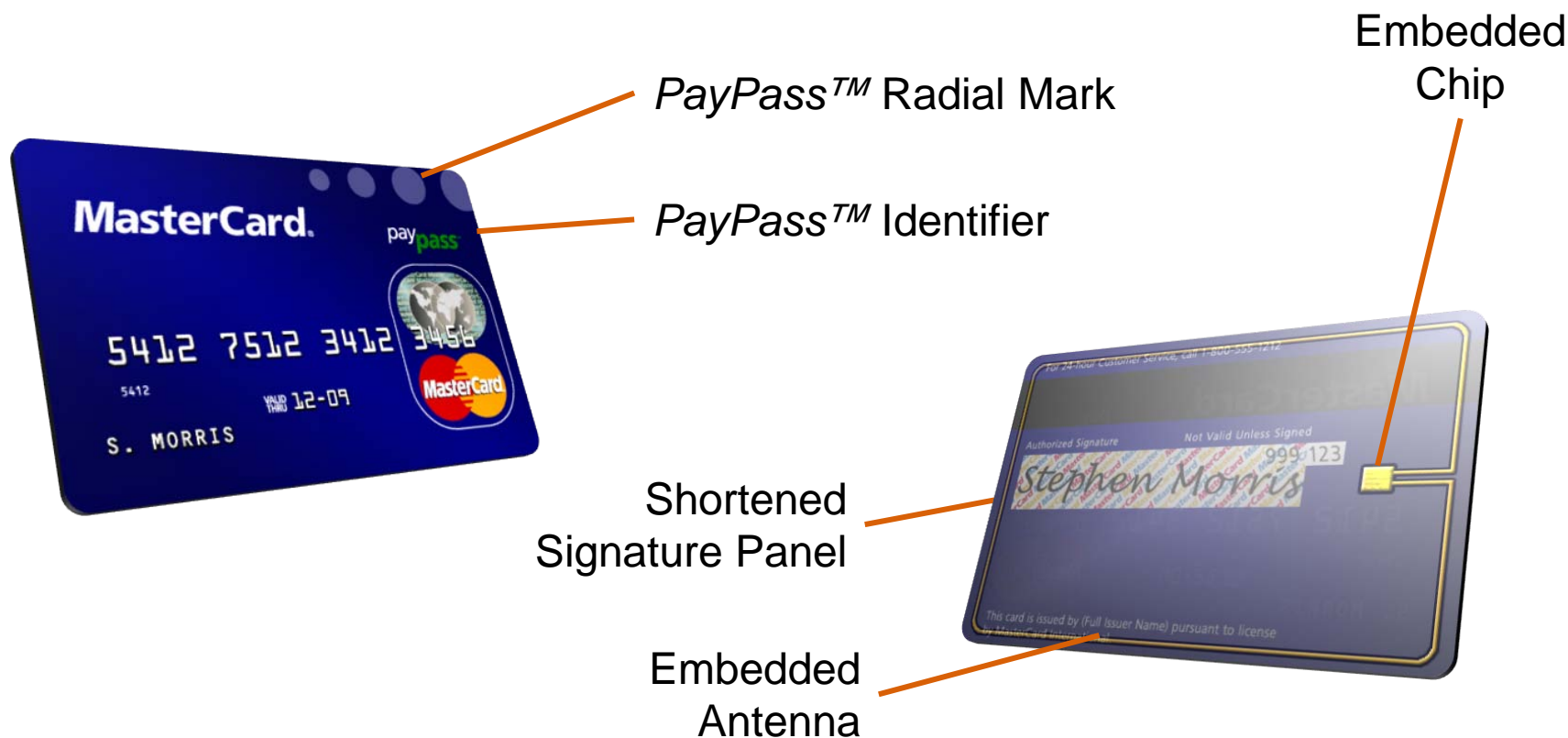
# *Talking Technology and Transportation (T3)*

## *Open Payment Systems in Public Transit*

**Sponsored by the ITS Professional Capacity Building Program, ITS Joint Program Office, Research and Innovative Technology Administration, U.S. Department of Transportation**

# Payment Card Products

Contactless - Similar to a standard payment card with some differences...



