



**Washington Metropolitan Area Transit Authority**

# **Use of Identity Credentials in Public Transit Fare Payment Systems**

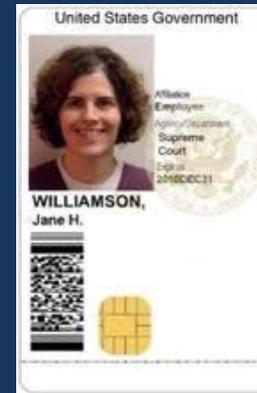
**Professional Capacity Building Program  
T3 Webinar**

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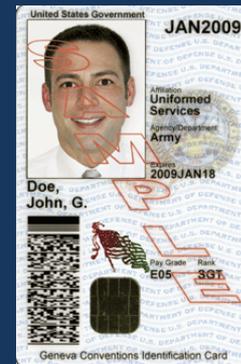
**Sponsored by the ITS Professional Capacity Building Program, ITS Joint Program Office,  
Research and Innovative Technology Administration, U.S. Department of Transportation**

# First....Some Definitions

- PIV –
  - Personal Identity Verification Card
  - Issued to most Executive Branch Federal Employees
    - Including key contractors
- CAC –
  - Common Access Card
  - Issued to DOD's employees in uniform and civilian capacities
    - Including key contractors
- Smart card-based technology
  - Dual interface chip
  - Logical and physical access



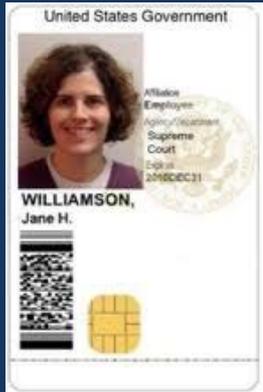
Federal Agency Personal Identity Verification Card (PIV)



DoD Common Access Card (CAC)



# Identity Management Platforms



Federal Agency  
Personal Identity  
Verification Card  
(PIV)



DoD Common  
Access Card  
(CAC)



First Responder  
Authentication  
Credential (FRAC)  
PIV – I (Interoperable)

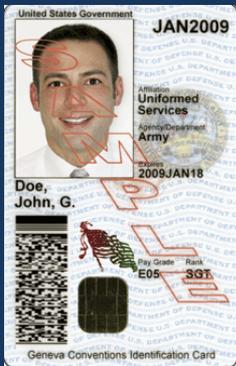
- HSPD-12 mandates secure credentials for all federal agencies (FIPS-201, PIV credential)
- State and local governments and first responders adopting interoperable credentials (PIV-I, FRAC, PIV-C)
- Commercial industry using compatible platform



# Convergence Opportunity



Contactless Transit  
Fare Cards



Personal Identity  
Verification Cards



Contactless Payment  
Cards; Credit, Debit or  
Pre-paid

- Common technology platform
  - Contactless smart cards
  - ISO 14443 standards
- Flexible account-based architecture
- Security demands
- Mutually beneficial opportunities



# Benefits to Customers and Agencies

- Customers:
  - More fare payment choices
  - Easy access using employer transit benefits programs
- Transit agencies:
  - Increase passenger revenues
  - Reduce revenue management costs
- Federal agencies:
  - End to end controls
    - Satisfy gaps highlighted in GAO audit
  - Reduce administrative cost

# Field Demonstration

- Proof of concept in Salt Lake City at Utah Transit Authority
- 6 Federal Agencies, 125 Participants
- All modes
  - Commuter rail
  - Light rail
  - Buses; local and express
- Proof of concept concludes September 2011





# Transit Industry Migration

- Migrate system architecture
  - Card-based to account-based
  - Modular approach to equipment and systems
  - Aligns with financial market approach
  - Identity credential becomes a transit payment token; think EZPass
- Multiple agencies advancing new payment platform
  - CTA, SEPTA, WMATA, NYMTA, DART, NJT and others
  - Processing PIV cards is included in system architecture



# Uniform Approach and Solution

- Standardize technical approach across Federal landscape
  - Pull same data elements over contactless interface
  - Single design solution
  - Assure simplicity and speed of transaction
- Standardize implementation approach
  - Same look/touch/feel from customer's viewpoint
  - Web interface to track transaction history
- Assure security; no exchange of PII
  - Apply security standard to data passed over contactless interface



# Summary Points

- Capitalize on standards-based infrastructure
- Sizable numbers of PIV cards present in every market
- Significant market growth using standard credential
- Account-based system provides tremendous flexibility
- Cost savings opportunity; grow passenger revenue



# Wrap Up

- Thank you for participating in today's T3 Webinar
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