



Clipper[®] Next Generation Fare Collection Update

SFMTA Board of Directors

June 24, 2014

The Clipper® card allows seamless travel between all of the major Bay Area transit agencies



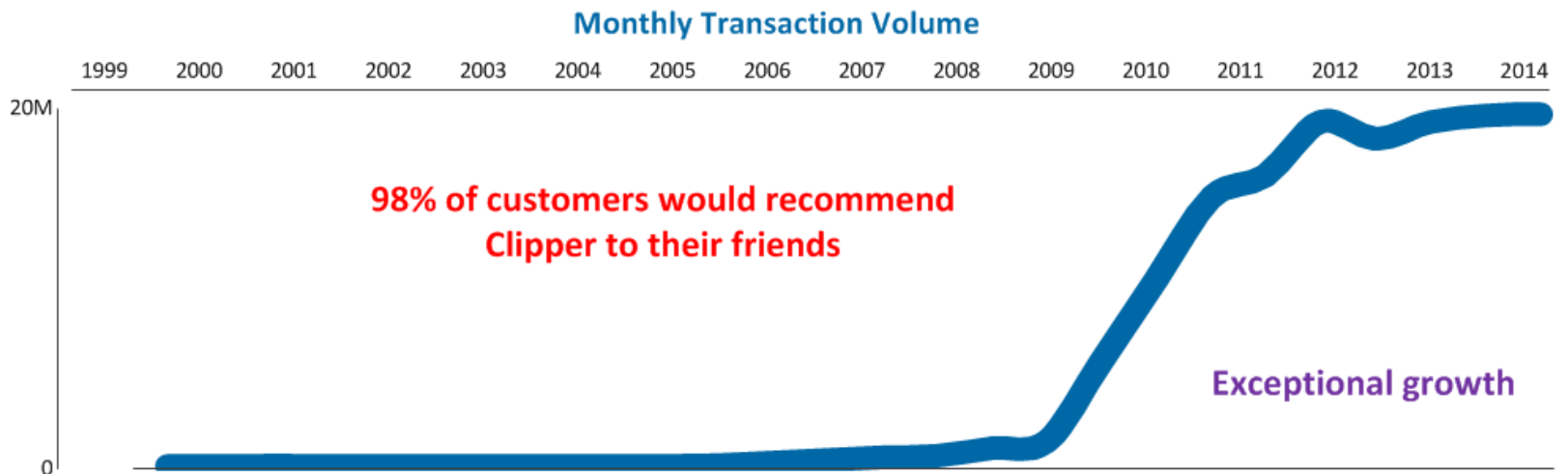
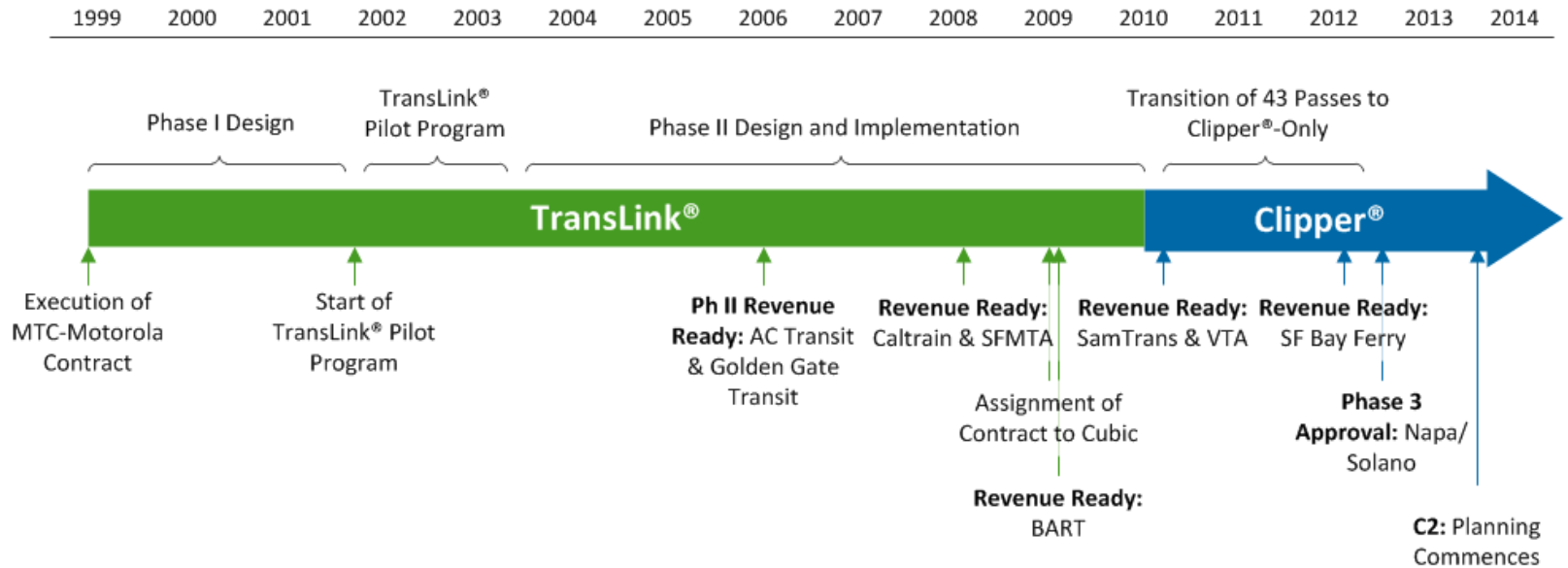
- Clipper is available on the 8 largest Bay Area transit systems:
 - Available to 95% of all riders
 - 1.4 million active cards
 - Processing \$35M/month
- ❖ ***Milestone Eclipsed! Clipper processed over 20 million fee-generating transactions in the months of April and May 2014!***
- Expansion underway:
 - Napa/Solano bus operators in 2014
 - East Bay suburban bus operators by 2015
 - Sonoma Co. bus operators by 2016
 - SMART will be Clipper-only



