A. INTRODUCTION

In FY04, FM cut $8.6 million from its maintenance and operations budget for a total reduction of 13.9% on operations excluding Energy, R & R funding and Streets and Sidewalks. The $8.6 million is a 6.5% reduction of FM’s total operating budget. The cuts were part of a reorganization that eliminated 104 FTEs representing a 12% reduction in our operations and administrative staff. The goals of the reorganization were to increase service, accountability and stewardship while directing FM’s business operations to control costs, increase productivity, increase customer service and satisfaction and foster an environment of employee satisfaction and development.

The majority of Facilities Management’s (FM) internal workforce is engaged in the delivery of maintenance and custodial services. FM has historically targeted improvement efforts to increase the productivity and effectiveness of both programs. For maintenance this means planning and scheduling work, establishing time and task standards, procuring materials expeditiously and focusing on required regulatory and industry-recommended maintenance. For custodial, this means productivity standards by type of space, efficient cleaning methods and employee training. It also involves flexible service options to offer customers prioritized levels of service.

The department’s 950 employees, who are represented by 18 different unions and work in over 40 skill specialties, almost exclusively clean, maintain, manage and operate:

- 250 buildings with an aggregate 22 million square feet (3 million square feet in research space) sitting on 900 acres and including 46 miles of sidewalks and 14 miles of streets),
- 15 miles of steam tunnels which distribute steam to 181 campus buildings,
- Distribution of electrical service as the 7th largest Excel customer in the region,
- A waste collection service for 9,000 tons of waste annually of which approximately 1/3 is recycled, and
- 30,000 tons of cooling capacity daily, including the Academic Health Center plant, which is one of the largest in the State of Minnesota.

FM provides oversight of the production and provision of utilities to campus. Local suppliers provide water, sewer and electric utilities. Steam is produced by University facilities under a 25-year operations and management agreement with a third party.

Some of the challenges enumerated in last year’s compact are still with us:
• The rationing of facility services…not funding programs to the level defined by program and industry standards,

• Skills…the demand for and scarcity of workers with digital control experience and other technical disciplines, and

• Potential inadequacies of building infrastructure to properly handle Indoor Air Quality regulations

B. UPDATE – MAJOR LONG-TERM GOALS/PRIORITIES FROM 2003 – 2004 COMPACT

1. Custodial Program Improvement Initiative (CPII)

FM has 485 custodians who are responsible for cleaning more than 9 ½ million square feet each day. The goal of the CPII is to bring the Beautiful U concept to the inside of campus buildings. The CPII focuses on 33 improvement initiatives that include team cleaning and the improvement of all custodial programs. In FY04, the number of custodial supervisors was reduced by 50%. To engage and involve custodians in the program, 16 custodians were appointed to a new position of lead custodian. This position was created to provide mentoring, training and leadership to all custodians and support to custodial supervisors.

A Building Services Director position has been created to help move the CPII initiative forward. The Building Services Director will direct custodial, waste management and recycling staff, perform activity documentation and inspections, and will be accountable for achieving the goals of the CPII which is to improve customer satisfaction with custodial services, increase cleaning service levels with existing resources and create custodian “pride and ownership” in the performance of duties through an integrated system.

The CPII program will be measured by customer and employee satisfaction. A baseline survey was completed at the beginning of the CPII program in 2000. A follow up survey will be completed once a Building Services Director is in place.

2. Maintenance Operations Improvement Initiatives (MOII)

The MOII deals with all Maintenance Operations process issues. The goals of the project are to fulfill our stewardship role by:

• Meeting lifecycle and regulatory compliance
• Improving customer satisfaction with maintenance services
• Reducing the cost of maintenance services
• Increasing maintenance levels with fewer resources
• Updating maintenance process documentation
• Creating operational pride and ownership in performance of duties

In FY04, FM continued to assign work to Teamster and Trade employees based on a 1995 ruling by the Bureau of Mediation Service (BMS). Arbitration on the interpretation of this agreement continues which would give management added work assignment flexibility.
3. Facilities Condition Assessment (FCA)

The Facilities Condition Assessment of the Twin Cities campus was completed in FY04. The FCA defines and documents current or anticipated building and equipment needs and estimates costs via inspections. The goal of the FCA was to create a web-based database available to all campus departments and to categorize, prioritize, and document reporting on the cost of building needs. The FCA:

- Provides an on-going system of identification and prioritization of capital repair and replacement projects.
- Provides solid knowledge of needs that must be corrected.
- Provides additional information on forecasting maintenance budget requirements.

