Facilities Maintenance Restructuring: Health Sciences Region
Executive Summary

The University of Michigan’s Facilities Maintenance (FM) department within Plant Operations is undertaking a restructuring effort aimed at fundamental improvements in how it performs building maintenance and repair activities. The changes are based on best practices in maintenance management and will lead to improvements in productivity, asset management practices, overall organizational performance and cost effectiveness. Although we compare favorably to other university facilities maintenance organizations, several key factors necessitate the need for restructuring:

- Continued reductions in maintenance general fund resources, with future funding unknown.
- Growth in University facilities. The University has added significant volume of built space in recent years. As these newer facilities and building systems begin to age, they will need maintenance care which will place an increasing burden on Facilities Maintenance.
- The technological complexity of facilities systems has dramatically increased.
- Increasing stakeholder expectations for facility use and job satisfaction

This combined effect of space growth, aging facilities and ongoing budget constraints makes the current operating model and structure of the FM organization unsustainable in the long term.

Facilities Maintenance will improve its operating model by:

- Shifting from a reactive maintenance methodology (fixing things as they break) to a more proactive methodology that emphasizes preventive and predictive maintenance (reducing the number of asset failures and need for repairs as assets age).
- Creating a new Work Management Process that emphasizes work planning and scheduling. This is not effectively done by the current FM organization, yet it is a principle of effective maintenance management that yields proven gains in productivity.
- Creating new cross-functional shops (Regions), dedicated to a discrete set of assets (buildings and equipment), which are able to provide a broader scope of services to a region of campus. The Health Sciences Region will include the facilities currently in the Med Sci and Life Sciences Zones.
- Focusing more on asset performance and analysis. FM does not currently track work effort, cost and failure data to individual buildings, systems or pieces of equipment. In order to increase the reliability of all of these assets, we will begin a more analytical approach to maintenance performance and reliability. This should save money in both the short- and long-run.
- Positioning resources closer to the work for logistical efficiencies - reduce travel time and vehicle usage from South Campus Central shops at Hoover and Greene Streets.

Facilities Maintenance tested the new work management process and organization structure before implementing it across the entire university. North Campus was selected and served as a pilot Region. After an evaluation of the pilot effort, Plant Operations concluded that the region model was ready to expand to other parts of campus. Despite deeming the model ready to expand, we will continue to work on process improvements and change management issues as we expand the regional model. This represents a substantial change in our business model and will take ongoing effort to fully implement in time.

What will it mean for Health Sciences Region facilities? What will be the impact on faculty, staff and students?
Near term (September – December):

- FM will continue to respond to emergency and urgent maintenance needs with the same, if not improved, effectiveness we currently display.
- In some cases, it may mean a slower response time on work requests as the new region group works through and learns the new work management processes. It may be “messy” at times, and there will
be moments of confusion during the initial stages of implementation. However, maintenance work will still get done at a high level of quality.

- It may mean a change in many “customer” - FM interactions. All FM employees serving the Health Sciences Region will have daily work assignments/schedules and be expected to adhere to them when possible (emergencies being the key exception). The changes will mean it is harder for facilities users to get so-called “on the spot services” from FM staff (as some may be accustomed to). FM needs to build greater consistency into its work processes in order to lower costs while improving performance. This may require a behavior change by some facilities users.

- It will mean that facility improvement services (“customer pay” work) currently being provided by Zone shops will be delivered by Construction Services in Plant Operations. We are separating improvement activities from maintenance and repair activities in the restructuring effort. Construction Services is redoing its processes in the Health Sciences region to ensure this transition is as seamless as possible and there is limited, if any, impact on Health Sciences region customer pay services.

**Long term:**

- Health Sciences facilities users should experience improved asset reliability (fewer things breaking, in need of repair or requiring premature replacement) and in time, less disruption to teaching, research and student activities.

- Service and performance quality of Facilities Maintenance will be maintained, and we believe improved in time, at a lower cost.

- We expect that as asset reliability improves, so will satisfaction with Facilities Maintenance.

The FM restructuring will result in a significant change in how Plant Operations provides long-term stewardship for the University’s physical infrastructure. This shift to an asset-centered maintenance methodology will serve the University’s students, staff and faculty best in the long term. It will, however require behavioral and process changes not only on the part of Facilities Maintenance and Plant Operations, but also on the part of facilities users and customers.

**Health Sciences Region Structure**