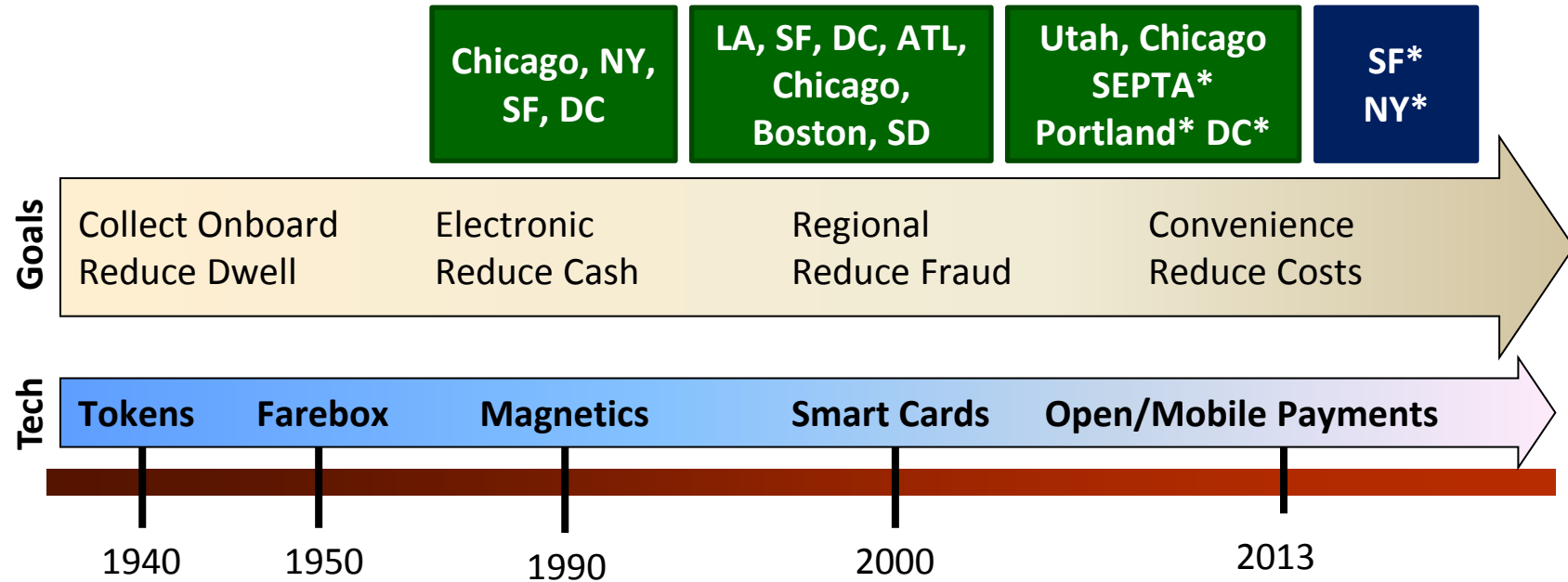
Clipper[®] Expansion: Phase 3 Operators



Clipper® Program History



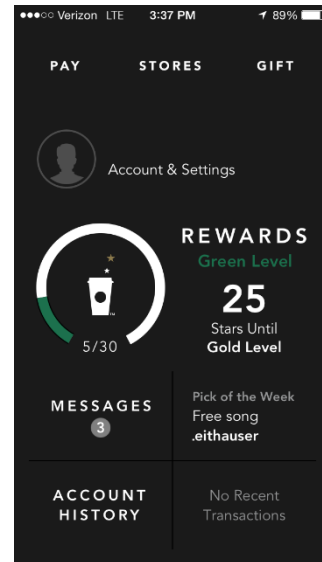
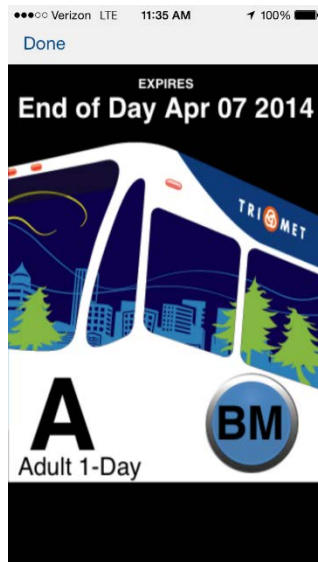
Fare collection has undergone significant changes over the last 30 years



* In development

New Payment Options are Emerging

Payment brands and technology providers are beginning to utilize contactless technology



Retailers and transit agencies are deploying apps to enable instant purchases over the air

