



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

## Meeting Agenda

### Clipper Executive Board

*Members:*

*Denis Mulligan, Chair      Edward D. Reiskin, Vice Chair*

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

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Monday, March 18, 2019

1:30 PM

Caltrain / SamTrans  
1250 San Carlos Ave, 2nd Floor  
San Carlos CA, 94070  
Caltrain / SamTrans Auditorium

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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, all guests will sign in with the lobby guard and take the elevators to the second floor Auditorium. For meeting location questions, please contact Paola Ledezma at 650-508-6222.

#### 1. Roll Call / Confirm Quorum

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

#### 2. Welcome Therese W. McMillan, Executive Director MTC

#### 3. Consent Calendar

3a. [19-0178](#) Minutes of the February 25, 2019 Meeting

**Action:** Board Approval

**Attachments:** [3a\\_CEB Minutes\\_Feb 25 2019.pdf](#)

#### 4. Approval

- 4a. [19-0212](#) Clipper® Two Year Budget and Work Plan
- Approval of Clipper Two Year Operating and Capital Budget and Work Plan.
- Action:** Board Approval
- Presenter:** Edward Meng
- Attachments:** [4a Two Year Budget and Work Plan.pdf](#)
- 4b. [19-0226](#) Clipper® Contract Amendment - Next Generation Clipper System Advisor Contract: IBI Group (IBI) (\$4,000,000)
- Approval of a contract amendment with IBI in an amount not to exceed \$4 million for continued support to the next generation Clipper system project.
- Action:** Board Approval
- Presenter:** Jason Weinstein
- Attachments:** [4b IBI Contract Amendment.pdf](#)

#### 5. Information

- 5a. [19-0213](#) Current Clipper® Program Update
- Update on the current Clipper system.
- Action:** Information
- Presenter:** Eric Davis
- Attachments:** [5a\\_C1 Program Update.pdf](#)
- 5b. [19-0214](#) Next Generation Clipper® System Integrator Implementation Update
- Update on the Next-Generation Clipper System Implementation.
- Action:** Information
- Presenter:** Jason Weinstein
- Attachments:** [5b\\_C2 SI Update.pdf](#)

**6. Executive Director's Report – Kuester**

**7. Public Comment / Other Business**

**8. Adjournment / Next Meeting**

**The next meeting of the Clipper® Executive Board will be Monday, April 15, 2019 at 1:30 p.m. in the BART Board Room, 3rd Floor, 344 20th Street, Oakland, 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](http://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.

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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)

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**File #:** 19-0178      **Version:** 1      **Name:**  
**Type:** Minutes      **Status:** Consent  
**File created:** 2/15/2019      **In control:** Clipper Executive Board  
**On agenda:** 3/18/2019      **Final action:**  
**Title:** Minutes of the February 25, 2019 Meeting  
**Sponsors:**  
**Indexes:**  
**Code sections:**  
**Attachments:** [3a\\_CEB Minutes\\_Feb 25 2019.pdf](#)

Date	Ver.	Action By	Action	Result
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**Subject:**  
Minutes of the February 25, 2019 Meeting

**Recommended Action:**  
Board Approval

**Attachments:**



## Agenda Item 3a

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*

*Grace Crunican, Nuria Fernandez, Jim Hartnett,  
Steve Heminger, Michael Hursh, Rick Ramacier,  
Nina Rannells*

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Monday, February 25, 2019

1:30 PM

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

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### 1. Roll Call / Confirm Quorum

**Present:** 7 - Chair Mulligan, Vice Chair Reiskin, Board Member Crunican, Board Member Hartnett, Board Member Heminger, Board Member Ramacier, and Board Member Rannells

**Absent:** 2 - Board Member Fernandez, and Board Member Hursh

Ahsan Baig acted as a delegate and voting member of the Board in place of Michael Hursh. Actions noted below as "Hursh" were taken by Baig.

### 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:** 8 - Chair Mulligan, Vice Chair Reiskin, Board Member Crunican, Board Member Hartnett, Board Member Heminger, Board Member Hursh, Board Member Ramacier and Board Member Rannells

**Absent:** 1 - Board Member Fernandez

**2a.**     [19-0027](#)     Minutes of the December 17, 2018 Meeting

**Action:** Board Approval

**Attachments:** [2a\\_CEB Minutes\\_Dec 17 2018.pdf](#)

**3. Approval****3a.     [19-0110](#)     Clipper® Program Collaboration Policy**

Principles and Guidelines for Partnership with the Clipper Program.

**Action:** Board Approval

**Presenter:** Carol Kuester

**Attachments:** [3a Clipper Program Collaboration Policy.pdf](#)

No action was taken on this item; staff will recommend policy at a later time.

**4. Information****4a.     [19-0043](#)     Clipper® Draft Two Year Budget and Work Plan**

Clipper Two Year Operating and Capital Budget and Work Plan.

**Action:** Information

**Presenter:** Edward Meng

**Attachments:** [4a Clipper Two Year Budget and Work Plan w-Attachments.pdf](#)  
[4a Handout Updated Attachment C.pdf](#)

**4b.     [19-0044](#)     Regional Fare Coordination and Integration**

Recent efforts on Regional Transit Fare Coordination and Integration.

**Action:** Information

**Presenter:** Carol Kuester

**Attachments:** [4b Regional Fare Coordination.pdf](#)

**4c.     [19-0144](#)     Current Clipper® Program Update**

Update on the current Clipper system.

**Action:** Information

**Presenter:** Lysa Hale

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

**4d.     [19-0112](#)     Next Generation Clipper® System Integrator Implementation Update**

Update on the Next-Generation Clipper System Integrator Implementation.

**Action:** Information

**Presenter:** Jason Weinstein

**Attachments:** [4d\\_C2 SI Update.pdf](#)

**5. Executive Director's Report – Kuester**

**6. Public Comment / Other Business**

**7. Adjournment / Next Meeting**

**The next meeting of the Clipper® Executive Board will be Monday, March 18, 2019 at 1:30 p.m. in the Caltrain / SamTrans Board Room, 2nd Floor, 1250 San Carlos Avenue, San Carlos, CA.**





# Metropolitan Transportation Commission

375 Beale Street, Suite 800  
San Francisco, CA 94105

## Legislation Details (With Text)

**File #:** 19-0212      **Version:** 1      **Name:**  
**Type:** Report      **Status:** Committee Approval  
**File created:** 2/26/2019      **In control:** Clipper Executive Board  
**On agenda:** 3/18/2019      **Final action:**  
**Title:** Clipper® Two Year Budget and Work Plan  
Approval of Clipper Two Year Operating and Capital Budget and Work Plan.