Now that this information has been shared with the user community groups, FM is working on a plan to roll out the FCA system-wide to be used as an enterprise system.

4. Infrastructure and Utilities

Energy Consumption

- New buildings and new technologies require increased energy consumption on campus. The Energy Consumption chart above shows how FM’s Energy Management Group has been able to manage energy consumption efficiently and effectively even with the challenges of new buildings and new technologies.
- FM has had success communicating the critical importance of prioritizing investments in the aging campus infrastructure and incorporating these needs into the 6-year Capital Plan. Examples include infrastructure investments in support of AHC facilities, investments in chiller replacements, steam...
distribution supporting the St. Paul campus and steam reliability for the Minneapolis campus.

- There is a direct connection between the adequacy of infrastructure and customer expectations for well-maintained, functional facilities that meet the academic program needs. FM will continue to focus on infrastructure needs identified in the 2000 Utility Master Plan (updated in 2001) and develop corrective strategies for the most critical portions of deferred capital investment.

5. Technology

COMPASS
In 1999, FM replaced its Computerized Maintenance Management System (CMMS) with new technology. The replacement project, COMPASS, greatly advanced the underlying technology, brought web service requests and invoices to our customers, and, most importantly, facilitated a major rework of 15 key business processes that reduced administrative costs by $600K annually.

COMPASS provides daily work order direction to FM’s 950 employees and is a very important tool in directing work activity and communicating with customers.

In FY03, FM became a beta (development) partner with COMPASS to implement the next generation of COMPASS (8i). This partnership provides the following benefits:
- Software modifications are created as enhancements to the base product, which should reduce time and costs to implement future software releases
- FM has significant input on the software design.

IMAGESITE
In 2002, FM sought out a software system to organize, store and manage the access to project documents and building blue prints. ImageSite was the system selected as the electronic repository for all project documents. ImageSite allows communication with a single, secure point of access for all project information for better project collaboration, engineering drawing management and the drawing review cycle. ImageSite benefits include eliminating errors due to wrong revision levels, tracking changes, reducing document distribution and reprographic costs, and improving communication through “live” conferencing.

Currently 35% of the Twin Cities historical projects records have been entered into the system.

6. Training and Development
As a service provider, FM recognizes the qualifications, skills and satisfaction of our employees directly impacts service quality. Training and development are key strategies to achieving FM’s goals and objectives.
- All FM directors have completed an intensive character-based leadership development and coaching program. The goal of the program was to develop leaders with a more focused vision, better insights into how to add value to the organization and an enhanced ability to lead the organization through change and growth.
- Front-line employees are continually attending skill building training. Current training includes
specialized technical job skill training and customer service training, which includes the university-wide Great Service initiative, to improve the effectiveness of joint labor-management committees in redesigning service delivery processes.

- Custodial training is part of the Custodial Program Improvement Initiative. New custodians participate in a two week training program designed to introduce them to the university environment and to provide them with the knowledge needed to operate equipment and handle cleaning chemicals in a safe and effective manner.
- Specialized training of mechanics has allowed FM to begin the implementation of the Bureau of Mediation Services (BMS) ruling that allocated types of jobs between Teamsters and Trades.

C. NEW LONG TERM GOALS

1. Custodial Program Improvement Initiative
   In FY05, CPII will establish a system for service accountability. 33 improvement initiatives which include training, standards, inspections and accountability have been identified. The new Building Services Director will be charged with taking CPII to the next level by establishing productivity measures, providing custodians with performance feedback, and creating a consistent level of custodial service delivery.

