

Agency 072 ELEMENTARY AND SECONDARY EDUCATION

Project ID/Name: MC4 Metropolitan Career and Tech HVAC

Project Description:

The Regents request \$2,500,000 to replace and repair the HVAC system for five buildings at the Metropolitan Regional Career and Technical Center's (MET Center) Peace Street and Public Street campuses. The project is to be completed over a period of three years at an estimated cost of \$833,333 per year in FY 2013 and FY 2014 and \$833,334 in FY 2015.

Project Justification:

The HVAC equipment at the Public Street campus was installed and commissioned in 2000-2001. Over the years, due to the "value engineering" of the system's original design and balancing, many of the controls and systems are unable to work together efficiently. The mechanical system's "useful" life which, is typically twenty-five years, has been greatly reduced due to these control issues; in fact some units run 24/7 regardless of the controls. Over the years, measures have been taken to re-commission and to correct these issues and many lower cost repairs have been completed, which resulted in some improvement to the systems, however heating, cooling, and more importantly, air quality issues still exist. Despite these actions, the current mechanical systems have above average operating costs as well as rising repair costs and more frequent equipment failures. In the last year, the MET Center has spent over \$65K in HVAC repairs and has operated a total of seven days cumulatively throughout the year with no heating/cooling in one or more buildings. During the winter months, portable space heaters have been necessary in some of the classrooms and administrative spaces. Otherwise, class space would be unacceptable for student and faculty use. Per the Rhode Island Fire Code, use of space heaters in the classrooms is deemed to be unsafe.

The goal of the Met Center is to execute a project that will:

1. Replace outdated, inefficient, and dysfunctional HVAC equipment, controls, and related energy components and systems.
2. Prolong the useful life of the existing HVAC system.
3. Based upon anticipated energy/utility cost savings from repairing and replacing existing equipment with more efficient equipment, gain additional operational savings that can be invested back into core educational programs and functions.
4. Implement and install a state-of-the-art "green" energy equipment and systems to create a more comfortable, healthy and safe environment for students, staff, and visitors.

Project Status:

RISE Engineering in conjunction with the State of Rhode Island Office of Energy Resources conducted a preliminary audit of our HVAC systems in 2009. The audit confirmed that the systems were not efficient and that units were operating 24/7 with no ability to control them. In fiscal year 2011, the MET entered into a relationship with LINC Service, an innovative HVAC solutions engineering firm, to conduct a detailed investment grade audit of the MET's HVAC systems. The investment grade audit identified \$4,167,365 in necessary repairs and replacements to the HVAC systems. This work, if funded, would correct the efficiency and operational issues with the current system in addition to reducing utility costs by over 59% for potential savings of \$171,000 annually. The MET plans on splitting the project into two Phases, Phase I consisting of necessary improvements totaling \$1.7M which would derive a utility savings that could be directed to support financing and project costs, a true ESCO/Performance Contracting project. Financing for this phase would be secured by the MET. Phase II would consist of necessary improvements totaling \$2.5M utilizing RICAP funds which would still derive a utility savings however not enough to support financing and

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project costs.

At this time, the MET is seeking financing proposals and interest rates for Phase I and working towards procuring services to complete these repairs and replacements.

Strategic Criteria

Safety Concerns Major

Safety Narrative

The HVAC units present issues relating to classroom air quality, ventilation, and proper temperature.

Code Violations Major

Code Narrative

During the winter months, portable space heaters have been necessary in some of the classrooms and administrative spaces. Otherwise, class space would be unacceptable for student and faculty use. Per the Rhode Island Fire Code, use of space heaters in the classrooms is deemed to be unsafe.

Energy Impact Major Positive

Energy Narrative

The replacement of HVAC units with newer more efficient equipment in addition to the repair and replacement of controls that will correct units that currently operate 24/7 will significantly reduce energy usage.

Customer Service Major

Customer Narrative

Students and staff expect that school sessions will be held in adequate facilities. Inappropriate climate control reduces the effectiveness of the education environment.

Geographic Significance Local

Geographic Narrative

This project is local to the Met School Public Street and Peace Street campuses.

Agency Mission High

Agency Narrative

The mission of schools is to educate students in a safe and healthy learning environment and to provide a safe work environment for all staff. With increased accountability requirements, the State needs to ensure students have fewer distractions so that they can achieve full proficiency in the core subjects.

User Financing 0

User Narrative

Asset Management Rehabilitation

Asset Narrative

This project involves replacing the HVAC systems at the MET Center, a State asset.

Operating Minor

Operating Narrative

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Historic Preservation No
Historic Narrative

Budgeted No
Budget Narrative

Critical Criteria

Critical Life Safety No
Critical Life Safety Narrative

Critical Legal Liability No
Critical Legal Liability Narrative

Prior Binding Commitment No
Prior Binding Commitment Narrative

FY 2014 - FY 2018

Capital Improvement Plan Request System

Agency Request vs. Plan

Funding Source	Pre FY 2013	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	Post FY 2018	Total
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Status: Plan									
RI Capital Plan Fund	\$0	\$833,333	\$833,333	\$833,334	\$0	\$0	\$0	\$0	\$2,500,000
Subtotal Plan	\$0	\$833,333	\$833,333	\$833,334	\$0	\$0	\$0	\$0	\$2,500,000
Status: Request									
RI Capital Plan Fund	\$0	\$833,333	\$833,333	\$833,334	\$0	\$0	\$0	\$0	\$2,500,000
Subtotal Request	\$0	\$833,333	\$833,333	\$833,334	\$0	\$0	\$0	\$0	\$2,500,000