



## **Agenda Item 3b**

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TO: Clipper<sup>®</sup> Executive Board

DATE: February 21, 2017

FR: Carol Kuester

RE: Clipper<sup>®</sup> Two Year Budget and Work Plan

This memorandum presents the Clipper<sup>®</sup> budget and work plan for FY 2017-18 and 2018-19 for the Clipper<sup>®</sup> Executive Board's approval.

### **Budget Process and Content**

Under the Amended and Restated Clipper<sup>®</sup> Memorandum of Understanding, the Executive Board is to review and adopt a biennial Clipper<sup>®</sup> 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 C1 and C2 work items, as well as transit-operator requested and funded projects.

### **Proposed FY 2017-18 and 2018-19 Budget and Work Plan**

The proposed budget and work plan for FY 2017-18 and 2018-19 is attached. Included in the attachments are:

- Clipper<sup>®</sup> Projected Operating Budget (Table 1) and Operating Budget Detail (Table 1A);
- Clipper<sup>®</sup> Projected Capital Budget (Table 1) and Capital Budget Detail (Table 1A); and
- Clipper<sup>®</sup> Staff Organizational Chart.

### **Highlights and Key Assumptions**

1. A draft budget was presented at the January 23, 2017 meeting of the Clipper<sup>®</sup> Executive Board, which showed an operating deficit of \$3.3M estimated in FY 2018-19 that grew larger in the following years, largely due to projected cuts in STA funds that the program had expected to receive. The current budget now shows an operating surplus in FY 2018-19. The following items were updated:
  - \$3 million of unregistered "Inactive" funds were assumed to be available from the program Float account (see Agenda Item 3a) and encumbered in FY 2017-18;
  - As described in January's Clipper<sup>®</sup> Executive Board, an additional \$2 million of RM2 Operating funds were included in the Operating Budget, subject to availability and the approval of the MTC Commission;
  - In the upcoming MTC agency budget, operating staff costs in FY 2017-18 were reconsidered in anticipation of demand for staff resources in the ramp-up for C2; and

- Regional Measure 2 funds were programmed through the Transit Capital Priorities program to the Capital budget, which allowed STA funds originally dedicated as a capital local match to be used for Operations.
2. Operating costs for C2 are assumed to be similar to current operating costs, with C1 operating costs decreasing as C2 comes on line. The current assumption is that the C1 and C2 systems operate in parallel in FY 2021-22, once C2 is deemed Revenue Ready after an assumed two years of design, implementation, and transition.
  3. Transit operators were surveyed for upcoming projects that would require enhancements to the Clipper® system. Capital System Enhancements for Operator Requested and Paid projects are current anticipated transit operator requests, and prioritization of these projects along with other system enhancements will occur at a later date.
  4. Full capital and operating costs of C2 are unknown at this time. The budget includes a high level capital estimate of \$110M plus an additional \$4M for integration of existing Clipper® ticket vending machines (TVMs) and faregates, with the majority of the costs being encumbered in years three through five of the C2 contract. This high level estimate does not include the following costs:
    - Communication infrastructure upgrades that may be required for C2; and
    - Replacement of transit operator TVMs and faregates.
  5. At this time, we anticipate that revenue to support C2 implementation may be provided from the following programs:
    - Transit Capital Priorities - \$70M
    - Cap and Trade, Low Carbon Transit Operations Program (LCTOP) - \$20M
    - To Be Determined - \$20M
  6. The timing of funding availability is unclear; MTC staff is working closely with MTC Programming and Allocations to manage cash flow. This effort requires staff resources to stay abreast of matching fund type to operational needs.
  7. Limited capital funds are available for new C1 capital initiatives. Additional C1 capital projects will increase the deficit for C2; capital funds are reserved for limited back-end system improvements and replacement of equipment that has reached end-of-life. Costs for implementation of equipment for fleet expansion are the responsibility of the transit operators.

### Recommendation

Staff recommends the Clipper® Executive Board approve and adopt the Clipper® Two Year Budget and Work Plan as shown in the attachments to this memorandum.

  
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Carol Kuester

### Attachments:

- Attachment A: Clipper® Projected Operating Budget
- Attachment B: Clipper® Projected Capital Budget
- Attachment C: Clipper® Staff Organizational Chart