**Sponsors:**

**Indexes:**

**Code sections:**

**Attachments:** [4a Two Year Budget and Work Plan.pdf](#)

Date	Ver.	Action By	Action	Result
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**Subject:**

Clipper® Two Year Budget and Work Plan

Approval of Clipper Two Year Operating and Capital Budget and Work Plan.

**Presenter:**

Edward Meng

**Recommended Action:**

Board Approval

**Attachments:**



## Agenda Item 4a

Bay Area Metro Center  
375 Beale Street  
San Francisco, CA 94105  
TEL 415.778.6700  
WEB [www.mtc.ca.gov](http://www.mtc.ca.gov)

TO: Clipper® Executive Board

DATE: March 12, 2019

FR: Carol Kuester

RE: Clipper® Two Year Budget and Work Plan

This memorandum presents the Clipper budget and work plan for FYs 2019-20 and 2020-21 for the Executive Board's review and approval. The Executive Board discussed and gave feedback on the Clipper Draft Two Year Budget and Work Plan at its meeting on February 25, 2019.

Under the Memorandum of Understanding, the Executive Board reviews and adopts a biennial Clipper budget. The budget is intended to provide an understanding of the scope and size of major expense categories and confirm availability of funding. The budget includes a work plan and staffing plan for the following two years and is updated annually. The budget includes both current Clipper system and next generation Clipper items, as well as transit-operator led and funded projects to enhance the current system.

Attached for your review are the budget and work plan for FYs 2019-20 and 2020-21. Included in the attachments are:

- Attachment A: Clipper Projected Operating Budget and Operating Budget Detail;
- Attachment B: Clipper Projected Capital Budget and Capital Budget Detail; and
- Attachment C: MTC Clipper FY 2019-20 Organizational Chart.

### Highlights

1. Both Operating and Capital Budgets are balanced in the two year timeframe.
2. The Capital Budget is covered and funded through FY 2024-25.
3. A deficit in the Operating Budget is projected to occur in FY 2022-23.
4. At the request of the transit operators, an additional \$600K is included in the annual capital expenses to fund additional investment in the current system, particularly for small operators.
5. The organization chart assumes three additional MTC staff to support the accelerated deployment and continued development and deployment of the next generation Clipper system.
6. The capital budget includes an additional \$1.5M in technical consultant support for the next generation Clipper system to deliver accelerated deployment.

### Detail Proposed FY 2019-20 and 2020-21 Budget and Work Plan

Details of the Clipper Two Year Budget and Work Plan are listed below.

1. Since the last approved Clipper Projected Operating Budget, the program has managed to identify several fund sources to help offset short-term Operating deficits. In December 2018, the Clipper Executive Board approved the disbursement of \$1.46M of Inactive Unregistered Funds to the Clipper program, which is now reflected in the current year's Operating Budget (FY 2018-19). Furthermore, at the end of 2018, a portion of Float Account funds deemed not immediately needed for daily operations were invested in a money market fund and began earning interest. That interest is expected to total an estimated \$1.5M annually based on current returns.

2. Based on this budget, an operating funding shortfall occurs in FY 2022-23, with an operating deficit of \$4.4M that grows larger in the following years. This is largely due to concurrent operating costs for both the current and next generation Clipper systems. MTC and transit agency staff are working to identify potential funding sources and solutions to address this shortfall, which may require changes to MTC and operator contributions.
3. Operating costs and MTC/transit operator contributions in this budget are assumed to be similar to current operating costs. The current assumption is that the current and next generation Clipper systems will operate in parallel between FYs 2019-20 (accelerated deployment) to 2023-24 (full deployment of the next generation system). Operator and Clipper staff are meeting to propose a detailed next generation Clipper cost sharing plan.
4. Since the approval of last year's Clipper Two Year Budget and Work Plan, the full capital cost of approximately \$194M for the next generation Clipper system integrator contract is now included in the capital budget. This budget assumes that expenses are incurred when major milestones and equipment deployment are achieved, and assumes that they occur at the current project schedule.
5. New fund sources in the capital budget include:
  - Regional Measure 3 - \$50M
    - The Regional Measure 3 Bill contains \$50M in funds for the design, development, testing, installation, and transition of the next generation Clipper system.
    - State of Good Repair (SGR) Population-Based Funds - \$10.2M annually beginning FY 2018-19.
    - Senate Bill 1 funds ~\$10.2M annually for the development and deployment of the next generation Clipper system. Those funds are assumed in the Clipper budget until capital needs are met.
6. The capital budget assumes three additional MTC staff members to support various initiatives related to transit operator support, next generation Clipper deployment, and other various initiatives, as well as increased next generation Clipper technical advisor support for transit operators in advance of accelerated deployment.
7. At the request of the transit operators, an annual pool of \$600K in capital funds is budgeted for new capital initiatives in order to support smaller projects, especially for smaller operators.

### Recommendation

MTC and transit operator staff recommend the Clipper<sup>®</sup> Executive Board approve and adopt the Clipper<sup>®</sup> Two Year Operating and Capital Budget and Work Plan as shown in the attachments to this memorandum.



Carol Kuester

### Attachments:

- Attachment A: Clipper Projected Operating Budget and Operating Budget Detail
- Attachment B: Clipper Projected Capital Budget and Operating Capital Detail
- Attachment C: MTC Clipper FY 2019-20 Organizational Chart

