University of Southern Maine

November 2008

The Facilities Management Program is a service of APPA: The Association of Higher Education Facilities Officers

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APPA, Leadership in Educational Facilities, is an international association dedicated to the development of leadership and professional management applicable to the planning, design, construction, maintenance, and operation of the facilities required for quality teaching, research, and public service.

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The appraisal of the institution is made in relationship to the criteria and guidelines of APPA’s Facilities Management Evaluation Program (FMEP). The evaluation report comments on the strengths of the institution and, when appropriate, offers suggestions and recommendations for improvements of performance. The report constitutes no endorsement or denial of endorsement, of the institution by APPA or by the members of the evaluation team. This document was created for the exclusive use of the institution named. All contents are confidential.
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Overview

This contextual overview of the University of Southern Maine (USM) campus environment includes an acknowledgement of a challenging facilities management setting and describes a number of drivers and trends affecting the present and future USM campus. It provides a logical starting point and serves as a backdrop for the work that was performed by the Facilities Management Evaluation Program (FMEP) review team. The report sections including the Overview, Introduction, Executive Summary, Evaluation Report and Recommendations, and Conclusion represent the review team’s collective view of the campus Facilities Management Department.

The criteria that the review team utilized for this review have evolved significantly over time to keep pace with changing conditions in the facilities management profession. These criteria are intended to help facility organizations address a dynamic environment, focus on strategy-driven performance, and align facility departmental goals with campus goals to assist in making key decisions driving both short-term success and long-term organizational sustainability. The FMEP criteria have continually progressed toward a comprehensive integrated systems perspective of overall organizational performance management. The review team prepared this review using these proven successful practices of facilities management professionals.

University of Southern Maine Mission Statement
The University of Southern Maine, with a rich history reaching back to 1878, is Maine’s comprehensive metropolitan university offering associate, baccalaureate, graduate,
and professional degrees within the University of Maine System. The University of Southern Maine's fundamental mission is teaching, research, and public service for the benefit of the citizens of Maine and society in general. In achieving its mission as a university, the USM also serves as a vehicle for linking southern Maine and the state to the nation and the world. The university actively encourages faculty, staff, and students to contribute to and participate in state, national, and international academic and professional communities.¹

The university's principal responsibility is to provide a wide range of programs responsive to students diverse in age, background, and experience. Undergraduate education at the University of Southern Maine provides every student with a solid foundation in the liberal arts and the sciences. Master's, professional, and selected doctoral degrees and research programs emphasize the integration of theory and practice. The University of Southern Maine seeks to assure broad access to educational opportunities, including lifelong learning and is committed to providing academic and support services essential to the needs of a diverse student body. This commitment includes creating a strong sense of university community and a vibrant, diverse cultural environment for the university's students, faculty, staff, and the entire community of southern Maine. In all activities, the university continually strives for excellence in teaching and learning.

As an essential Maine resource, the university's program priorities are driven by the needs of the people and institutions of southern Maine in particular, and the state in general. The university fulfills an historical and special commitment to elementary and secondary education through the preparation of teachers and educational leaders. The University of Southern Maine links the teaching, research, and public service capabilities of faculty and staff, through both traditional and interdisciplinary programs and units, with the people, organizations, and institutions of the state and region. As one of seven campuses in the University of Maine System, the University of Southern Maine complements and collaborates with the other six institutions in the system and the Maine Community College System to fulfill the needs of public education in the state of Maine.

Institutional Profile

- With an enrollment of 10,478, the University of Southern Maine is the second largest of the seven campuses in the University of Maine System.
- Created in 1970 by the merger of two state supported institutions under the name University of Maine at Portland-Gorham, and renamed the University of Southern Maine in 1978. Gorham Teachers College (1945) was founded as Western Maine Normal School in 1878, while the University of Maine at Portland (1957) was founded as Portland Junior College in 1933. Lewiston/Auburn College (LAC) was created as the third campus of the University of Southern Maine in 1988.
- USM has three campuses, one in the city of Portland (population 64,249), one in the rural town of Gorham (population 14,141), and one in Lewiston/Auburn (population Lewiston: 35,690, and Auburn: 23,203).
- USM has 1,574 regular employees: 398 faculty, 713 professional staff, and 463 classified staff. Of the 393 full-time instructional faculty, 63 percent are tenured, 42 percent are women, the average age is 52, and the average length of service is 14 years.
- Approximately 1,575 course sections are offered each semester to both full-time and part-time students from 8:00 a.m. to 9:30 p.m. Monday-Friday, 8:00 a.m. to 4:30 p.m. on Saturday, and on Sunday afternoon. There are courses available to students approximately 350 days per year.
- USM's 2006 fall enrollment of 10,478 accounted for 30 percent of all enrollees in the University of Maine system.
- USM also offers summer and winter sessions; in summer 2006, 4,932 students chose from over 650 courses; in winter 2005/2006, 337 students chose from 22 courses.
- During 2005-2006, 112,251 persons participated in 3,004 public service activities.
- The education and general (E&G) operating budget for 2006-2007 was $102,562,285.
- The University of Southern Maine is accredited by the New England Association of Schools and Colleges.

