## Fare Collection System Overview

May 8, 2023 Ed Petrie Dennis Dworshak





#### **Today's Presentation Objectives**



- Brief Overview of Fare Collection
- Metro Transit Fare Collection System
- Review Fare Collection Upgrade
- Next steps

### **Types of fare Payment/Sales**

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

#### **Offboard Fare Collection Designs**





- Gated system
  - All fares are validated as customer enters fare zone
  - Turnstile, gate, revolving door type entrance
- Proof of Payment
  - Metropolitan Council
    - Carry a ticket, pass, smart card
    - Prove valid fare was paid
    - Random Fare Inspector Spot Checks
    - Single or multi-use tickets/passes

#### **Offboard fare Payment**

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- Pay before you board
- All Rail/BRT lines
- Cubic or Parkeon/Flowbird Ticket Vending Machines

#### Validator

#### **Cubic Ticket Vending Machines**



- Large Full Service
- Rail Lines
- Service Centers
  - Reload smart cards
  - Gives change
  - Fast transactions
  - Issues magnetic tickets
    - Compatible with Genfare Fareboxes
  - 155 Cubic TVMs in service

#### **Cubic Validator, Flowbird Ticket Vending Machines**





- Validators
  - BRT
  - Rail
- Upgraded 2022 Win 10
- Flowbird TVMS
  - Bus Rapid Transit (BRT)
  - Small Footprint
  - Two per platform
  - Solar / Cellular option



#### **Onboard Fare Payment**

- Fareboxes
  - Accepts Cash, Tokens, Coupons
  - Issues Transfers
  - Phasing in Fastfare Fareboxes
    - Five-year plan including MTS fixed route
    - Swipe Transfers
    - Future integration with Mobile App
- Bus Mobile Validators (BMVs)
  - Fixed route regionwide
  - DAR / Metro Mobility

#### **Go-To Card System**

- Went live in 2004 with Blue Line launch
- Approximately \$20M implementation costs
- Approximately \$70M annually in revenue pre-covid
- Relatively minimal investment over 19 years
  - Minor system upgrades as needed
  - Replace obsolete equipment
  - Additional equipment to support expansion lines



#### **Cubic Upgrade**

Retain



155 TVMs installed Upgraded \$20 Million +



385 validators, 9 MPOS installed, upgraded \$5.5 Million +



Spare Parts \$600,000 +

Retain

**Open Payment** Enabled Account Based Fare Capping Upgrade/Replace Enforcement Inspection Devices Ability to process **Desfire** (Upgraded smart cards) Integrate w/ Flowbird

Replacement Bus Validators Cloud Host Azure Open Partner APIs for CRM, IVR TVM RSV upgrade kits Replace Health System Monitoring

Upgrade

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#### Business Item: 2023-106: Fare Collection System Upgrade Consultant

#### **Proposed Action**

That the Metropolitan Council authorize the Regional Administrator to execute contract 22P161 with Clevor Consulting Group, to provide transit fare collection system consulting support for strategic advice, project planning, design overview, vendor proposal reviews, transition planning, deployment, ongoing operations, and maintenance for the fare collection system upgrade in an amount not to exceed \$1,850,000.

# **Questions?**

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