



Bay Area Metro Center
375 Beale Street
San Francisco, CA 94105

Meeting Agenda

Clipper Executive Board

Members:

Denis Mulligan, Chair Rick Ramacier, Vice Chair

*Nuria Fernandez, Jim Hartnett, Michael Hursh,
Tom Maguire, Therese W. McMillan,
Robert Powers, and Nina Rannells*

Monday, August 19, 2019

1:30 PM

San Francisco Bay Area Rapid Transit District
344 20th Street, 3rd Floor
Oakland, CA 94612
BART Board Room

This meeting will be recorded. Copies of recordings may be requested at the Metropolitan Transportation Commissioner (MTC) at nominal charge, or recordings may be listened to at MTC offices by appointment.

To access meeting location, please access through the Webster Street entrance between CVS Pharmacy and 24-Hour Fitness. Take the elevator to the 3rd floor and exit the elevator to your right where the agenda will be posted. Please enter the room through the double doors. For meeting location questions, please contact Angelica Dill-James at 510-464-6093.

1. Roll Call / Confirm Quorum

Quorum: A quorum of this committee shall be a majority of its regular voting members (5).

2. Consent Calendar

2a. [19-0869](#) Minutes of the July 15, 2019 Meeting

Action: Board Approval

Attachments: [2a CEB Minutes July 15 2019.pdf](#)

2b. [19-0874](#) Clipper® Contract Change Order - End of Useful Life Devices: Cubic Transportation Systems, Inc. (\$300,000)

Action: Board Approval

Presenter: Edward Meng

Attachments: [2b Change Order End of Life Devices.pdf](#)

3. Information

- 3a.** [19-0876](#) Current Clipper® System Update
- Update Board members on the current Clipper program. Clipper staff last updated this Board on the ongoing work and projects related to the current Clipper system at the July 2019 meeting.
- Action:** Information
- Presenter:** Jason Weinstein
- Attachments:** [3a_C1 Program Update_rev.pdf](#)
-
- 3b.** [19-0877](#) Next Generation Clipper® System Update
- Update Board members on key developments related to the implementation of the Next Generation Clipper System Integrator project, provide an overall program update, and highlight key technical updates.
- Action:** Information
- Presenter:** Jason Weinstein and Lysa Hale
- Attachments:** [3b_C2 Program Update.pdf](#)
-
- 3c.** [19-0878](#) Regional Fare Coordination and Integration Update
- Update Board Members on regional fare coordination and integration efforts and proposed next steps.
- Action:** Information
- Presenter:** Pamela Herhold, Bay Area Rapid Transit
- Attachments:** [3c_Regional_Fare_Coordination_and_Integration.pdf](#)

4. Executive Director's Report – Kuester

- [19-0922](#) So Long, Swiping. The 'Tap-and-Go' Subway Is Here.
The New York Times
- Attachments:** [4_ED Report - So Long, Swiping. The 'Tap-and-Go' Subway Is Here. - The New](#)
-
- [19-0953](#) Excerpts from: Cal-Integrated Travel Project Market Sounding Kick-off
Event
- Action:** Information
- Attachments:** [4_ED Report Handout Market Sounding Presentation.pdf](#)

5. Public Comment / Other Business

6. Adjournment / Next Meeting

The next meeting of the Clipper® Executive Board will be Monday, September 16, 2019 at 1:30 p.m. in the Caltrain / SamTrans Board Room, 2nd Floor, 1250 San Carlos Avenue, San Carlos, CA.

Public Comment: The public is encouraged to comment on agenda items at Committee meetings by completing a request-to-speak card (available from staff) and passing it to the Committee secretary. Public comment may be limited by any of the procedures set forth in Section 3.09 of MTC's Procedures Manual (Resolution No. 1058, Revised) if, in the chair's judgment, it is necessary to maintain the orderly flow of business.

Meeting Conduct: If this meeting is willfully interrupted or disrupted by one or more persons rendering orderly conduct of the meeting unfeasible, the Chair may order the removal of individuals who are willfully disrupting the meeting. Such individuals may be arrested. If order cannot be restored by such removal, the members of the Committee may direct that the meeting room be cleared (except for representatives of the press or other news media not participating in the disturbance), and the session may continue.

Record of Meeting: Committee meetings are recorded. Copies of recordings are available at a nominal charge, or recordings may be listened to at MTC offices by appointment. Audiocasts are maintained on MTC's Web site (mtc.ca.gov) for public review for at least one year.

Accessibility and Title VI: MTC provides services/accommodations upon request to persons with disabilities and individuals who are limited-English proficient who wish to address Commission matters. For accommodations or translations assistance, please call 415.778.6757 or 415.778.6769 for TDD/TTY. We require three working days' notice to accommodate your request.

可及性和法令第六章: MTC 根據要求向希望來委員會討論有關事宜的殘疾人士及英語有限者提供服務/方便。需要便利設施或翻譯協助者，請致電 415.778.6757 或 415.778.6769 TDD / TTY。我們要求您在三個工作日前告知，以滿足您的要求。

Acceso y el Titulo VI: La MTC puede proveer asistencia/facilitar la comunicación a las personas discapacitadas y los individuos con conocimiento limitado del inglés quienes quieran dirigirse a la Comisión. Para solicitar asistencia, por favor llame al número 415.778.6757 o al 415.778.6769 para TDD/TTY. Requerimos que solicite asistencia con tres días hábiles de anticipación para poderle proveer asistencia.

Attachments are sent to Committee members, key staff and others as appropriate. Copies will be available at the meeting.

All items on the agenda are subject to action and/or change by the Committee. Actions recommended by staff are subject to change by the Committee.



Metropolitan Transportation Commission

375 Beale Street, Suite 800
San Francisco, CA 94105

Legislation Details (With Text)

File #: 19-0869 **Version:** 1 **Name:**
Type: Minutes **Status:** Consent
File created: 7/19/2019 **In control:** Clipper Executive Board
On agenda: 8/19/2019 **Final action:**
Title: Minutes of the July 15, 2019 Meeting
Sponsors:
Indexes:
Code sections:
Attachments: [2a_CEB Minutes_July 15 2019.pdf](#)

Date	Ver.	Action By	Action	Result
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Subject:
Minutes of the July 15, 2019 Meeting

Recommended Action:
Board Approval

Attachments:



Agenda Item 2a

Bay Area Metro Center
375 Beale Street
San Francisco, CA 94105

Meeting Minutes - Draft

Clipper Executive Board

Members:

Denis Mulligan, Chair Edward D. Reiskin, Vice Chair

*Nuria Fernandez, Jim Hartnett, Michael Hursh,
Therese W. McMillan, Robert Powers, Rick Ramacier, and
Nina Rannells*

Monday, July 15, 2019

1:30 PM

San Francisco Bay Area Rapid Transit District
344 20th Street, 3rd Floor
Oakland, CA 94612
BART Board Room

1. Roll Call / Confirm Quorum

Present: 8 - Chair Mulligan, Vice Chair Reiskin, Board Member Hartnett, Board Member Hursh, Board Member Ramacier, Board Member Rannells, Board Member McMillan, and Board Member Powers

Absent: 1 - Board Member Fernandez

Raj Srinath acted as a delegate and voting member of the Board in place of Nuria Fernandez. Actions noted below as "Fernandez" were taken by Srinath.

2. Consent Calendar

Upon the motion by Board Member Rannells and second by Board Member Hartnett, the Consent Calendar was unanimously approved. The motion carried by the following vote:

Aye: 9 - Chair Mulligan, Vice Chair Reiskin, Board Member Fernandez, Board Member Hartnett, Board Member Hursh, Board Member Ramacier, Board Member Rannells, Board Member McMillan and Board Member Powers

2a. [19-0775](#) Minutes of the June 17, 2019 Meeting

Action: Board Approval

Attachments: [2a CEB Minutes June 17 2019.pdf](#)

2b. [19-0790](#) Clipper® Purchase Order - Network Services: AT&T (\$400,000)

Action: Board Approval

Presenter: Edward Meng

Attachments: [2b Purchase Order ATT Network.pdf](#)

3. Approval

- 3a. [19-0820](#) Change Order Amendments - Ticket Vending Machines (TVM) and Faregate Maintenance - Prevailing Wages: Cubic Transportation Systems, Inc. (\$1,425,000)

Change Order Amendments - Adding Funds to Pay Prevailing Wages for TVM and Faregate Maintenance per California Labor Code and Federal Davis-Bacon Act: Cubic Transportation Systems, Inc. (Cubic) (\$1,425,000).

Action: Board Approval

Presenter: Lynn Valdivia

Attachments: [3a Change Order Cubic PW.pdf](#)

Jerry Grace spoke on this item.

Upon the motion by Board Member Hartnett and second by Board Member Ramacier, the Change Order Amendments - Ticket Vending Machines (TVM) and Faregate Maintenance - Prevailing Wages: Cubic Transportation Systems, Inc. (\$1,425,000) was unanimously approved. The motion carried by the following vote:

Aye: 9 - Chair Mulligan, Vice Chair Reiskin, Board Member Fernandez, Board Member Hartnett, Board Member Hursh, Board Member Ramacier, Board Member Rannells, Board Member McMillan and Board Member Powers

- 3b. [19-0791](#) Clipper® Contract Change Order Amendment - Clipper Card Procurement: Cubic Transportation Systems, Inc. (\$4,000,000)

Request for approval of a Change Order Amendment for procurement of Clipper cards: Cubic Transportation Systems, Inc. (Cubic) (\$4,000,000).