2. Quad System for Recycling
   In FY05, FM’s goal is to re-emphasize the use of the Quad System on the Twin Cities campus. A pilot program in Appleby Hall has demonstrated the cost and time savings this program can deliver. The greater volume of waste we are able to recycle the lower our disposal costs. We are also able to reallocate custodial time that would be spent collecting refuse to other cleaning activities.

   A marketing strategy will be implemented to engage campus participation in the Quad System Recycling Program.

3. Maintenance Operations Improvement Initiative (MOII)
   There are 46 new initiatives for the MOII program. One of the key initiatives is the resolution of the remaining BMS issues, which gives us flexibility in the assignment of work. Once the issues are resolved, we can move forward in training and assigning building systems operations to mechanics and utilizing the skilled trade workers for repair work.

In an effort to improve service delivery and customer satisfaction, the Building Services Director will work with FM’s customers, specifically the Office of Classroom Management, to discuss service expectations and how FM’s custodial program can meet customer needs.
The 46 initiatives are designed to meet our organizational goals of cost control, productivity, employee development and customer service and satisfaction. Work assignment flexibility is the key component to moving the 46 initiatives forward.

4. **Facilities Condition Assessment (FCA)**
The FCA has provided the University with a central repository for facilities needs information. FM’s goal is to provide the University and the coordinate campuses with a tool for master planning, facilities programming and capital planning and capital financial planning and budget forecasting. This information will help make better decisions when leveraging capital dollars to maximize the impact to the overall condition of campus facilities.

5. **Partnership with Xcel and Fuel Alternatives**
FM continues to work with Xcel to leverage the U’s relationship to obtain more competitive pricing with power purchases. Current initiatives include:
- Maximize the Conservation Improvement Program (CIP) rebate dollars by using CIP funds for combined heat and power (CHP) fuel cell experiments, Photovoltaic (PV) experiments and alternative energy programs such as the burning of oat hulls.
- Adding oat hulls to the fuel mix will save an anticipated $1.5M a year. FM’s Energy Management has been successful with two test burns using oat hulls and is waiting for the MPA to review and approve the University’s Title V permit.
- Requesting funding from CASK for $2M to help fund retrofits to the steam plant for the oat hulls project
- Requesting funding from the Department of Energy (DOE) for $2M to help fund the oat hulls project.
- Wheeling power to campus via an electrical connection through a leased line. This results in $630K in annual savings

6. **Energy Management**
**Utility Modeling**
- Modeling campus expansion and funding will help Energy Management to identify utility needs for future requirements. This is a valuable tool for campus and master planning. Modeling is currently done by outside suppliers. It is our goal to bring modeling in-house.
- Completed utility models include: steam model for East Bank, electrical model for East Bank and steam model for St. Paul. Storm and Sanitary Sewer modeling for St. Paul is in process.

**Energy Conservation Strategies**
- The Energy Conservation Group will be short three FTEs in FY05. It is a challenge to fill engineering openings in the Energy Management group as compensation is not in line with market value.
• Energy Management is exploring the possibility of having preferred outside resources identify and define additional energy savings opportunities.

7. Building Systems Automation Center (BSAC)

BSAC provides 24 x 7 building systems automation systems service University-wide. BSAC meets all regulatory requirements and is UL certified. Building physical points have increased 316% since 1995 with 46,875 points in place July 2004. 4,149 points have been added in the last year alone.

The growth of alarms has strained point capacity limits with Unity, the software product FM uses to integrate different building automation software into a single user interface. Unity is considered a legacy product that will be obsolete in the next 12 – 18 months. FM has hired a consultant to identify options for building systems interoperability and to develop budget estimates. The analysis has been completed and vendors have been on campus to demonstrate software interoperability with the university’s systems.

BSAC is faced with a funding challenge to support the physical point total, software, data bases, operator service levels, system integration and network communication with the current funding levels. The goals for BSAC is to meet the technology challenges by finding solutions to the increasing operational costs of maintaining old technology and the lack of future integration capabilities.

8. Technology

Consistency of systems, cost savings and moving software systems from departmental utilization to enterprise systems are the long-term goals for technology.