Facilities Management Department

Facilities Management Mission Statement

We are committed to providing a safe, healthy, clean, comfortable, and favorable learning, living, and working envi-

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vironment for students, faculty, staff, and visitors. Our efforts are to be achieved by building an empowered, creative, and socially responsible workforce, with a culture and philosophy to continuously improve the quality and efficiency of our services. Facilities management’s goal is the active involvement, participation and commitment of all staff members. The end result being that our members of facilities management and our customers are able to take great pride in our university.

The executive director has reinforced to the FMEP review team that the principle focus of the facilities management is to make every effort to ensure that the campus buildings and grounds are maintained in such a way that these facilities are able to support the university mission, and provide a healthful, safe, clean, and comfortable, learning, living, and working environment. Facilities management’s main service is to provide the services required to maintain the facilities that house the academic programs of the university. The Facilities Management Department executive director has further articulated the primary goal of the department as the maintenance of facilities, by moving toward a structured preventive maintenance program, development of adequate resources to maintain existing and new facilities, capital renewal of the academic spaces such as classrooms, laboratories, building systems, and reduced utility usage.3

The Facilities Management Department consists of four organizational units 1) administration and information systems; 2) facility maintenance; 3) environmental services; and 4) engineering and architectural services.

Administration and information systems has responsibility for many of the department’s business processes and practices, including budgets, financial analysis, purchasing, accounts payable, equipment inventory, departmental charge backs, motor pool administration, work orders, payroll, and human resources (HR). Its responsibility for information systems is limited to the responsibility for tracking all department telecommunication and computer equipment and for all computer and software purchases and upgrades in the department. This work unit does not have information system professionals assigned to it.

Maintenance services include carpentry, the lock shop, painting, plumbing, electrical, refrigeration, HVAC, heating plant operations, and life safety.

Environmental services consists of housekeeping, grounds, and waste management.

Engineering and architectural services is responsible in large part for overseeing and managing large capital construction, new construction, renovation, and maintenance projects. The department has grown from a staff of four to seven over the past eight years. Engineering and architectural services also support the operations and maintenance department in the following areas: trades’ staff technical assistance, department regulatory oversight, space accounting, CAD support, signage, engineering design, all computerized system support, energy, building automation systems, and mechanical systems.

All employees, with the exception of supervisory positions, are members of a collective bargaining unit. The service and maintenance employees are represented by the Teamsters Union, Local 340. Administrative support staff are represented by the Clerical Office Laboratory and Technical Staff Union (COLT). The nonsupervisory professional staff are represented by the University of Maine Professional Staff Unit (UMPSA).

Facilities management uses contractors to perform specialized services such as:
- Elevator maintenance
- Water treatment systems maintenance
- Refrigeration start-ups and shut-downs and major repairs
- Cleaning of small boilers in wooden structures
- Major painting projects
- Roof repairs
- Replacement of large broken windows

**USM Physical Plant**

The major academic and residential life facilities are generally constructed of masonry, steel, concrete, and glass. The university owns 27 wood-framed, structures on the Portland campus and 12 wood-framed structures on its Gorham campus, as well as a conference center which formerly was a private home and is located about 15 miles from campus in Freeport, Maine. Although the academic and residential life
structures are old and have considerable deferred maintenance, the wood structures are far more maintenance intensive and far less efficient to operate than institutional buildings. For the most part, they also do not meet Americans with Disabilities Act (ADA) requirements. Most are used for faculty and department offices and are in need of upgrades, including replacement of boilers, roofs, floor covering, and painting, etc.

Electrical, heating, air conditioning, ventilation, and control systems in the major buildings constructed since the 1950s are original to the building, with some minor modifications. Most systems are beyond their useful life. Fourteen of the buildings on the Portland and Gorham campuses have roofs that are over 25 years old, and 27 buildings are over 20 years old, with the oldest dating back to 1905 (slate).

The academic facilities—Bailey, Russell, Corthell, Luther Bonney, Masterton, Payson Smith Halls, and the science complex are all very heavily used from 8 a.m. to 10 p.m. Monday through Friday by an average of 5,000 students per day during the academic year. Many of the classrooms are also in use on Saturdays and during breaks. They are also heavily used in the summer, making it difficult to access spaces to address maintenance needs. All classroom work is scheduled through the space and scheduling office, which is part of the campus registrar’s office.

The review team was informed that there are four separate and distinct facility management operations at USM, including facilities management, residential life, athletics, and Lewiston/Auburn College.

<table>
<thead>
<tr>
<th>University of Southern Maine Building Summary</th>
<th>E&amp;G</th>
<th>Bldgs</th>
<th>Gross</th>
</tr>
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<tbody>
<tr>
<td>Portland</td>
<td>45</td>
<td></td>
<td>1,260,098</td>
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<tr>
<td>Gorham</td>
<td>34</td>
<td></td>
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<tr>
<td>Lewiston</td>
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<td></td>
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<tr>
<td>Freeport</td>
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<td>2,067,930</td>
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<tr>
<th>Auxs</th>
<th>Bldgs</th>
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### Leased Bldgs Gross

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<th>Gross</th>
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<tr>
<td>Augusta</td>
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<td><strong>Total</strong></td>
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### Totals Bldgs Gross

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<th>Gross</th>
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<tr>
<td>Aux</td>
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<tr>
<td>Lease</td>
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<tr>
<td><strong>Total</strong></td>
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<td><strong>2,835,589</strong></td>
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</tbody>
</table>

University-owned land comprises 146 acres.

