University of Michigan

Plant Operations

2008-2009 Annual Report
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Plant Operations Mission Statement

Plant Operations, a member of the University Community, maintains the physical environment and provides related services to support the University in reaching its goal of excellence in education, research, and public service.

Plant Operations Vision Statement

• To be an organization where continuous and measurable improvement in services is the standard.
• To be recognized by the University community for excellence in service, as a partner in solving our customers’ problems, and as the provider of choice.
• To be an innovative leader in facilities management.
• To be an organization where all employees are treated equitably and honestly.
• To be an effective, diverse work community.
• To be a learning organization, where all staff members are empowered and supported in reaching their full potential.
• To be a workplace where the atmosphere of trust encourages creativity and innovation.
2009 Performance

2009 was a year of sustained performance.

More than 96,000 work orders were completed, with work order completion rates at virtually 100%.

In FY09, the General Fund Facility Condition Needs Index decreased, which shows an improvement in the overall condition of the General Fund campus. The Facility Condition Assessment Program was launched in 1998 to identify and prioritize deferred maintenance needs. Plant Operations continues to strive toward low FCNI scores to avoid costs associated with deferred maintenance.

Plant Operations increased its focus on preventive maintenance. As the number of hours spent performing preventive maintenance has increased, hours spent performing corrective repairs has decreased.
Aligning with Business & Finance Goals

Provider of Choice

Plant Operations is a campus leader in customer engagement and collaboration.
- The Facilities User’s Network (FUN group), a joint customer/Plant professional network, continues to thrive since its inception in 2001.
- Customer-negotiated Service Level Agreements (SLAs) have grown by 56% since FY08 to over $875,000 of maintenance and repair services.
- Plant customers participated in every management hiring decision in FY09.
- Customers now have routine access to information on all work orders in the new web-based FMAX system.
- Non-Plant facilities professionals attended Plant Academy courses 141 times during FY09, with over 50 facility managers from a variety of schools and colleges participating.

Best in Class

Sightlines Benchmarking
The facilities benchmarking firm Sightlines compared U-M to its peer institutions. Plant Operations’ work management process was named “Best in Class” when compared to other large research universities.

Employer of Choice

Employee Wellness
- On-the-job preventive health care: Participation in flu shot clinics increased by nearly 8% over FY08.
- During the 8th Annual F&O “Shape Up for Winter” charity competition, employees recorded over 255,000 exercise minutes. The competition raised nearly $850 for Dawn Farm.

Employee Recognition
Customers and coworkers gave 1,359 C.A.R.E. awards to Plant employees during FY09. C.A.R.E. awards recognize recipients for exemplary contributions and performance.

Employee Safety
The Plant Operations Safety Committee revised the Electrical Safety Program to conform to the National Fire Protection Association’s 70E 2009 standard.

Training & Development
Plant continued to invest in employee development; employees attended over 17,000 hours of technical, supervisory, safety, and facility management training.

Labor-Management Relations
Supervisors of AFSCME staff attended quarterly labor-management educational sessions aimed at developing joint problem-solving skills. These sessions have shown early signs of contributing to a decrease in grievances.

The Construction Services Labor-Management Council entered its fourth year of collaboratively working on initiatives to improve employee satisfaction.
2009 Major Initiatives

Cleaning for Health: Operating System 1 (OS1)

Building Services began implementing a new cleaning method called OS1 in pilot buildings around campus. This program represents a switch from the current zone method to a task team cleaning method. In OS1, each team member specializes in specific tasks. The program includes efficient and ergonomically correct tools, lean chemical distribution, and a systematic program for cleaning. Savings are expected to average 20-30% over the zone cleaning method.

Program philosophy: “Clean for health first, then aesthetics.”

First facility: Dana Hall, May 2009

Expected project timeline: 3 years, 200+ facilities

Facilities Maintenance Restructuring

While customer expectations continue to increase, Facilities Maintenance (FM) continues to take annual budget reductions for the foreseeable future. These circumstances call for dramatic and innovative restructuring action in FM. As the first steps of the restructuring effort, FM engaged a data review consultant and convened three cross-functional teams to identify opportunities for operational and structural improvements. Our goal is to emerge from this process leaner, more productive and responsive to the ever-present need for responsible stewardship of the University’s physical properties.

Communications Task Force

The Plant Operations Communication Task Force was launched in FY09 to:
1. Systematically examine information flow within Plant.
2. Identify solutions to communication problems.
3. Oversee implementation of improvements.

Through change management activities and direct communication with staff at shop meetings, the task force made considerable progress in multiple focus areas:
- Information input: entering the work order system.
- Information throughput: internal communication and work coordination.
- Information output: feedback to the customer.

The task force will continue to develop and implement further solutions during FY10.

FMAX Conversion

Plant introduced a new Facilities Management System, FMAX, in February. The introduction of FMAX represents an effort to align data entry abilities with the way Plant does business. Customers can now directly enter and track work order information for work being done in their buildings. In spring 2009, Work Management began FMAX training for both customers and Plant employees. Training sessions have equipped participants with the necessary skills and knowledge to navigate and use the system effectively.