9. Organization

FM’s organizational goals are to focus on our three core businesses of custodial, maintenance and energy management.
The FY04 reorganization has helped move FM forward by aligning our leadership with our core businesses. This will allow us to play closer attention to the detail of our work. This will help us to meet our goals of increasing productivity, controlling costs, developing our employees and increasing customer service and satisfaction.

We will evaluate our relationships with our customers and identify where there are opportunities to be a better partner to units we serve. We will leverage our expertise in our core competencies to assist university departments and coordinate campuses. And, we will identify areas where we might benefit from letting others be the expert in providing services.

10. **Financial**
FM has two long term financial goals. The first is to control costs in our operations. The second is to determine what financing model best serves the university in terms of the delivery of facility services. Are facility services a common good provided to units free of charge or services units must pay for? FM is positioning to respond to the university’s direction on IMG.

11. **Employees**
Working with University Services Human Resources, FM will implement a performance management program for its employees. Involvement and recognition will be key components to that plan.
D. **DIVERSITY ASSESSMENT AND PLANNING**

FM Staff Diversity (Non-student Full-time Equivalent) as on **12/29/03**

<table>
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<th>Ethnic Category</th>
<th>P &amp; A Male</th>
<th>P &amp; A Female</th>
<th>Civil Service &amp; Bargaining Unit Male</th>
<th>Civil Service &amp; Bargaining Unit Female</th>
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<tr>
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<td>1</td>
<td>50</td>
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</tr>
</tbody>
</table>

Diversity in FM’s workforce is consistent overall with what is available in the market. However, supervisory and senior level management is not as diverse as the entire FM workforce. FM has a strategy to pursue diverse candidates for open positions.

E. **OUTREACH AND CIVIC ENGAGEMENT**
   N/A

F. **ENROLLMENT MANAGEMENT**
   N/A

G. **FACILITIES ISSUES**
   N/A

H. **OTHER FINANCIAL ISSUES**

1. **Structural Budget Deficit**
   Implementation of a University-level strategic planning effort that evaluates options in fuel flexibility, labor strategy and the demand for facilities must occur if facility costs are to be reduced.

   FM’s budget has historically included a structure deficit of approximately $3M that has been financed on a non-recurring basis primarily through utility cost savings based on favorable weather conditions. Trends in wage increases, particularly in the Trades, combined with the practice of funding less than these increases centrally, pushed the projected structural deficit to $5.6M in FY03.
The FM Reorganization in FY04 reduced the structural deficit to $1.45M.

Although FM’s budget process has a rigorous base budget review, it is not enough to mitigate the structural deficit. Funding Trade and other compensation and other base budget adjustments brings the projected deficit for FY05 to $3.76M before factoring in potential reductions to the central allocation.

2. **Steam Plant Contingencies**
   The University operates the steam plant under a 25-year Management, Operations and Maintenance Agreement (MOMA) with a third party. This third party was also contracted to design and build renovations to the plant that were to have been completed in May 1999. The third party has failed to perform adequately on the Design and Construction Agreement (DCA) and as a result, plant acceptance was delayed. Delayed acceptance resulted in higher tariff rates for steam production, lower fuel efficiency guarantees and a loss of co-generation capability. In addition, the third party has neglected the annual facility maintenance of the plant resulting in a backlog of maintenance (some of it critical) estimated at $12M - $17M. Although the DCA provides delay damages of $5K per day, resolution on these matters has not been reached. As of February 2004, we are in the final stages of mediation and resolution is not imminent.

3. **Utility Inflation and Consumption**
   Electricity, steam heat, cooling and water are unavoidable costs of operating facilities. This year, the cost of natural gas is a concern based on recent legislation allowing Xcel to install gas turbines. The demand for natural gas could cause spot shortages and higher gas prices than Xcel had forecasted in the Public Utility Commission (PUC) proposal. The increase in gas prices impacts electricity costs.

   If the forecasts are correct, we have no concern. However, Energy Management believes that there is a good possibility the forecasted numbers are incorrect. We are concerned about significantly higher gas prices in the future.

