

**Date:** January 22, 2014

**To:** Board of Directors

From: Neil McFarlane

Subject: RESOLUTION 14-01-02 OF THE TRI-COUNTY METROPOLITAN

TRANSPORTATION DISTRICT OF OREGON (TRIMET) AUTHORIZING A CONTRACT WITH MODERN RAILWAY SYSTEMS, INC. FOR DESIGN, FURNISH AND INSTALL SERVICES FOR THE WESTSIDE EXPRESS COMMUTER RAIL POSITIVE TRAIN CONTROL

**PROJECT** 

#### 1. Issue or Purpose of the Item.

The purpose of this item is to request that the TriMet Board of Directors ("Board") authorize the General Manager to execute a contract with Modern Railway Systems, Inc. ("MRS") for design, furnish and install services for the Westside Express Commuter Rail Positive Train Control Project ("Project").

#### 2. Reason for Board Action.

Board approval is required for goods and services contracts obligating TriMet to pay in excess of \$500,000. This contract will be structured with an initial contract for pre-implementation services only, which will be subsequently modified to add the implementation services. The amount of the initial pre-implementation services contract is \$235,435. Even though the pre-implementation services contract amount is under the Board approval threshold, staff is bringing this contract to the Board at this time because the addition of implementation services will exceed the Board approval threshold. Staff will return to the Board at the end of the pre-implementation phase for authorization to add the implementation services.

## 3. Background.

TriMet's Westside Express Service ("WES") operates on a section of railroad between Wilsonville and Beaverton for a distance of approximately 15 miles. The WES right-of-way is under the operational control of Portland and Western Railroad ("PNWR"). TriMet is a tenant to PNWR, and has contracted with PNWR to be the operator of the WES commuter rail service.

All rail traffic on the PNWR railroad must comply with Federal Railroad Administration ("FRA") safety regulations. In 2008, Congress passed the Rail Safety Improvement Act, requiring that Positive Train Control ("PTC") equipment be installed on most of the United States railroad network by the end of 2015. The FRA published detailed regulations implementing the law in 2010. PTC regulations require a train control system that prevents accidents which are primarily caused by human error, including train-to-train collisions,

overspeed derailments, incursions into established work zone limits, and the movement of a train through a switch that is in the improper position. These safety features are ensured by signal and communications systems that monitor and control train movements to prevent human factor errors. A diagram depicting basic operation of a PTC system is provided in Attachment A to this memorandum.

The safety systems currently in place on WES (an Automatic Train Control System and a Centralized Traffic Control System) already meet many requirements of the new regulations. Since 2010, TriMet and PNWR have worked with the FRA to define the needed upgrades to the existing train control system that would meet the remainder of the new regulations. In April, 2013, TriMet received approval from the FRA for its proposed upgraded system.

On November 7, 2013, TriMet issued a Request for Proposals ("RFP") to design, furnish and install a PTC-compliant system. TriMet posted the RFP on its web-based Ebid system, and on November 20, 2013, a pre-proposal conference was held, which was attended by six interested firms. TriMet appointed an Evaluation Committee ("EC") with members from TriMet's Capital Project Systems department and Diversity and Transit Equity department, PNWR staff and a Systems expert from the Utah Transit Authority, which has similar PTC issues, to review and evaluate the proposals. EC members were selected based on their expertise, experience and knowledge related to the Project.

On December 13, 2013, TriMet received one proposal, from MRS. MRS is the firm that designed and installed TriMet's current train control system in 2008, under its previous name Rail Systems Solutions, Inc. TriMet believes that it received only a single proposal for several reasons. First, there are only a few companies that perform PTC work, and there is a significant amount of PTC work currently occurring due to the new FRA regulations and the implementation deadline. Furthermore, TriMet's is the smallest project, and will utilize a different technology than most other projects. These factors led to a reduced market for this Project.

When only one proposal is received, TriMet may cancel the procurement if it determines that the price is not fair and reasonable or the proposer is not qualified. In this instance, TriMet's Evaluation Committee ("EC") determined that the proposer was well qualified, and TriMet staff has determined that its price is fair and reasonable.