Action: Board Approval

Presenter: Edward Meng

Attachments: [3b Change Order Card Procurement.pdf](#)

Aleta Dupree spoke on this item.

Upon the motion by Board Member Ramacier and second by Board Member Hursh, the Clipper® Contract Change Order Amendment - Clipper Card Procurement: Cubic Transportation Systems, Inc. (\$4,000,000) was unanimously approved. The motion carried by the following vote:

Aye: 9 - Chair Mulligan, Vice Chair Reiskin, Board Member Fernandez, Board Member Hartnett, Board Member Hursh, Board Member Ramacier, Board Member Rannells, Board Member McMillan and Board Member Powers

3c. [19-0808](#) Clipper® Executive Board Election of Vice Chair

Nomination and Election of the Vice Chair of the Clipper Executive Board.

Action: Board Approval

Presenter: Edward Meng

Attachments: [3c Clipper Vice Chair.pdf](#)

Upon the motion by Board Member Rannells and second by Board Member Hursh, the Clipper® Executive Board unanimously voted to appoint Board Member Ramacier as Vice Chair. The motion carried by the following vote:

Aye: 9 - Chair Mulligan, Vice Chair Reiskin, Board Member Fernandez, Board Member Hartnett, Board Member Hursh, Board Member Ramacier, Board Member Rannells, Board Member McMillan and Board Member Powers

4. Information**4a. [19-0793](#) Current Clipper® System Update**

Update Board members on the current Clipper program. Clipper staff last updated this Board on the ongoing work and projects related to the current Clipper system at the June 2019 meeting.

Action: Information

Presenter: Jason Weinstein

Attachments: [4a C1 Program Update.pdf](#)

4b. [19-0794](#) Next Generation Clipper® System Update

Update Board members on key developments related to the implementation of the Next Generation Clipper System Integrator project, provide an overall program update, and highlight key technical updates.

Action: Information

Presenter: Jason Weinstein

Attachments: [4b C2 Program Update.pdf](#)

5. Executive Director's Report – Kuester

6. Public Comment / Other Business

Aleta Dupree was called to speak.

[19-0844](#)

Attachments: [06 Handout Policy Advisory Council Recommendations July 2019 Transit Fare Integration.pdf](#)

7. Adjournment / Next Meeting

The next meeting of the Clipper® Executive Board will be Monday, August 19, 2019 at 1:30 p.m. in the BART Board Room, 3rd Floor, 344 20th Street, Oakland, CA.



Metropolitan Transportation Commission

375 Beale Street, Suite 800
San Francisco, CA 94105

Legislation Details (With Text)

File #: 19-0874 **Version:** 1 **Name:**

Type: Contract **Status:** Consent

File created: 7/25/2019 **In control:** Legislation Committee

On agenda: **Final action:**

Title: Clipper® Contract Change Order - End of Useful Life Devices: Cubic Transportation Systems, Inc. (\$300,000)

Sponsors:

Indexes:

Code sections:

Attachments: [2b Change Order End of Life Devices.pdf](#)

Date	Ver.	Action By	Action	Result
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Subject:

Clipper® Contract Change Order - End of Useful Life Devices: Cubic Transportation Systems, Inc. (\$300,000)

Presenter:

Edward Meng

Recommended Action:

Board Approval

Attachments:

Clipper® Executive Board

August 19, 2019

Agenda Item 2b

Clipper® Contract Change Order – End of Useful Life Devices: Cubic Transportation Systems, Inc. (\$300,000)

Subject: Request for approval of a Contract Change Order to obtain additional inventory for end of useful life Clipper devices and equipment: Cubic Transportation Systems, Inc. (Cubic) (\$300,000).

Background: Cubic has communicated to MTC that several types of devices and accessory equipment currently used by the Clipper program are reaching the end of their useful life and will no longer be produced. MTC is requesting authorization to obtain quantities of certain device types and accessories to support operator needs and keep the existing system in a state of good repair until the transition to the Next Generation Clipper system. Devices procured by this change order will be placed in program inventory to be installed as part of future operator requests and will supplement the pool of maintenance spares.

Change Order Scope of Work

MTC and Cubic have determined that the Tri-Reader (TR3) and Handheld Card Reader (HCR4) battery are the only equipment types facing an inventory shortage. The Clipper program proposes procuring two versions of the TR3 along with HCR4 batteries to gain sufficient program inventory:

Device Type	Project/Justification	Supported Operators	Quantity
TR3 (K)	Future Vending Machines, Operational Spares	BART	171
TR3 (W)	Future Ticket Vending Machines, Operational Spares	SFMTA, Golden Gate Transit, VTA	245
HCR4 Battery	Operational Spares	13 Operators	300

These quantities were determined based on known and anticipated needs over the next three years. All equipment procured will be placed in program inventory until allocated to a future installation effort.

Issues: There are no issues with this proposed Change Order.

Recommendation: Staff recommends that the Clipper Executive Board approve a Contract Change Order with Cubic in an amount not to exceed \$300,000 to obtain additional inventory for end of life Clipper devices and equipment described above.


Carol Kuester

REQUEST FOR BOARD APPROVAL

Summary of Proposed Contract Change Order

Consultant:	Cubic Transportation Systems, Inc. San Diego, CA
Work Project Title:	End of Useful Life Clipper Devices
Purpose of Project:	To procure additional inventory for end of useful life Clipper devices and equipment
Brief Scope of Work:	Procurement of additional Tri-Reader and Handheld Card Reader batteries for end of useful life Clipper devices and equipment.
Project Cost Not to Exceed:	\$300,000
Funding Source:	STP, CMAQ, STA, STP Exchange, Regional Measure 2 Capital and Regional Measure 2 Operating, Regional Measure 3, SB1 State of Good Repair
Fiscal Impact:	Funds available in the FY 2019-20 MTC agency budget.
Motion by Board:	That the Contract Change Order with Cubic Transportation Systems, Inc. as described herein and in the Clipper Executive Director's August 19, 2019 memorandum, is hereby approved by the Clipper Executive Board.
Clipper Executive Board:	
	<hr/>
	Denis Mulligan, Chair
Approved:	August 19, 2019



Metropolitan Transportation Commission

375 Beale Street, Suite 800
San Francisco, CA 94105

Legislation Details (With Text)

File #: 19-0876 **Version:** 1 **Name:**
Type: Report **Status:** Informational
File created: 7/25/2019 **In control:** Clipper Executive Board
On agenda: 8/19/2019 **Final action:**
Title: Current Clipper® System Update

Update Board members on the current Clipper program. Clipper staff last updated this Board on the ongoing work and projects related to the current Clipper system at the July 2019 meeting.

Sponsors:

Indexes:

Code sections:

Attachments: [3a_C1 Program Update_rev.pdf](#)

Date	Ver.	Action By	Action	Result
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Subject:

Current Clipper® System Update

Update Board members on the current Clipper program. Clipper staff last updated this Board on the ongoing work and projects related to the current Clipper system at the July 2019 meeting.

Presenter:

Jason Weinstein

Recommended Action:

Information

Attachments:

Clipper® Executive Board

August 19, 2019

Agenda Item 3a

Current Clipper® System Update

Subject: Update Board members on the current Clipper program. Clipper staff last updated this Board on the ongoing work and projects related to the current Clipper system at the July 2019 meeting.

Background: **Transactions and Sales**
Clipper processed 23.1 million transactions and settled \$57.5 million in revenue in July. This is the highest recorded level of activity for July for the Clipper program.

Clipper Customer Education

The third phase of the “Clipper Works for You” campaign targeting AC Transit and Muni riders has wrapped up. The campaign included transit advertising, digital advertising, and Spanish and Chinese print ads. MTC continued to conduct outreach events through mid-August to provide additional support for the campaign.

MTC is supporting BART’s Clipper-only station pilot. From August through September, BART will roll out four stations that will vend only Clipper cards; these stations will, however, still accept magnetic stripe tickets. MTC will support the pilot with 12 outreach events.

MTC also supported BART’s National Night Out program with outreach support at five BART stations throughout the region.

Implementation and Enhancement Projects

AC Transit announced to this Board at the July 2019 meeting that the revenue service date for Bus Rapid Transit (BRT) will be moved to as early as December 2019. Cubic will provide an updated implementation schedule upon receipt of the construction schedule from AC Transit’s contractor.

MTC continues to coordinate with SFMTA on Clipper equipment installation for the Central Subway, currently anticipated to take place no earlier than November.

Clipper equipment continues to perform well in the field and meets contractual performance requirements.

Attachments: **Attachment A:** Clipper Master Schedule



Carol Kuester

[illegible]



Metropolitan Transportation Commission

375 Beale Street, Suite 800
San Francisco, CA 94105

Legislation Details (With Text)

File #: 19-0877 **Version:** 1 **Name:**
Type: Report **Status:** Informational
File created: 7/25/2019 **In control:** Clipper Executive Board
On agenda: 8/19/2019 **Final action:**
Title: Next Generation Clipper® System Update

Update Board members on key developments related to the implementation of the Next Generation Clipper System Integrator project, provide an overall program update, and highlight key technical updates.

