

Appendix C — Existing Fare Collection System Inventory (Informational Only)

Purpose

This appendix provides a detailed inventory and assessment of the current fare collection hardware, software, and infrastructure to assist vendors in understanding the operational environment. All hardware listed herein is for reference purposes only. Vendors may propose equivalent or alternative devices that meet the functional requirements specified in the Scope of Work.

Key Notes for Vendors:

1. All listed devices are informational only.
2. Vendors may propose replacement or retrofit solutions to achieve full functional compliance.
3. Any proposed alternative hardware must fully meet all operational, reporting, and integration requirements specified in Sections 4–5 of the Scope of Work.
4. The agency will evaluate alternative solutions based on functional equivalence, reliability, and cost-effectiveness, not brand identity.

I. Existing Fareboxes

- **Make and Model:**
 - SPX Genfare Industries (GFI) Fast Fare (Fixed Route)
 - GFI Odyssey (Fixed Route)
- **Quantity in Active Service:**
 - Fast Fare: 37
 - Odyssey: 26
- **Age / Installation Dates (by year and quantity):**
 - Fast Fare: 11 installed in 2022; 26 installed in 2024
 - Odyssey: 8 installed in 2011; 10 installed in 2012; 8 installed in 2013
- **Condition Assessment:**
 - Fast Fare: Good
 - Odyssey: Fair to Poor

II. Farebox Accessories & Peripherals

- **Cash Vaults:**
 - Stationary: 2 GFI Dual Port Vaults
 - Mobile:
 - 37 GFI Fast Fare Medium (plus 2 spares)
 - 26 GFI Odyssey Tall (plus 10 spares)
- **Data Transfer Devices:**
 - Data is extracted via probe stations connected to the Garage Data System (GDS) and a Portable Data Unit (PDU).
 - **Inventory:**
 - 3 Probe Stations
 - 4 Universal Probes
 - 2 Odyssey Probes
 - 1 Portable Data Unit (PDU) with 1 High-Speed Probe

II-A. Customer Service POS & Card Issuance Hardware

- OmniKey 5427CK desktop contactless reader/writer (x3) — used for card issuance and personalization
- Workstations (agency-provided) used with POS peripherals for card issuance
- Supported media currently in use:
 - Magnetic stripe “period passes” (thermal poly, 10-mil, 0.375" stripe)
 - No current chip-based extended-use smart card deployed (planned future state)
- Encoding workflow:
 - Mag-stripe passes are encoded with designators read by fareboxes
 - Smart-card encoding not currently in production use

III. Software & Network Infrastructure

- Fare Collection Software:
 - Name: SPX Genfare Data System 7 (Version 2.05.10.34)
 - Hosting Location: 3701 Maintenance Facility, Room 117
 - Integration Capabilities: To be determined
- **Connectivity Hardware:**
 - Vehicle Modems: 63 active Cradlepoint IBR 1700 (plus 25 spares)
 - Probe Station Interface: 1 active Isolation Box (plus 1 spare) connecting probe station wiring to the GDS computer
 - Wi-Fi Access Points: Signal coverage noted to be strongest near Shop and Warm Storage facilities

- **Network Infrastructure:**
 - Fare collection devices connect to central systems via the Municipality of Anchorage (MOA) Network
- **Testing & Training Equipment:**
 - Software: PuTTY used for farebox testing
 - Training: On-the-job and bench training conducted in-house
 - Process: Farebox testing primarily performed in-vehicle; component repair and rebuild bench in service; older farebox testing station present but non-functional

III-A. Customer Service POS Environment (Active System — Candidate for Integration or Replacement)

- The agency currently uses Productive Solutions for in-person fare sales and smartcard issuance at Customer Service.
- Smartcards encoded through Productive Solutions are accepted by the existing Genfare fareboxes for validation in revenue service.
- Customer payments processed through Productive Solutions include both cash and credit/debit transactions.
- Revenue collected through Productive Solutions is manually re-entered into external systems for reconciliation and is not automatically synchronized with the Genfare back-office environment.
- The Productive Solutions environment is not integrated with the Genfare Data System or the Masabi JustRide mobile ticketing platform.
- Vendors may propose either (a) integration with Productive Solutions or (b) full replacement of the Productive Solutions POS environment, provided the proposed approach meets all requirements defined in the Scope of Work.

IV. Mobile Ticketing System (Active System — Candidate for Integration or Replacement)

- Platform: Masabi JustRide Mobile Ticketing App
- Function: Supports mobile ticket purchasing and validation via the Transit App and JustRide Dashboard. Currently operates as a stand-alone system separate from the back-office fare collection environment.
- Integration Status: Limited integration with fleet fareboxes. Validation is performed manually by operators using a farebox key for record-keeping purposes only. No real-time transaction link exists between JustRide and the Genfare Data System.

- **Data & Reporting:** Masabi provides its own web-based reporting dashboard and analytics. Data exchange between Masabi and the agency back office is not automated.
- **Institutional Programs:** Existing UPass and employer programs are administered manually and are not managed or distributed through Masabi accounts.
- **Future Considerations:** Vendors may propose integration with Masabi or Transit App APIs to support future interoperability or data migration, or may propose a replacement system that consolidates mobile ticketing into the new SaaS platform. The agency will evaluate either approach based on functionality, operational continuity, and total cost of ownership.

V. Customer Service POS & Card Issuance Hardware (Informational Only)

- **Smart Card Encoder**
 - Model: HID Omnikey 5427CK
 - Quantity in Active Use: 1
 - Functional Role: Used by Customer Service staff to encode and personalize smart cards at the point of sale
 - Integration Context: Operates within the existing Productive Solutions POS workflow; not currently integrated with the back-office system
 - Condition: Good

VI. Fare Media Types in Current Use

- **Period Pass (Mag-Stripe Media)**
 - Substrate: 10-MIL thermal poly with 0.375" magnetic stripe
 - Classification: “Period Pass” with encoded Designator
 - Encoding Behavior: Configurable at issuance for multiple validity durations (not fixed to 30-day)
 - Validation Logic: Farebox determines in/out of validity window at time of swipe
 - Limitations: Not reloadable; not account-based; no chip security
- **Smart Card (Chip-Based Media — Not Publicly Deployed)**
 - Capability exists via Productive Solutions POS workflow to encode chip cards
 - Chip cards can support stored value, date ranges, and/or ride products
 - Not currently issued to the public; not in active deployment
 - Can be numbered and optionally printed with barcode, QR, or Aztec code
 - Considered a future-capable medium, not part of current rider base

Interpretation Rule — Appendix C

This inventory is informational and does not establish a requirement to retain, integrate, or replace any specific device, model, or vendor. Scope and obligations are governed exclusively by Appendix A (Project Items Prioritization Matrix) and the Consolidated Scope of Work.