### Deferred Maintenance

Facilities management reports a deferred maintenance backlog of approximately $60 million without including campus infrastructure and soft-costs required to administer the deferred maintenance projects. A comprehensive facility audit has been conducted by in-house personnel and the assessment data has been entered into a system developed by a firm that specializes in facility condition assessments, Vanderweil Facility Advisors (VFA) in Boston, Massachusetts.

Facilities management has taken the facility audit findings and provided a listing of 13 “high impact” top priority projects for the university should funding for deferred maintenance become available. The estimated total cost of these 13 high impact projects for 2008 is $1.3 million.

### Facilities Management Operating Budget

The Facilities Management Department E&G budget for fiscal year 2008, which was shared with the review team, is projected to be approximately $8.47 million. This total budget allows $5.31 million for salaries. Facilities management has 91 positions identified for the 2008 fiscal year budget. The Facilities Management Department leadership has identified staffing levels as a major concern. Approximately $600,000 is budgeted for material and supplies.

The review team heard from numerous members of facilities management and from other campus stakeholders a perception that facilities management has historically been under-funded. Although additional buildings and infrastructure have been added to the campus inventory over the past several years, facility management stated that no new
positions have been added to the maintenance shops for the maintenance of the additional facilities. The director of the Facilities Management Department retired in May 2008, and the assistant director resigned. The review team was informed that both of these positions are being eliminated and that any funds for these positions that remain in the facilities management budget will be utilized toward operating expenses for newly constructed buildings on the Portland campus. This new space in Wishcamper and the Osher Library expansion will add 79,000 square feet of building space to the facilities maintenance workload.

**Major Capital Projects in Process**
Current budgeted capital construction projects include three projects totaling $35.4 million. These projects include Wishcamper, Osher Map Library expansion, and phase 2 of the Lewiston/Auburn facility.

Over the past ten years, the USM campus has completed 13 major capital projects at a construction cost of approximately $100 million.
This report is an evaluation of the Facilities Management Department of the University of Southern Maine. The observations and recommendations are those of a team of senior facilities management professionals who visited the campus on June 15 through June 19, 2008.

The review was conducted at the request of Eduard Dailide, University of Maine System Director of Facilities Management and Planning.

The review was structured in accordance with the Facilities Management Evaluation Program (FMEP) of APPA-The Association of Higher Education Facilities Officers. In addition to the standard criteria utilized for an FMEP, the review team addressed a number of specific considerations requested by the university’s Chief Financial Officer Dick Campbell. These considerations are contained in Section 8.0: Other Considerations.

Facilities professionals, with specific expertise, were selected for the FMEP team. Selections were based on their experience in the management and leadership of comparable facilities organizations relevant to those of the University of Southern Maine.

Members of the review team included the following:
Jack Hug, Team Leader
Assistant Vice Chancellor, Facilities
University of California, San Diego-Retired
APPA Past President
The review team interviewed staff within the Facilities Management Department and numerous principal campus administrators, faculty, primary customers, and key constituents external to the Facilities Management Department.

**Campus administrators interviewed include:**
- Joe Wood, Interim President
- Mark Lapping, Interim Provost
- Dick Campbell, Chief Financial Officer
- Judy Ryan, Vice President, Human Resources
- Craig Hutchinson, Vice President, Student and University Life
- Rosa Redonnette, Vice President, Enrollment Management
- Bill Wells, Chief Information Officer
- Stephen Houser, Director IT, Database, and Applications Support
- Scott Steinberg, Director, Undergraduate Admissions
- Gregg Allen, Director, Business Services
- Robert Casparius, Director, Campus Environment and Safety
- Cynthia Quinn, Executive Director, Financial Resources
- Bob Caswell, Executive Director, Office of Public Affairs
- Lisa Beecher, Chief of Police and Safety
- Sandra Eustis-Brackett, Parking Director
- Carl Hill, Assistant Director, Facilities Residential Life/Education
- Denise Nelson, Director, Residential Life/Education
- Al Bean, Director, Athletics and Recreation
- Nancy Martz, Director, Research Administration

**College deans and academic department heads who were interviewed include:**
- Devinder Malhotra, Dean, College of Arts and Sciences
- Betty Lou Whitford, Dean/Professor, College of Education/Human Development
- William Foster, Dean/Professor, Public Policy/Management
Peter Pitegoff, Dean/Professor, Law School
Jack Kartez, Associate Vice President for Research,
Scholarship, Creative Activity

Campus customers-group meetings included:
Chris O’Conner, Woodbury Campus Center
Jim O’Brien, Assistant to the President
Tim Thornton, CEC
Sue Taylor, Nursing
Mike Mullett, Assistant Director, Athletics
Alan Brown, Operations Manager, Research
Tom Wood, Director of Operations, Research
   Administration
Michelle Dustin, Assistant to the Director, Glickman Library
Mark Austin, Crew Leader, Residential Life
Jenny Nelson, Director, Gym and Outdoor Recreation
Nancy Austin, Director, Telecommunications and
   Card Services
Bob Smith, Director of Administration, Mailroom

Customers with recent experience with capital project services included:
Sondra Bogdonoff, Director, Development and Planning
David Nutty, Director, Glickman Library
John Wright, Dean/Professor, Applied Sciences,
   Engineering/Technology