Sponsors:

Indexes:

Code sections:

Attachments: [3b_C2 Program Update.pdf](#)

Date	Ver.	Action By	Action	Result
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Subject:

Next Generation Clipper® System Update

Update Board members on key developments related to the implementation of the Next Generation Clipper System Integrator project, provide an overall program update, and highlight key technical updates.

Presenter:

Jason Weinstein and Lysa Hale

Recommended Action:

Information

Attachments:

Clipper® Executive Board

August 19, 2019

Agenda Item 3b

Next Generation Clipper® System Update

Subject: Update Board members on key developments related to the implementation of the Next Generation Clipper System Integrator project, provide an overall program update, and highlight key milestones.

Background: **Executive Summary**

Included as Attachment A to this memorandum is a summary of recently completed activities related to delivering the Next Generation Clipper program; upcoming activities and deliverables for MTC, Cubic, and the transit operators; and noteworthy items that the project team is managing. This will be updated and presented to this Board monthly.

Initial Design Review

On August 8th Cubic submitted the first group of technical design documents for review as planned. They include documents related to:

- Accelerated Deployment Design
- Validator Design (multiple validator types as required by the Contract)
- Back Office Design (C1 functionality to support future system migration)
- Website, Web Portal, and Mobile App Design
- Communications Network Design

The content of these documents includes design information on the following: more-frequent action list software updates, fare validators, the back office design for the Accelerated Deployment phase, the mobile app design and outcome of the mobile app user interface/user experience (UI/UX) workshops, and network design for on-board and hardwired networks.

MTC and transit operator staff are expected to complete their first review of these documents by the end of August with submission of comments to Cubic the first week of September. Cubic will address any comments with resubmission of the documents in late September. The target date for approval is early October 2019.

Next Generation Clipper Mobile App Update

Mobile app UI/UX development continues, with the process more than 2/3 complete. Transit operators and MTC staff have provided feedback on UI/UX of standard (plastic) card management and most elements of the trip planner and are now working on the UI/UX for the mobile (virtual) card. The UI/UX process is scheduled for completion on September 23, 2019. The results of this effort will be rolled into the design documents produced by Cubic.

Sample screenshots, which include staff feedback on the mobile app UI/UX, are included in Attachment B to this memo.

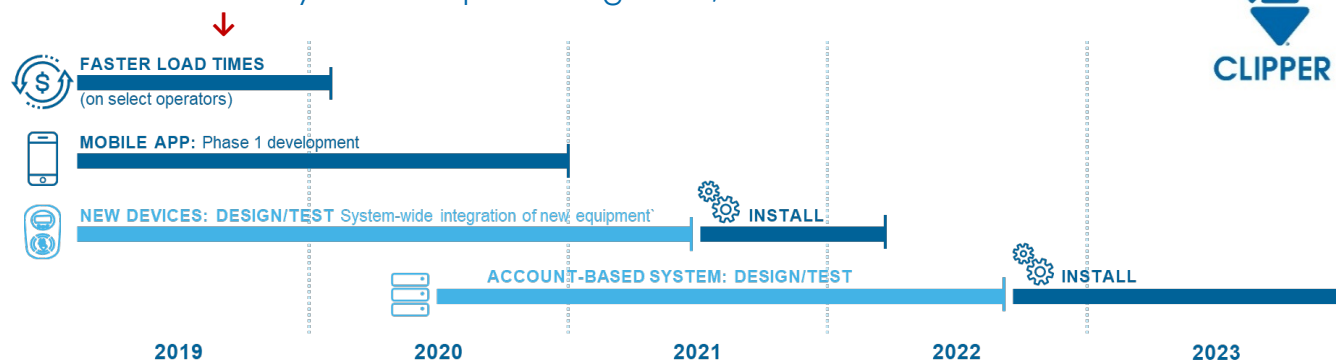
Attachments: **Attachment A:** Next Generation Clipper Program Executive Summary Status Report
Attachment B: Clipper Mobile App UI/UX Development


Carol Kuester



Next-Generation Clipper Program

Executive Summary Status Report – August 19, 2019



Summary

- Faster Load Times and Mobile App test plans approved.
- Review Cycle 1 for Accelerated Deployment design documents underway.
- Mobile App UI/UX workshops and technical discussions continue with operators.

Recently Completed Activities

	MTC/IBI	Cubic	Operators	Date
• Technical meetings with operators:				
o BART	•	•	•	Jul 17
o SFMTA	•	•	•	Jul 19, Aug 16
• Accelerated Deployment Test Plans:				
o Resubmittal by Cubic		•		Jul 19
o Comments on resubmittal sent to Cubic	•			Jul 23
o Approval by MTC	•			TBD
• Mobile App UI/UX design workshops	•	•	•	Jul 15, 22, 29; Aug 5, 13
• Review Cycle 1 documents:				
o Submittal by Cubic		•		Aug 8
o Review meeting (internal)	•		•	Aug 13

Upcoming Activities/Deliverables

	MTC/IBI	Cubic	Operators	Date
• Mobile App UI/UX design:				
o UI/UX design workshops	•	•	•	Aug 20; Sep 3, 9, 17
o UX approval	•		•	Aug 23
o UI approval	•		•	Sep 23
• Review Cycle 1 documents:				
o Review meetings with Cubic	•	•	•	Week of Aug 19
o Comments due to Cubic	•		•	Sep 5
• Technical meetings with operators:				
o BART	•	•	•	Aug 21
o SFMTA	•	•	•	Sep 20
• Clipper Executive Board Meeting	•	•	•	Sep 16

Items to Highlight

Description	Resolution/Mitigation
• Changes to scope of work required for revised DC3/CID5 device strategy and new onboard equipment integration designs.	Change Management Process, including monthly meetings of Change Control Board, being followed to review, facilitate, and approve contract changes.

