

# Clipper® Executive Board

November 15, 2021

Agenda Item 3c

## Clipper® Implementation Update

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### **Subject:**

Update on key developments related to the implementation of the Current and Next Generation Clipper system.

### **Background:**

#### **Next Generation Implementation and Enhancement Projects**

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 Transportation Services, and the transit operators; and noteworthy items that the project team is managing.

### **Highlights Include:**

- expected resubmission of Equipment Manuals and Training Materials;
- expected resubmission of Account-based Development and Testing documents;
- execution and witnessing for System Integration Testing;
- start of Pilot installations and testing;
- ongoing Final Design Review of the account-based system;
- ongoing technical and planning discussions and review with operators; and
- planned installation of new devices, scheduled to begin later this year.

MTC received an updated Project Schedule and Schedule Narrative from Cubic on October 8, 2021. This schedule still shows the same delays we described in previous months, namely delays caused by COVID-driven engineering resource shortages and supply chain issues with chips and plastics leading to a 4-month delay in equipment installation. The current schedule for equipment installation will start towards the end of this year with fleetwide installation complete by Fall 2022.

Clipper staff will continue to work with Cubic to refine an approach to make meaningful schedule recovery. Cubic has outlined a proposed approach to achieve Revenue Ready by the Oct 2022 Guaranteed Completion Date in which C2 Account-based system components and functions would be tested and implemented in two stages: the first prior to achieving Revenue Ready and the second prior to starting Customer Transition.

Cubic has agreed to document this approach for MTC and Transit Operator review in the development, testing, and implementation documents. We have finished the initial review of the Development and Testing Plans and Implementation Plans should be received soon. We expect that the Project Schedule will be updated in December to reflect this approach if, and when, MTC and Cubic reach agreement on the details and the Development, Testing, and Implementation plans are approved by MTC.

**Issues:**

None identified.

**Recommendations:**

Information.

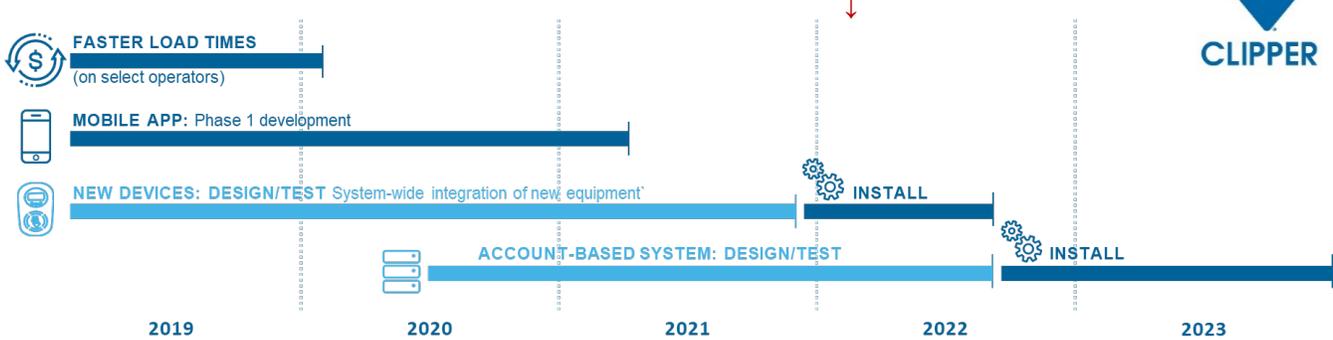
**Attachments:**

- Attachment A: Next Generation Clipper Program Executive Summary Status Report



Carol Kuester

Next-Generation Clipper Program  
Executive Summary Status Report – Nov 15, 2021



Summary

- System Integration Testing (SIT) dry runs for new devices (standalone and onboard validators) continue; SIT witnessing and Pilot installations/testing starting soon.
- Account-Based documentation review continues, including Final Design Review (FDR) submittals, Development & Testing Plans, and Implementation Plans.
- Technical and planning discussions continue with operators on various topics, including Clipper business rules, CAD/AVL integration, paratransit integration, BART and Muni equipment, and new device installation.
- Joint coordination meetings ongoing between MTC and C2 Contractors Cubic (System Integrator), WSP (Customer Service Center), and Fiserv (Payment Services). Responses to Fare Media Supplier RFP due 11/18/2021.

Recently Completed Activities

	MTC/IBI	Cubic	Operators	Date
• New Devices:				
o SIT dry runs (validators)		•		Nov
• Account-Based System Final Design Review:				
o FDR Part 2 comments from MTC/operators	•		•	Nov 8
o FDR Part 1 resubmittal by Cubic		•		Nov 10 (planned)
• Account-Based Development and Testing Plans:				
o Comments from MTC/operators to Cubic	•		•	Oct 28

Upcoming Activities/Deliverables

	MTC/IBI	Cubic	Operators	Date
• New Devices:				
o Manuals/Training Materials resubmittal		•		Nov
o SIT execution/witnessing (cont'd.)	•	•	•	Nov–Jan
o Pilot installation and testing	•	•	•	Dec–Feb
• Account-Based System Final Design Review:				
o FDR Part 1 resubmittal review	•		•	Nov–Dec
o FDR Part 2 resubmittal by Cubic		•		Nov/Dec
• Account-Based Development and Testing Plans:				
o Resubmittal by Cubic		•		Nov/Dec
• Account-Based Implementation Plans:				
o Initial submittal by Cubic (Package 9)		•		Dec
• Clipper Executive Board Meeting	•		•	Dec 20