Individual meetings held with the Facilities Management Department directors, assistant director,
and human resources liaison included:
David Early, Executive Director
Paul Kuplinski, Director, Administration and Information Systems
Dana Gray, Director, Engineering and Architecture
Lee Forest, Director, Environmental Services
Walter Lacombe, Assistant Director, Maintenance, Gorham
Nicole Leclerc, Human Resources Liaison

Group meetings were conducted with Facilities Management Department supervisors and included:
Bob King, Maintenance Supervisor, Gorham
Dan Warren, Maintenance Supervisor, Portland
Roger Guillerault, Executive Custodian, Portland
Steven Sweeney, Executive Custodian, third shift, Portland
Colice Tyson, Executive Custodian, first shift, Gorham
Joe Seger, Executive Custodian, third shift, Gorham
Group meetings were also conducted with a number of front-line staff representing the various functional areas of the Facilities Management Department including:

*Members of the First Shift and Second Shift Custodial Staff*
- Jean Marandola, Gorham
- Marland Wing, Portland
- Daoud Ahmed, Portland
- Marilyn Kourinos, Portland
- Larry Faulkingham, Portland

*Facilities Trades/Maintenance Shops*
- Bill Griffiths, Carpenter, Portland
- Larry Ricker, Carpenter, Gorham
- Cecil Curtis, General Trades, Portland
- Chuck Darneille, HVAC Portland
- Betty Hilton, Locksmith, Gorham
- George Pattershall, Life Safety, Gorham

*Grounds*
- Eric Curry, Portland
- Gary Heath, Gorham
- John Roberts, Gorham

*Engineering and Architecture*
- Carol Potter, Building Construction Engineer
- Nancy Theriault, Project Coordinator
- Michael Wacker, Building Construction Engineer/Energy Management
- John Gray, Project Coordinator
- Brian Labrecque, Building Construction Engineer

*Administrative Services*
- Wendy Chase, Administrative Assistant II
- Justine Ray, Administrative Assistant II
- Susan Holmes, Administrative Assistant I
- Barbara Hall, Administrative Assistant I
- Jessica Picard, Administrative Assistant I
University of Maine System
Eduard Dailide, System Director of Facilities Management and Planning

The facility at the Lewiston/Auburn (LA) campus was also included in the review process and interviews were conducted with Randy Estes, director of Maintenance, LA Campus, Marvin Drucker, interim dean/professor LA Campus, and Pamela Roy, director of Finance, LA Campus.

An extensive campus tour was also included in this review process, which provided opportunities to enter several major campus facilities on the Portland and Gorham campus. A tour of the Facilities Management Department shops, offices, several mechanical rooms, and other workspaces was also conducted.

Acknowledgment
The FMEP review team acknowledges, with deep appreciation, the help and support of the management and staff of the Facilities Management Department. Special recognition is given to Paul Kuplinski, director of Administration and Information Systems, and to Nicole Leclerc who did a stellar job in providing the review team workspace, arranging interviews, and providing logistical support. Paul’s flexibility, patience, and efficient response to our many additional requests for information and additional meetings were truly remarkable. Executive Director David Early, the directors, supervisory staff, and all members of the Facilities Management Department are acknowledged for their participation and willingness to share information, supporting documentation, materials, and valuable insights. Their participation enabled this review to reach a successful conclusion.

The review team wishes to acknowledge the assistance of those members of the University of Southern Maine campus administration for sharing their valuable time and for their participation in both individual interviews and group discussion. All interviews were conducted at the scheduled times, and all those who participated willingly shared their time and insights. We are especially grateful for such a positive reception to the review.

We further acknowledge the support of Chief Financial Officer Dick Campbell. His willingness to share his time and insights on several occasions was truly exceptional.
The executive summary of this report provides an extraction of facts and information taken from the overall findings of the review team while on campus from June 15 through June 19, 2008. The recommendations in this report are offered to outline a possible roadmap to help facilities management (FM) further align its actions with that of the needs of the University of Southern Maine (USM). How effectively facilities management delivers on its mission and makes a distinctive impact relative to its resources is a major part of this review.

The criteria that the review team utilized for this review have evolved significantly over time to keep pace with changing conditions in the facilities management profession and to help facility organizations address a dynamic environment, focus on strategy-driven performance, and assess the alignment of facility departmental goals with campus goals and key decisions driving both short-term success and long-term organizational sustainability. The FMEP criteria have continually progressed toward a comprehensive, integrated systems perspective of overall organizational performance management. The review team prepared this review using these proven successful practices of facilities management professionals.

It is appropriate to emphasize in this part of the report that the Facilities Management Department has many outstanding staff members who have pride in working at USM and who expressed a strong desire to improve the appearance and function of campus facilities. The people in the Facilities
Management Department are truly a most important asset for the university, and it is incumbent upon management to fully utilize and nurture the capabilities of this most significant characteristic of the organization. The strength of the staff and the quality of people within the Facilities Management Department matter greatly and provide much encouragement for a successful future.

Although the report that follows is critical in some areas and identifies a number of challenges, the review team has in every case provided recommendations to assist in the continuous improvement of services that the facilities management executive director and the chief financial officer has expressed. The desire to “make things better for USM” was expressed on a number of occasions.

Over and over again, we heard that USM is an institution in transition. The report “Transforming USM: 2004-09” presents the challenges that the university faces, provides a plan and vision, and identifies the changes necessary for success of the plan. The upgrade and expansion of facilities is included in the report as one of five essential levers of change.

