



EXECUTIVE DECISION DOCUMENT

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| GENERAL MANAGER APPROVAL: | | DocuSigned by: <i>Michael Jones</i> 47000790F2D7463... | GENERAL MANAGER ACTION REQ'D: Approve and Forward to Board of Directors | | |
| DATE: 9/3/2024 | | 10/1/2024 | BOARD INITIATED ITEM: No | | |
| Originator/Prepared by: Ana Maria Maxey Dept: New Car Procurement | General Counsel | Controller/Treasurer | District Secretary | BARC | |
| DocuSigned by: <i>Ana Maria Maxey</i> 24DE449C8B16463... | DocuSigned by: <i>Amelia Sandoval</i> 2528C067C44147D... | DocuSigned by: <i>Shirley Gan</i> EE11C8CEEEA04FD... | | DocuSigned by: <i>Shane Edwards</i> 8128A2EB2F014F3... | |
| Signature/Date: 9/26/2024 | 9/26/2024 [] | 9/26/2024 [] | [] | 9/27/2024 [] | |

Change Order No.075 to Contract No. 40FA-110 - ATO Optimization -TS 14.4.3 Automatic Speed and Pre-Braking Regulation

PURPOSE:

To obtain Board authorization for the execution of Change Order No. 075 (ATO Optimization), in the amount of \$4,362,035.39, to Contract No. 40FA-110, Procurement of Transit Vehicles ("the Contract").

DISCUSSION:

On May 10, 2012, the Board authorized the award of the Contract to then-Bombardier Transit Corporation (now Alstom) for the procurement of Fleet of the Future transit vehicles.

The San Francisco Bay Area Rapid Transit (BART) District (the District) intends to reduce the wheel flat incidents by regulating train speed from higher speed codes to lower speed codes.

During the winter season rain is frequent and abundant in the San Francisco Bay Area. Under such conditions, it occasionally happens that the train braking rate is below the supervised covered rate due to lower rail adhesion. Wheel locking may occur, leading to flat spots on the train wheels. Worst case, all cars in the train can be affected. To stop this from happening the solution proposed is in slowing the train to the next block speed, before it enters this block. This new function ensures that the train enters a block at a block speed which will be especially helpful during the winter season, when the observed braking rate is close to the guaranteed minimum braking rate.

This change involves modifying the on-board ATO software to incorporate a speed regulation solution that performs pre-braking actions before entering a wayside train control block. The changes will enable the software to dynamically refer to a comprehensive system map table containing block locations, maximum speed limits, and routes. This setup or route will be initialized before train starts movement. There will also be the ability to adjust operational map table parameter modification without full software re-uploads.

Pursuant to Board Rule 5-2.3, for construction and procurement contracts greater than \$200 million, any Change Order involving an expenditure greater than \$500,000 requires Board approval.

The Office of the General Counsel will approve this Change Order as to form prior to execution.

The Procurement Department will review this Change Order for conformance with its Procedures prior to execution.

FISCAL IMPACT:

Funding in the amount of \$ 4,362,035 for Change Order No. 075 is included in the total Project budget for FMS #40FA001 - Rail Car Procurement.

The table below lists funding assigned to the referenced project and is included to track funding history against spending authority. As of August 28, 2024, the following fund sources have been secured out of the total project budget of \$2.045 billion:

| | |
|--------------|-------------------------|
| BART | \$ 306,088,625 |
| Federal | \$ 1,089,154,858 |
| State | \$ 222,079,697 |
| Regional | \$ 269,049,860 |
| VTA | \$ 158,297,038 |
| Total | \$ 2,044,670,078 |

The following is the project expenditures summary as of August 28, 2024, for the Rail Car Procurement project:

| | |
|------------------------|------------------|
| Total Project Estimate | \$ 2,044,670,078 |
| Expense to Date | \$1,719,571,207 |
| Encumbrances | \$258,883,621 |
| Reserved | \$10,539,348 |
| This Action | \$4,362,035 |
| Remaining Balance | \$51,313,866 |

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 unprogrammed District Reserves.

ALTERNATIVES:

If we decline to approve this Change Order, wheel flats on cars will continue, cars will need to be removed from service, and wheel costs will continue to cost the District money throughout the years of service.

RECOMMENDATION:

It is recommended that the Board adopt the following motion

MOTION:

The General Manager is authorized to execute Change Order No. 075 for changes to the Technical Specification 14.4.3 Automatic Speed and Pre-Braking Regulation under Contract No. 40FA-110 Procurement of Transit Vehicles.