The EC evaluated MRS's technical proposal based on the criteria set forth in the RFP. The technical scoring criteria included Proposer Experience and Past Performance; Proposed Team; Proposed Project Approach and Work Plan; Contracting Plan, including DBE and Workforce participation; and Project Management, including Quality and Safety Plans and Project Controls to maintain schedule and budget. The technical proposal submitted by MRS indicated that it was highly qualified to perform the work. After evaluating the technical proposal, the EC opened the proposer's price and completed the scoring of the proposal. MRS submitted a price of \$235,435 for the initial pre-implementation services, which is inclusive of all cost, overhead and fee. Pre-implementation services will consist of all design and project management work required to prepare for the installation of the FRA-compliant PTC system, including cost estimating, scheduling, and full design of the system.

MRS estimates that it will achieve 15 percent DBE participation during the implementation phase of the contract. The vast majority of work on this contract is specialty systems related (including specialty control center and wayside software), which does not lend itself to many subcontracting opportunities. However, MRS and TriMet will work together during the pre-implementation phase to maximize DBE utilization to the extent possible.

The \$253,435 pre-implementation services amount is significantly less than TriMet's independent cost estimate of \$644,700. As part of the pre-implementation services work, TriMet will negotiate an implementation services contract modification, which is expected to be approximately \$5,000,000. TriMet expects to return to the Board to request this contract modification in the fall of 2014. The Project is budgeted within TriMet's fiscal year 2013-16 budgets.

## 4. Options

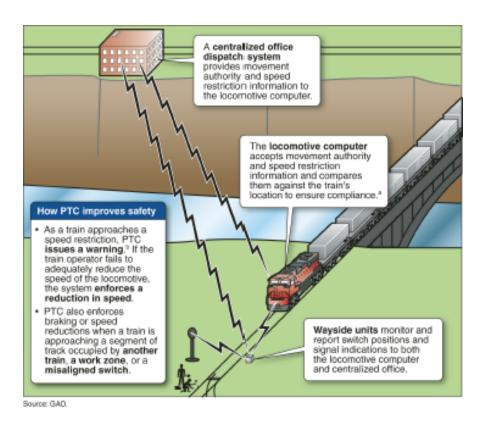
The primary option to approving the recommended action would be to re-procure the contract. However, this option is not recommended because MRS is highly qualified, and its pre-implementation services price and fixed fee percentage are fair and reasonable. Further, the impending December 31, 2015 federal deadline to implement PTC is looming and re-procurement would pose a significant schedule risk. There is also no guarantee that re-procurement would garner additional interest. Therefore, staff believes that the current results of this procurement would not be improved through re-procurement. Award of the contract to MRS is the only recommended option.

#### 5. Recommendation.

The General Manager recommends approval of the Resolution.

# Resolution 14-01-02 Board Memo Attachment A

# Basic Operation of a Positive Train Control (PTC) System



**a** Train Location information is determined through various methods depending on the specific PTC systems, including satellite-based positioning systems and sensors installed along the track.

#### **RESOLUTION 14-01-02**

RESOLUTION OF THE TRI-COUNTY METROPOLITAN TRANSPORTATION DISTRICT OF OREGON (TRIMET) AUTHORIZING A CONTRACT WITH MODERN RAILWAY SYSTEMS, INC. FOR DESIGN, FURNISH AND INSTALL SERVICES FOR THE WESTSIDE EXPRESS COMMUTER RAIL POSITIVE TRAIN CONTROL PROJECT

WHEREAS, TriMet has authority under ORS 267.200 to enter into a contract with Modern Railway Systems, Inc. for Design, Furnish and Install Services for the Westside Express Commuter Rail Positive Train Control Project ("Contract"); and

WHEREAS, the total amount of the Contract shall, as modified, exceed \$500,000; and

**WHEREAS,** the Board of Directors ("Board"), by Resolution dated November 25, 2009, adopted a Statement of Policies requiring the Board to approve all goods and services contracts in excess of \$500,000;

#### NOW, THEREFORE, BE IT RESOLVED:

- 1. That the Contract shall be in conformance with applicable laws.
- 2. That the General Manager or his designee is authorized to execute the Contract.

Dated: January 22, 2014	
	Presiding Officer
Attest:	
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Recording Secretary	
	Approved as to Legal Sufficiency:
	Legal Department