Facilities management is also in transition; experiencing change in leadership in two key positions and a shift in focus from managing an active capital construction program to an urgent need to renew its focus and commitment to improve operation and maintenance of the built environment. Clearly, if the aspirations described in “Transforming USM: 2004-09” are to become a reality, then the appearance, condition, capacity, and functionality of campus facilities must be improved. This transitional period represents a significant opportunity for FM to align its purpose, its view of the future, values and guiding principles, and strategic focus with the changes that are taking place. In times of institutional transition, transitional management or repositioning of the organization will be necessary. Allocation of limited resources to ensure a more clear alignment of budget, plans, and priorities is likely. For FM, the status-quo will no longer be acceptable. The facilities management operating budget allocation, the campus need for addressing facilities capital renewal and deferred maintenance, and the review teams findings that the on-going operations and maintenance services need improvement gives mandate to the department to have a stronger operations and maintenance focus and a solid management direction. To achieve
this, it will be necessary for FM to capture the moment and take full advantage of the opportunities presented by the institutional transition.

**LEADERSHIP (LEADERSHIP-TEAM, STRATEGIC AND OPERATIONAL PLANNING)**

The FMEP review team has applied a “leadership system” definition in making its assessment of the FM leadership. For this purpose, the leadership system is defined as; “how leadership is exercised, formally and informally, throughout the organization; it is the basis for the way that decisions are made, communicated, and carried out. It includes structures for decision making; selection and development of leaders and managers; and reinforcement of values, direction, and performance expectations. An effective leadership system respects the capabilities and needs of employees. An effective leadership system contains mechanisms for the leaders to conduct self-examination, receive feedback, and improve.”

Although all of the seven FMEP criteria are supportive and complementary criteria, we have linked the first three criteria to emphasize areas that, if improved, can make a significant and positive difference for the USM Facilities Management Department. This connection includes the criteria of Leadership, Strategic and Operational Planning, and Customer Focus. In other words, the FM executive director and all those who occupy leadership positions (leadership team) should set clear directions, create a customer focus, have clear and visible values, and high performance expectations. These directions, values, and expectations should balance the needs of all campus stakeholders.

The key management position vacancies in facilities management (director of Facilities Maintenance and the assistant director of Maintenance, Portland), the reduction in capital project workload, and the operating budget provide opportunities to restructure the department organization. This is also an opportunity to design an organization that is most optimal and aligned with the context of the institution and of FM financial realities for the next several years. Some very difficult decisions have to be made, and many of these

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decisions are driven by financial considerations and the need for FM to continue to strive to find ways to do more and to provide better services to the campus with the same amount or with less resources. To face this reality successfully, facilities management leadership is provided this roadmap taken from the review findings.

The review team recommends the following:

- **Build a strong leadership team with an operations and maintenance focus that is not dependent on any one individual and a team that fits the institutional needs for professional facilities management.**

- **Review and align the mission, principles, and values in light of the institutional transitions and the campus facilities and infrastructure condition and appearance realities. Employ a style of governance that ensures that all those in leadership positions behave and make decisions consistent with the stated mission and values.**

- **Develop a clear and compelling vision for the future of the facilities management organization. FM has not articulated a vision for the future and consequently has no strategy or “game plan” for the department. To this end, FM cannot be content to be simply good stewards of facilities, but must become more fully engaged with the entire campus community. FM needs to be broadly collaborative and build solid partnerships to be of benefit to the institution. The executive director and the entire leadership team need to be much more visible and actively engaged within FM and throughout the campus.**

- **Complete a thorough analysis of the strengths, weaknesses, opportunities, and threats (SWOT Analysis) using a systematic model. Analysis of the identified strengths and weaknesses will be an important factor in development of a facilities management strategy.**

- **Provide more information to staff members. Although the director of the Facilities Management Department meets monthly with the maintenance staff on the Portland and Gorham campuses for the purpose of updating them on departmental issues, during interviews with staff members, many of them noted that they do not get enough information about what is going on in the department. The director of FM, the assistant director of Maintenance, Portland, and the Portland maintenance supervisor meet with the Portland campus major departments monthly.**
This is not the case on the Gorham campus and has not included representatives of environmental services.

- Look continually for opportunities to improve the organization, including opportunities for staff learning and growth (working together in a better way) and regular assessment of the leadership-team.

- Develop and execute a strategic plan with clear and thoughtful goals and objectives linked to the vision. Develop this plan with the use of a planning process that is practical for the organization.

- Design an organizational structure to fit the strategy. Based on the context of the institution and FM realities, an organizational structure that encourages collaboration, cooperation, employee learning and growth, and the efficient use of people and other resources is emphasized.

- Develop plans that address all aspects of performance, including financial, customer service process, and employee learning and growth. Set measurable targets for each measure of performance based on relevant data. The APPA-FPI information and data that facilities management has already captured and that pertains to the Facilities Management Department performance should be fully utilized for comparisons, trending, and general decision support.

- Communicate the strategy to all levels of staff so that they understand their role in the organization and how achieving the strategy will help the organization over the next several years. FM does not have a practice of including subunit managers in the budget formulation and execution process. While the director of Administration and Information Systems does distribute an expenditure report to subunit managers, the reports are not used to make financial or operational decisions. There appears to be little connection between the resource needs of sub-units and the budget process. The budget appears to be based on historical expenditures adjusted by current budget constraints, and subunit managers are not managing their operations based on budgeted resources.