**CLIPPER® PROJECTED OPERATING BUDGET - MARCH 4, 2019**

Item No.	Descriptions	Current FY 18/19 (\$M)	FY 19/20 (\$M)	FY 20/21 (\$M)	FY 21/22 (\$M)	FY 22/23 (\$M)	FY 23/24 (\$M)	FY 24/25 (\$M)
<b>MTC Operating Costs</b>								
1	Annual C1 Operating Costs - MTC	\$8.8	\$9.3	\$9.7	\$10.0	\$5.0	\$1.0	\$0.0
2	Annual Next Gen Clipper SI Operating Costs - MTC	\$0.0	\$0.3	\$0.8	\$1.9	\$6.4	\$7.3	\$7.7
3	Annual Next Gen Clipper Other Operating Costs - MTC <sup>1</sup>	\$0.0	\$0.7	\$1.3	\$2.0	\$2.6	\$2.7	\$2.8
4	MTC Staff	\$1.3	\$1.3	\$1.3	\$1.4	\$1.4	\$1.5	\$1.6
5	Clipper® Operations - Misc.	\$0.6	\$0.6	\$0.7	\$0.7	\$0.7	\$0.8	\$0.8
6	In Person Customer Service Centers	\$1.1	\$1.2	\$1.2	\$1.3	\$1.4	\$1.4	\$1.5
7	Customer Education Program	\$1.4	\$1.8	\$1.8	\$1.9	\$2.0	\$2.1	\$2.2
8	Consultants	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
9	<i>Subtotal MTC expenses</i>	\$13.4	\$15.0	\$16.9	\$19.1	\$19.6	\$16.9	\$16.6
<b>Transit Agency Costs</b>								
10	Annual C1 Operating Costs - Transit Agencies	\$17.6	\$18.5	\$19.4	\$19.9	\$10.0	\$2.0	\$0.0
11	Annual Next Gen Clipper SI Operating Costs - Transit Agencies	\$0.0	\$0.5	\$1.6	\$3.8	\$13.1	\$14.8	\$15.7
12	Annual Next Gen Clipper Other Operating Costs - Transit Agencies <sup>2</sup>	\$0.0	\$3.3	\$6.2	\$8.5	\$11.9	\$12.2	\$12.5
13	<i>Subtotal Transit Agency expenses</i>	\$17.6	\$22.4	\$27.2	\$32.3	\$34.9	\$29.0	\$28.1
14	<b>Total Operating Costs (MTC+Transit)</b>	<b>\$31.0</b>	<b>\$37.4</b>	<b>\$44.1</b>	<b>\$51.4</b>	<b>\$54.6</b>	<b>\$45.9</b>	<b>\$44.8</b>
<b>Operating Revenues</b>								
15	Total STA Revenues	\$9.7	\$7.1	\$7.5	\$7.3	\$7.5	\$7.7	\$7.8
16	Total RM2 Marketing Revenue	\$1.1	\$1.1	\$1.1	\$1.1	\$1.1	\$1.1	\$1.1
17	Additional RM2 Marketing Revenue <sup>3</sup>	\$1.5	\$1.7	\$1.7	\$1.7	\$1.7	\$1.7	\$1.7
18	Additional RM2 Operating Revenue <sup>3</sup>	\$2.0	\$2.0	\$2.0	\$2.0	\$2.0	\$2.0	\$2.0
19	Unregistered Inactive Funds	\$1.5	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
20	Cap and Trade	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
21	Float Account Interest	\$0.0	\$1.5	\$1.5	\$1.5	\$1.5	\$1.5	\$1.5
22	Total Transit Agency Revenue	\$17.6	\$22.4	\$27.2	\$32.3	\$34.9	\$29.0	\$28.1
23	<b>Total Operating Revenue</b>	<b>\$33.4</b>	<b>\$35.8</b>	<b>\$41.0</b>	<b>\$45.9</b>	<b>\$48.7</b>	<b>\$43.0</b>	<b>\$42.2</b>
24	<b>Cumulative Surplus/Deficit<sup>4</sup></b>	<b>\$8.6</b>	<b>\$7.0</b>	<b>\$3.9</b>	<b>\$1.4</b>	<b>(\$4.4)</b>	<b>(\$7.3)</b>	<b>(\$9.8)</b>

<sup>1</sup> Includes O&M for CSC

<sup>2</sup> Includes O&M for CSC, Pass Through Fees (incl. Mobile Fees & Third Party Commissions), Payment Gateway Fees, etc.

<sup>3</sup> Contingent upon availability and MTC Commission Approval

<sup>4</sup> Operations Carry Forward From Prior Year = \$6.2M

Assumes continuation of ~ 1/3 MTC, 2/3 Transit Agency split of non-Pass Through Fees in C2 & Agencies can pay their share

Assumes 10% tax, no contingency

**TABLE 1A: Operating Budget Detail**  
**March 4, 2019**

Operating Budget Item #	Category	Project Name	Vendor	Current FY 18/19 (\$M)	FY 19/20 (\$M)	FY 20/21 (\$M)
1	Annual C1 Operating Costs - MTC	MTC share of annual C1 operating costs per the MOU	Cubic	8.82	9.26	9.72
2	Annual Next Generation Clipper System Integrator Operating Costs - MTC	Estimated MTC share of Next-Gen Clipper System Integrator annual operating costs	Cubic	0.00	0.27	0.79
3	Annual Next Generation Clipper Other Operating Costs - MTC	Estimated MTC share of Next-Gen Clipper Other Operating costs	TBD	0.00	0.66	1.32
4	MTC Staff	MTC Staff	MTC	1.35	1.25	1.31
5	Clipper Operations - Misc.	Data Store, ATT Network Services, Storage Fees	Various	0.11	0.12	0.12
		SSAE Audit	Cubic	0.22	0.23	0.24
		Operational Reporting and Analysis	RDA	0.20	0.21	0.22
		Website Maintenance	Cubic	0.08	0.08	0.08
6	In Person Customer Service Centers	AC Transit In Person Customer Service Center	AC Transit	0.25	0.25	0.25
		Embarcadero Kiosk	Fanueil	0.50	0.53	0.56
		Bay Crossings In Person Customer Service Center	Nematode	0.30	0.32	0.34
		Transportation Information Booth	Fanueil	0.08	0.08	0.08
7	Customer Education	Creative design for website and customer education initiatives	MIG	0.55	0.55	0.55
		Ad Campaigns	TBD	0.50	0.50	0.50
		Research/Survey	TBD	0.00	0.15	0.15
		Next-Generation Customer Research	TBD	0.00	0.25	0.25
		Outreach Support	Caribou	0.20	0.25	0.25
		Production costs for signage and collateral	TBD	0.02	0.04	0.04
		Cardholder Materials	Cubic	0.15	0.05	0.10
8	Consultants	Program Mgt. and Strategic Planning	Synapse Strategies	0.03	0.00	0.00
9	TOTAL			13.36	15.04	16.88