*Sample MasterCard® PayPass™ card, other branded products may be similar*

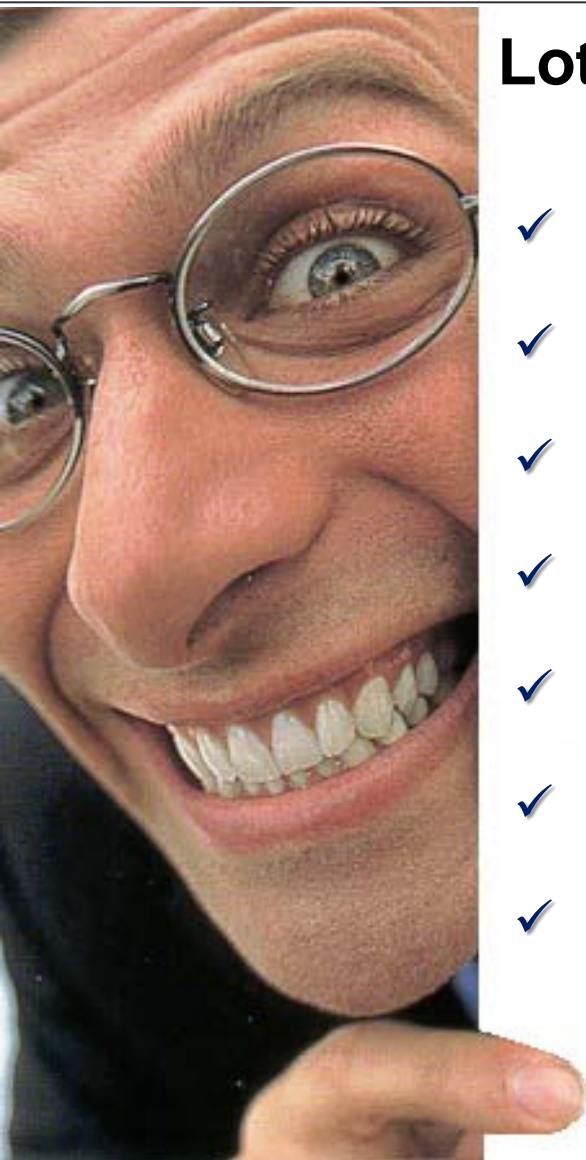
# Payment Card Products

The Financial Industry is migrating to contactless... in many forms



*Sample MasterCard® PayPass™ enabled products, other branded products may be similar*

# Contactless Bankcards Used In Transit



## Lots of ways to say it...

- ✓ *Open System*
- ✓ *Open Standards System*
- ✓ *Open Bankcard System*
- ✓ *Open Payments System*
- ✓ *Open Standards Payments System*
- ✓ *Open Contactless Payments System*
- ✓ *Open Banking Standards Payment System*

## Open Payments *(continued)*

### So what does MasterCard® mean “Open Payments?”

#### **Open Standard**\*

- A standard that is publicly available and has various rights to use associated with it
- May also have various properties of how it was designed (e.g. open process)