**LEADERSHIP: CUSTOMER FOCUS**

Customer focus is not a core competency of the facilities management organization. The review findings in Section 3.0: Customer Focus underscore the deficiencies for much
of the FM Department. The lone exception was our findings from customers who have had experience working with engineering and architectural services on capital projects. This is an important leadership responsibility that may be overlooked because FM enjoys the benefit of an understanding customer constituency who seem to have accepted the belief that FM is seriously under-funded. This understanding is changing, however, as many of those who participated in interviews expressed that their department was also under-funded, but that they are still expected to provide services.

The highlights of our findings are presented in the following recommendations on customer service and include a need to strengthen elements of organizational structure (organize for service), the use of technology, people, and service management.

Facilities management leadership could serve the organization well if it were to nurture service leadership throughout the department and spend time with campus customers. It is the FM leader’s responsibility to know the customer requirements and to translate and communicate this to everyone in the organization. Good customer service does not happen by accident and experience has shown that successful facility management organizations at our colleges and universities have a customer service strategy and an active customer orientation practiced by service personnel.

- The need for improvement in customer service includes the initiation of a number of basic and fundamental customer service practices including the establishment of an improved work management function with an effective process for managing customer requests, work orders, and for responding to customer complaints effectively. There is a need for the department to work hard on customer relationships and to have discipline in its approach to have real discussions with customers on a timely basis.

- FM needs to measure customer satisfaction and initiate service improvement based on actionable information. There is a need to use a variety of means to listen to the voice of the customer including personal contact, focus groups, discussions with front-line service employees, and a variety of practical methods to determine customer satisfaction.

- There is a need for FM to develop a customer information system to help understand the different type and levels of
service needs. There are many different customer requirements and a “one-size fits all” approach is no longer acceptable to the campus. The desire and interest on the part of athletics, residential life, and the campus facilities maintenance at LAC to have facilities personnel on their staff is partially because FM services have not matched the needs and expectations for services.

- There is a need to make it easy for customers to get information. Interviews with customers revealed that there were regular customer meetings being held by the director and assistant director of facilities, however, both of these positions are now vacant and customers expressed concern about what would happen to the customer meetings.

- FM has not developed service level standards that match budgeted resources with campus department service needs. Standards for custodial services, building maintenance, grounds maintenance, and service responsiveness are needed. Little or no service training has been provided and employees are not rewarded for providing quality service.

Granted, this is a substantial list of leadership requirements that cannot be accomplished overnight, but anything less than an all out effort to improve the organization’s performance in these areas will shortchange the quality of facility services that a campus desiring to become a nationally recognized regional comprehensive university deserves.

**MANAGEMENT OF ORGANIZATIONAL INFORMATION AND KNOWLEDGE**

Various aspects of information include facilities inspections, audits, financial expenditure reports, utility data, and other relevant performance measures and indicators are an essential part of facilities management. Information and analysis of information should be used to evaluate performance and drive future performance improvements. Of interest are the types of tools used (for example, peer comparative data clarified and validated through benchmarking), and how information technology is used to enhance organizational performance.

The review team findings and recommendations for these criterion indicate substantial need for improving information gathering and for improved use of information technology.
The backbone for information accessibility for most facilities management organizations is a computerized maintenance management system (CMMS) or computer based work-order system with a customer web-based self-help interface. FM has no effective CMMS or work-order system that typically is a key element of a good performance indicator system since it serves as the repository of data needed to support performance indicators, review, and analysis. The computer-based work-order system (Infor MP2) is not being used to its advertised capacity because it is believed to be too complex and user unfriendly by USM staff members. (See criteria 4.3 and 4.7 findings and recommendations).

FM does not have a systematic process in place for identifying and prioritizing performance indicators, comparative information, and benchmarking studies in most of its areas of operation. With the exception of engineering and analysis purposes. The review team commends FM for participating in the APPA Facilities Performance Indicator Survey (FPI); however, the review team did not find evidence of widespread use and analysis of the FPI data to drive decisions. Additionally, while the APPA FPI database is a very good source for strategic benchmarking, it does not substitute for routine operational-tactical performance indicators. Benchmarking results, comparisons, and performance indicators need to be tracked and used to drive action within the organization.

FM does not have a regular facilities audit and inspection program in place. In 2004-2005, an inspection of all education and general facilities was conducted by in-house personnel that identified and quantified building conditions. The University of Maine System selected the Vanderweil Facilities Associates (VFA) program for tracking all capital renewal/deferred maintenance on its seven campuses. All information gathered from the inspections of the E&G facilities was entered into the VFA system and estimates were created using this system. The review team commends FM for the wealth of facilities condition information contained in the VFA database. However, this information will easily become outdated since there is no process in place to update the data based on completed work, and there are no ongoing inspections. This valuable information needs to be kept current and utilized for its intended purpose.
• There is no systematic process of operational inspection of facilities to identify day to day maintenance and repair requirements. There seems to be an over reliance on customers’ requests to identify repair requirements. A proactive approach to facilities inspection should be initiated.

