Date: January 27, 2016

To: Board of Directors

From: Neil McFarlane

Subject: RESOLUTION 16-01-07 OF THE TRI-COUNTY METROPOLITAN TRANSPORTATION DISTRICT OF OREGON (TRIMET) AUTHORIZING A MODIFICATION TO THE CONTRACT WITH INNOVATIONS IN TRANSPORTATION, INC. FOR ADDITIONAL COMPUTER AIDED BUS DISPATCH AND RADIO SYSTEM SOFTWARE AND HARDWARE AND AN INCREASE IN THE CHANGE ORDER ALLOWANCE

1. **Purpose of Item**

   This Resolution requests that the Board of Directors ("Board") authorize a contract modification with Innovations in Transportation, Inc. ("INIT") for additional Computer Aided Bus Dispatch and Radio System software and hardware ("Modification"), and an increase in the contract change order allowance amount.

2. **Type of Agenda Item**

   - [ ] Initial Contract
   - [x] Contract Modification
   - [ ] Other ________________

3. **Reason for Board Action**

   Board authorization is required for goods or services contracts obligating TriMet to pay in excess of $500,000.

4. **Type of Action:**

   - [x] Resolution
   - [ ] Ordinance 1st Reading
   - [ ] Ordinance 2nd Reading
   - [ ] Other ________________

5. **Background**

   In September 2009, pursuant to Resolution No. 09-09-74, the Board authorized a contract with INIT in the amount of $38,496,887 for procurement of new Computer Aided Dispatch ("CAD/AVL") and Bus/Rail Radio Systems. A change order allowance not to exceed 5 percent of the total approved contract amount was included in the Board approval. The CAD/AVL and Bus/Rail Radio System procured under the contract has been in use since April 2013, and is operating in accordance with the agency’s project objectives.
The requested Modification would increase the total contract amount by $2,559,148 to make necessary software and hardware modifications to the CAD/AVL and Bus/Rail Radio System as described below, and to cover change order costs incurred from other related TriMet projects that had internal approval but were authorized in advance of obtaining additional contractual allowance. In addition, this Resolution would authorize a 5 percent increase to the Board approved change order allowance in the amount of $1,924,844, for a total cumulative contract change order allowance not to exceed $3,849,688.

The required software and hardware changes to the CAD/AVL and Bus/Rail Radio System are described below:

1. **New System Integration with CAD/AVL**: The following new systems need to be integrated into the existing CAD/AVL:
   - **eFare Validator Integration**
     The eFare project requires integrating the new eFare validators with the bus operator’s mobile display terminal and the on board computer. This modification will allow the eFare system to acquire vehicle information from the CAD/AVL system, such as bus number, service block, and location. The integration will allow the eFare System to pass fare information to the Operator’s mobile data terminal.
     Cost: $518,625

   **New Systems Integration Request Total: $ 518,625**

2. **Safety Required Changes**: The following equipment is required to ensure maintenance of way worker safety:
   - **Infill Radio Site**
     A small radio tower and associated radio equipment are required to fill in a small, but crucial radio coverage hole along the rail alignment in Hillsboro. This additional radio site will insure portable radio coverage for maintenance of way technicians working along the alignment.
     Cost: $450,000

   - **Sub Station and Signal Room Mobile Radios**
     Some signal room and substations where portable radio coverage inside these rooms is inadequate, require the addition of mobile radios and antennas. Mobile radios inside the rooms will allow maintenance personnel working inside the rooms to communicate effectively with maintenance crews in the right of way.
     Cost: $150,000

   **Safety Equipment Request Total: $ 600,000**

3. **Related Project Change Orders**: Changes orders for projects related to CAD/AVL but not in original project scope.
• **Mobile Ticket Printer and Integration**  
This modification integrated the Mobile Ticket Printer into the CAD/AVL System and eliminates the paper transfer and results in improved fare enforcement.  
Cost: $1,440,523

**Related Project Change Orders Total: $1,440,523**

INIT’s price proposals for the above requested New Systems and Safety changes have been evaluated and determined by staff to be fair and reasonable.

Other integration and system improvements to the CAD/AVL and Bus/Rail Radio System are in development but firm cost estimates are not available at this time. The proposed changes currently in development include: integrating CAD/AVL with the Board approved Closed Circuit Television ("CCTV") System replacement; Bus Rapid Transit Traffic Signal Priority Software Improvements; and computer server virtualization. The 5 percent increase in the change order allowance requested for approval in this Resolution is intended to allow these changes to be made under the contract.