**CLIPPER® PROJECTED OPERATING BUDGET - FEBRUARY 13 2017**  
**TABLE 1: COSTS and REVENUES, FY 2016/17-2020/21**

Two Year Work Plan  
for Approval

Operating Budget (\$M)							
Item No.	Descriptions	Current FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	Total FY 16/17- FY 20/21
<b>MTC Operating Costs</b>							
1	Annual C1 Operating Costs - MTC	\$8.0	\$8.4	\$8.8	\$9.3	\$9.7	\$44.2
2	Annual C2 Operating Costs - MTC	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
3	MTC Staff	\$2.0	\$1.3	\$1.4	\$1.5	\$1.6	\$7.8
4	Clipper® Operations - Misc.	\$0.7	\$0.6	\$0.6	\$0.6	\$0.7	\$3.2
5	In Person Customer Service Centers	\$1.3	\$1.4	\$1.4	\$1.5	\$1.6	\$7.1
6	Customer Education Program	\$1.4	\$1.3	\$1.4	\$1.4	\$1.5	\$7.0
7	Consultants	\$0.2	\$0.2	\$0.2	\$0.3	\$0.3	\$1.2
8	<i>Subtotal MTC expenses</i>	\$13.5	\$13.3	\$13.9	\$14.6	\$15.3	\$70.5
<b>Transit Agency Costs</b>							
9	Annual C1 Operating Costs - Transit Agencies	\$18.0	\$19.7	\$20.7	\$21.7	\$22.8	\$102.9
10	Annual C2 Operating Costs - Transit Agencies	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
11	<i>Subtotal Transit Operator expenses</i>	\$18.0	\$19.7	\$20.7	\$21.7	\$22.8	\$102.9
12	<b>Total Operating Costs (MTC+Transit)</b>	<b>\$31.5</b>	<b>\$33.0</b>	<b>\$34.6</b>	<b>\$36.3</b>	<b>\$38.1</b>	<b>\$173.4</b>
<b>Operating Revenues</b>							
13	<b>Total STA Revenues</b>	<b>\$12.4</b>	<b>\$11.0</b>	<b>\$5.3</b>	<b>\$5.3</b>	<b>\$5.7</b>	<b>\$39.7</b>
14	<b>Total RM2 Marketing Revenue</b>	<b>\$1.3</b>	<b>\$1.3</b>	<b>\$1.3</b>	<b>\$1.3</b>	<b>\$1.4</b>	<b>\$6.6</b>
15	<b>Additional RM2 Marketing Revenue<sup>1</sup></b>	<b>\$1.7</b>	<b>\$1.7</b>	<b>\$1.7</b>	<b>\$1.7</b>	<b>\$1.7</b>	<b>\$8.5</b>
16	<b>Additional RM2 Operating Revenue<sup>1</sup></b>	<b>\$0.0</b>	<b>\$2.0</b>	<b>\$2.0</b>	<b>\$2.0</b>	<b>\$2.0</b>	<b>\$8.0</b>
17	<b>Unregistered Inactive Funds<sup>2</sup></b>	<b>\$0.0</b>	<b>\$3.0</b>	<b>\$0.0</b>	<b>\$0.0</b>	<b>\$0.0</b>	<b>\$3.0</b>
18	<b>Total Transit Agency Revenue</b>	<b>\$18.0</b>	<b>\$19.7</b>	<b>\$20.7</b>	<b>\$21.7</b>	<b>\$22.8</b>	<b>\$102.9</b>
19	<b>Total Operating Revenue</b>	<b>\$33.4</b>	<b>\$38.7</b>	<b>\$31.0</b>	<b>\$32.0</b>	<b>\$33.6</b>	<b>\$168.7</b>
20	<b>Cumulative Surplus/Deficit</b>	<b>\$2.1</b>	<b>\$7.9</b>	<b>\$4.3</b>	<b>\$0.0</b>	<b>(\$4.5)</b>	

<sup>1</sup> Contingent upon availability and MTC Commission Approval

<sup>2</sup> Contingent upon Clipper Executive Board Approval

TABLE 1A: Operating Budget Detail  
February 13, 2017

Operating Budget Item #	Category	Phase	Project Name	Vendor	Current FY 16/17 (\$M)	FY 17/18 (\$M)	FY 18/19 (\$M)
1	Annual C1 Operating Costs - MTC	C1	MTC share of annual C1 operating costs per the MOU	Cubic	8.00	8.40	8.82
2	Annual C2 Operating Costs - MTC	C2	Estimated MTC share of C2 annual operating costs	TBD	NA	NA	NA
3	MTC Staff	C1	MTC Staff	MTC	1.98	1.35	1.42
4	Clipper Operations - Misc.	C1	Data Store, ATT Network Services, Storage Fees	Various	0.10	0.11	0.11
		C1	SSAE Audit	Cubic	0.20	0.21	0.22
		C1	Operational Reporting and Analysis	RDA	0.18	0.19	0.20
		C1	Website Maintenance	Cubic	0.08	0.08	0.08
		C1	SFSU passes	Cubic	0.10	0.00	0.00
5	In Person Customer Service Centers	C1	AC Transit In Person Customer Service Center	AC Transit	0.25	0.25	0.25
		C1	Embarcadero Kiosk	Nematode	0.70	0.00	0.00
		C1	Embarcadero Kiosk	TBD	0.00	0.74	0.77
		C1	Bay Crossings In Person Customer Service Center	Nematode	0.30	0.32	0.33
		C1	Transportation Information Booth	Fanueil	0.00	0.08	0.08
6	Customer Education	C1	Creative design for website and customer education initiatives	MIG	0.54	0.55	0.55
		C2	C2 Public Engagement Promotion	MIG	0.01	0.00	0.00
		C1	Ad Campaigns	TBD	0.40	0.25	0.40
		C1	Research/Survey	TBD	0.00	0.10	0.00
		C2	C2 Customer Research	TBD	0.10	0.15	0.10
		C1	Outreach Support	Caribou	0.20	0.20	0.25
		C1	Production costs for signage and collateral	TBD	0.02	0.02	0.02
		C1	Contingency	N/A	0.03	0.00	0.00
		C1	Cardholder Materials	Cubic	0.05	0.05	0.06
7	Consultants	C1	Program Mgt. and Strategic Planning	Synapse Strategies	0.21	0.24	0.24
		C2	C2 Public Engagement Strategic Planning and Management	Synapse Strategies	0.04	0.02	0.02
8	TOTAL				13.49	13.29	13.91

