Utah Transit Authority
Electronic Fare Collection
Full System Deployment

Transportation Use Cases
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UTA Overview

- 530 regular buses
- Forty ski service buses
- 80 paratransit vehicles
- TRAX light rail line has 46 vehicles on two lines over 18 miles
- Commuter rail service launched April 2008 with an initial 44 mile line
UTA Approach to Electronic Fare Collection (EFC)

- Account based
- Merchant for open payments
- Avoid direct issuance of media
- Collaborative development
- Open systems – open interfaces:
  - Card to reader
  - Reader to mobile data computer
  - Reader/front office to back office platform
- Communications
  - UTA develops, owns and controls
  - Utilize continuous cellular
  - Integrate with other applications
The Appeal of Contactless Credit and Debit

- Others issue payment media
- Integration with payment mainstream: payment at the fare box, gate or platform as a merchant POS transaction
- Automatic interagency interoperability
- Customer service with issuers
- Security standard
- Architecture provides flexibility in product development
- Robustness of open payments ecosystem
- Commoditization of devices
- Potential for pathway to elimination of cash
- Speed of deployment
- Cost
- Co-promotion
EFC Full System Deployment Timing

- RFI – Early 2007
- RFP – May 2007
- Award to ERG – October
  - Same firm provided ski service pilot
  - Three year effort with three more one year options
  - To provide front end and hosted back office
- Launch – End of 2008
Phase I - 2008

- Install infrastructure for fixed route service
  - Readers on every bus and rail platform
  - Communications provided by UTA
  - Transaction processing platform in hosted back office
  - Inspection with NFC phones or other mobile devices
- Account based architecture
- First two products
  - Third party pass accounting
    - Ed Pass
    - Eco Pass
    - Ski Pass
    [Use IDs issued by 3rd parties]
  - Contactless credit card acceptance for all single ride adult fares with transfers
- Check-in/check-out from beginning
Eco Pass/Ed Pass

- Vanguard partners
  - Read their existing IDs if they have contactless building access built in
  - Partner to put UTA chip with encoding for other ID cards
- For others, put UTA chip with encoding into the Eco Pass/Ed Pass cards (companion cards)
- Transition program to get all partners to use their IDs for UTA access
- Challenge of training pass holders to touch readers on every trip
Phase I – EFCS Architecture
Phase II – 2009-2010

- Provide additional fare products within credit/debit architecture
- Prepaid accounts with all fare products to be accessed via contactless credit or debit cards
  - Transfers
  - Stored value
  - Period passes
  - Guaranteed best fare
- Special fares for seniors and disabled
- Contactless co-branded and gift card issuance programs
- Exploit new opportunities
  - Federal (FIPS 201 ID use for administering employee transportation benefit
  - Horizon benefits card
Privacy

- UTA values the linked origination-destination data enabled by this system for service evaluation and planning.
- But does not need or want to know who is traveling.
- Third party payers keep identities of who is authorized to ride.
- Third party payers should not need information of who made what trips.
- Contractor to separately maintain records and processes for credit/debit processing, application of business rules for prepaid or registered accounts and PCI assurance.
- PCI: Payment Card Industry data security standard.
Issues of Interest

- Complexity of fare policy/business rules
- Touch-on/touch-off and exceptions(?)
- Establishing, supporting and maintaining partnerships
- Real-time vs. near-real time authentication
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