**CLIPPER® PROJECTED CAPITAL BUDGET - MARCH 4, 2019**

Item									
No.	Description	Current FY 18/19 (\$M)	FY 19/20 (\$M)	FY 20/21 (\$M)	FY 21/22 (\$M)	FY 22/23 (\$M)	FY 23/24 (\$M)	FY 24/25 (\$M)	TOTAL FY 18/19 - 24/25 (\$M)
Capital Costs (See Table 2 for Cost Detail)									
	Current Clipper® System (C1)								
1	MTC Staff	\$1.2	\$1.3	\$1.3	\$0.7	\$0.0	\$0.0	\$0.0	\$4.5
2	Clipper Cards & Fare Media	\$4.0	\$4.0	\$4.0	\$3.0	\$3.0	\$2.0	\$1.0	\$21.0
3	Consultants	\$0.8	\$1.0	\$1.0	\$1.0	\$1.0	\$1.0	\$0.0	\$5.8
4	System Enhancements	\$1.3	\$0.6	\$0.6	\$0.6	\$0.0	\$0.0	\$0.0	\$3.1
5	System Enhancements - Operator Requested and Paid	\$0.9	\$1.6	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$2.4
6	Infrastructure Refresh/End-of-Lifecycle Replacement	\$3.5	\$3.0	\$3.0	\$0.0	\$0.0	\$0.0	\$0.0	\$9.5
	Next Generation Clipper® System								
7	MTC Staff	\$1.9	\$3.5	\$3.7	\$4.6	\$5.6	\$5.9	\$6.2	\$31.3
8	System Integrator Contract <sup>1</sup>	\$12.9	\$47.8	\$22.4	\$62.0	\$15.6	\$28.5	\$5.2	\$194.3
9	Customer Service Center	\$0.0	\$1.0	\$0.5	\$0.5	\$0.5	\$0.0	\$0.0	\$2.5
10	Integrate Existing TVMs/Faregates	\$0.0	\$4.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$4.0
11	Replace TVMs/Faregates - Operator Paid	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
12	Consultants	\$1.9	\$2.0	\$2.7	\$2.0	\$2.1	\$2.2	\$2.3	\$15.2
13	Total Expenses	\$28.3	\$69.7	\$39.2	\$74.4	\$27.8	\$39.5	\$14.7	\$293.6
Revenue									
14	TCP - FTA	\$5.0	\$0.0	\$14.1	\$15.5	\$15.5	\$15.5	\$15.5	\$81.1
15	TCP - OBAG2-STP/CMAQ	\$5.7	\$8.8	\$20.4	\$0.0	\$0.0	\$0.0	\$0.0	\$34.8
16	TCP - OBAG2-RM2	\$2.6	\$10.4	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$13.0
17	Fare Media and Card Fee Revenue	\$5.0	\$5.0	\$5.0	\$5.0	\$5.0	\$5.0	\$5.0	\$35.0
18	Operator Paid Revenue	\$0.9	\$1.6	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$2.4
19	Cap and Trade	\$3.1	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$3.1
20	Regional Measure 3	\$0.0	\$0.0	\$0.0	\$50.0	\$0.0	\$0.0	\$0.0	\$50.0
21	SB1 State of Good Repair	\$10.2	\$10.2	\$10.2	\$10.2	\$4.5	\$0.0	\$0.0	\$45.3
22	BATA Rehab	\$9.6	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$9.6
23	Total Annual Revenue	\$42.1	\$35.9	\$49.7	\$80.7	\$24.9	\$20.5	\$20.5	\$274.3
24	Cumulative Surplus/Deficit <sup>2</sup>	\$38.8	\$5.1	\$15.6	\$21.9	\$19.1	\$0.0	\$5.8	

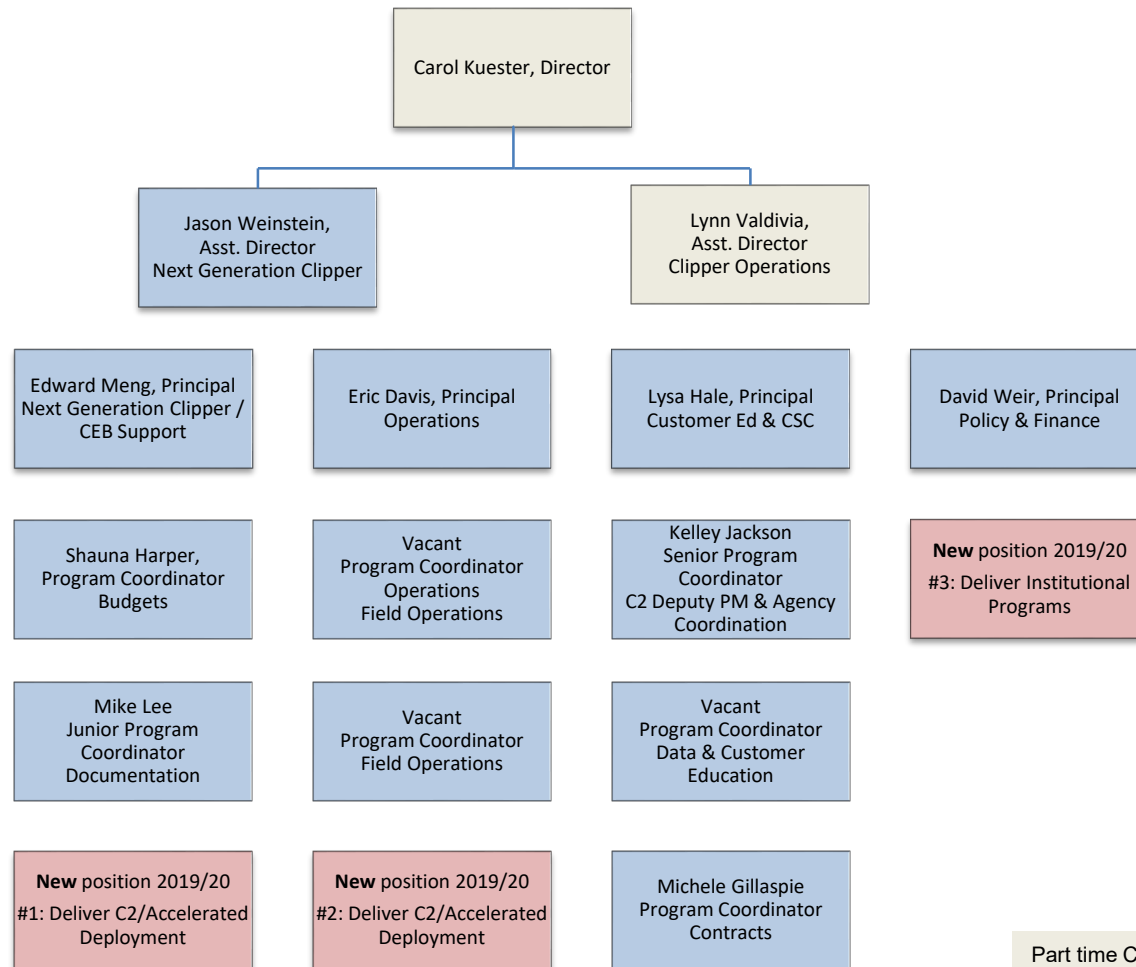
<sup>1</sup> Assumes Contract Ceiling Price, No Open Payment Deployment, 15% Contingency, 10% tax where applicable