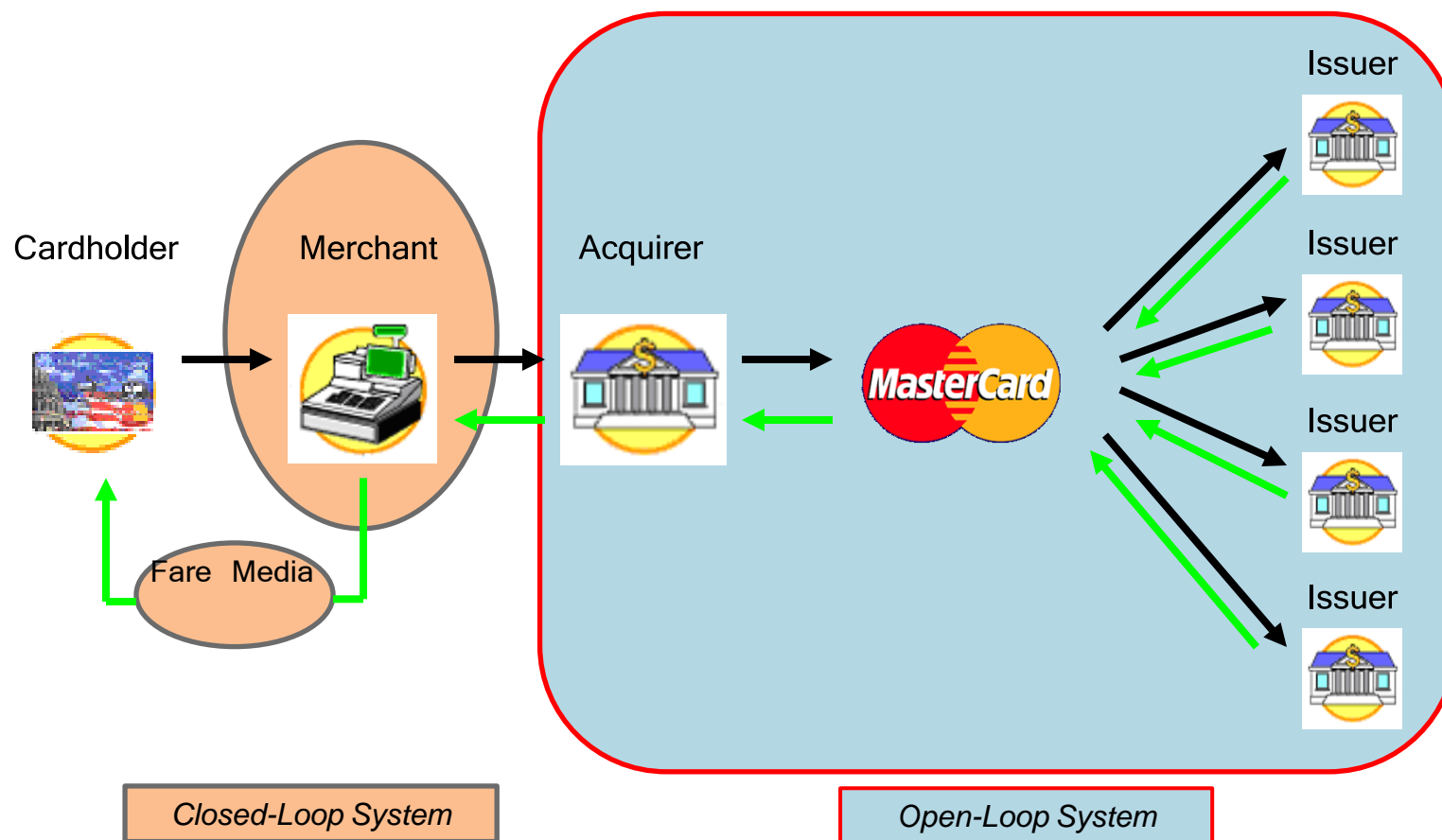
#### **Global Open Payments System:**

- A global payment system, specifically related to bankcard payment processing
- Capable of accepting and processing payment transactions originated by cardholders/consumers using payment cards or devices issued by any bank globally

\*Source: Wikipedia: [http://en.wikipedia.org/wiki/Open\\_standard](http://en.wikipedia.org/wiki/Open_standard)

# Traditional Transit Payment System

## Transaction Process Flow\*



\* Illustration denotes traditional AFC system and is only one (1) of several potential payment processing schemes

## Open Payments *(continued)*

### How do “Open Payments” in transit differ from Proprietary “Closed Loop” Payments

- With Open Payments there is no need for consumer to first buy proprietary transit fare media or load proprietary transit fare media with value before they can access transit
- Open Payments allows consumers to simply tap with a contactless banking card/device at entry points **without** any prior interaction



