Clipper: The Next Generation

SPUR

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Clipper in the Region and San Francisco

Diana Hammons
San Francisco Municipal Transportation Agency
Clipper = Seamless Travel

- **9 counties/20 transit systems**
  - Available to more than 95% of transit riders
  - 1.7 million active card accounts
  - 20-23 million transactions per month
  - Processing $40 to $45 million in transit revenue per month
  - More than 300 retailers

- **Fare policy**
  - 4 fare categories: adult, senior, youth, disabled
  - 4,000+ unique fares
  - 12,000+ recognized transfer combinations
  - 100+ agency fare products

- **Expansion underway**
  - Sonoma Marin Area Rail Transit (SMART) launch fall 2016
  - Union City Transit launch early 2017
Clipper Program History


Phase I Design  TransLink® Pilot Program  Phase II Design and Implementation  Transition of 43 Passes to Clipper®-Only

Execution of MTC Motorola Contract  Start of TransLink® Pilot Program  Ph II Revenue Ready: AC Transit & Golden Gate Transit  Revenue Ready: Caltrain & SFMTA  Assignment of Contract to Cubic  Revenue Ready: BART

Revenue Ready: SamTrans & VTA  Revenue Ready: SF Bay Ferry  Revenue Ready: Marin Transit and Napa/ Solano  C2: Planning Commences  Ph III Expansion: East Bay Sonoma/101 SMART
More than 22 million transactions in March 2016

Clipper Growth
## Clipper: Snapshot of Current System Use

<table>
<thead>
<tr>
<th>Transaction Volume</th>
<th>March 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Weekday Ridership</td>
<td>820,826</td>
</tr>
<tr>
<td>Fee-Generating Transactions</td>
<td>22,819,399</td>
</tr>
<tr>
<td>Unique Cards Used</td>
<td>897,304</td>
</tr>
<tr>
<td>Active Card Accounts</td>
<td>1,768,171</td>
</tr>
<tr>
<td>Settled Transit Operator Revenue</td>
<td>$47,619,933</td>
</tr>
</tbody>
</table>
Clipper Use Across Agencies

Clipper Revenue, March 2016

BART: $1,017,288
SFMTA (Muni): $1,096,548
Caltrain: $700,869
AC Transit: $509,396
Golden Gate Ferry: $149,007
VTA: $149,853
Golden Gate Transit: $14,687
SamTrans: $14,687
WETA: $14,687
Napa Solano: $14,687
East Bay: $14,687
SFMTA Parking: $14,687

Total: $25,002,258
Clipper on Muni

- Monthly pass customers transitioned in fall 2010
- Approximately 110,000 monthly passes sold each month
- $123 million in revenue collected on Clipper (55% of fare revenue)
- Free Muni programs for youth, seniors and disabled provided via Clipper
System Limitations for SFMTA

- Low-income fare category not available for Lifeline passes
- Single-use products not available to meet needs of social service clients and visitors
- Time-based fares and transfers not available
Current Fare Collection Developments

- Youth age changing to 18
- Pricing differential for Clipper customers
  - Creates need for more add-value locations
- SFMTA mobile app to serve markets not served by Clipper
  - Tourists
  - Single rides
Clipper: The Next Generation

Carol Kuester, Metropolitan Transportation Commission
Planning for the Next Generation: C2

- Current contract to operate system ends November 2019
- System limitations
  - System architecture is from the late 1990s
  - Card readers and other equipment are approaching end-of-life
  - Integrating new technologies into the existing Clipper system would be expensive and risky
C2 Vision and Mission

• The **vision** for the next generation of Clipper is a customer-focused, cost-effective fare payment system that supports seamless transit travel in the San Francisco Bay Area.

• The **mission** of Clipper is to provide a convenient, flexible and efficient regional fare payment system.
C2 Goals

**Customer Service**
- Provide an intuitive, efficient and familiar experience
- Provide excellent, proactive customer service

**Governance**
- Create a transparent, consistent, inclusive and timely decision-making process
- Govern the program efficiently and cost-effectively

**Operational**
- Ensure that accurate and complete data are available to support decision making at every level
- Ensure program flexibility and responsiveness
- Ensure operational efficiency and reliability
Contracting and Technology Alternatives

- Focus on meeting customer needs and requests
- Speedy system changes if needed
- Regional communication infrastructure separate from fare payment
- Benefits of card- and account-based
  - Single account capability
- Modern back office
- Inexpensive and accessible media
- Easy to upgrade
Customer Ease of Mind