The contract amounts are set forth below:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
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<tbody>
<tr>
<td>Initial Contract Amount</td>
<td>$38,496,887</td>
</tr>
<tr>
<td>Initial Change Order Allowance (5%)</td>
<td>$1,924,844</td>
</tr>
<tr>
<td><strong>Total Contract Amount and Change Orders To Date</strong></td>
<td><strong>$40,421,731</strong></td>
</tr>
<tr>
<td>Proposed Modification Integration &amp; Safety Work</td>
<td>$1,118,625</td>
</tr>
<tr>
<td>(includes changes above original allowance)</td>
<td></td>
</tr>
<tr>
<td>Proposed Modifications for Related Project Change Orders</td>
<td>$1,440,523</td>
</tr>
<tr>
<td>Proposed Additional Change Order Allowance</td>
<td>$1,924,844</td>
</tr>
<tr>
<td><strong>Total Contract Amount if Modification and Change Order Allowance Increase is approved:</strong></td>
<td><strong>$44,905,723</strong></td>
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</tbody>
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6. **Procurement Process**

In 2009, the CAD/AVL and Radio Replacement Project was awarded to INIT after issuance of a formal, competitive Request for Proposal process. INIT’s proposal received the highest technical score and was the lowest cost proposal. The change order overrun that occurred was due to a cross-divisional internal control issue that has been addressed through a procedural update to prevent a future occurrence.

7. **Diversity**

The initial contract did not have an estimated percentage for Disadvantaged Business Enterprise ("DBE") or Minority Business Enterprise ("MBE") participation. These change order requests offer an opportunity to increase DBE and/or MBE participation. INIT is negotiating with TRIUNITY Engineering for radio engineering services and is actively pursuing other DBE and MBE firms for the work that is under development.
8. **Financial/Budget Impact**

The INIT contract Modification changes have been planned, budgeted and accounted for in the project(s) budgets.

9. **Impact if Not Approved**

If the Board does not adopt the Resolution, TriMet would not be able to integrate eFare Validators, nor the CCTV System with the existing TriMet CAD/AVL System. Without eFare and CAD/AVL integration the successful implementation of eFare is not possible. Failure to add the infill radio site and substation and signal room mobile radios, will present serious safety concerns for maintenance of way workers, and would require major changes to current standard operating procedures.

Changes to INIT’s CAD/AVL system require INIT to perform the proprietary software changes. Without Board approval to increase this existing INIT contract amount, a separate sole source contract with INIT would be required.
RESOLUTION 16-01-07

RESOLUTION OF THE TRI-COUNTY METROPOLITAN TRANSPORTATION DISTRICT OF OREGON (TRIMET) AUTHORIZING A MODIFICATION TO THE CONTRACT WITH INNOVATIONS IN TRANSPORTATION, INC. FOR ADDITIONAL COMPUTER AIDED BUS DISPATCH AND RADIO SYSTEM SOFTWARE AND HARDWARE AND AN INCREASE IN THE CHANGE ORDER ALLOWANCE

WHEREAS, TriMet has authority under ORS 267.200 to enter into a contract modification with Innovations in Transportation, Inc. (“INIT”) for additional computer aided bus dispatch and radio system software and hardware (“Modification”) and to increase the contract change order allowance; and

WHEREAS, the total amount of the Modification shall exceed $500,000; and

WHEREAS, the TriMet Board of Directors (“Board”), by Resolution dated November 25, 2009, adopted a Statement of Policies requiring the Board to approve goods and services contracts obligating TriMet to pay in excess of $500,000:

NOW, THEREFORE, BE IT RESOLVED:

1. That the General Manager or his designee is authorized to execute the Modification in an amount not to exceed $2,559,148.

2. That the contract change order allowance is increased by $1,924,844 and the General Manager or his designee is authorized to execute change orders to the contract in a total cumulative amount not to exceed $3,849,688.

3. That the Modification and contract change orders shall be in conformance with applicable laws.

Dated: January 27, 2016

_________________________________________
Presiding Officer

Attest:

_________________________________________
Recording Secretary

Approved as to Legal Sufficiency:

_________________________________________
Legal Department