**CLIPPER® PROJECTED CAPITAL BUDGET - FEBRUARY 8, 2017**  
**TABLE 1: CAPITAL COSTS AND REVENUES, FY 2016/17-2020/21**

Two Year Work Plan  
for Approval

Item No.	Description	Capital Budget (\$M)					
		Current FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	TOTAL FY 16/17 - 20/21
Capital Costs (See Table 2 for Cost Detail)							
	Current Clipper® System (C1)						
1	MTC Staff	\$1.1	\$1.1	\$1.2	\$1.3	\$1.3	\$6.0
2	Clipper® Cards	\$2.0	\$2.0	\$2.0	\$2.0	\$2.0	\$10.0
3	Consultants	\$1.2	\$1.0	\$0.8	\$0.5	\$0.0	\$3.5
4	System Enhancements	\$0.4	\$0.3	\$0.0	\$0.0	\$0.0	\$0.7
5	System Enhancements - Operator Requested and Paid	\$0.5	\$0.5	\$0.0	\$0.0	\$0.0	\$1.0
6	Infrastructure Refresh/End-of-Lifecycle Replacement	\$2.0	\$3.5	\$3.5	\$3.0	\$2.0	\$14.0
	Next Generation Clipper® System (C2)						
7	MTC Staff	\$0.9	\$1.8	\$1.9	\$2.0	\$2.1	\$8.7
8	Replace Back End/Front End Devices (not TVMs/faregates)	\$0.0	\$0.0	\$5.0	\$15.0	\$35.0	\$55.0
9	Integrate Existing C1 TVMs/Faregates	\$0.0	\$0.0	\$4.0	\$0.0	\$0.0	\$4.0
10	Replace TVMs/Faregates - Operator Paid	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
11	Consultants	\$2.8	\$2.7	\$1.7	\$1.3	\$1.3	\$9.8
12	Total Expenses	\$10.9	\$12.9	\$20.1	\$25.0	\$43.7	\$112.7
Revenue							
13	TCP - FTA	\$13.9	\$5.0	\$0.0	\$0.0	\$25.0	\$43.8
14	TCP - OBAG2-STP/CMAQ	\$0.0	\$0.0	\$5.7	\$8.8	\$9.5	\$24.0
15	TCP - OBAG2-RM2	\$1.0	\$1.1	\$2.5	\$3.5	\$4.9	\$13.0
16	Operator Paid Revenue	\$1.2	\$0.5	\$0.0	\$0.0	\$0.0	\$1.7
17	Card Fee Revenue	\$2.0	\$2.0	\$2.0	\$2.0	\$2.0	\$10.0
18	STA	\$1.0	\$0.0	\$0.0	\$0.0	\$0.0	\$1.0
19	Cap and Trade	\$3.6	\$1.1	\$1.1	\$1.1	\$1.1	\$8.0
20	Total Annual Revenue	\$22.6	\$9.7	\$11.3	\$15.3	\$42.5	\$101.5
21	Cumulative Surplus/Deficit	\$30.6	\$27.3	\$18.6	\$8.9	\$7.7	