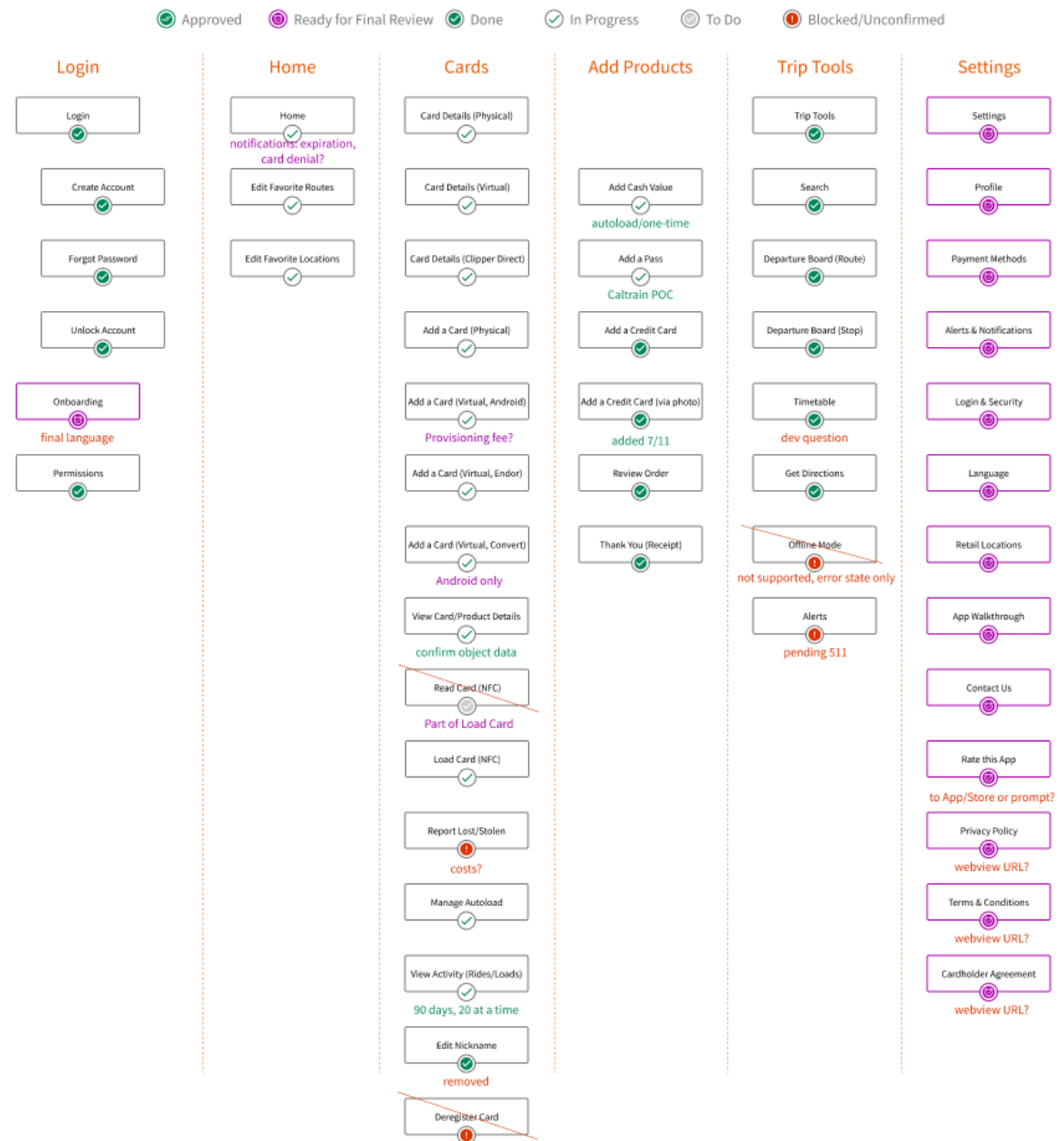


Clipper Mobile App UI/UX Development

Clipper Executive Board
August 19, 2019

Agenda Item 3b
Attachment B

Progress Board



Sample UX Screens

LO 1

Login › Returning User
June 10, 2019

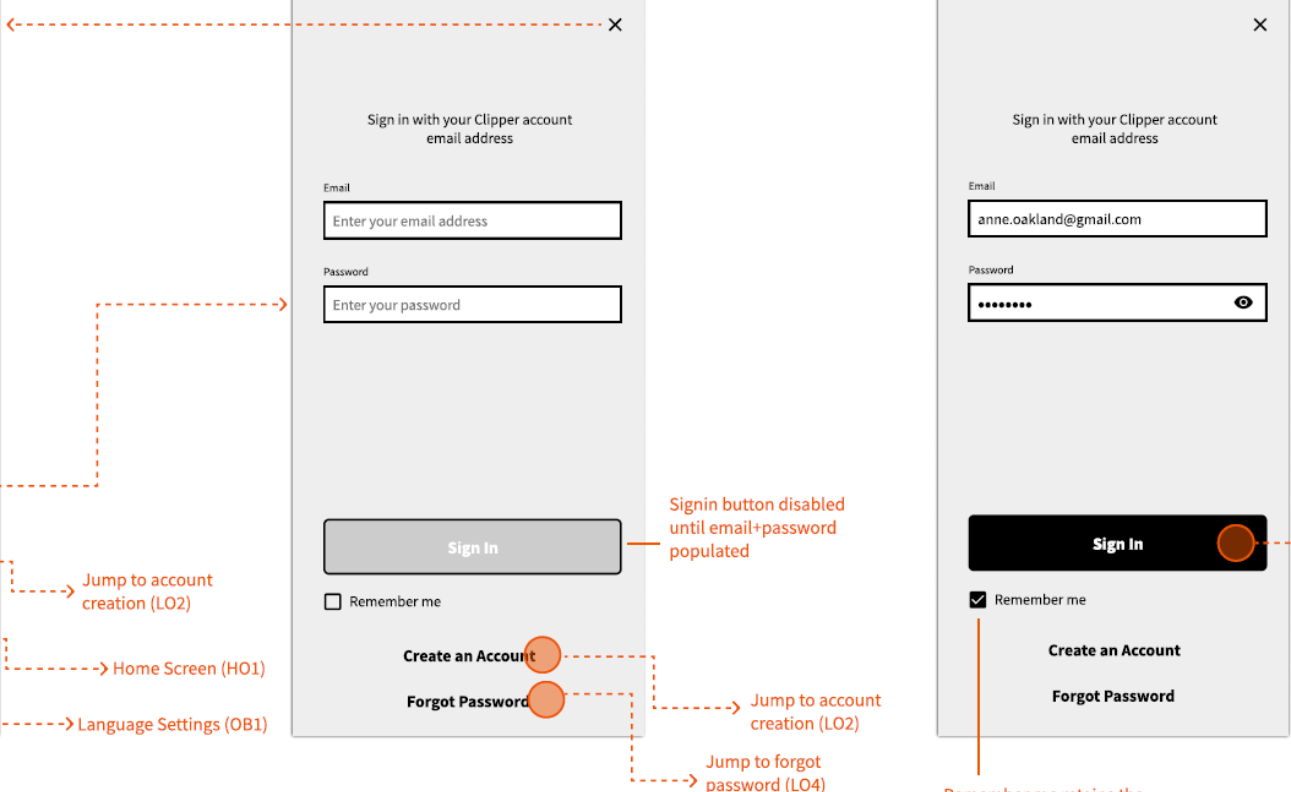
1
Welcome Screen



2a
Login



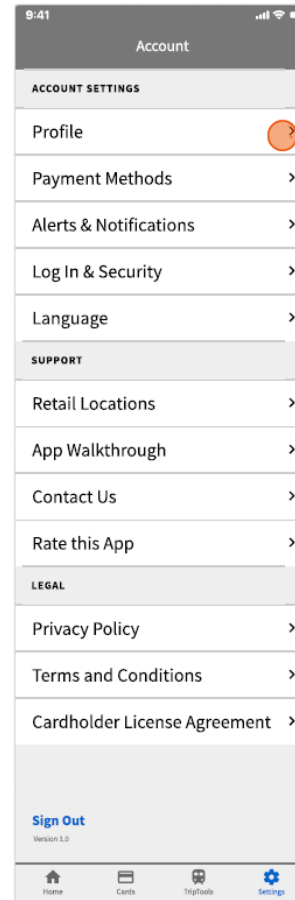
2b
Login | Ready



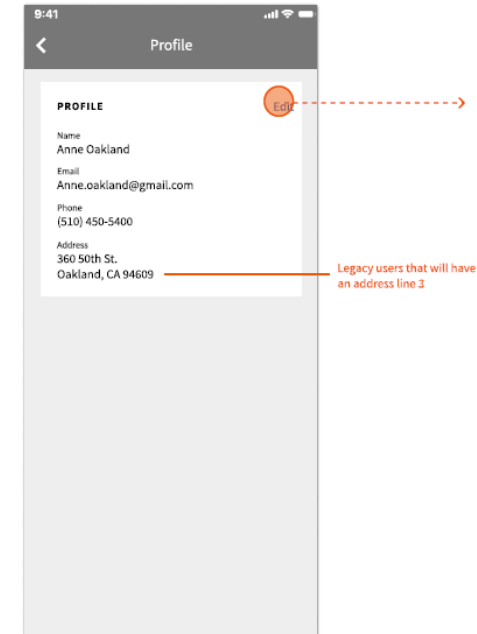
Sample UX Screens

MM 2 More Menu › Profile July 23, 2019

MM1-1a
More Menu (Registered)



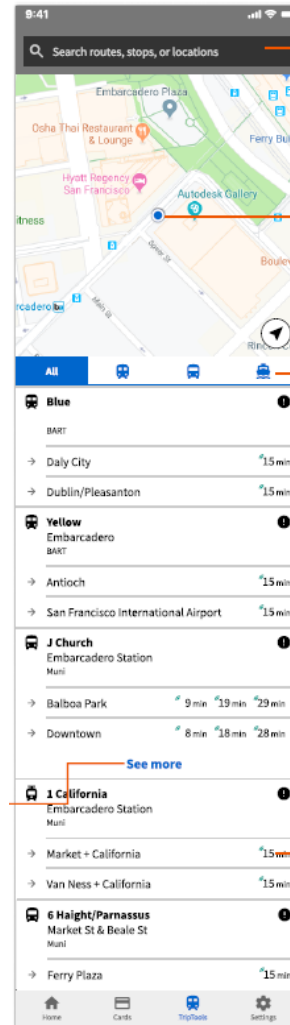
1
Profile



Sample UX Screens

TT 1 Trip Tools > Nearby (Trip Tools Home) July 19, 2019

1 Nearby



Riders can search routes, stops, and points of interest

Map centered on rider's location

Filters

filter by mode: all, rail/tram only, bus only, and ferry only

List is populated with nearest stops, associated lines/routes, and arrival time(s)

Nearby Details

icon represents specific mode (bus, rail, ferry) route name/headsign

station/stop agency

route/stop-related alert* if supported by S11

real-time

scheduled (if no real-time)

destination(s)

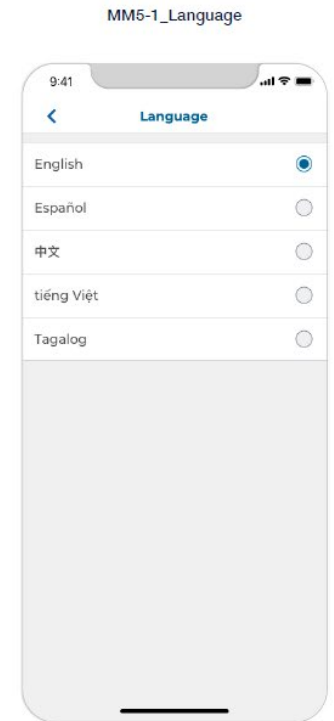
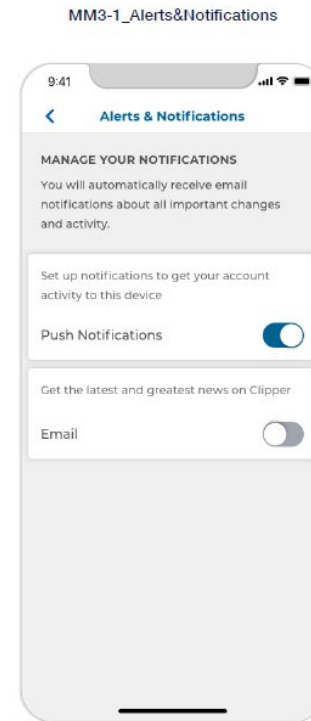
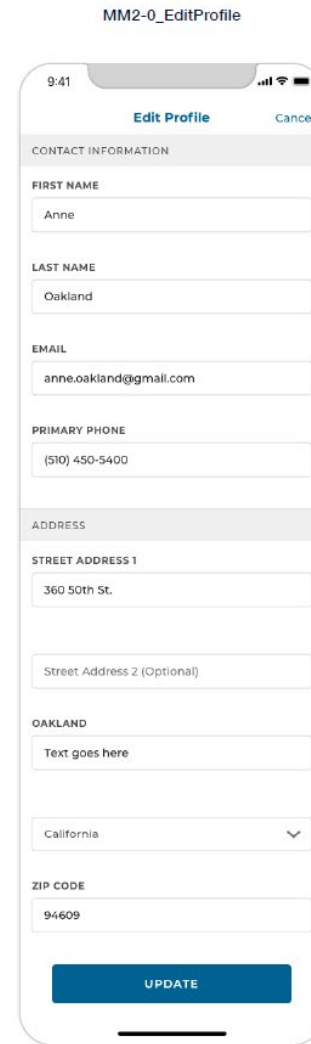
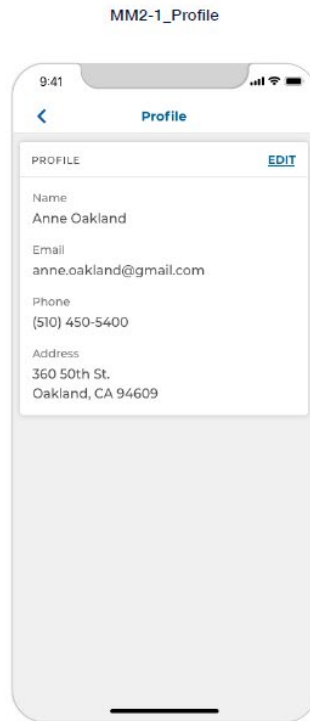
Church"
o Route name: Church"
o Icon should t
o Embarcadero line, so there is destination "C"
o Route name: "California"
o Icon should t
o Stop is Califo Embarcadero!
o Stop is at the the only destin California/Van