4. **Utility Infrastructure Issues**
   - The University is out of electric power at Fulton station. This serves the AHC area on the Twin Cities East Bank. Two proposals are being put together by Xcel Energy. The estimated cost based on these two proposals is $2.7M. FM has implemented a short-term fix that should work for 2-3 years.
   - The University is out of steam on the east side of the Minneapolis East Bank campus. Any expansion in that area will require an upgrade to the distribution capacity.
   - The St. Paul electrical distribution substation is in need of renovation and additional service. Energy Management is proceeding with pre-engineering for a
solution as part of subsequent phases of the St. Paul Chiller Plant project.

- The northeast corner of the St. Paul campus is out of steam. $6M for tunnels and piping will be needed as the northeast corner is built out.
- Xcel Energy has proposed a utility service fee (Reserved Capacity Charge) on redundant electrical feeders. Because of the nature of the University’s business, redundancy is required. The initial cost could be as much as $1.5M. It is most probable the initial cost will be $100K with recurring fees of $144K to $264K annually.

5. Energy Conservation Strategies
   Based on the U of M calendar, there are approximately 58 semester break days that are not holidays. This is close to the days that HVAC systems would be shut down if the U was on a four day week. Therefore the potential cost avoidance is in the $700K to $1M range.
   To achieve this number all systems in all buildings that do not serve laboratories, animals or hospitals would need to be shut down. No fans, lights, or plug equipment would be in operation for the duration of the semester break. Donhowe and Morrill Hall for example could not be occupied.
   For all practical purposes, space utilization and major systems adjustments would need to be made before this strategy could be implemented.

6. Growth in Facilities Costs
   Costs continue to grow based upon contractual wage increases, fuel costs and the increasing size and complexity of the physical infrastructures. The growth in costs will continue unless mechanisms are put in place to reduce the demand for facilities.
   Opportunities to:
   - aggregate space use by day and time of day
   - re-invest in existing space versus new
   - schedule firm building operating hours
   - create incentives for units to reduce space requirements thereby reducing costs.
   Significant facilities cost reductions can only be realized through reduction in the amount of space operated and maintained.

7. Meeting Routine Maintenance Standards
   The University has developed preventive and regular maintenance standards by utilizing nationally identified standards, state and national building codes, and manufacturer’s specific recommended equipment maintenance. The maintenance backlog is $2.4M per year, unadjusted for inflation.

8. Meeting Custodial Standards
   The University has established standards of cleanliness based on APPA II (ordinary tidiness levels) and standards of productivity per hour based upon the activity occurring in the space. In addition, routine window washing is provided on an every-other-year basis. The custodial backlog is $2.2M per year, unadjusted for inflation.
9. **Building Systems Automation Center (BSAC)**
   Building construction, control retrofits, the Duluth campus and other FM projects will cause the number of physical points will increase to 46,875 by July of 2004. This is a 316% increase since the base year of 1995. Not included in the physical points are tens of thousands of lines of software code that let systems function based on a specified program or software that has been developed for system analysis. The cost to replace the Unity Software, Legacy system, is $3.4M. $400,000 is needed annually to fund the replacement over 10 years.

10. **Landcare**
    Landcare is in need of an equipment storage, material depot and planting staging area on the East Bank campus. Currently these functions are taking place at Poucher and MRRC buildings. Poucher is scheduled for demolition in the near future. MRRC is in the capital request for a renovation to house CLA at which time Landcare will be displaced.

I. **COMPACT DEVELOPMENT**
   The Compact was developed using business plans that were created as part of the FY04 budget process. These business plans are based on long-term strategic goals as well as customer input relative to FM performance. Customer expectations include:
   - Well-maintained and functional buildings to meet academic program standards, needs and accreditations,
   - Facility services designed in accordance with authoritative standards, yet having the flexibility to design portions of facility services to better meet individual academic program needs,
   - Competent, cost-effective consultation and implementation, and
   - Knowing how to reach us, what to expect from us and notification when work is completed.

J. **DATA PROFILE**

K. **REPORT SUMMARY AND ALLOCATION SUMMARY**
   N/A