

ANTHONY JOHNSON

Solutions Architect | Transit Fare Collection Systems
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SUMMARY

Solutions architect and engineering leader with 10+ years delivering next-generation fare collection systems for major North American transit agencies, including programs in San Francisco, Boston, Chicago, Philadelphia, Baltimore, Toronto, and Vancouver. Deep expertise in account-based ticketing, open-loop EMV payments, technical specifications and procurement, system integration, and large-scale program delivery from requirements through revenue service.

EXPERIENCE

Director of Engineering, Clever Consulting Group (CCG)

2021 – Present

Lead technical resource across CCG's largest fare collection modernization engagements

- **TransLink (Vancouver, BC): Compass Modernization, 2025–Present:** Technical lead for next-generation fare system procurement; designed multi-stakeholder needs-gathering workshops and coordinated 12 SMEs to produce the comprehensive technical specification anchoring TransLink's procurement strategy.
- **SEPTA (Philadelphia, PA): Key 2.0, 2022–Present:** Led definition of system technical specifications and software, hardware, and operational requirements; supported vendor evaluation and selection; currently manage technical delivery of the program.
- **SEPTA, Vendor Transition Planning:** Leading SEPTA's transition from incumbent vendor (Conduent) to incoming vendor (Cubic), evaluating cutover strategies that balance rider continuity, customer experience, and incumbent development burden; work directly informs the agency's transition roadmap.
- **MBTA (Boston, MA): AFC 2.0, 2021–Present:** Project management and technical lead through design, validation, and deployment of contactless EMV open payments, now live across Boston; led the comprehensive testing effort and design/validation of the mobile, inspection, and validation device solutions.
- **MBTA, Fraud Management:** Serve as the program's fraud management expert, advising on fraud detection, risk mitigation, and revenue protection across the full AFC 2.0 ecosystem while driving the rollout of the new account-based CharlieCard.
- **CTA (Chicago, IL): Ventra 3.0, 2021–Present:** Lead validation of Cubic's open architecture environment for third-party readiness; refined vendor integration guides and API documentation; evaluating integration pathways for Metra's participation in the Ventra ecosystem; run weekly program PMO.
- **Metrolinx (Toronto, ON): PRESTO Procurement, 2021–2023:** Designed a structured requirements capture process synthesizing input from 50+ stakeholders across 11 agencies; architected back-office and open architecture requirements for one of North America's largest fare systems.
- **MDOT MTA (Baltimore, MD): CharmCard 2.0, 2021–2024:** Led technical reviews of fare gates, validators, and back-office designs; surfaced and drove resolution of gaps and risks; coordinated integration sequencing between fare collection and agency IT teams.

Systems & Project Engineer, Cubic Transportation Systems

2019 – 2021

Concord, CA: Next Generation Clipper (C2) program, San Francisco Bay Area

- Coordinated technical delivery of the Clipper mobile fare payment system, directing 35 engineers across 5 countries through design and build of iOS and Android apps and an Azure cloud back office.
- Launched Clipper in Apple Wallet and Google Pay in just over two years, serving 9 counties, 24 transit agencies, a major retail network, and 15,000+ legacy fare rules; iOS virtual card revenue exceeded \$25,000/day within two weeks of launch.
- Facilitated technical integration partnerships with Apple and Google, earning the direct trust of the customer, the Metropolitan Transportation Commission.

Software Engineer, Cubic Transportation Systems

2015 – 2019

San Diego, CA

- Lead software engineer for the automatic gate subsystem on Singapore's Thomson East Coast Line, one of the world's longest driverless rapid transit lines; designed, developed, and delivered gate driver software integrated with the LTA's back-office control system.
- Worked directly with customers on design requirements, project scope, and system verification across device software spanning low-level drivers to GUI applications.

CORE COMPETENCIES

Account-Based Ticketing • Open-Loop EMV Payments • Technical Specifications & Procurement • Vendor Evaluation & Transition Planning • System Integration & Open Architecture APIs • Testing, Validation & Defect Management • Fraud Management & Revenue Protection • Mobile Ticketing & NFC Wallets (Apple Wallet, Google Pay) • Stakeholder Facilitation & PMO Leadership • Azure Cloud Back Office

RECOGNITION

- **Values In Practice (VIP) Award, 2020:** Excellence in customer satisfaction, Cubic
- **High Potential Program, 2019:** Selected among the top 2% of Cubic employees for strong functional ability and exceeding expectations
- **STAR Award, 2018:** On-time delivery of the Singapore TEL gate prototypes, Cubic

EDUCATION

B.S. Computer Engineering, University of California, San Diego

2016

Jacobs School of Engineering