Sample UI Screens

MM2,3,5

Profile, Alerts & Notifications, Language

Modified on July 17, 2019

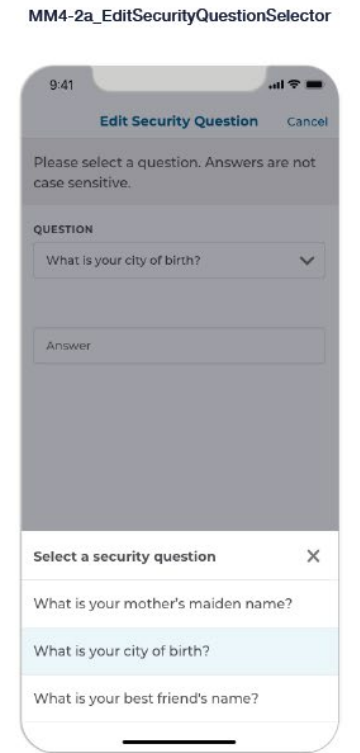
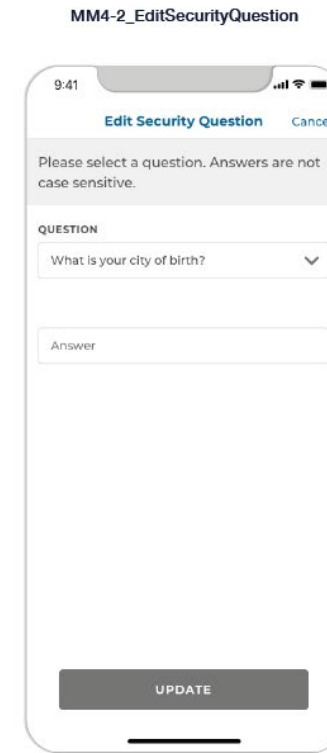
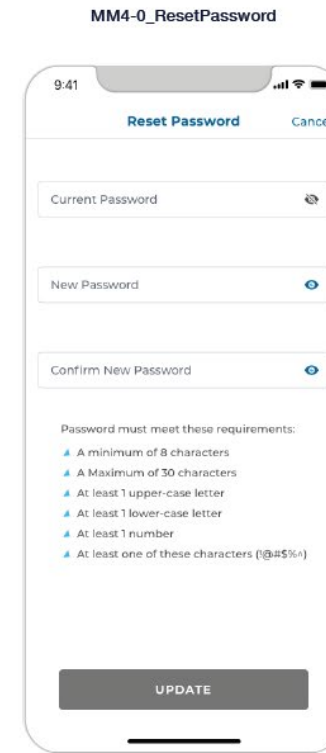
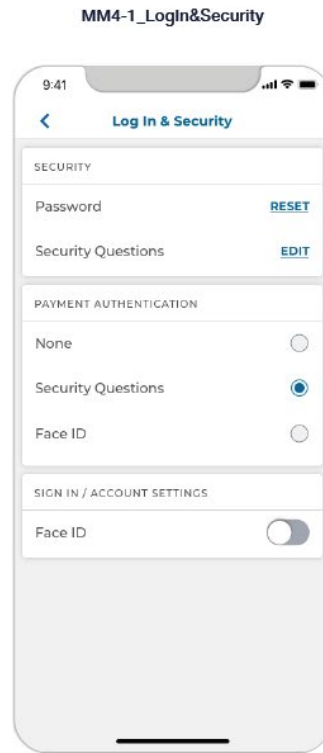


Sample UI Screens

MM4

Login & Security

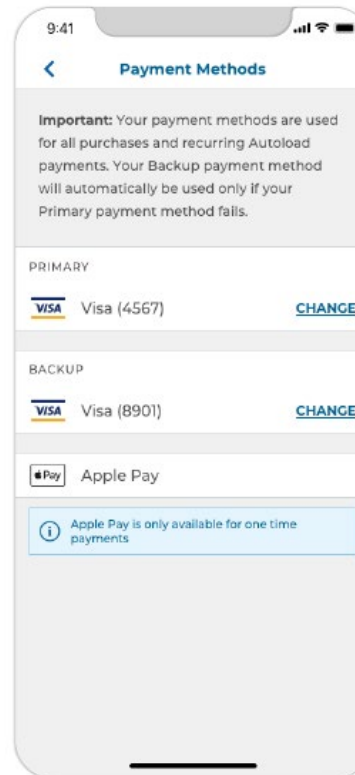
Modified on July 8, 2019



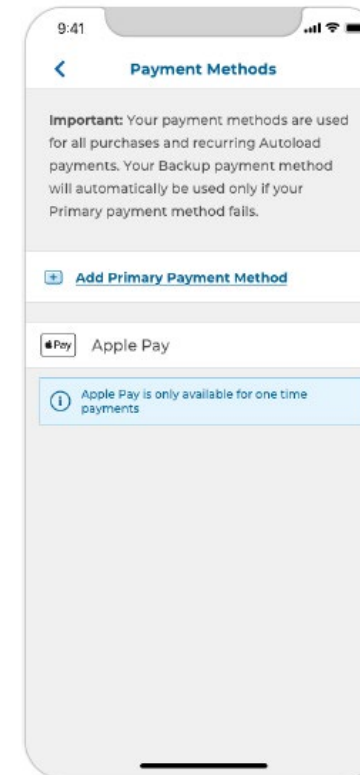
Sample UI Screens

MM7
Payment Methods
Modified on July 17, 2019

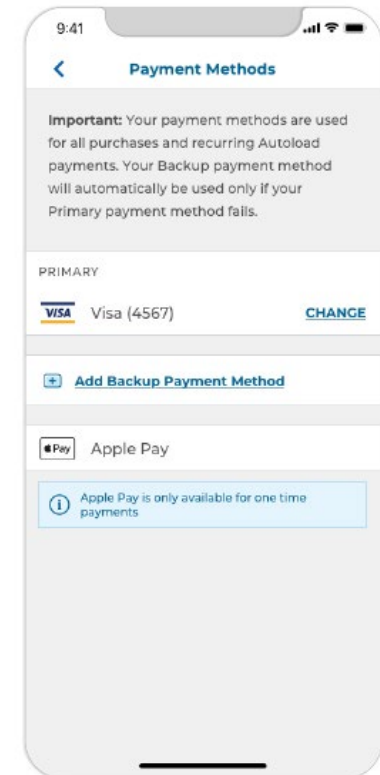
MM7-2_PaymentMethodsOverview



MM7-2b_PaymentMethod
MissingPrimary



MM7-2c_PaymentMethod
MissingBackup





Metropolitan Transportation Commission

375 Beale Street, Suite 800
San Francisco, CA 94105

Legislation Details (With Text)

File #:	19-0878	Version:	1	Name:	
Type:	Report	Status:		Informational	
File created:	7/25/2019	In control:		Clipper Executive Board	
On agenda:	8/19/2019	Final action:			
Title:	Regional Fare Coordination and Integration Update				
	Update Board Members on regional fare coordination and integration efforts and proposed next steps.				
Sponsors:					
Indexes:					
Code sections:					
Attachments:	3c_Regional_Fare_Coordination_and_Integration.pdf				

Date	Ver.	Action By	Action	Result
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Subject:
Regional Fare Coordination and Integration Update

Update Board Members on regional fare coordination and integration efforts and proposed next steps.