Separate Fare Purchase/Reload



Access to Transit Services

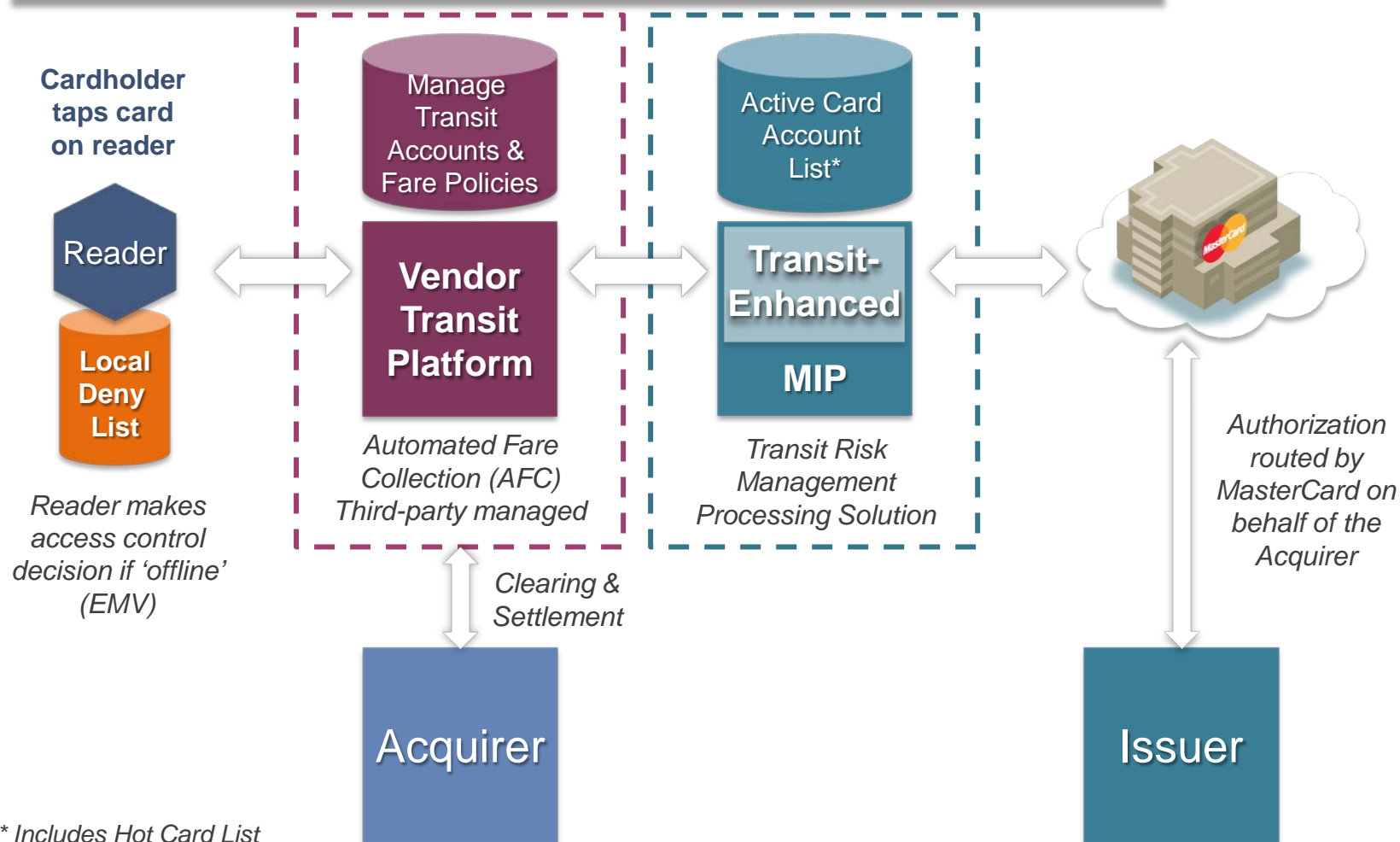


Use of Transit Services



# Open Payments Solution

## MASTERCARD TRANSIT RISK MANAGEMENT PROCESSING FLOWS





## Open Payments *(continued)*

### Benefits of Open Payments in Transit

- Can displace cash, proprietary paper tickets/contactless cards:
  - *reduced ticket vending lines and bus boarding times*
  - *increased passenger flow in stations & on buses*
- Can reduce need for:
  - *paper ticket and/or proprietary card procurement and card security*
  - *ticket vending equipment and maintenance*
  - *issuance and vending operations staff*
  - *cash handling and reconciliation*
  - *large customer service call centre operations*

# Open Payments *(continued)*

## Benefits of Open Payments in Transit

- Standard Cardholder Devices:
  - *MasterCard PayPass™ cards/devices and contactless products from other payment brands that are already in market can work in the system*
    - *No special application required*
  - *solution based on industry standards (EMV, ISO14443)*
  - *multiple form factors (fobs, mobile devices, stickers, etc.)*
- Standard Terminals and Readers:
  - *compliant PayPass readers available via multiple vendors*
  - *inexpensive payment terminals available via multiple vendors*
  - *compliant with industry security standards (PCI DSS)*
  - *certified to international standards (EMV / MChip etc.)*

## Open Payments *(continued)*

- Leveraging open standards could enable rapid deployment in a transit agency or even in a region
- Leveraging open standards can provide for increased competition:
  - *more vendors competing*
  - *new sources for equipment*



## Open Payments *(continued)*

### Open Standards and Business Rules

- **Open Standards** can be leveraged to develop technologies to support your business needs
- **Business Rules** play an important role:
  - Merchant Rules (transit specific, parameter driven)
  - Industry Rules:
    - *Payments Processing*
    - *Data and Security Requirements and Best Practices*

*Open Standards and Business Rules*  
*Used together could yield the desired solution*

# Contact Information

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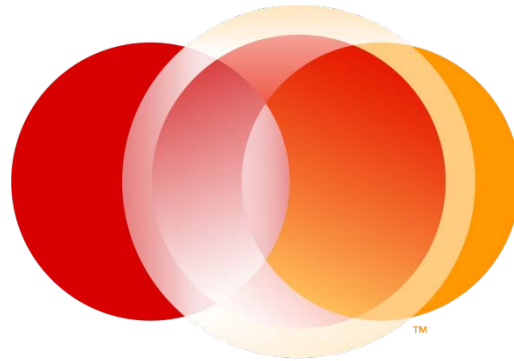
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