- Alternatives to pre-paid media while reducing cash
  - Limited-use tickets
- Clear messages for complex payment schemes
  - Day passes
  - Fare incentives
- Simple solutions for needs-based, disabled and other discount-eligible riders
- Choice of mood, not mode
  - Make taking bus, bike, rail, ferry, car share, walking simple
Request for Expressions of Interest (RFEI)

Purpose of RFEI

• Solicit vendor feedback on proposed delivery and contracting strategies

• Specifically seeking feedback on:
  – Technical aspects
  – Commercial aspects
  – Financial aspects
  – Approach to procurement

• Also would like to receive industry suggestions for:
  – Cost savings
  – Schedule acceleration
Peer Agency Experience

Monitoring other agencies replacing legacy systems
• Chicago Ventra
• Seattle ORCA
• Washington D.C. Smart Trip

Monitoring agencies implementing new card systems
• New York MTA MetroCard
• Portland Tri Met Hop Fastpass
Clipper: A Regional Approach

Denis Mulligan,
Golden Gate Bridge, Highway & Transportation District
Clipper Governance Structure

Original Memorandum of Understanding (MOU) identified:

- MTC’s Clipper-related responsibilities
- Transit agencies’ Clipper-related responsibilities
- Process for amending Clipper Operating Rules
- Process for dispute resolution among program participants
- Method for MTC and transit operators to divide program costs and revenues
Changes to MOU

Creation of Clipper Executive Board
- SFMTA, BART, Caltrain/SamTrans, AC Transit, VTA, Golden Gate Transit, MTC and two representatives of remaining transit operators
- Meets regularly
- Establishes goals and work plan
- Approves business matters

Program Goals and Objectives

Clipper Contracting Agency
- MTC defined as Clipper Contracting Agency
- Staffs Clipper program and fulfills related duties

Creation of Clipper Executive Director
The Clipper Environment

Collaboration is Key
• Staff of agencies in regular communication, identifying opportunities to cooperate on Clipper programs

Customer Focus
• 97% of Clipper customers satisfied to very satisfied
• Customers want discounts for using Clipper

Survey of Muni Cash Customers, 2014

<table>
<thead>
<tr>
<th>Incentive</th>
<th>Much More Likely</th>
<th>Somewhat More Likely</th>
<th>Total More Likely</th>
</tr>
</thead>
<tbody>
<tr>
<td>25-cent per-ride discount (N = 403)</td>
<td>64%</td>
<td>22%</td>
<td>86%</td>
</tr>
<tr>
<td>50-cent per-ride discount (N = 144)</td>
<td>79%</td>
<td>8%</td>
<td>88%</td>
</tr>
<tr>
<td>Clipper-only transfers (N = 403)</td>
<td>76%</td>
<td>13%</td>
<td>90%</td>
</tr>
</tbody>
</table>
Clipper: Frequently Asked Questions
Frequently Asked Questions

When can I use the value added to my card?

- You can use the value added to your card in person right away.
- If you add value online or over the phone, it may take up to 5 days for the value to be available.

Why does it take so long?

- Clipper is a card-based system, and the card has to touch a Clipper device for value to be added to it.
- It takes a day for value to be available on “hard-wired” devices like ticket machines and fare gates, but it’s a two-step process for buses and light rail vehicles and takes longer – see next slide.
The smart chip on a Clipper card:

- holds cash value
- or transit passes

If value is added at a store, ticket office or ticket machine:

- value is available immediately
- Ride!

If value is added online or by phone:

- batched orders are sent from servers to Clipper devices
- within 24 hours value is uploaded to faregates at transit stations or terminals
- within 5 days value is uploaded to card readers on buses, light rail vehicles and streetcars when they return to the garage or yard
- Value is transferred to your card when you tag a card reader
- Ride!
Frequently Asked Questions

In the next version of Clipper, will it still take this long?

- No, but we are exploring the best way to ensure that value you add remotely – such as online or over the phone – is available more quickly.
Frequently Asked Questions

Why isn’t there a Clipper mobile app now?

- No mobile apps for smart card fare collection systems in the U.S. today
  - Requires near-field communications (NFC)-enabled phone/device
  - Security and privacy protection significant concerns
  - Current NFC market penetration low
  - Secure element access controlled by phone providers
  - Transit agencies piloting mobile ticket systems for single rides
  - Must purchase tickets or products in advance
  - No way to support pay-as-you-go for multiple operators

- Planning for true mobile payment for next generation of Clipper
  - Manage and reload account
  - Directly pay for transit fares on multiple operators
  - Account integration for customer service, credits and other services