• Facilities management does have an effective system of measuring and recording electrical utility data for much of the campus. Utility data is used to establish trends, minimize costs, and identify excessive usage and this is done by FM through its Energy Watch Dog program. This information is not widely distributed. The department also currently has a contract with Hirnak Energy Services to read and analyze the utility submeters at the Gorham site. Part of the services provided in the contract is to analyze trends and to provide feedback regarding usage, trends, excessive usage, and to provide monthly reports and a quarterly analysis. The department charges the auxiliary services for their utility usage. The FM utility budget for campus E&G facilities for 2008 is $2.56 million, which represents over 30 percent of the total FM operating budget. Energy management and conservation will continue to be a major challenge as prices continue to escalate. There is a need for FM to establish an aggressive energy management and conservation strategy for the campus.

DEVELOPMENT AND MANAGEMENT OF HUMAN RESOURCES

The success of facilities management depends increasingly on the knowledge, skills, innovative creativity, and motivation of its people. These criteria address the ways in which the facilities organization ensures continuing learning environment through communication, policies, recognition, training, professional development opportunities, and other methods.

The review team’s findings and recommendations for this critical area are as follows:

• There is pride in the workforce, however, it is mainly institutional based rather than departmental based.

• There is commitment among some staff members to improve, but not enough to bring about meaningful continuous improvement. Given a clear direction and the tools to accomplish new expectations, the group can perform better. As with any group of veterans, however, change
will not come easy, and it is incumbent on FM leadership to set the direction and align all staff constituencies.

- Staff members want to have a quality operation and are frustrated with having to be mostly reactive to reoccurring problems resulting mostly from poor communications, inadequate work management, uncertainty about purpose and strategy, a belief that budgets are inadequate, and a perception of constraints caused by policy and inadequate support needed to get the job done.

- Overall, internal communications in the Facilities Management Department are not good, and there is a need to improve communications on the changes that are taking place and on critical goals and issues for the department. There is a noticeable absence of clearly defined and communicated goals and objectives for the FM organization.

- Job descriptions and job classifications follow USM HR policy and procedures. It appears that generally the individuals holding the positions in FM are classified appropriately.

- There is a new employee orientation provided by members of key campus departments. A new employee’s role in the department and the overall role of the FM department are reviewed with applicants during the interview and hiring process. Supervisors also review individual staff specific roles after they are hired at preshift or shop meetings.

- FM managers are supportive of training, especially technical training required for license continuation. Employees are encouraged to attend trade and equipment shows, vendor training and product shows, and educational conferences. Additional training is available for employees, especially technical training where licenses are required. The university has a tuition remission program for staff members and their families. Management could help employee growth and development by doing more to help build a development plan for all staff members. It would be helpful if training needs were assessed across the entire organization and a training, education, and development plan with priorities for training determined. For example, facilities management staff and campus customers indicated they would like to see more cross-training for those working on the building automation HVAC systems. Library staff, for example, noted that the library’s special collections rely heavily on the HVAC
system working properly, and they are concerned about the small number of people who can operate and repair the systems.

- Working relationship between EH&S and facilities management regarding safety policies and procedures are good. Safety policy and procedures are reviewed with new employees at orientation and by supervisors during regular safety training sessions. There is good understanding of the importance of excellent safety practices by all staff who participated in the interview process. Standard procedures for reporting and completing accidents reports are followed.

- FM utilizes informal ways to determine employee well-being. As stated in the self-evaluation” being a small organization, the supervisors and crew leaders know how their employees are feeling and if they have issues.” When the review team asked staff members to indicate what percentage of employees they felt where unhappy, the answers ranged from 50 percent to 100 percent. It is hard to reconcile FM’s method of utilizing informal employee assessment as an effective means for determining employee satisfaction. It is never a good practice to assume that you know what people are thinking. Employee climate surveys; when administered professionally, are a much more reliable way of determining employee morale, employee satisfaction, and employee well-being. Interviews with facilities management staff also indicate that there are opportunities for improving communication between management and staff. The review team recommends that FM look at more disciplined ways to determine workplace and workforce priorities and issues. An employee satisfaction survey should be considered as a practical tool to determine a base level of employee satisfaction, dissatisfaction, and well-being. As it stands now, the management team does not have any factual information on how employees feel about workforce and workplace issues. There is a need for management focus on making FM a great place to work.

- FM holds an annual recognition breakfast each fall to recognize achievement; the university holds separate breakfasts for staff members and professionals to recognize years of service; there is a breakfast at the beginning of the new academic year with some recognition, as well as a welcoming of new employees. Direct and local or “on-the-spot recognition” of work done well by all super-
Visors and managers in the field regularly reviewing the work that people are performing is an additional way to provide recognition. There is a successful practice process for “Catching people doing something right,” but it can only happen when management spends the time to see the work of staff members first hand. In some areas, work output is obvious, but in many areas of facilities management, the work performed is in basements, mechanical rooms, on roofs, and behind the scenes.

**PROCESS MANAGEMENT**

Effective process management addresses how the facilities organization manages key product and service design and delivery processes. The review team found a number of fundamental core facilities management processes missing. Among the most critical and important are processes for managing financials, work management, and preventive maintenance inspection processes. Our findings and recommendations for this section are summarized below.

- Subunit managers do not control expenditures based on budgets. It is not clear to the review team whether responsibility has been delegated or not. However, the director of Administration and Information Systems seems to be the only facilities management official with the exception of the executive director involved in budget activities. The austere budget situation seems to be the reason given for not being more proactive in budget activities. The review team acknowledges the difficulty in placing subunit managers in the expenditure control process, especially when the managers have never had a requirement to do so.

