

EXECUTIVE DECISION DOCUMENT

GENERAL MANAGER APPROVAL:	GENERAL MANAGER ACTION REQ'D:			
DATE: 3/19/2021	BOARD INITIATED ITEM: Yes			
Originator/Prepared by: Debanjan Chakraborty Dept: Systems Engineering for Signature/Date: 6/14/2021	General Counsel Com b 14 2021	Controller/Treasurer Chini Gan G/14/2021	District Secretary	BARC (N)

PROCUREMENT OF SINGLE BOARD COMPUTERS FOR TICKET VENDING & ADD FARE MACHINES

PURPOSE:

To request Board authorization for the General Manager to enter into a sole source contract with Advantech Corporation, in accordance with California Public Contract Code section 20227, to procure single board computers for an amount not to exceed \$2,327,000. Two thirds vote required.

DISCUSSION:

Microsoft Windows-embedded Standard 7 Cubic Single Board Computers (SBC) are currently installed in BART Ticket Vending and Add Fare Machines, providing patrons the ability to pay their transit fare with a Clipper card or credit card. Microsoft support for these SBCs ended October 2020. In order to maintain Payment Card Industry (PCI) Data Security Standards (DSS) Compliance for mission-critical credit card processing, the District has extended this support through October 2021. However, the cost of this support doubles annually, and Microsoft will be phasing out support in the next two years.

To maintain Payment Card Industry (PCI) Data Security Standards (DSS) Compliance, BART needs to upgrade to the supported operating system, Microsoft Windows 10 IoT, which requires the procurement of new single board computers (SBC) from Advantech Corporation.

Pursuant to California Public Contract Code Section 20227, the Board may direct the purchase of any supply, equipment or material without observance of competitive bidding

process upon a finding by two-thirds of all members of the Board that there is only a sole source of procurement. In addition, FTA Circular 4220.1, Chapter VI, Subparagraph 3.i(1) (b) stipulates that the recipient may make a sole source award under certain circumstances such as when the product contains "patent or data rights restrictions that would preclude competition", or if a competitive procurement would lead to "substantial duplication costs" or an "unacceptable delay".

Cubic Transportation Systems, the original manufacturer of the District's current vending machines and add fare machines, has designated Advantech's SBC as the only single board computer replacement compatible with both Windows 10 IoT as well as Cubic's proprietary software in use on existing ticket vending machines and add fare machines throughout the District. Cubic's disk image was created specifically for the Advantech SBC. The procurement of Advantech SBCs is also justified under the aforementioned FTA sole source requirements based on "data rights restrictions" and "substantial duplication costs". The Cubic software is proprietary and must be used going forward to avoid substantial cost impact and schedule delay. Even if another vendor supplied a system that met written requirements, BART would need to duplicate a significant amount of in-house engineering work and cost, including hardware prototyping and software modifications, to validate all SBC components function properly with BART equipment. Based on the foregoing, the procurement of Advantech SBCs complies with Section 20227 and FTA requirements in that the SBCs are being procured to replace those in use on fare machines deployed throughout the District.

Pursuant to the District's Disadvantaged Business Enterprise ("DBE") Program, the Office of Civil Rights reviewed the scope of work for this sole source contract and determined that there were no DBE subcontracting opportunities; therefore, no DBE participation goal was set for this Contract.

The Office of the General Counsel will approve the contract as to form.

FISCAL IMPACT:

Funding in the amount of \$2,327,000 for award of procurement is included in the total project budget for the AFCE SBC Equipment Refresh Project Number 47CJ017.

The table below list funding assigned to the referenced project and is included to track funding history against spending authority. Funds needed to meet this request will be expended from the following sources:

Project 47CJ017:

Project	Fund	Fund Description	Source	Amount	
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47CJ017	3015	FTA 5307 & 5337 CA-2019-126-00	FEDERAL	2,400,000
47CJ017	8532	FY2018 Operating Capital Allocation	BART	543,196
47CJ017	8524	FY2018 Operating Capital Allocation	BART	206,804

As of April 6, 2021, \$3,150,000 is the total budget for this project. BART has expended \$676,472 committed \$0 and reserved \$0 to date. This action will commit \$2,327,000 leaving an available fund balance of \$146,528 in this fund source for this project.

The Office of the Controller/Treasurer certifies that funds are currently available to meet this obligation.

This action is not anticipated to have any Fiscal Impact on un-programmed District reserves.

ALTERNATIVES:

The Board can elect not authorize the General Manager to award this contract. In this case the District would have to source the computers from an alternative supplier, which would pose the risk of not protecting BART's Operational Network and not maintaining PCI Compliance for credit card processing.

RECOMMENDATION:

Adopt the following motion.

MOTION:

Pursuant to California Public Contract Code Section 20227, the Board of Directors finds that Advantech is the single source for the procurement of single board computers for the sole purpose of upgrading the operating systems on ticket vending machines and add fare machines currently in use throughout the District.

The General Manager is authorized to award a sole source procurement contract to Advantech Corporation to procure single board computers for an amount not to exceed \$2,327,000.