Presenter:
Pamela Herhold, Bay Area Rapid Transit

Recommended Action:
Information

Attachments:

Clipper[®] Executive Board

August 19, 2019

Agenda Item 3c

Regional Fare Coordination and Integration Update


- Subject:** Update Board Members on regional fare coordination and integration efforts and proposed next steps.
- Background:** At its June 17, 2019 meeting, the Clipper Executive Board considered a request to support the use of \$599,839 in residual funds available from the Integrated Fare Structure Program, capital project number 34, under Regional Measure 2 (RM 2) to support developing a business case for transit fare integration. As the successor body to the TransLink Consortium – the project sponsor identified in RM 2 legislation – the Clipper Executive Board was asked to authorize MTC staff to request that the MTC Commission allocate these funds for the business case work. At the June meeting the Clipper Executive Board voted to defer this action on the request to support the use of RM 2 funds to a future meeting, no later than October 2019.
- Issues:** After the June 2019 meeting, the Executive Board Chair shared with Board Members a draft summary scope of work for the fare integration business case developed by MTC staff. The full detailed draft scope of work developed by MTC staff was subsequently shared directly with transit operator staff. Subsequently, transit agency staff provided comments and alternatives.
- On August 2, 2019, transit operator and MTC staff met to discuss a path forward to bring a scope of work back before the Clipper Executive Board. The operators were in agreement that fare coordination is an important issue for the Bay Area and warranted a prioritized study. A significant portion of the discussion also focused on the proposed Faster Bay Area mega-measure and possible funding for fare integration from that measure. Transit operator staff expressed a strong desire to have input into the development of a fare integration project in the Faster Bay Area measure, rather than have one included in the measure without their input. Staff also discussed developing a cost number for fare integration/coordination to provide to proponents of the measure based on the current total amount of fare revenue collected across all transit operators.
- Staff Working Group:** Based on these discussions, transit operator and MTC staff recommend the establishment of a Staff Working Group. The Staff Working Group would be convened by staff from SamTrans/Caltrain and would focus on two key tasks:
- In concert with the Staff Working Group, BART will develop a fare coordination and integration cost number to provide to the proponents of the Faster Bay Area measure over the next 2-3 months; and
 - Producing a combined scope of work for a Bay Area fare coordination and integration opportunities study/business case, based on the multiple staff-developed scopes of work, for consideration by the

Clipper Executive Board, ideally on September 16, 2019 but no later than October 21, 2019.

Fare Coordination and Integration Opportunities Scope of Work: When transit operator and MTC staff return to the Clipper Executive Board with a scope of work for the fare coordination and integration study/business case they will also present a proposed project management structure for the Clipper Executive Board to consider. The scope of work will contain details about possible public engagement elements of the study/business case work as well as recommendations for how to involve other stakeholders interested in this topic, including transit agency board members, MTC Commissioners, and advocates.

As noted above, \$599,839 in residual funds available from the Integrated Fare Structure Program, capital project number 34, under RM 2 are available to support a comprehensive study focusing on fare integration. Per the RM 2 statutes, "the purpose of the integrated fare program is to encourage greater use of the region's transit network by making it easier and less costly for transit riders whose regular commute involves multizonal travel."

Should the Clipper Executive Board support a scope of work and the use of RM 2 funds at its September or October meetings, MTC staff will subsequently request that the Commission allocate RM 2 funds to the project.



Carol Kuester



August 14, 2019

Clipper Executive Board
C/O Metropolitan Transportation Commission
375 Beale Street, Suite 800
San Francisco, CA 94105

Re: Agenda Item 3c: Regional Fare Coordination and Integration Update

Dear Chair Mulligan and Executive Board members:

SPUR is a member-supported nonprofit organization that promotes good planning and good government in the SF Bay Area through research, education and advocacy. Improving public transportation and increasing transportation use in cities are core priorities for our organization.

SPUR asks the Clipper Executive Board to take leadership on regional fare integration. We think regional fare integration is a necessary solution to deal with the region's transportation, equity and sustainability challenges.

The potential impacts of regional fare integration are not well understood; the issue has not been studied for more than 10 years. A Business Case for Fare Integration is a necessary next step to gather information on actual the impacts, benefits and costs of integrating fares across transit operators.

As the Clipper Executive Board once again considers allocating funding for the Business Case, we ask the Board to think thoughtfully about the study process and scope of work and to consider how both can be designed to prioritize the customer experience and maximize learning. This letter offers our recommendations for both the process and scope, including:

- Establish a well-resourced, transparent process that includes a wide range of stakeholders
- Establish a shared vision, goals and objectives for fare integration and the business case
- Identify the fare policy problems that need to be solved
- Anchor the business case in the rider experience
- Conduct robust public outreach and engagement, including user experience research
- Consider both revenue neutrality and revenue investment options.
- Identify and evaluate several options for regional fare integration.

1. Establish a well-resourced, transparent process that includes a wide range of stakeholders.

Fares, though essential to transit operations, impact more than the operator that collects them. Fare policy is a regional equity, funding and customer experience issue. Fares can be employed strategically to grow ridership, promote social equity and keep transit competitive, among other outcomes; fares are far more than a revenue raising tool. For these reasons, the actors who develop solutions to the region's fare policy challenge need to be broader than just transit operators. Transit agency boards, general managers and MTC as well as advocates, major employers and institutions and Bay Area cities should all contribute to this effort.

Transit operator planning staff (in addition to revenue and finance staff) should be part of the proposed staff working group. When we acknowledge fares are a customer-facing element of the transportation system that affect ridership, it flows that planners, who structurally have this perspective, should be included. TransLink's (Vancouver, BC's transit operator) fare review process, for example, was in fact led by its planning and policy staff with input from revenue and finance staff. The finance team set the applicable range for farebox recovery, but then left it to a team of planners to figure out the fares structures that worked for riders, while also meeting financial targets.

MTC's proposal for a project structure, presented at the June 17th Clipper Executive Board meeting, is well-rounded as it includes participation by a variety of stakeholders who care while ensuring the project is ultimately owned by transit operator general managers whose guidance and active support are necessary for success. The Clipper Executive Board should confirm this structure with the addition of major employers, institutions and cities to the advisory committee.

2. Establish a shared vision, goals and objectives for fare integration and the business case.

A shared understanding and starting point are essential to the success of fare integration and the business case. We encourage the Clipper Executive Board to embrace the principles (copied below) proposed in the June 17th Clipper Executive Board meeting.

- Treat the Bay Area transit network as one system;
- Fares should be predictable to users;
- There should be no penalty for transferring;
- Discounts based on age or status should apply uniformly;
- Trips of a similar distance should cost similar amounts;
- Transit should be affordable for all; and
- Passes, if offered, should encourage transit use, not operator loyalty

SPUR believes the goal of the Business Case should be to determine how the region might restructure fare policy to remove fare barriers and maximize ridership, encourage modeshift, promote equity and improve transit competitiveness while maintaining the financial stability of the region's transit operators. The Business Case should be designed to identify what good outcomes for riders would be, even if it takes multiple steps, and a period of years, to get there.

3. Identify the fare policy problems that need to be solved.

The business case should identify fare barriers, that is the ways the existing fragmented fare policies limit riders' ability to use transit, even when it is the best choice for their trip.

This exercise should not be theoretical; it should identify where in the region the fare barriers manifest, describe how they are experienced by various users, and the magnitude of their impact. That is, the analysis should seek to capture the transit trips that *could* involve more than operator or mode but are thwarted by the fare barriers. This effort should consider where transit is time competitive with driving but not cost competitive. This could provide insight into the transit markets that could be the focus for near-term fare integration opportunities.

3. Anchor the Business Case in the rider experience.

Metrolinx's (Toronto's regional rail transit operator and planning agency) Business Case for Fare Integration is serving as a template for the Bay Area's fare integration business case. SPUR has engaged with Metrolinx staff and in our discussions, they noted that they've come to realize that their business case would be of more value if it were anchored in the rider experience. That is, if the business case were less theoretical and framed in such a way that the public could relate to it and understand what fare integration would mean for them and how it would improve their transit experience.

The Bay Area would be wise to heed this lesson and can do this by in two key ways:

- **Create personas or archetypes** (such as visitors, employers, infrequent transit users, transit users with low incomes and commuters) to identify how exactly the problem of disjointed fares impacts specific user groups.
- **Develop a public facing website and materials.** The Business Case should be approached as an opportunity to grow public support for a more streamlined fare system and the resources needed to make it happen. TransLink, for its fare review process, created a comprehensive website that was as engaging as it was informative. We think this is could be a good template for the Bay Area's Business Case for Fare Integration.

4. Conduct robust public outreach and engagement, including user experience research.

We cannot solve the region's fare policy problem without understanding riders' fare policy needs, pain points and expectations. The optimal way to anchor the business case in the rider experience is to go where the riders are and talk to them.

Traditional outreach efforts, such as focus groups and open houses are helpful, but not sufficient for this effort because these tools don't provide insight into the lived experience of transit riders. Public engagement for the Business Case for Fare Integration should include a wide variety of ethnographic research, such as customer narrative workshops, one-on-one interviews, customer intercept surveys at transit hubs, observational research, journey mapping workshops, and ride-alongs designed to extract customer behaviors, attitudes and beliefs. We believe this research should seek to unearth the following:

- Legibility of the current fare system and what information matters to customers for the purposes of their trip
- Customers' decision-making process leading to and during the trip
- Valued and important aspects of transit service
- Perceived experiences and level of satisfaction during transit trips
- Meaning of the fares and its relationship to customer experience

TransLink commissioned ethnographic research for their fare review process. We recommend reviewing their findings to understand the power of this type of research and how it can supplement other qualitative and qualitative data. The research can be access here: https://www.translink.ca/-/media/Documents/plans_and_projects/transit_fare_review/Appendix-C--Customer-Experience-Research.pdf

5. Consider both revenue neutrality and revenue investment options.

SPUR commits to supporting fare integration proposals that help keep transit operator income sustainable through increased revenues or subsidies.