<sup>2</sup> Capital Carry Forward From Prior Year = \$25.1M

TABLE 1A: Capital Budget Detail  
March 4, 2019

Item #	Category	Project Name	Vendor	Current 2018/19 (\$M)	2019/20 (\$M)	2020/21 (\$M)	Description
Current Clipper System							
1	MTC Staff	MTC Staff	MTC	1.20	1.26	1.32	MTC staff funded with capital funds
2	Clipper Cards	Clipper card order	Cubic	4.00	4.00	4.00	Annual Clipper card order
3	Current System Consultants	Technical Advisor	Jacobs	0.60	0.80	0.80	Tech Advisor support expected to increase in the short term to fulfill current staffing needs and maintain state of good repair of current system
		Capital projects support	TBD - bench contract	0.20	0.20	0.20	As needed support from Consultant Assistance Bench, including data and reporting infrastructure improvements
			Subtotal:	0.80	1.00	1.00	
4	Current System Enhancements	Credit card improvement initiatives	Cubic	0.20	-	-	Card acceptance/fraud reduction, selective card blocking
		Regional Means-Based Discount	Cubic	1.00	-	-	Implementation of a regional means-based discount on Clipper for multiple operators
		Operator Requested Regionally Approved Enhancements	Cubic	-	0.60	0.60	Enhancements to the system specially requested by operators that are approved by the region
		Operator asset management tracking	Cubic	0.10	-	-	Enhancement for automated tracking of bus equipment and maintenance
			Subtotal:	1.30	0.60	0.60	
5	Current System Enhancements - Operator Requested and Paid	Caltrain - TVM Integration	TBD	-	0.1	-	Integrate Caltrain TVMs with Clipper
		GG - Business Rule Simplification	Cubic	0.12	-	-	Implementation of new transfer rules for Golden Gate Transit
		GG - Tiburon	Cubic	TBD	TBD	TBD	Creation of Tiburon Ferry product
		GG - Tiburon	Cubic	TBD	TBD	TBD	Equipment Installation at Tiburon Ferry Terminal for CIDs, TVM, and TDS
		GG - TVM Replacement	Cubic	TBD	TBD	TBD	Third Party Integration with an external TVM supplier, or a solution for a new TVM not tied to SFMTA
		Marin Transit - Standalone Operator	Cubic	-	TBD	TBD	Conversion of business rules from dual-tag to flat fare payment
		SFMTA - Lifeline Pass	Cubic	-	1.5	-	Transition Lifeline Pass to Clipper-only
		VTA - TVM Integration	Cubic	0.16	-	-	Integration of VTA TVMs to dispense Clipper cards
		WETA - Richmond & San Francisco	Cubic	0.60	-	-	Equipment Installation at Richmond Ferry Terminal and expansion at San Francisco Ferry Terminal
		Multiple Operators - Fleet Replacement and Expansion	Cubic	TBD	TBD	TBD	Bus device procurements for fleet replacements and expansion
		Multiple Operators - New Driver Console (DC3) - Single Point Log-on	Cubic	TBD	TBD	TBD	Onboard integration of Clipper and other vehicle systems for operators with new bus devices
			Subtotal:	0.88	1.56	-	
6	Infrastructure Refresh/End-of-Lifecycle	Replace end-of-life equipment as needed	Cubic	3.50	3.00	3.00	Replace obsolete equipment at end of lifecycle
			Subtotal:	3.50	3.00	3.00	
Next Generation Clipper System							
7	MTC Staff	MTC Staff	MTC	1.89	3.50	3.68	MTC staff funded with capital funds eligible for equipment/system replacement
8	System Integrator Contract	Next Generation Clipper System Integrator	Cubic	12.88	47.79	22.35	Replace back end systems and front end devices (retailer devices, ticket office terminals, vehicle and platform card readers, handheld readers)
9	Customer Service Center	Next Generation Clipper Customer Service Center provider	TBD	-	1.00	0.50	Provide customer service functions related to the Next-Generation Clipper fare payment system
10	Integrate TVMs and Faregates	Integrate existing TVMs and faregates	TBD	-	4.00	-	Existing TVMs and faregates will be integrated into the next-generation system. Individual operators are responsible for replacement (see Line 10). Integration estimate assumes Cubic supplies web-based API, all existing hardware is adequate, and no change to credit/debit gateways.
11	Replace TVMs and Faregates	Replace TVMs and faregates	TBD	-	-	-	Replacement of TVMs and faregates is <u>not</u> included in the scope of next-generation Clipper; only integration of the existing TVMs and faregates. Operators are responsible for replacement costs.
12	Consultants	Next Generation Clipper RFP Financial Evaluation	KPMG	0.10	-	-	Financial evaluation and review of vendor proposals for cost realism and cost effectiveness
		Next Generation Clipper Strategic Planning/Advice Contract	Invoke	0.20	0.20	0.20	Strategic planning/advice during next-generation Clipper procurement and implementation
		Next Generation Clipper Legal Support	Thompson Coburn	0.20	-	-	Legal and contracting support for next-generation Clipper procurement and implementation
		Next Generation Clipper Technical Advisor	IBI Group	1.40	1.75	2.50	Next-generation Clipper planning, procurement, management, implementation, and technical support
			Subtotal:	1.90	1.95	2.70	
13		TOTAL		28.35	69.66	39.15	

# MTC Clipper FY 2019-20 Organizational Chart



Part time Clipper staff = 2

Full time Clipper staff = 12

Proposed New Clipper staff = 3





# Metropolitan Transportation Commission

375 Beale Street, Suite 800  
San Francisco, CA 94105

## Legislation Details (With Text)

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**File #:** 19-0226      **Version:** 1      **Name:**  
**Type:** Contract      **Status:** Committee Approval  
**File created:** 3/6/2019      **In control:** Clipper Executive Board  
**On agenda:** 3/18/2019      **Final action:**  
**Title:** Clipper® Contract Amendment - Next Generation Clipper System Advisor Contract: IBI Group (IBI) (\$4,000,000)

Approval of a contract amendment with IBI in an amount not to exceed \$4 million for continued support to the next generation Clipper system project.

**Sponsors:**

**Indexes:**

**Code sections:**

**Attachments:** [4b IBI Contract Amendment.pdf](#)

Date	Ver.	Action By	Action	Result
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**Subject:**

Clipper® Contract Amendment - Next Generation Clipper System Advisor Contract: IBI Group (IBI) (\$4,000,000)

Approval of a contract amendment with IBI in an amount not to exceed \$4 million for continued support to the next generation Clipper system project.

