

Clipper® Executive Board

June 22, 2020

Agenda Item 5c

Next Generation Clipper® System Update

Subject: Update on key developments related to the implementation of the Next Generation Clipper System Integrator project.

Background: This summary reflects two months of updates, as the May 18, 2020 Clipper Executive Board meeting agenda did not include information items.

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:

- Continued discussions on preferred options for transit operator integration of the next-generation on-board validators with existing on-board vehicle systems;
- Approval of Review Cycle 3 documents and upcoming approval of Review Cycle 4 (which comprises the final set of documents for Accelerated Deployment); and
- Final stages of design review for user experience on the Clipper mobile app with testing beginning within the next several months.

Transit operators have been sending requests for additional features and functionality for the Next-Generation Clipper system. This functionality was included in the requirements of the Next-Generation system and will be incorporated in the planning of design of the Account-Based system beginning later this summer.

To date, no critical milestones have slipped beyond their contractual guaranteed completion dates, and the program is currently on schedule and within expected budget.

Attachments: **Attachment A:** Next Generation Clipper Program Executive Summary Status Report


Carol Kuester

A horizontal timeline from 2019 to 2023 showing the progress of four strategic initiatives. The timeline is marked with vertical dashed lines for each year. The initiatives are represented by horizontal bars: dark blue for 'FASTER LOAD TIMES' and 'MOBILE APP: Phase 1 development'; light blue for 'NEW DEVICES: DESIGN/TEST System-wide integration of new equipment'; and a combination of light blue and dark blue for 'ACCOUNT-BASED SYSTEM: DESIGN/TEST'. The 'NEW DEVICES' and 'ACCOUNT-BASED SYSTEM' initiatives include 'INSTALL' phases marked with gear icons. The 'CLIPPER' logo is in the top right corner.

Initiative	Phase	Start Year	End Year	Install Year
FASTER LOAD TIMES	(on select operators)	2019	2020	-
MOBILE APP	Phase 1 development	2019	2021	-
NEW DEVICES	DESIGN/TEST	2019	2021	-
	INSTALL	2021	2022	2022
ACCOUNT-BASED SYSTEM	DESIGN/TEST	2019	2022	-
	INSTALL	2022	2023	2023

- Review Cycle 3 for Accelerated Deployment design documents complete. Review Cycle 4 nearly complete.
- System Integration Test reports for Faster Load Times under review. Monitoring system activity to determine start date for additional daily actionlist distributions.
- Mobile App test procedures under revision by Cubic; initial testing to start in summer.
- Technical discussions continue with operators, including BART network design and CAD/AVL integration planning.

	MTC/IBI	Cubic	Operators	Date
• Review Cycle 3 documents:				
○ Mobile App design approved by MTC	●			April 16
○ Remaining RC3 documents resubmitted by Cubic		●		May 7, 14
○ Approved by MTC	●			May 22
• Review Cycle 4 documents:				
○ Comments sent to Cubic	●		●	Apr 20
○ 2 nd submission received from Cubic		●		May 29
○ Comments on 2 nd submission sent to Cubic	●		●	Jun 15
• Faster Load Times:				
○ Test Reports submitted by Cubic		●		Jun 9
• Mobile App Test Plans:				
○ Comments sent to Cubic	●		●	Apr 27
• Operator site visits for onboard surveys:				
○ SFMTA	●	●	●	May 26–27
○ SamTrans	●	●	●	May 28–29
○ VTA	●	●	●	June 1–2
○ AC Transit	●	●	●	June 3–4
• Account-Based System design:				
○ BART integration/implementation overview document resubmitted by Cubic		●		May 13
○ Review meeting with BART	●	●	●	June 10
• Technical meetings with operators:				
○ SFMTA	●	●	●	June 18

Upcoming Activities/Deliverables

	MTC/IBI	Cubic	Operators	Date
• Review Cycle 4 documents:				
○ 3 rd submission expected from Cubic		●		TBD
• Faster Load Times:				
○ Add third daily actionlist distribution		●		TBD
• Mobile App Test Plans:				
○ 2 nd submission expected from Cubic		●		TBD
• Technical meetings with operators:				
○ BART	●	●	●	Jul 15
○ SFMTA	●	●	●	Jul 16
• Clipper Executive Board Meeting	●		●	Jul 27