Fare Collection System Upgrade

Transportation Committee Presentation

1/22/2024

METROPOLITAN COUNCIL

Today's Meeting Objectives

- Metropolitan Council Regional Fare Collection System Overview

- Review Fare Collection Upgrade

- Upcoming Business Action

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Proof of Payment

- Rail and Bus Rapid Transit
  - Proof of Payment System
    - Carry a ticket pass or smart card
    - Prove valid fare was paid
    - Random fare inspection spot checks
    - Single or multi-use tickets or passes
- Fixed Route Buses
  - Pay upon boarding
    - Farebox
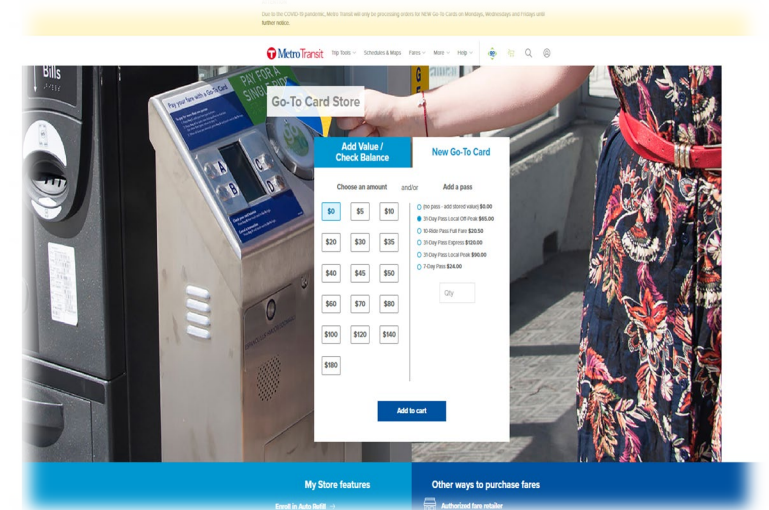   - Tap validator
    - Mobile App flash pass

Types of fare payment sales

Where to pay your fare:

- Web store
- Retail Partners
- Mobile App
- Offboard
  - Ticket Vending Machines
  - Platform Validators
- Onboard
  - Fareboxes
  - Bus Mobile Validators

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Need to upgrade fare collection system

- Justification for upgrading existing system originally installed in 2004:
    - Regional system upgrade for easier customer payment system-wide

    - Capital Improvement Plan (CIP) projection for several years

    - Take advantage of new technology now available

    - Increased penetration of contactless payment methods

    - Incremental patches, minor upgrades throughout kept system relevant and operational

    - End of useful life for bus validators

    - Legacy technology in fare inspection devices

    - Strong customer support for use of current technology

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System upgrade objectives

Customer Ease of Use

- On-demand loading Smart Cards via web and mobile
- Acceptance of credit/debit card payments at the validators
- Easy region-wide acceptance of all fare products

Equity and Access to All Customers

- Improves Fare Policy options
- Fare capping enabled
- Expanded and improved retail options
- During transition
  - accept old and new style technology
  - while accepting bills and coins
- Disadvantaged Business Opportunities
  - Armored Cash Transport – Largest Finance MCUB contract

Maximum System Flexibility

- Easier integration with 3rd party systems and devices
- Industry proven
  - Security
  - Database
  - Report management
- Allow for third party integration
  - Bike lockers
  - Shared mobility
  - Many other options

System upgrade objectives

Support Efficient and Reliable Transit

- Real-time fare calculation
- Enhanced device monitoring and management
- Cloud hosted – efficiency
- Support for open payments including use of
  - Contactless credit cards
  - Mobile wallets

Leverage Enhanced Data Tools to Improve Operations

- Consolidated reporting for third party devices
- Automated reporting and data analytics support
- Improve system security

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Customer Benefits

Easy fare payments

- Instant account transactions
  - Cellular connection to all buses
  - No auto-load/watch list delays on buses
- Multiple cards can be connected to an account
- Contactless payments accepted
  - Bypass the Ticket Machines
    - Tap credit cards
- Replace GoTo card with your credit card
  - Set up account for reduced fares, TAP if needed

Improved experience for all customers region wide

- Visitors have instant payment options
  - Bus, Rail, BRT
    - Credit card
    - Mobile Wallet
    - Google pay, Apple Pay, Cash App
    - Avoid Ticket machines
- Special Event Customers
  - Avoid missing train by tapping card
- Improved fare equipment reliability
- Gift card enabled (future integration)

UNION SQUARE PARK $2.30 OPEN

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THIS IS AN UPGRADE OF THE EXISTING FARE COLLECTION SYSTEM

TECHNICAL BENEFITS

Current vendor, Cubic, highly capable of delivering on all of Metro Transit's system requirements

FINANCIAL BENEFITS

System upgrade lowers capital costs by significantly leveraging existing system, infrastructure and equipment, where possible

SCHEDULE BENEFITS

- Streamlined timeline for implementation and transition
- Reduces Schedule risks for future planned expansion lines
- Minimizes transition fare collection down-time

