

**Board Report**

File #: 2016-0124, **File Type:** Contract**Agenda Number:** 31

**SYSTEM SAFETY, SECURITY AND OPERATIONS COMMITTEE
APRIL 14, 2016****SUBJECT: FTA PLATFORM TRACK INTRUSION DETECTION SYSTEM PILOT PROGRAM****ACTION: AWARD CONTRACT****RECOMMENDATION**

AWARD a three-year, firm fixed price Contract No. PS4443900HONEYWELL, a sole source procurement, to Honeywell International, Inc. (Honeywell) for the **Platform Track Intrusion Detection System (PTIDS) pilot program** for an amount of \$1,553,050 inclusive of sales tax. The contract includes both labor and materials, including project management support, installation and demonstration planning, system design and testing, and training of Metro staff on installation. Materials will include the PTIDS system, to be installed at three station platform sides on the Metro Rail system.

ISSUE

In February 2015, Metro was selected for a grant to pilot the PTIDS at three platform station locations, as part of the United States Department of Transportation Federal Transit Administration (FTA)'s Innovative Safety, Resiliency, and All-Hazards Emergency Response and Recovery Research Demonstrations grant program. FTA will be awarding Metro \$1,722,400, with a Metro match of \$430,600 for Metro labor and \$247,000 for contingency. The award of this contract will allow Honeywell, who helped prepare the grant application, to complete its tasks in the scope of work through the funding programmed by FTA.

DISCUSSION

In December 2013, Metro, in partnership with Honeywell International Inc., and ProTran Technology LLC, submitted an application in response to FTA's Notice of Funding Availability (NOFA) Solicitation of Project Proposals for Innovative Safety, Resiliency, and All-Hazards Emergency Response and Recovery Research Demonstrations, dated October 1, 2013. Metro's project sought to demonstrate the performance of the proposed innovative electronic PTIDS. PTIDS is a radar system that detects and alerts staff to track intrusions.

Metro is focused on a strategy to improve safety at rail passenger station platforms and reduce vulnerabilities, risks, and system delays. Track intrusions represent not only a safety hazard but a

security risk as well. Unauthorized track entry has the potential to lead to vandalism or theft, which creates additional safety, security, and operational hazards.

The purpose of this project is to demonstrate that the PTIDS can be relied upon to increase safety and security at/near rail passenger station platforms by detecting bodies/obstacles intruding the right-of-way and providing immediate warning to rail operation safety systems and personnel. Sensors trigger safety systems and alert personnel to stop trains if a person/object enters the right-of-way. PTIDS detects and alerts the intrusion immediately upon occurrence, thereby allowing the maximum amount of time for response and mitigation. PTIDS is innovative because it incorporates fail-safe mechanisms and uses algorithms to minimize false alarms; thereby, ensuring rail operational safety and resiliency with interruptions limited to actual intrusions.

In May 2015, Metro submitted a request for a Buy America waiver for the manufacturing of the PTIDS technology. The system is currently being manufactured in Europe, and is therefore non-compliant with the FTA Buy America program. There are no similar technologies being manufactured in the United States, and the FTA approved the waiver, publishing a Federal Register Notice in December 2015. The FTA provided an award of grant funding to Metro for this project.

The contract allows Honeywell to design and manufacture the system for three station platform tracks: one aerial (Metro Gold Line - Chinatown), one subway (Metro Red Line - Civic Center), and one at-grade (Metro Blue Line - 103rd Street). The contract also includes training Metro staff for installation, and overseeing the 6-month demonstration. Additionally, Metro staff will award up to \$95,000 for materials, design, and labor to Protran Technology, under separate cover.

Sole Source Justification

The significance of this sole source procurement is that there is no other company currently producing this form of technology. Metro staff confirmed through independent research that there are no competitors for a radar-based track intrusion technology. This was further confirmed by FTA during the Buy America waiver process, as FTA staff had to ensure that there were no US-manufactured technologies that could be used in lieu of the Honeywell technology.

DETERMINATION OF SAFETY IMPACT

The implementation of the Pilot program will evaluate this technology as a method of improving passenger safety on rail station platforms, which has the potential for a positive safety impact.

FINANCIAL IMPACT

The funding of \$1,553,050 to Honeywell for PTIDS design, manufacturing, installation training, and monitoring is being awarded by FTA. Approximately \$1,000,000 would be needed in FY17 and is budgeted in project number 205103, cost center 3960. The remaining costs would be expended in FY18 and the beginning of FY19. Since this is a multiyear contract, the Chief Operations Officer and

Project Manager will be responsible for future fiscal year budgeting.

Impact to Budget

The source of funding for the project is Prop A 35% and a FTA grant. No other source of funds were considered or are eligible for the project.

ALTERNATIVES CONSIDERED

The Board may decide to not authorize the award of this Contract. This alternative is not recommended. In prior years, Metro has considered the use of other platform track intrusion technologies, but has not found alternatives that are reliable enough to effectively alert the system for intrusions with minimal impact on operational delays. As such, there is currently no track intrusion system installed on Metro Rail, and intrusions are only noticed by Closed Circuit Television (CCTV) observers, which can be limiting and result in injuries and fatalities.

NEXT STEPS

After approval by the Board, staff will execute Contract No. PS4443900HONEYWELL with Honeywell International, Inc. for PTIDS. Staff will continue to monitor the PTIDS and will evaluate the effectiveness of the system.

ATTACHMENTS

Attachment A - Procurement Summary
Attachment B - DEOD Summary

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