The 2008 Fare Integration Study only considered a revenue-neutral scenario, which resulted in options that were too costly to riders and ultimately dismissed for their infeasibility. To avoid the same outcome, the business case should include two different scenarios: revenue neutrality and revenue investment. The revenue-neutral scenario should consider the potential of an integrated fare structure to increase ridership overall and thus increase revenue for the regional system, which could then be distributed among operators through revenue sharing. The revenue-investment scenario should assume that a certain amount would be invested to support the development of an integrated fare structure.

6. Identify and evaluate several options for regional fare integration.

There is no single way to achieve fare integration. For example, it could be achieved through multi-operator passes that more or less leave the region's hybrid fare structure intact. Seattle's successful PugetPass is an example of this. Or, it could be achieved through steep transfer discounts or multi-operator fare capping. A single common fare structure for the region may be the best remedy because it would fully eliminate the penalty for transferring between transit systems. Accordingly, the business case should evaluate a wide range of options for fare integration, from modifications to the status quo to transformative changes. The goal should be to determine which options have the highest benefit to cost ratio per the four-part case analysis.

We caution the Clipper Executive Board from over focusing on fare coordination. Fare coordination can be a good goal: transit riders should be able to learn something in one part of the region and use that information anywhere in the region. While it's worthwhile to have a common definition for youth and senior, for example, fares have the dimension of price and price can influence behavior. Fares should be coordinated but the coordination should not be arbitrary; rather, fares should be coordinated with the goal of increasing mobility and transit ridership. A uniform \$0.50 transfer discount is only so good as it supports the outcomes and adopted policy goals our region and state have for our transportation system.

You took the big step with the Clipper card. We now ask that you pursue regional fare integration. It's hard to make it easy; figuring out an integrated fare scheme will be complicated. But it is our responsibility as leaders and specialists to delve into that complexity so that we can create simplicity for riders.

Thank you for your leadership on this crucial issue for the Bay Area. We look forward to working with you.

Sincerely,

A handwritten signature in black ink, appearing to read 'A. Fleisher', with a stylized, flowing script.

Arielle Fleisher
Transportation Policy Director



Metropolitan Transportation Commission

375 Beale Street, Suite 800
San Francisco, CA 94105

Legislation Details (With Text)

File #: 19-0922 **Version:** 1 **Name:**
Type: Report **Status:** Informational
File created: 8/1/2019 **In control:** Clipper Executive Board
On agenda: 8/19/2019 **Final action:**
Title: So Long, Swiping. The 'Tap-and-Go' Subway Is Here.
The New York Times

Sponsors:

Indexes:

Code sections:

Attachments: [4 ED Report - So Long, Swiping. The 'Tap-and-Go' Subway Is Here. - The New York Times smaller](#)

Date	Ver.	Action By	Action	Result
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Subject:

So Long, Swiping. The 'Tap-and-Go' Subway Is Here.
The New York Times

Attachments:

The New York Times

So Long, Swiping. The 'Tap-and-Go' Subway Is Here.

The switch from the MetroCard to tapping a credit card or smartphone is a major milestone for the struggling subway.



By **Emma G. Fitzsimmons**

July 30, 2019

It can often feel like New York City's subway is stuck in the Stone Age compared with systems in other cities across the world. Trains built in the 1960s still run on the subway tracks and parts of the signal system date back to before World War II.

But perhaps one of the greatest symbols of the outdated system is the MetroCard — the flimsy fare card that was introduced a quarter century ago.

Cities like London and Chicago have embraced tap cards and smartphone payments while New Yorkers still stand at turnstiles trying to swipe their MetroCard at the precise slow, but not-too-slow, speed to avoid the dreaded “Please swipe again.”

Now New York is finally getting a modern “tap-and-go” fare system that will make other cities jealous.

The system, called OMNY, short for One Metro New York, started in May on a handful of subway and bus routes. Riders can tap a credit card or smartphone on an electronic reader and keep walking.

OMNY will be installed on the rest of the subway and bus system by the end of next year and on the Long Island Rail Road and Metro-North Railroad, the two commuter railroads the authority operates, by 2021.

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Subway riders are a notoriously cynical group, but early reviews have been positive.

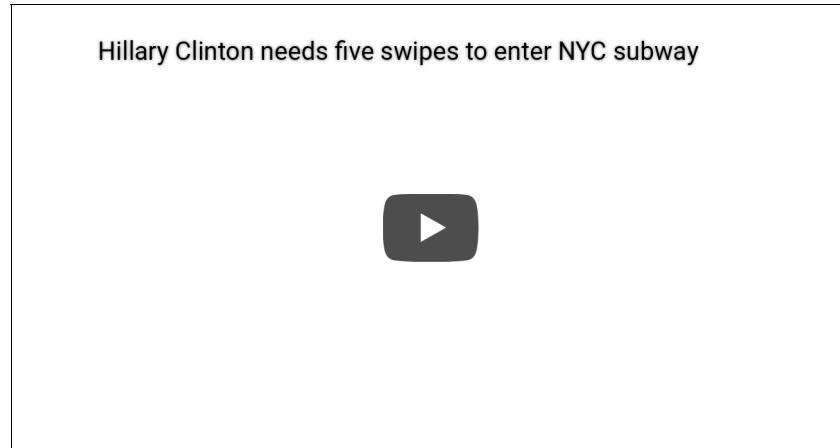
“It works perfectly,” Greg Dorsainville, 39, of White Plains, said as he tapped his Android phone on the turnstile at Grand Central Station on a recent morning. “It’s seamless.”

The switch to OMNY is a major moment for the subway and a rare bright spot for a system that continues to frustrate riders. The MetroCard system is obsolete and should have been retired years ago. OMNY is a glimpse at the future and an example of one effort to modernize the system.

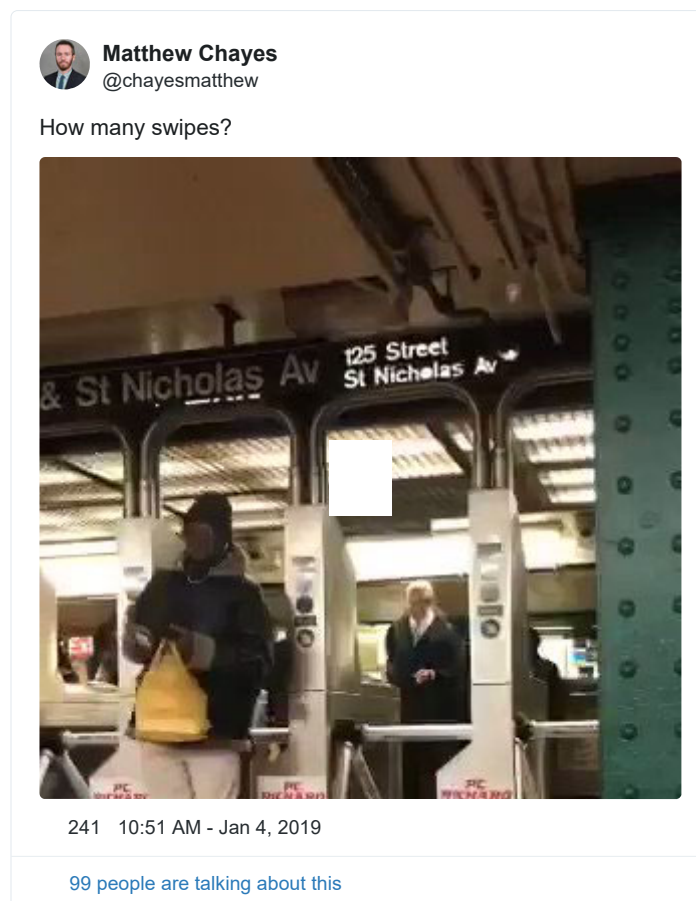
“I’m amazed that we’re getting it done and it’s had no problems so far,” said Mitchell Moss, a professor of urban planning at New York University. “This will make it easier and much faster to get to your train.”

The MetroCard has long bedeviled regular subway riders and famous ones, including Hillary Clinton, who had to

swipe five times in a row to enter the subway during her presidential campaign in 2016.



Mayor Bill de Blasio tried multiple cards at a news conference this year — an attempt that was mocked on Twitter. “It’s all in the wrist,” a rider advised.



When the MetroCard arrived in 1993, it was hailed as the “biggest change in the culture of the subways since World War II.” Its predecessor, the subway token, was officially retired in 2003, after it had been in use for 50 years.

Plans to replace the MetroCard over the last decade have been mired in delays — and costs have soared — even as other cities adopted more durable tap cards. Washington’s subway introduced its SmarTrip card two decades ago.

Boston has the CharlieCard; San Francisco has the Clipper; and Hong Kong has the Octopus. But none of the transportation systems in these cities accept bank cards or smartphones yet.

In a surprising twist, New York took so long that it is now getting the best technology, known as contactless payments. Credit card companies and banks, like Chase and American Express, are mailing out special cards with an antenna that makes them compatible with OMNY readers. The readers also accept smartphones with “digital wallets” like Apple Pay.

OMNY is being put in place by Cubic, a payments company behind the MetroCard and that oversaw London’s fare system. The project is expected to cost about \$644 million — \$200 million more than what the authority estimated in 2016.