TRANSITION BENEFITS

- Reduced transition complexity
- Rolling upgrade instead of a full system replacement

INTEGRATION BENEFITS

- Potential to establish new partnerships, as desired

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IF APPROVED, UPGRADE WILL INCLUDE A BROAD RANGE OF SYSTEM ENHANCEMENTS

SYSTEM DEVICE UPGRADES

- New bus and station validators
  - Open payments
- Ticket Vending Machine software and hardware refresh
- Replace retail partner point of sale devices
- Support for the new Code of Conduct
  - New inspection devices, citation database management
  - Easier for customers to pay their fares

TECHNOLOGY ENHANCEMENTS

- New cloud-hosted, account-based
  - Issuance of new account-based transit cards
- New reporting solution
- New device monitoring solution
- New call center Customer Service Application

Fare Collection Upgrade Schedule – Phased Approach

Phase 1: Technology Upgrades

Q1 2024 – Q1 2025

- Goal is to minimize service disruption to our customers

- Design reviews

- Cloud Hosting, migrate legacy data

- Software technology upgrades and new reporting system

  - Integration with Bus Rapid Transit TVMs for consolidated reporting

- Upgrade device monitoring system and software

- Open partner APIs for integration with existing third parties

Metro Transit Fare Collection Upgrade Schedule

Phase 2: Customer Facing

Q2 2025 – Q3 2026

- Refreshed devices with updated software and hardware kits

- Bus validators replaced

- New fare inspection App on new Metro Transit provided inspection devices

- Replace retail partner devices

- Transition to updated smart cards for functionality and added security

- Acceptance of Open Payments

- Retire legacy smart cards

Cost Analysis

Cubic Proposal Costs

- $28,179,277 Design and Build
- $ 8,094,731 Operations and Maintenance
- $ 885,635 Customer Service Application
- $ 540,357 Upgraded smart cards
- **$37.7M Estimated Total**

- **Additional Council Resource Costs and needs**
  - **Up to five additional IT support staff/and some professional services for implementation:**
    - Web Development
    - Backend development/Integration
    - Cloud deployment
    - Database Administration
    - Security/PCI compliance
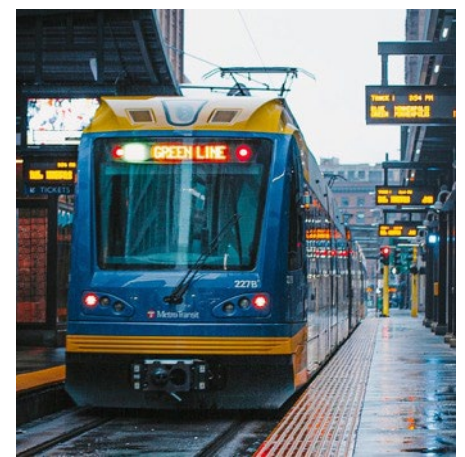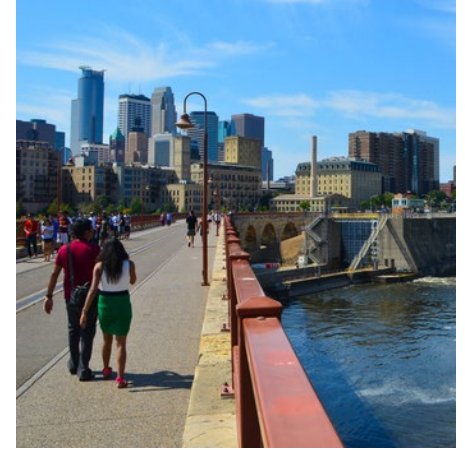
Independent Cost Estimate

- Estimated cost savings over full system replacement
  - Metro Transit Estimate:
    - 20 – 27% Cost savings
  - Clever Consulting Group
    - Up to 30% Cost Savings
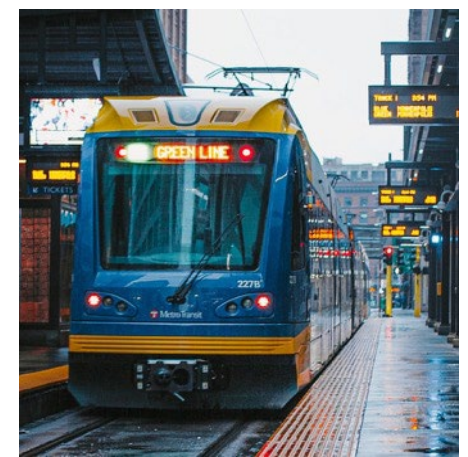
Business Item, Cubic Upgrade

Approve Cubic Regional Fare Collection System Upgrade for our customers

- Five Year Contract
  - Up to $37.7M
  - Includes Design and Build
  - Up to 500,000 smartcard replacements
  - Operations and Maintenance
- Timeline:
  - Transportation Committee Feb 12, 2024
  - Metropolitan Council February 28, 2024

Questions?