

Clipper[®] Executive Board

May 11, 2020

Agenda Item 3e

Next Generation Clipper[®] Contract Change Order – Computer Aided Dispatch and Automated Vehicle Location (CAD/AVL) Integration Implementation: Cubic Transportation Systems, Inc. (Cubic) (\$1,800,000)

Subject: Request for approval of a Change Order for integration of Next Generation Clipper onboard equipment with CAD/AVL systems.

Background: The Next Generation Clipper[®] System Integrator Contract between MTC and Cubic provides for an integration between existing transit operator onboard Computer-Aided Dispatch/Automatic Vehicle Location (CAD/AVL) systems and the Next Generation Clipper System.

In November and December 2019, MTC, transit operator staff, Cubic, and CAD/AVL vendors met in a series of workshops intended to identify operator requests and develop the design requirements for other potential integration opportunities with Next Generation Clipper equipment and existing onboard bus systems. This resulted in the identification of three additional integration options requested by the transit operators to meet the technical and operational needs of the region's 18 bus operators, including options that would not require the purchase and ongoing maintenance and operation of an operator control unit. The inclusion of these options would free up precious space in the front of the bus where an operator control unit would normally be installed, and would allow Next Generation Clipper equipment to seamlessly communicate and receive information from existing onboard systems. Bus operators are already interacting with this existing equipment to correctly identify routes, calculate fares and transfers, and collect additional trip information.

The region's 18 bus operators have communicated their preferred integration options with MTC and strongly support this approach. The proposed change order would provide for the development of the three additional CAD/AVL integration options, as well as testing and support for operators and CAD/AVL vendors. Cubic has indicated that if work begins this summer, there would be no discernible impacts to the guaranteed completion dates in the Next Generation Clipper System Integrator contract.

Issues: The region's bus operators have also identified additional costs for their CAD/AVL providers to fully implement software integration of onboard systems with Next Generation Clipper equipment. The estimated costs for software upgrades and integration are estimated between \$1,000,000 and \$1,750,000 and when fully identified, Clipper staff will return to this Board for approval of this work. MTC has been assessing the overall Clipper program budget and given the regional benefits and overwhelming transit operator support for this work, has identified funding to cover these costs. Notwithstanding the proposed change order costs and the additional costs that would be paid to CAD/AVL providers there would be a savings of approximately \$7 million to the Clipper capital budget from the reduction of equipment needed. Hardware upgrades of CAD/AVL on-board equipment would remain the responsibility of each operator.

Recommendation: Staff recommends that the Clipper Executive Board approve a Contract Change Order with Cubic in an amount not to exceed \$1,800,000 for CAD/AVL integration as described above.



Carol Kuester

REQUEST FOR BOARD APPROVAL

Summary of Proposed Contract Amendment

Consultant: Cubic Transportation Systems, Inc.
San Diego, CA

Work Project Title: Next Generation Clipper® CAD/AVL Integration Implementation

Purpose of Project: Provide integration and support of CAD/AVL systems with Next Generation Clipper®

Brief Scope of Work: To develop and implement CAD/AVL integration solutions as well as provide testing and support for Operators and vendors

Project Cost Not to Exceed: \$1,800,000

Funding Source: FTA, FHWA, OBAG2, STP, CMAQ, STA, STP Exchange, Regional Measure 2 Capital and Regional Measure 2 Operating, Regional Measure 3, SB1 State of Good Repair

Fiscal Impact: Funds available in the FY 2019-20 MTC agency budget.

Motion by Board: That the Contract Change Order with Cubic Transportation Systems, Inc. as described herein and in the Clipper Executive Director's May 11, 2020 memorandum, is hereby approved by the Clipper Executive Board.

Clipper Executive Board:

Rick Ramacier, Chair

Approved: May 11, 2020