**Presenter:**

Jason Weinstein

**Recommended Action:**

Board Approval

**Attachments:**



## Agenda Item 4b

Bay Area Metro Center  
375 Beale Street  
San Francisco, CA 94105  
TEL 415.778.6700  
WEB [www.mtc.ca.gov](http://www.mtc.ca.gov)

TO: Clipper® Executive Board

DATE: March 12, 2019

FR: Carol Kuester

RE: Clipper® Contract Amendment - Next Generation Clipper System Advisor Contract: IBI Group (IBI) (\$4,000,000)

This memorandum requests Executive Board approval to extend the IBI Group (IBI) contract term to June 2021 and to add \$4,000,000 over FY 2019-20 and FY 2020-21 to provide technical advice to MTC and the transit operators, support management of the next generation Clipper system integrator contract, oversee design and testing of the next generation Clipper system, support related Clipper system procurements, and provide additional consulting services as needed to support delivery of the next generation Clipper system.

### Background

In 2013, MTC and the 22 transit operators participating in the Clipper program began planning for the next generation Clipper system. Together, MTC and the operators developed a scope of work for a consultant to advise and help manage the procurement of the next generation Clipper system service provider(s) and equipment supplier(s). In September 2014, MTC issued a Request for Proposal (RFP) for consultant support to the next generation Clipper system. The scope included support for:

- System design;
- System development;
- Testing; and
- Transition to a new fare payment system and operations.

The RFP provided for a contract period through June 2020 with options to extend up to an additional 10 years and included support of one or more procurements for the new system. This RFP led to a contract with IBI that was executed in May 2015 and is currently in force through June 2020.

### IBI Performance, Resources and Staffing

The IBI contract term was set to allow MTC and the transit operators the opportunity to re-evaluate Clipper next generation technical advisor needs at key points (at completion of the system integrator procurement, and after system implementation) so that we could develop another technical advisor support strategy if the work was deemed unsatisfactory. MTC and transit agency staff have been satisfied with IBI's work to date. IBI Project Manager Paul Lavalley and his team provided valuable support during the next generation Clipper system procurement. Their work ensured a smooth procurement process and contract award within a tight schedule. The IBI team has established good working rapport with MTC staff and transit agency staff. In January of this year, IBI added Angus Davol to lead the system integration, transit operator coordination, and special programs elements of the project. Mr. Davol is based in San Francisco and brings a strong history of work previously at IBI Group in Boston and San Francisco; at Stanford University in transportation program development and planning; and at San Francisco International Airport in landside operations management, including development and implementation of tracking and revenue collection systems for ground transportation vehicles, including taxis and TNCs. His experience is highly relevant not only to the


technical work of delivering the new Clipper system, but also to planning for how the next generation Clipper system could potentially serve as a foundation for Mobility-as-a-Service applications, expanding its reach to include non-transit and other emerging mobility services.

Attachment A summarizes actual and projected expenditures on the IBI contract compared to planned expenditures. FY 2015-16 contract expenditures were higher than planned because of some unexpected tasks and because work was provided on a time and materials basis. MTC staff moved quickly to provide leadership in the RFP and procurement process and managing work on a deliverables basis, which resulted in better alignment of scope and budget expectations.

The Two Year Budget and Work Plan, agenda item 3a of this Board package, includes funds for IBI's enhanced support during the accelerated deployment phase of the next generation Clipper project and continued support of the program during design and development of the account-based systems. The level of funding required for resources under the IBI contract increases in fiscal years 2019-20 and 2020-21. The accelerated deployment support plan includes approximately five to six full time equivalent staff from IBI, including three full time staff members located in the Bay Area, with a fourth to be added in the coming months. IBI's team will be essential in supporting the rollout of the next generation system accelerated deployment items, and design of the next generation account-based system, and providing support directly to the transit operators on system integration in preparation for both accelerated deployment and account-based operations. The next generation Clipper system contract with Cubic provides for numerous technical deliverables to enable us to track design and development and progress against the schedule. IBI staff will review every deliverable and support MTC and transit operator reviews. IBI staff will also be instrumental in the procurement of the other Clipper program contracts required to operate the new system, including the customer service center, payment gateway, and fare media procurements.

### **Recommendation**

Staff recommends that the Board approve a contract amendment with the IBI Group to extend the term of the contract to June 2021 and to add \$4,000,000 over FY 2019-20 and FY 2020-21 to provide next generation Clipper system consultant support.