The Metropolitan Transportation Authority, which oversees the subway and buses, is starting OMNY in phases, with the readers currently available on buses on Staten Island and at subway entrances on the 4, 5 and 6 lines between Grand Central Station in Manhattan and the Barclays Center in Brooklyn.

Subway officials are taking a slow, cautious approach after other cities have struggled with hiccups like defective readers and riders getting double charged. For now, riders can pay for one trip at a time at the full fare of \$2.75. Monthly and weekly passes will not be available through OMNY until 2021.

The agency will offer a physical OMNY card in 2021, and the MetroCard will meet its demise in 2023. Subway officials say there will always be a cash option for New Yorkers who do not have bank cards or smartphones.

The idea has progressed in fits and starts. A decade ago, the authority’s chairman, Jay Walder, had wanted to bring “tap-and-go” cards to New York after he implemented the Oyster card in London. Officials wanted to phase out the MetroCard as early as 2012, but it did not happen, in part because credit card companies were slow to make their cards compatible.

The authority said in 2016 that it was soliciting bids from companies to install the system and would award a contract by the end of that year. That did not happen until October 2017.

The project cost rose by more than \$200 million from an earlier estimate, transit officials said, because the scope grew to include things like incorporating the commuter railroads and funding for Cubic to run the “back end” technology that riders do not see.

Matt Cole, an executive at Cubic, said that OMNY’s launch had prompted banks to issue cards with contactless technology.

“Although other cities did have smart cards earlier than New York, in many ways New York has leapfrogged other cities in the world that have smart cards but not contactless,” Mr. Cole said in an interview.

Riders are already using the technology more than transit officials expected. More than 18,000 people used OMNY on a single weekday in June, according to the authority. The taps have come from credit cards issued around the world, representing 82 countries.

Al Putre, an M.T.A. executive overseeing OMNY, said about 80 percent of the transactions were made with digital wallets on smartphones, not bank cards. Mr. Putre joined the transit agency in 1987 and helped oversee the introduction of the MetroCard.

“Not everyone has a contactless card,” he said. “Everyone has a smartphone.”

OMNY has other potential benefits, subway officials said: reducing crowds at ticket machines; allowing for all-door boarding on buses to speed up service; saving millions of dollars to maintain the MetroCard system; and helping reduce fare evasion which some riders blame on broken ticket machines.

Subway officials said they would protect riders' personal information and that OMNY adheres to industry standards, like encrypting transaction data. The agency will not track customers, officials said, and will use anonymous data to analyze rider patterns.

At Grand Central Station, most subway riders were still using their MetroCards on a recent morning, even if they had trouble swiping. The OMNY readers confused some visitors who tried to tap them with their MetroCard. A subway worker stood to the side offering advice.

Ryan Frere used OMNY for the first time while visiting from Boston.

"It was super easy," he said. "It's a lot better than getting a ticket from the machine."

Mr. Frere, 41, who works in the payments industry, said OMNY was easier for out-of-towners who did not know which subway pass to buy.

"It saved me some time," he said. "I didn't have to worry about figuring out how much to pay."

After M.T.A. Setbacks, No-Swipe Fare Cards Are Still Stuck in the Future Feb. 24, 2013



New York to Replace MetroCard With Modern Way to Pay Transit Fares Oct. 23, 2017



Emma G. Fitzsimmons is a transit reporter in New York. She previously covered breaking news at The Times and worked as a local reporter at the Chicago Tribune. @emmagf

A version of this article appears in print on July 30, 2019, Section A, Page 27 of the New York edition with the headline: Tap Replacing Swipe, In Subway Revolution

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Metropolitan Transportation Commission

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Legislation Details (With Text)

File #: 19-0953 **Version:** 1 **Name:**

Type: Report **Status:** Informational

File created: 8/19/2019 **In control:** Clipper Executive Board

On agenda: 8/19/2019 **Final action:**

Title: Excerpts from: Cal-Integrated Travel Project Market Sounding Kick-off Event

Sponsors:

Indexes:

Code sections:

Attachments: [4_ED Report_Handout_Market_Sounding_Presentation.pdf](#)

Date	Ver.	Action By	Action	Result
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Subject:
Excerpts from: Cal-Integrated Travel Project Market Sounding Kick-off Event

Recommended Action:
Information

Attachments:

Welcome

Cal-ITP Market Sounding Kick-off Event

Excerpts from:



The five objectives of Cal-ITP



Improve the transit experience
in California



Increase public agency buying power
for technology and services



Meet California
climate change law

Reduce inequality



Realize benefits for transit services



Illustrative Use Cases

Infrequent riders

Value - efficiency

Mix of public transit, ride-hailing, car-sharing, possibly bike/scooter

Current Payment Options:

Cash, bank card, app

Discounted Fares

Value - cost

Primarily public transit or personal car

Current Payment Options:

Clipper/Compass/TAP Card

Commuters

Value - consistency

Primarily public transit; occasionally uses private operators for first/last mile connections

Current Payment Options:

Clipper/Compass/TAP Card, bank card

Income Discounts

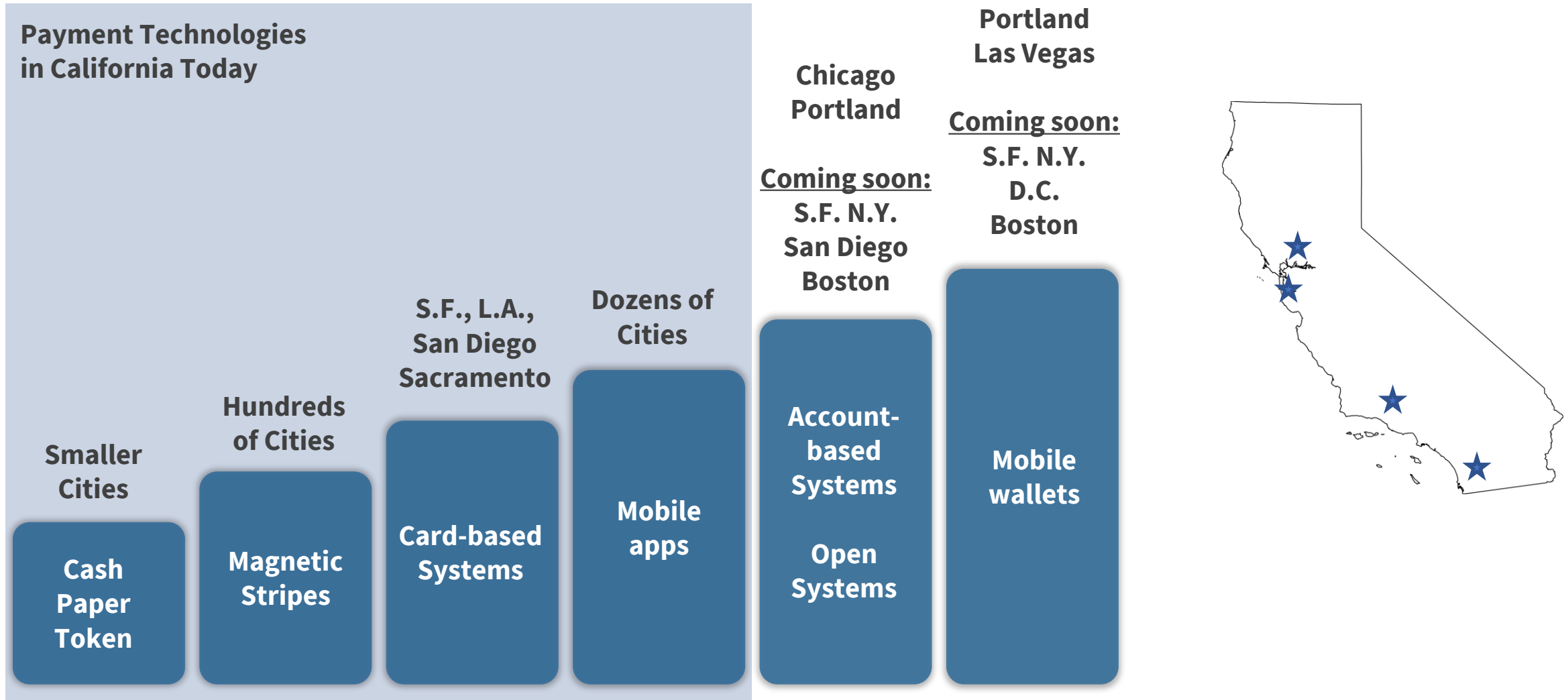
Value - access/equity

Current Payment Options:

Clipper/Compass/TAP Card, cash



Transit Payment Systems in the USA



Prerequisites of a new system

- Provide payment solution that serves **all customer groups**
 - Adults, seniors, youth, children
 - Full price and discount-eligible customers
 - Commuters and infrequent users
 - Long-haul and short-trip travelers
- Enable integrated payment **and pricing** across mobility services
 - Public Transit
 - Bike Share / Scooter Share / Car Share
 - Transportation network companies (TNCs)
- Introduce new payment options to both new and established services with **minimal barriers to entry**

Prerequisites of a new system

- Provide unbanked and underbanked customers **equal access to all mobility services**
- Prioritize customer experience, and encourage use of services by **reducing friction** in the payment process
- Provide **integrated trip planning and payment** across services where practical
- Leverage economies of scale to provide a **cost-effective solution** statewide for customers