Mobile Payment Use Cases

Account Management



Mobile Tickets



Mobile Wallets



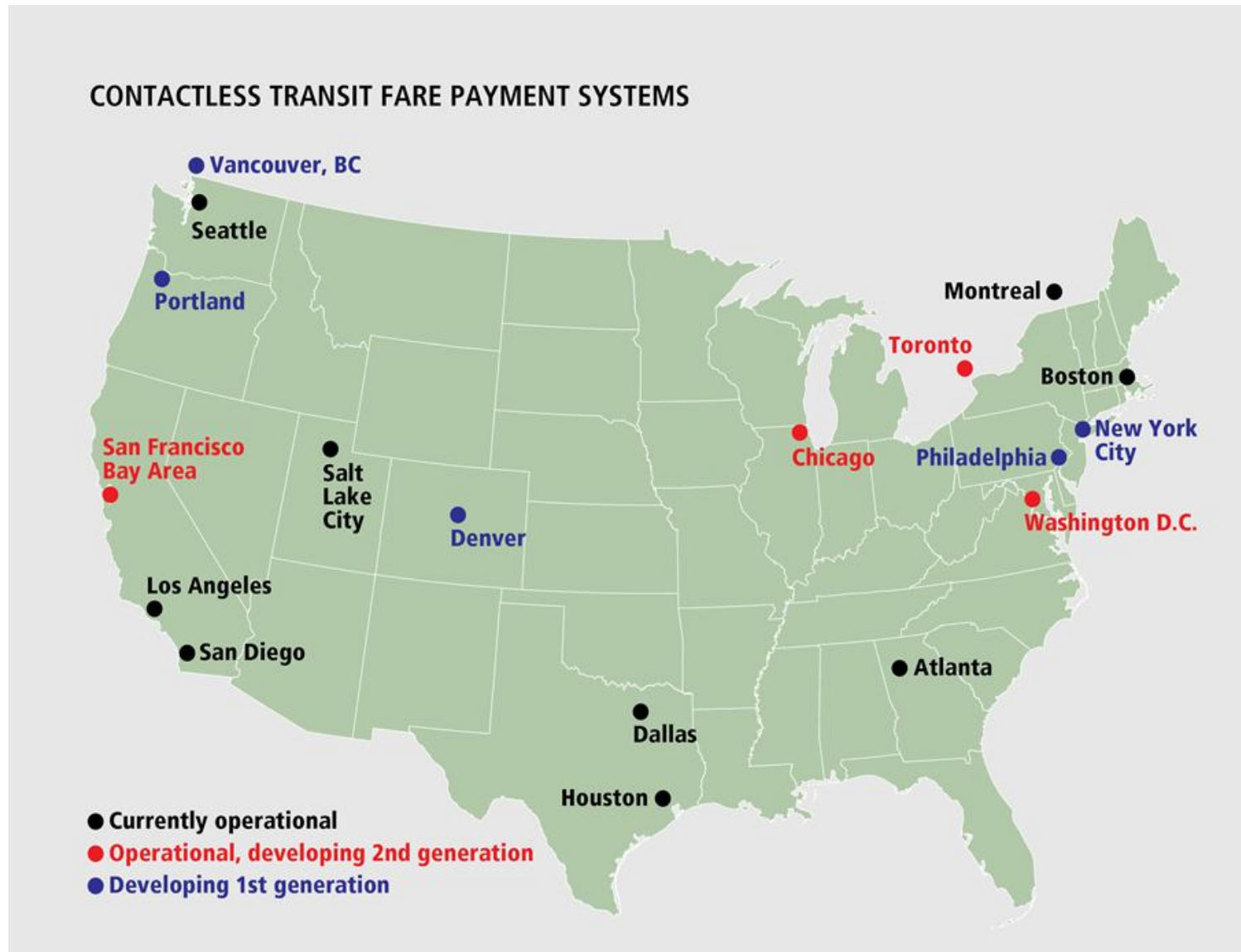
Bluetooth Low Energy*



* In development

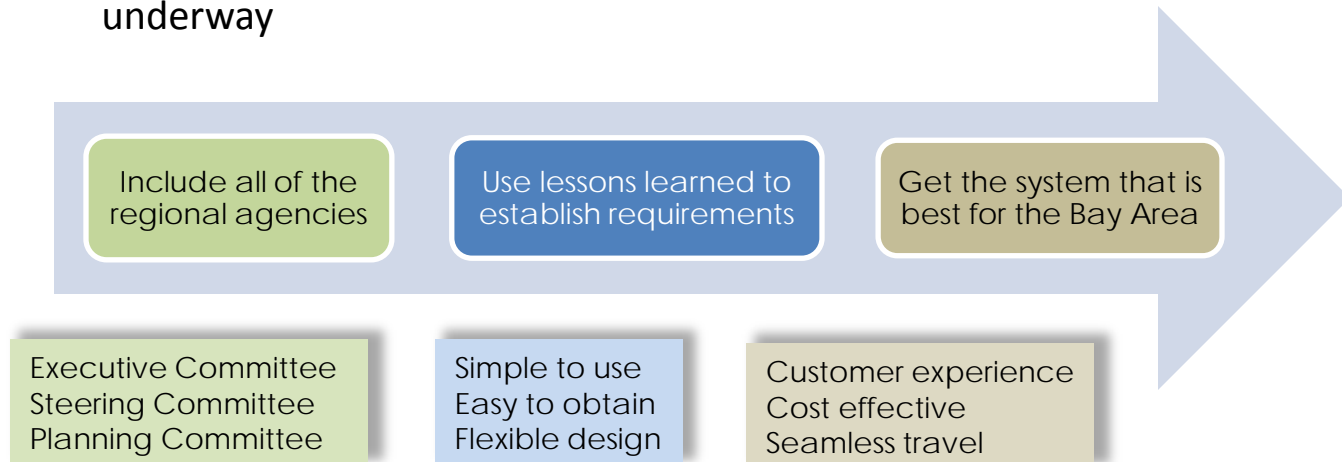
	Purchase	Use	Validation	Integration
Purchase	Fares purchased in mobile app/website, available for use in 1-3 days	Tickets purchased through mobile app and stored on phone	"Pay as you go" with virtual contactless credit/debit card stored on NFC-enabled phone	"Pay as you go" with Bluetooth-enabled phone
Use	Tap fare media associated with account on contactless reader	Activate ticket in mobile app before or during ride	Tap phone on contactless reader	Enter payment area phone
Validation	N/A	By operator or automatically by scanner	Automatically by contactless payment devices	Automatically by bluetooth beacons that fence payment area
Integration	Mobile website currently provided by Clipper	Clipper: Possible, but unproven and expensive C2: Can be included in initial design	Clipper: Not supported C2: Possible without additional engineering if open payments supported	Use cases still evolving, integration requirements unknown

Smart Card Program Landscape – North America



Planning for the Next-Generation Clipper® System

- Contract with Cubic ends in November 2019
- System limitations
 - System architecture is from the late 90s
 - Device components approaching end-of-life
 - Complex regional policies limit flexibility
 - Layering in new technologies to integrate with the existing Clipper® system would likely be expensive and risky
- Preparing for new procurement
 - Executive, Steering and Long-Range Committees meeting regularly
 - Work on vision for new system, concept of operations, and fare simplification underway



C2 Schedule – Taking the Time to Do it Right