  
\_\_\_\_\_  
Carol Kuester

### **Attachment:**

- Attachment A: IBI Actual and Projected Expenditures vs. Planned

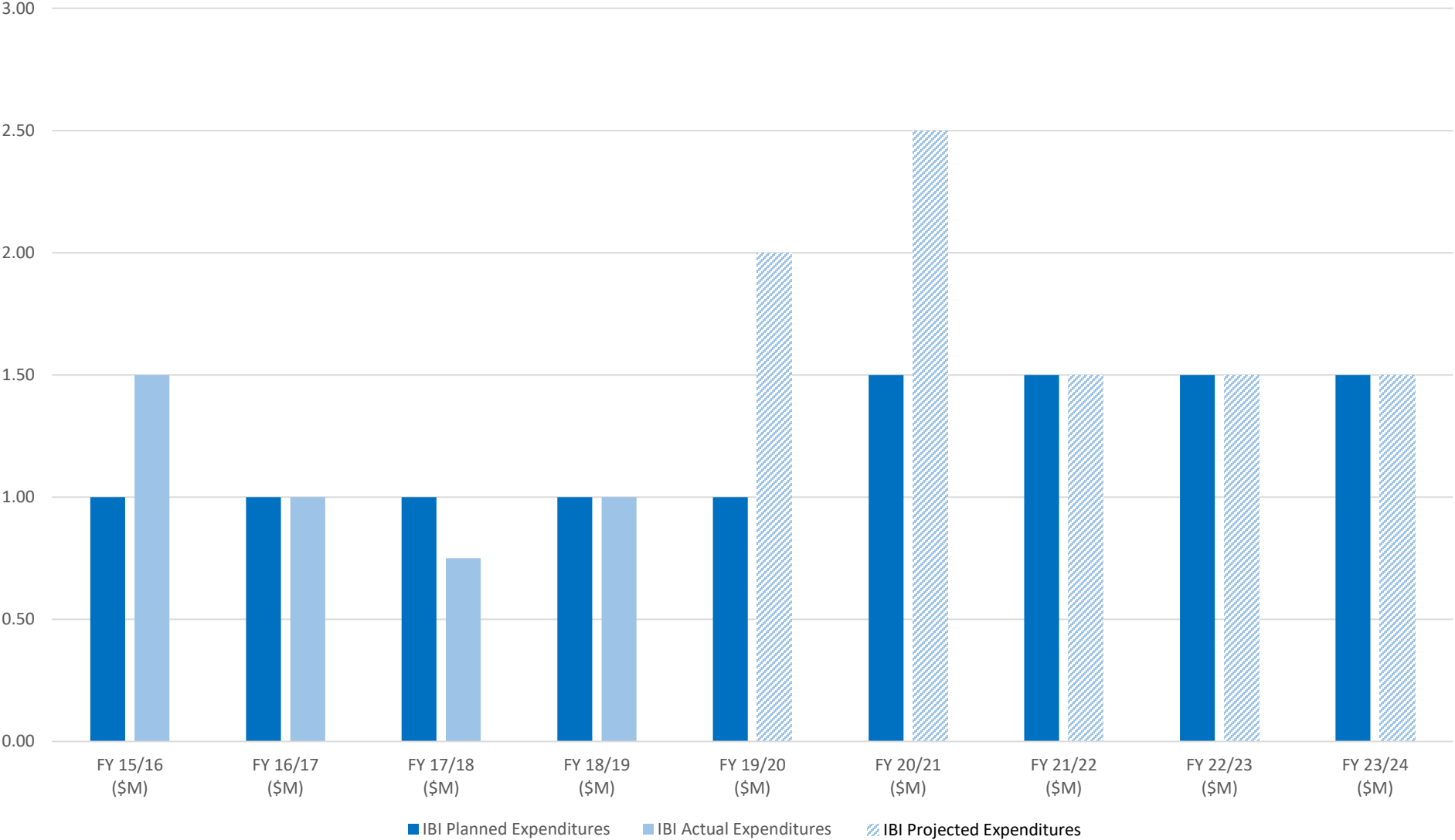
## REQUEST FOR BOARD APPROVAL

### Summary of Proposed Contract Amendment

Contractor:	IBI Group Seattle, WA
Project Title:	Next Generation Clipper® System Consultant Support
Purpose of Amendment:	Provide technical support, advice and management services to support multiple next generation Clipper system procurements and oversight of the work to be performed by the next generation System Integrator.
Brief Scope of Work:	Provide technical advice services through June 2021 with an option to extend up to an additional 9 years.
Project Cost Not to Exceed:	\$4,000,000 (this amendment) Total Contract value including amendments before this amendment = \$5,000,000 Total contract amount with this amendment = \$9,000,000
Funding Source:	TCP, STP (FTA/FHWA) / CMAQ (OBAG 1 and OBAG 2), STA, Regional Measure 2 Capital, Regional Measure 2 Operating, Regional Measure 3, LCTOP, Fare Media and Card Fee Revenue, SB1 State of Good Repair, BATA Rehab.
Fiscal Impact:	Funding is available in the FY 2019-20 and FY 2020-21 Clipper Budget.
Motion:	That the contract amendment with IBI Group, for the purposes described herein and in the Executive Director's March 11, 2019 memorandum, is hereby approved by the Clipper Executive Board.
Clipper Executive Board:	<hr/> Denis Mulligan, Chair
Approved:	Date: March 18, 2019

IBI Actual and Projected Expenditures vs. Planned

Agenda Item 4b  
Attachment A





# Metropolitan Transportation Commission

375 Beale Street, Suite 800  
San Francisco, CA 94105

## Legislation Details (With Text)

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**File #:** 19-0213      **Version:** 1      **Name:**  
**Type:** Report      **Status:** Informational  
**File created:** 2/26/2019      **In control:** Clipper Executive Board  
**On agenda:** 3/18/2019      **Final action:**  
**Title:** Current Clipper® Program Update  
Update on the current Clipper system.

**Sponsors:**

**Indexes:**

**Code sections:**

**Attachments:** [5a\\_C1 Program Update.pdf](#)

Date	Ver.	Action By	Action	Result
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**Subject:**

Current Clipper® Program Update

Update on the current Clipper system.

**Presenter:**

Eric Davis

**Recommended Action:**

Information

**Attachments:**



**Agenda Item 5a**  
Bay Area Metro Center  
375 Beale Street  
San Francisco, CA 94105  
TEL 415.778.6700  
WEB [www.mtc.ca.gov](http://www.mtc.ca.gov)

TO: Clipper® Executive Board

DATE: March 12, 2019

FR: Carol Kuester

RE: Current Clipper® Program Update

### **Background**

Clipper staff last updated this Board on the ongoing work and projects related to the current Clipper system at the February 2019 meeting. This memorandum is to provide further updates on the current Clipper program.

### **Transactions and Sales**

Clipper processed 21.5 million transactions and settled \$53.6 million in revenue in February. This level of activity is consistent with average volumes.

### **Walgreens Issue**

Retail sales were affected when Walgreens inadvertently deleted our merchant code and was temporarily unable to sell or add value to Clipper cards. MTC and many transit operators notified customers of this issue. The problem was resolved after nine days, but these included the first few days of February, which are traditionally busy days for retail sales. The Clipper Customer Service Center experienced higher than normal call volumes during the outage, particularly the first few days of the month. Customer service representatives provided callers with guidance on alternative methods of adding value to cards.

### **Clipper Card Dispensing**

To date, BART has dispensed 834,000 cards. Clipper's market share on BART grew to 84.1% in January. VTA began rolling out card sales at ticket vending machines in July and completed retrofit of 152 machines in December. During the July-February period, VTA dispensed 5,425 cards. Add Value machines are still in use at the Temporary Transbay Terminal.

### **Implementation and Enhancement Projects**

Noteworthy implementation and enhancement projects for the Clipper system include:

- SMART new stations – we will coordinate with SMART on two extension stations (Larkspur and Windsor) and one infill station (Downtown Novato) over the next two years.
- Caltrain ticket machine integration – we are working on integrating card distribution in 12 Caltrain ticket vending machines.
- Clipper on SFMTA Central Subway – Clipper installation work will begin in May.

Upcoming projects include implementation of Clipper on AC Transit's Bus Rapid Transit Service and work on BART's extension stations. This list should continue to be somewhat light as the program's focus is largely on the development of the next-generation Clipper system. However, ongoing projects include bus equipment replacements and expansion. For the status of other projects, please see the attached Clipper Master Schedule.

