Clipper® Executive Board

Clipper® Schedule, Implementation, and Deployment Update

Subject:

Update on key developments related to the implementation of the Next Generation Clipper System (C2). The Senior Vice-President of Cubic Transportation Systems will be in attendance to provide a system integrator progress report.

Background:

Next Generation Project Schedule

Since the last Clipper Executive Board meeting on October 28, we have continued to make progress on the tasks identified as necessary for completion in November to maintain the schedule we presented in September for a potential Spring start of customer transition. However, progress on formal System Integration Testing (SIT) remains slower than anticipated: of the 51 system components covered by formal System Integration Testing, Cubic projects that testing will have been executed for 14 components by the end of November. This has put the SIT testing on the Critical path along with mobile integration and Ventek ticket vending machines. Cubic has identified specific functionality and lesser-used business rules that it is proposing for deferral to expediently start Pilot and the Customer Transition. MTC has been working closely with Transit Operator staff to identify impacts and develop workarounds, if necessary, so that we can allow for these requested deferrals. As noted last month, regional transfer discounts and contactless open payment acceptance remain high priorities and will be available at the time of customer transition. Below is an update to the reported items that needed to be accomplished in the 30 days following the October 28 CEB meeting to preserve the last schedule:

- Continuation of System Integration Testing for Operator Business Rule Modules
  - SIT witnessing sessions were held for 14 of the 51 components. The current estimated time of completion is January.
- Mobile Wallet Testing in the C2 Production Environment
  - Production testing to begin after one remaining item is resolved.

- Begin installation of readers into BART ticket vending machines (TVMs) in the field
    - A pilot installation of C2 validators in a production TVM was completed at the 19th Street Oakland station. BART and Cubic are working on resolving a few issues prior to expanding the TVM installation throughout the network.
- Ventek TVM Software Testing (Caltrain, GGBHTD, SMART, VTA)
    - Ventek has made iterative progress with Cubic's assistance

In the next 30 days we plan to complete the following items:

- Continuation of system integration testing
- Resolve remaining mobile wallet issue in production
- Complete pilot installation of BART TVM
- Begin installation of software for the Ventek ticket vending machines (Caltrain, GGBHTD, SMART, VTA)

Staff will continue to monitor and assist with expediting ongoing activities in advance of the Pilot and Customer Transition. We will report back to this Board in December on the progress to reduce the schedule risks, and towards determining a new target date for the start of Customer Transition.

C2 Schedule Risks

MTC continues to work with Cubic, transit operators, and other partners to address the following high-priority risks:

- Completion of System Integration Testing
- Fare Gate integration and installation
- Ticket Vending Machine integration and installation with BART and regionally with Ventek machines
- Fully tested integration with the phone providers and their payment wallets

C2 Implementation

Included as Attachment A to this memorandum is a summary of recently completed activities related to delivering the next-generation system; upcoming activities and deliverables for MTC, Cubic, and the transit operators; and other noteworthy items managed by the project team.

C2 Equipment Deployment

The installation of on-board Clipper readers and stand-alone platform readers has been substantially completed. BART continues to make progress with the installation of next-generation readers (TR4s) at its fare gates and its ticket vending machines.

C2 Testing

System integration testing started in October. The completion of testing will be followed by the Pre-Transition Pilot in 2025.
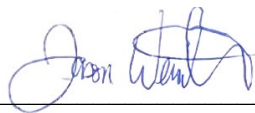
Issues:

Schedule risks described above

Recommendations:

Information

Attachments:

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

- Attachment B: Next Generation Clipper Program Schedule Presentation

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