NVTC Fare Collection Update

Presentation for the TPB
Regional Public Transportation Subcommittee
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NORTHERN VIRGINIA TRANSPORTATION COMMISSION

Overview

About NVTC
Challenge
Solution
Current Efforts
Looking Ahead

About NVTC

NVTC was established in 1964 to provide a governing structure for Northern Virginia role in the development of Washington Metro. Since then, NVTC has taken on a central role in the public transit serving Northern Virginia.

NVTC Jurisdictions and Agencies:
- Loudoun County
- Arlington County
- Fairfax County
- City of Alexandria
- City of Fairfax
- City of Falls Church
- Potomac and Rappahannock Transportation Commission (PRTC)

Background

- Regionally integrated fare payment system: Northern Virginia transit operators must coordinate fare payment technology alongside WMATA

- WMATA's New Electronic Payments Program (NEPP) cancelled by WMATA in April 2016

- Aging fare collection system relying on obsolete components:
  - Several components of the fareboxes are no longer manufactured or supported
  - The regional supply of spare parts is expected to be increasingly at-risk by December 2017

- WMATA entered into a contract with CUBIC December 2016 to upgrade the farebox/DCU while the region reorganizes post-NEPP

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Upgrade Requirements

Requirements include:
- DCU
- Mounting hardware
- New circuit board
- Cabling
- Power conditioner
- Software
- Security
- Garage Wi-Fi hardware and software compatibility
- Integration with Clever where required
- Testing/Pilot
- Installation/Installation Support
- Training

NVTC is working to ensure compatibility with fareboxes and configurations for:
- ART
- Fairfax Connector
- CUE
- DASH
- Loudoun County Transit
- PRTC OmniRide

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The Role of NVTC

- NVTC Fare Collection Team: Kimley Horn, IBI
- Coordination: Northern Virginia agencies, WMATA, Cubic
- Configuration: ensuring mounting, cabling and installation compatibility
- Design/Procure custom hardware if necessary
- Garage hardware and software compatibility
- Hardware and equipment procurement
- Testing/Pilot support
- Installation support and training
- Working with agencies to incorporate future upgrades and bus purchases
- Funding – Capital and Technical Assistance

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Upgrade Timeline

December 2016: WMATA contracted with Cubic Transportation Systems, Inc. ➡ July 2017: Lab Regression Testing ➡ August 2017: First Article Testing ➡ December 2017: Pilot complete, ready for large-scale purchase

Current Status

Currently surveying each agency's buses and bus garage

- Determine the configuration of the DCU, mounting case, cables, and power conditioner in each bus
- Review bus types, mounting locations, and identify potential mounting and installation issues with the proposed equipment
- Take measurements and photos
- Verifying sizing using a prototype of proposed DCU
- Determining hardware purchase needs for testing

WMATA's Fare Collection Lab visit
- Verify DCU integration with agencies' fareboxes
- Software and hardware testing preparation

Configuration Examples
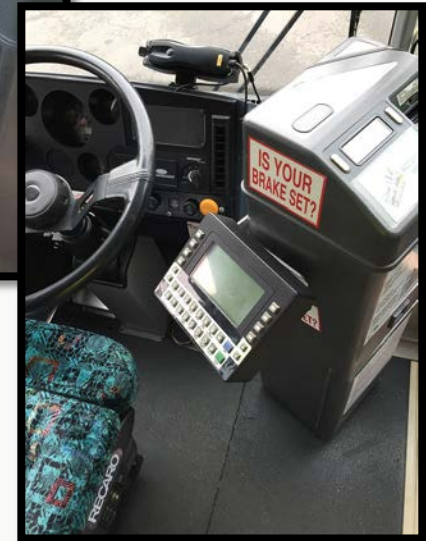
Funding

Equipment Purchase:
NVTC has applied for a scope modification of an existing NEPP capital assistance grant from the Department of Rail and Public Transportation (DRPT)

Contracts:
WMATA's DCU contracts will include a rider giving regional partners the same pricing, terms and conditions as WMATA
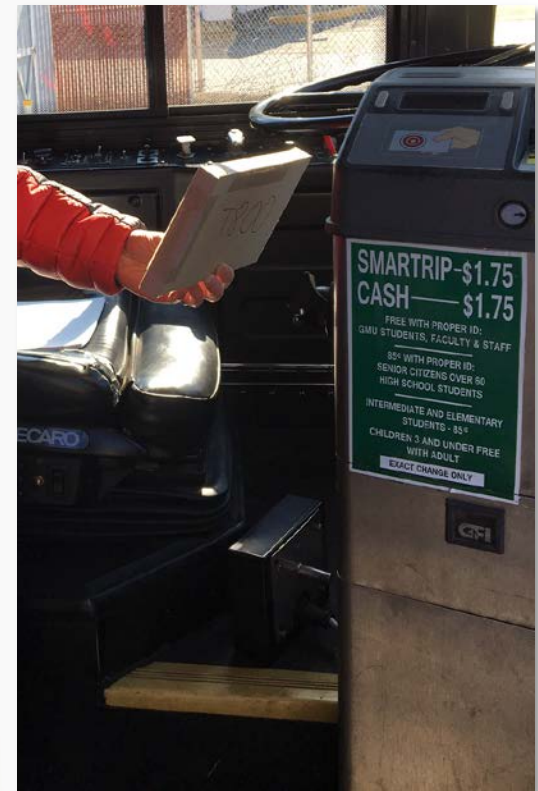
Looking Ahead

Develop Regional Strategy moving forward:

- Working with WMATA to chart a path forward– extending the life of the overall SmarTrip system (not just the fareboxes)

- Planning for future fare payment strategy and ensuring that it serves our Northern Virginia agencies

Off-Board Fare Payment Planning: City of Alexandria and Arlington County.

- Identify opportunities for joint procurement of off-board payment technologies

- Working with with regional systems (Purple Line and MTA) to discuss regional strategy

Questions?

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