### **Other Clipper News**

Other Clipper-related news includes:

- Clipper is implementing the Regional Means-Based Transit Fare Discount Pilot Program. Current tasks are completion of Cubic change orders related to the program, as well as procurement of an eligibility verifier, a firm that will ensure applicants are qualified for the program. Clipper is working with other internal resources at MTC to develop an application portal through which people can apply for the program.
- MTC Clipper staff, along with MTC's Programming and Allocations section, are evaluating next steps and working with the project consultant from the regional transit fare integration charrette held on February 8, 2019. We plan to update this Board at next month's Clipper Executive Board meeting with a full report.
- Clipper has three open positions, and MTC has been recruiting for all. We expect all positions to be filled by mid-April.

  
\_\_\_\_\_  
Carol Kuester

### **Attachment:**

- Attachment A: Clipper Master Schedule



[illegible]



# Metropolitan Transportation Commission

375 Beale Street, Suite 800  
San Francisco, CA 94105

## Legislation Details (With Text)

**File #:** 19-0214      **Version:** 1      **Name:**  
**Type:** Report      **Status:** Informational  
**File created:** 2/26/2019      **In control:** Clipper Executive Board  
**On agenda:** 3/18/2019      **Final action:**  
**Title:** Next Generation Clipper® System Integrator Implementation Update  
Update on the Next-Generation Clipper System Implementation.

**Sponsors:**

**Indexes:**

**Code sections:**

**Attachments:** [5b\\_C2 SI Update.pdf](#)

Date	Ver.	Action By	Action	Result
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**Subject:**

Next Generation Clipper® System Integrator Implementation Update

Update on the Next-Generation Clipper System Implementation.

**Presenter:**

Jason Weinstein

**Recommended Action:**

Information

**Attachments:**



## **Agenda Item 5b**

Bay Area Metro Center  
375 Beale Street  
San Francisco, CA 94105  
TEL 415.778.6700  
WEB [www.mtc.ca.gov](http://www.mtc.ca.gov)

TO: Clipper® Executive Board

DATE: March 12, 2019

FR: Carol Kuester

RE: Next Generation Clipper® System Integrator Implementation Update

This memorandum is to update Board members on key developments related to the implementation of the next generation Clipper System Integrator project.

### **Contract Submittal Package 1 and Review**

1. MTC and the transit operators are working towards the approval of the first Submittal Package from Cubic Transportation Systems, Inc. (Cubic). The initial contract submittal package includes the Project Schedule, Accelerated C2 System Deployment Plan, Program Management Plan, Requirements Traceability Matrix, and Software List.
2. Cubic submitted an updated Project Schedule on Friday, March 8, 2019 which corrected and addressed comments on its initial submittal. After additional review from MTC, IBI, and the transit operators, MTC Clipper staff expect the Project Schedule, along with the remaining contract submittals included in the initial Contract Submittal Package, will be approved prior to this Board's March 18 meeting.
3. MTC and IBI will summarize the Project Schedule with key milestones and design review periods and plan to present to transit operator staff and this Board at the April 2019 Board meeting.

### **Contract Submittal Package 2 and Review**

Following the delivery of Cubic's second Submittal Package expected on March 19, 2019, MTC has scheduled a series of meetings with Cubic and the operators to present key proposals within the documents and discuss any initial questions. Attachment A to this memorandum lists the contract submittals included in Contract Submittals Package 2.

### **Monthly Program Management Meeting**

Cubic's first monthly program management meeting with MTC and transit operators is scheduled for March 19, 2019.

### **Executive Summary**

Included as Attachment B to this memorandum is a summary of recently completed activities related to delivering the 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.



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Carol Kuester

### **Attachments:**

- Attachment A: Contract Submittals Package 2
- Attachment B: Next-Generation Clipper Program Executive Summary Status Report

# Contract Submittal Package 2

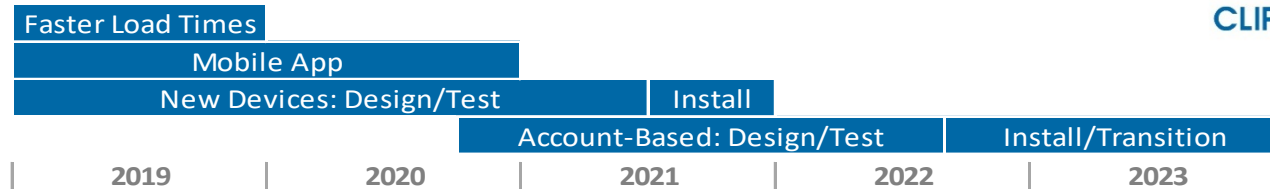
CS-DD-013	C1 Design Coordination Plan
CS-DD-015	Joint C1-C2 Development and Testing Plan
CS-O&M-005	Change Management Plan
CS-O&M-013	Quality Assurance and Quality Control Program Plan
CS-O&M-013a	C2 System Configuration Management Plan
CS-O&M-014	Risk Management Plan
CS-O&M-015	Safety Management Plan
CS-O&M-016	Information and Security Management Plan
CS-O&M-018	System Monitoring and Control Management Plan
CS-PM-001	Change Management Register
CS-PM-003	Contract Submittals Management Plan
CS-PM-005	Cost Adjustment Register
CS-PM-009a	Schedule Recovery Plan
CS-PM-012	Risk Register
CS-TEST-001a	Accelerated C2 System Deployment Testing Plan





# Next-Generation Clipper Program

## Executive Summary Status Report – March 18, 2019



### Summary

- Submittal Package 1 (including Accelerated Deployment Plan and Project Schedule) approved by MTC following stakeholder review of Cubic resubmittals.
- Submittal Package 2 (including development and testing plans) expected from Cubic on 3/19/2019.
- Technical discussions continue with operators.

### Recently Completed Activities

	MTC/IBI	Cubic	Operators	Date
• Submittal Package 1:				
○ 2 <sup>nd</sup> resubmittal by Cubic		•		Mar 8
○ Approval by MTC	•			Mar 13
• Technical meetings with operators:				
○ SFMTA	•		•	Mar 14

### Upcoming Activities/Deliverables

	MTC/IBI	Cubic	Operators	Date
• Technical meetings with operators:				
○ VenTek TVM integration	•	•	•	Mar 20
○ BART	•	•	•	Mar 20 (tentative)
• Submittal Package 2:				
○ Submittal by Cubic		•		Mar 19
○ Review meeting (internal)	•		•	Mar 26
○ Review meeting with Cubic	•	•	•	Apr 2/3
• Clipper Executive Board Meeting	•	•	•	Apr 15

### Items to Highlight

Description	Resolution/Mitigation
• Project schedule baseline milestone pushed out to improve schedule clarity.	Several in-person meetings held to review/address comments. Final resubmittal and approval anticipated March 15.
• Packet 1 responses included many later phase design questions from operators.	Future Technical/Design items tracking list created. Will be maintained and referred to during design and implementation phases.