Salt Reduction Program

Although this winter brought record-breaking snowfall and ice storms, Grounds Services decreased sand/salt usage per inch of snow by more than 25% compared to FY08.

WinEstimator

Construction Services began the transition to WinEstimator software for providing more accurate and timely job estimates. WinEstimator will improve the process for analyzing project costs and variances in addition to improving all aspects of customer service.

Geographical Information System

The Utilities Records Integration Group (URI) developed a system that allows faster access to utility information and reduced costs through data automation. Utilities databases, FMAX records, and other utility information are integrated into a single Geographical Information System (GIS), with easy-to-use interfaces. The GIS maps enable Plant shops to quickly analyze information and perform complex system modeling for future projects.

Brick Tunnel Replacement Project...

Utilities Distribution Services completed replacement of steam tunnels surrounding the central campus Diag area, ensuring that our utilities distribution system will remain reliable well into the future. The tunnels were part of the 100 year-old original campus steam distribution system.
Sustainability Report

Recycling
The campus-wide recycling rate for FY09 was 27.8%.
Plant Building & Grounds Services partnered with Housing in late August to divert Student Move-in waste. From August 27 to September 1, 2008, 89.5 tons of cardboard, 502 bags of polystyrene and 40 bags of packing peanuts were collected.

Solar Collector
This year was the first operational year of the solar collector. Located on the roof of the Central Power Plant (CPP), the two-axis tracking concentrator is the first renewable energy system at the CPP.

Planet Blue Initiative
Mission: To actively engage the University of Michigan community to conserve utilities and increase recycling thereby saving money and benefitting the environment.

In FY09, noticeable energy savings were realized in three of the five pilot buildings, which were originally engaged in Planet Blue activities during FY08.

FY09 Planet Blue highlights:
- Over 2,500 faculty, staff and students attended open houses in 30 buildings
- Over 2,600 members of the U-M community have signed up online to become Planet Blue citizens
- The Planet Blue website has received over 120,000 hits, with over 300 visits per day
- Over 900 of the motion-sensing power strips have been installed
- Utilities & Plant Engineering engineers and Planet Blue teams identified 89 Energy Conservation Measures (ECMs). The estimated project costs are almost $3 million with a potential annual savings of approximately $550,000.

Planet Blue Distinguished Citizen Award
Planet Blue presented Jan Buswinka with the first Planet Blue Distinguished Citizen Award. She was recognized for her idea of implementing automatic controls for the fume hoods in the Chemistry building atrium teaching labs.
The completion of this energy conservation project resulted in annual savings of $170,000 in utility costs for the Chemistry Building.

Energy-Saving cogged fan belts...
Installations across campus are now saving the University over $200,000 per year.

Institute for Social Research
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<th>Energy Reduction</th>
<th>Cost Avoidance</th>
<th>Key Conservation Measures</th>
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<tr>
<td>26%</td>
<td>$191K</td>
<td>Chiller interconnection, HVAC scheduling, occupancy sensors</td>
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Rackham
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<tr>
<th>Energy Reduction</th>
<th>Cost Avoidance</th>
<th>Key Conservation Measures</th>
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<tr>
<td>32%</td>
<td>$210K</td>
<td>Fan schedule reductions, equip-sequencing, occupancy sensors</td>
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Space Research
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<th>Energy Reduction</th>
<th>Cost Avoidance</th>
<th>Key Conservation Measures</th>
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<tr>
<td>17%</td>
<td>$62K</td>
<td>Air handler upgrades, steam trap replacements, building tune ups</td>
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Cost Savings: Sick Time Decrease

Due to an incentive change in the Skilled Trades contract, Plant Operations has seen a significant decrease in the use of short-term sick time by Skilled Trades employees. This trend allows supervisors to plan and schedule work more efficiently, allowing Plant to better serve our customers.
Plant Operations
2008-2009 Annual Report

Lead Team
Rich Robben, Executive Director of Plant Operations
Steve Brabbs, Communications Task Force Team Leader
Mary Diskin, Administrative Specialist
Kevin Donovan, F&O Strategic Planning Manager
Sarah Ely, Plant Academy Training Center Manager
Kevin Fraley, Associate Director of Work Management
Ted Gerutta, Information Technology Manager
Paul Guttman, Associate Director of Construction Services
Lowell Hanson, Associate Director of Facilities Maintenance
Stacy Johnson, F&O Human Resources Manager
Kim Kiernan, F&O Business Manager
Kris Kolevar, Planet Blue Project Manager
Greg Lambert, Wellness Coordinator
John Lawter, Associate Director of Plant Building and Grounds Services
Rich Steiner, Division Controller and Associate Director of Administrative Services
Keith Trombley, Senior OSEH Representative
Bill Verge, Associate Director of Utilities & Plant Engineering
Lynette Wright, Materials & Moving Services Manager

For more information, please visit our website at http://www.plant.bf.umich.edu/