TABLE 1A: Capital Budget Detail  
February 8, 2017

Item #	Category	Project Name	Vendor	Current 2016/17 (\$M)	2017/18 (\$M)	2018/19 (\$M)	Description
Current Clipper System (C1)							
1	MTC Staff	MTC Staff	MTC	1.11	1.14	1.20	MTC staff funded with capital funds
2	Clipper Cards	Clipper card order	Cubic	2.00	2.00	2.00	Annual Clipper card order
3	Current System Consultants	Technical Advisor	CH2MHill	1.00	0.80	0.60	Tech Advisor support expected to decrease as capital projects are completed and resources shift in-house; more focus on state of good repair and system operations
		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:	1.20	1.00	0.80		
4	Current System Enhancements	Test bed upgrades	Cubic	0.10	-	-	Upgrades to test bed to support introduction of Phase 3 operators
		Credit card improvement initiatives	Cubic	0.30	0.20	-	Card acceptance/fraud reduction, selective card blocking
		Operator asset management tracking	Cubic	-	0.10	-	Enhancement for automated tracking of bus equipment and maintence
		Subtotal:	0.40	0.30	-		
5	Current System Enhancements - Operator Requested and Paid	AC Transit Fleet Expansion	Cubic	TBD	TBD	TBD	Cubic to provide legacy bus devices for AC Transit fleet expansion
		AC Transit/VTA/SFMTA - Expanded Limited Use Tickets for Single Ride/Passports	Cubic	0.20	-	-	Eliminate tokens/paper passes
		AC Transit - Transbay Transit Center AVMs	Cubic	0.06	-	-	Installation of AVMs at the Transbay Transit Center
		Caltrain - TVM Integration	TBD	-	-	-	Integrate Caltrain TVMs with Clipper
		Caltrain - New EMU Vehicles	TBD	-	-	-	Schedule TBD
		GG - Business Rule Simplification	Cubic	-	TBD	TBD	Implementation of new transfer rules for Golden Gate Transit
		GG - Tiburon	Cubic	-	TBD	TBD	Creation of Tiburon Ferry product
		GG - TVM Refresh	Cubic	-	TBD	TBD	TVM component refresh and potential procurement of additional TVMs for Sausalito or Tiburon if necessary
		Marin Transit - Flat Fare Implementation	Cubic	-	TBD	TBD	Conversion of business rules from dual-tag to flat fare payment
		SFMTA - New Passes	Cubic	0.25	TBD	TBD	Develop 1, 3, and 7-Day Pass (without Cable Car)
		VTA - TVM Integration	Cubic	-	TBD	TBD	Integration of new 10 new TVMs
		WETA - Richmond	Cubic	-	TBD	TBD	Equipment Installation at Richmond Ferry Terminal
		WETA - San Francisco	Cubic	-	TBD	TBD	Equipment expansion in downtown San Francisco
		Multiple Operators - New Driver Console (DC3) - Single Point Log-on	Cubic	-	0.50	-	Onboard integration of Clipper and other vehicle systems for operators with new bus devices
		Subtotal:	0.51	0.50	-		
6	Infrastructure Refresh/End-of-Lifecycle	Replace end-of-life equipment as needed	Cubic	2.00	3.50	3.50	Replace HCR3s (FY16/17) and other obsolete equipment at end of lifecycle
		Subtotal:	2.00	3.50	3.50		
Next Generation Clipper System (C2)							
7	MTC Staff	MTC Staff for C2	MTC	0.90	1.80	1.89	MTC staff funded with capital funds eligible for equipment/system replacement
8	Replace Back End/Front End Devices	Replace Back End/Front End Devices (not TVMs/faregates)	TBD	-	-	5.00	Replace back end systems and front end devices (retailer devices, ticket office terminals, vehicle and platform card readers, handheld readers)
9	Integrate TVMs and Faregates	Integrate existing TVMs and faregates	TBD	-	-	4.00	Existing TVMs and faregates will be integrated into C2. Individual operators are responsible for replacement (see Line 10). Integration estimate assumes C2 vendor supplies web-based API, all existing hardware is adequate, and no change to credit/debit gateways.
10	Replace TVMs and Faregates	Replace TVMs and faregates	TBD	-	-	-	Replacement of TVMs and faregates is <u>not</u> included in the scope of C2; only integration of the existing TVMs and faregates. Operators are responsible for replacement costs.
11	Consultants	C2 Public Involvement Consultant	MIG	0.05	-	-	C2 Public Engagement Plan
		C2 RFP Financial Evaluation	TBD	-	0.20	-	Financial evaluation and review of vendor proposals for cost realism and cost effectiveness
		C2 Strategic Planning/Advice Contract	Invoke, TBD	0.25	0.25	0.25	Strategic planning/advice during C2 procurement process
		Clipper/FasTrak Convergence	CH2MHill/Jacobs	-	-	-	Evaluation of potential opportunities for convergence of Clipper and FasTrak systems and customer service centers
		Communications	TBD	0.25	0.25	0.25	Assessment and development of strategy for Clipper communications and network
		C2 Legal Support	Thompson Coburn	0.25	0.30	0.20	Legal and contracting support for C2 procurement and implementation
		C2 Technical Advisor	IBI Group	2.00	1.70	1.00	C2 planning and procurement support
		Subtotal:	2.80	2.70	1.70		
12		TOTAL		10.92	12.94	20.09	

## Clipper Staff Organizational Chart January 2017

