Funding for DART’s Portion of a PTC Maintenance and Support Contract Between Trinity Metro and Wabtec Corporation and

Increase Funding for TRE Operations and Maintenance Contract for PTC Support

Customer Service, Safety & Mobility Committee
November 10, 2020

Claude Smith
Director, Positive Train Control
There are two agenda items for consideration that have several similarities; therefore, the two items were combined into one presentation to eliminate duplicate information.
The Rail Safety Improvement Act of 2008 (RSIA 2008) mandated that all passenger service must develop a plan for implementing PTC before December 31, 2015.

The deadline was subsequently extended by the PTC Enforcement and Implementation Act of 2015.

TRE included an alternative schedule and sequence for implementing PTC no later than December 31, 2020.

Due to this mandate, all passenger service is required to install this technology (TRE, TEXRail, DCTA and Amtrak) in this region.
# PTC Software

<table>
<thead>
<tr>
<th>Segments</th>
<th>Software</th>
<th>Updates</th>
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</thead>
<tbody>
<tr>
<td>Onboard</td>
<td>Train Management Software</td>
<td>Semi-Annually</td>
</tr>
<tr>
<td>Wayside</td>
<td>Wayside Interface Units (WIU)</td>
<td>Annually</td>
</tr>
<tr>
<td></td>
<td>Wayside Status Relay System (WSRS)</td>
<td>Annually</td>
</tr>
<tr>
<td>Back Office System</td>
<td>Computer Aided Dispatch / Train Dispatch Management System (CAD/TDMS)</td>
<td>Annually</td>
</tr>
<tr>
<td></td>
<td>Back Office Software (BOS)</td>
<td>Annually</td>
</tr>
<tr>
<td></td>
<td>Mobile Data Manager (MDM)</td>
<td>Annually</td>
</tr>
<tr>
<td></td>
<td>Admin Client Configuration Tool</td>
<td>Annually</td>
</tr>
<tr>
<td></td>
<td>Office Communication Manager (OCM)</td>
<td>As Needed</td>
</tr>
<tr>
<td></td>
<td>Key Exchange Server (KES)</td>
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</table>
## PTC Components & FRA Reports

### Components

<table>
<thead>
<tr>
<th>Segments</th>
<th>TRE</th>
<th>TEXRail</th>
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<tbody>
<tr>
<td>Onboard</td>
<td>17</td>
<td>8</td>
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<tr>
<td>Wayside</td>
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<tr>
<td>Base Stations</td>
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<td>2</td>
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<tr>
<td>Back Office Systems</td>
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### FRA Inspections and Reporting Frequencies

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<tr>
<th>Segments</th>
<th>Daily</th>
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<td>Wayside</td>
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<tr>
<td>System Reports</td>
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</table>
Expenditure Justification

• These expenditures are necessary because PTC is a Federal Mandate and all Passenger Railroads are required to be operational and Certified by December 31, 2020. TRE has installed PTC equipment, components and applications on the existing TRE fleet, inside wayside signal houses, communication tower and dispatch centers. All these items need to be maintained and serviced.

• They should happen now because the installed equipment will require periodic FRA inspections and maintenance. We are transitioning from the original implementation warranty to regular maintenance.

• These items cannot be phased in due to regular inspections and maintenance that are required and mandated by the FRA.

• The amounts have been negotiated for the best possible service with least amount of workforce required.
PTC Support for DART’s Portion of Wabtec Contract
Today’s Consideration
PTC Support for DART’s Portion of Wabtec Contract

Approval of a resolution authorizing the President/Executive Director or his designee to fund the DART's portion of the PTC Maintenance and Support Contract between Trinity Metro and Wabtec Corporation for a long-term (five-year) service agreement for the maintenance of Wabtec-provided proprietary software and hardware that comprise the Interoperable Electronic Train Management System (I-ETMS) PTC System including onboard and Back Office Systems (Computer Aided Dispatch (CAD)/Train Management Dispatch System (TMDS), Back Office Software (BOS), and Mobile Data Management (MDM)), for a total amount not to exceed $5,313,649.
Wabtec PTC Support

- Wabtec will provide ongoing service and support all their proprietary PTC systems, applications and tools including but not limited to:
  - 24-hour access to PTC product support desk
  - Interoperable Electronic Train Management System (I-ETMS) Onboard Hardware product support
  - I-ETMS Onboard Software Application Interoperability and Feature Enhancement
  - I-ETMS Onboard Application Defect Resolution
  - Computer Aided Dispatch (CAD)/Train Management Dispatch System (TMDS), Back Office Software (BOS), and Mobile Data Management (MDM) and Support
  - Track Service (Subdiv) Support
The Agencies have requested unit pricing for the following optional services:
- Field Test Engineer Support
- Onboard Field Service Technician Support
- Lab Integration Test Engineer
- Track Service Engineer
- Hardware Repair Pricing

The negotiated contract includes a base cost ($4,524,918) and optional time and material costs ($788,731).

The cost for year one will be $1,000,850, and will increase each year by 3% escalation for a five-year total of $5,313,649.

The contract cost will be split by seat mile, which is 43.22% for DART ($2,296,559.10) and 56.78% for Trinity Metro ($3,017,089.90).
Recommendation

Approval of a resolution authorizing the President/Executive Director or his designee to fund the DART's portion of the PTC Maintenance and Support Contract between Trinity Metro and Wabtec Corporation for a long-term (five-year) service agreement for the maintenance of Wabtec-provided proprietary software and hardware that comprise the Interoperable Electronic Train Management System (I-ETMS) PTC System including onboard and Back Office Systems (Computer Aided Dispatch (CAD)/Train Management Dispatch System (TMDS), Back Office Software (BOS), and Mobile Data Management (MDM)), for a total amount not to exceed $5,313,649
TRE O&M Contract for PTC Support
Today’s Consideration for TRE O&M Contract for PTC Support

Approval of a resolution to increase funding to the existing Trinity Railway Express ten-year Operations and Maintenance Contract with Herzog Transit Services, Inc., [Contract No. 2005858-1], to support PTC by providing ongoing service continuity and supporting all PTC systems in a manner that does not degrade the service, service level flexibility or performance, and is responsible for ensuring the PTC system maintains FRA compliance in an amount of $7,118,138 for a new total authorized amount not to exceed $334,191,840
HTSI PTC Support

• The PTC system is scheduled to be fully implemented and certified by December 31, 2020
• Although a line item for PTC support was included in the Operations and Maintenance Contract, the cost of PTC support was unknown when this contract was negotiated
• PTC support costs have been negotiated for the remaining five years of the contract as a modification
HTSI PTC Support (cont’d)

• Herzog Transit Services, Inc. will provide the day to day maintenance and servicing of PTC hardware equipment installed onboard trains, inside wayside signal houses, communication interfaces, and dispatch center

• The cost for year one will be $1,340,734, and will increase each year by 3% escalation for a five-year total of $7,118,138.

• The funding increase will be split by seat mile, which is 43.22% for DART ($3,076,459.24) and 56.78% for Trinity Metro ($4,041,678.76)
Resolution

Approval of a resolution authorizing the President/Executive Director or his designee to increase funding to the existing Trinity Railway Express ten-year Operations and Maintenance Contract with Herzog Transit Services, Inc., [Contract No. 2005858-1], to support PTC by providing ongoing service continuity and supporting all PTC systems in a manner that does not degrade the service, service level flexibility or performance, and is responsible for ensuring the PTC system maintains FRA compliance in an amount of $7,118,138 for a new total authorized amount not to exceed $334,191,840