The Facilities Management department (FM) saved more than $5 million by redesigning its preventive maintenance program. FM is responsible for conducting ongoing manufacturer recommended equipment maintenance (i.e. inspections, testing, lubrications, cleaning) in order to extend equipment life and avoid emergency breakdowns. In the wake of the 2009 budget crisis, the department reviewed every aspect of the preventive maintenance (PM) program and identified the following opportunities for improvement:

**Reduce PM Frequency** – By comparing the number of PM’s to the value of the equipment being maintained, FM determined which equipment was worth performing preventive maintenance on. They chose to invest in PM’s for expensive equipment, such as a fan that cools critical research, but let bathroom fans run until they fail because replacement is more cost effective than maintaining them.

**Focus Discretionary Repairs** – FM reduced the amount of PM’s by focusing efforts on mission critical equipment and deferring repairs on non-critical pieces.

**Manage Overtime** – Emergencies (e.g. floods) and customer demands (e.g. fixing a classroom outside of school hours) often mean that FM work must be performed off shift. Being more planful when customer requests arise enables FM to make adjustments wherever possible. If there's not a good business reason to complete a project using overtime then it is placed in a queue to be completed on shift.

Implementing strategies to capitalize on these opportunities was accomplished in two phases.

**Phase I**

In order to create a more comprehensive vision to maximize performance and life cycle, FM combined data from its computerized maintenance management system and financial systems. This enabled the department to understand its total cost of operation (resources, assets, materials), improved equipment life cycle costs and created a more focused maintenance program and workforce. The result is improved visibility into current performance as well as likely future performance.

**Phase II**

Phase II of FM’s PM overhaul changed staffing levels to better align with a revised service delivery method, maintenance program requirements and the three district model implemented by FM in 2011.

**Benefits**

**Phase I Savings**

FM saved $3.2 million annually ($1.2 million in PM reductions and $2 million in reduced maintenance repairs) after implementing Phase I strategies, including:

- Increased productivity through performance management
- Reduced overtime by 50%
- Improved cost recovery

**Phase 2 Savings**

Staffing level changes enabled FM to save $2 million annually through the following tactics:

- Reduced from four to three service districts
- Reduced staff through attrition
- Optimized the mix between district positions and purchased labor
- Outsourced fire alarm testing and maintenance
- Insourced maintenance for West Bank Office Building and University Office Plaza

**Bottom Line**

Total Annual Savings **$5,200,000**