- The review team did not find processes to ensure equipment is programmed and included in the budget based on needs and equipment life cycle. Equipment is replaced as it becomes nonserviceable on an as required basis. This results in equipment being kept in service beyond its service life when it becomes less efficient and more costly to operate. The executive director should review what is expected of subunit managers regarding budgetary responsibility and ensure there is no lack of clarity and participation in budget development and expenditure monitoring and management.

- Facilities management does not have and effective work management system in place. The current MP2 work-
order system is considered too complex and user unfriendly. See recommendation for criterion 4.7.

- The FM leadership understands the importance of an effective preventive maintenance (PM) program, but they believe budget constraints prevent them from staffing such a program. In addition, some are of the opinion that the MP2 system does not support a PM program. The review team verified that the MP2 program does have a preventive maintenance module with the ability to produce PM work orders, but that this feature is not being used. Equipment failures and reactive maintenance will continue to dominate the workload unless an effective PM program is put in place.

- Management should reconsider the judgment that budget constraints prevent staffing a PM program. Theoretically, resources applied to preventive maintenance reduce the resources required for breakdown and reactive work. A good preventive maintenance program also is a foundational component of a successful energy management program.

- FM engineering and architectural services has developed construction standards for equipment, materials, surfaces, finishes, systems, etc., which are provided to the design firms to follow as they prepare contract documents. These guidelines were developed with input from the facilities maintenance staff. One member of the engineering and architectural services staff is responsible for keeping these standards current. All UMS system campuses are required to follow Leadership in Energy and Environmental Design (LEED) guidelines in the design, construction, or renovation of all facility spaces. The review team commends FM for its achievement in its application LEED to the new construction on campus. While good design guidelines and construction standards are key to success factors for construction projects, involvement of maintenance and operation personnel in all phases of construction projects is also very important. During interviews, the review team learned that while maintenance and operation staff is involved in some of the new construction projects, they are not always invited to key project milestone events. Personnel interviewed did note that lately they have become more involved than in the past. It would help department teamwork if maintenance and operation staff members continue to be involved in all phases of new construction and major renovation.
PERFORMANCE RESULTS

In addition to the areas addressed in previous sections of this executive summary, facilities management’s performance results can be assessed through campus appearance and condition, and the effectiveness of infrastructure and systems operations.

- The review team’s consensus is that there are many areas on campus that do not yet meet an acceptable minimum standard. Landscape fixtures such as benches, trash cans, lighting fixtures, and building entrance areas are not very well maintained. The overall appearance of the campus is below what we would expect to see at USM and below the level of a national norm for colleges and universities.

- The condition and cleaning of the facilities at the Portland campus can be described as only moderately clean. There appears to be an effective floor care program in place, as stained carpet and dull and stained hard floors were not overly evident. However, general cleaning is beginning to show the signs of reduced staffing and reduced frequency of performing certain cleaning tasks. The review team commends FM for having a written document describing safety and cleaning procedures for the cleaning function. The document also documents the square feet coverage per person for the Gorham and Portland campuses. However, with the turnover and hiring freeze, the square feet coverage has likely fallen out of balance. Even though there is a document prescribing the cleaning tasks and frequencies, because of the actual or perceived staff shortages, individual custodians have to make personal judgment about which tasks to skip or discontinue. The custodians appear to be sufficiently trained and properly supported with proper equipment, products, and tools.

While the review team did not inspect as many spaces on the Gorham campus as it did on the Portland campus, interviews with Gorham campus residence halls management team suggest that the residence halls cleaning program is well run, very effective, and fully meeting the needs of the customers. The review team understands that there are 21 FTEs assigned to the residence halls cleaning work unit. This level of staff might be disproportionately high relative to the total cleanable square feet associated with residence halls and the dining facilities. The review team found the LAC campus to be very well cared for and the custodial and grounds appearance and levels of maintenance were exceptional.
Some of the FM workspaces need attention, and there are a number of service functions that have totally inadequate workspaces. Custodial services workstations and supply closets in some areas are totally inadequate. Grounds equipment maintenance workspace is totally inadequate and inhibits efficient and effective services. While facilities such as shops, storerooms, and administrative spaces seem only marginally adequate, the review team found no plan or strategy for upgrading or expanding the facilities management complex. The review team recognizes in light of the budget situation that adequate FM space will most likely be a low priority in university’s capital program. However, legitimate facilities needs for maintaining and operating the university should be documented in the same manner as all other facilities needs.

The challenges of controlling temperatures in many buildings were cited by a number of those interviewed as the single most frequent building systems issue. The facilities management executive director, supervisors of the HVAC, and electrical shop expressed a determined effort to obtain appropriate system upgrades and redundancy in critical systems and equipment.

In order to avoid long-term facilities decline, it is necessary to recognize that campus facilities will deteriorate over time. Building and infrastructure components have a finite life cycle and many of the buildings on the campus have exceeded at least one cycle of depreciation. Only through a program of constant reinvestment in order to offset the predictable decline of building components can an institution expect to avoid major problems. Inadequate funding levels for maintenance and operations force the deferral of small repairs that cause escalating consequences when left unattended. Experience has demonstrated that it does not take long until a leaking roof that needs to be replaced begins to cause ceiling and structural building damage. The longer the problem is left unattended, the faster the cost for restoration grows. The facility condition audit for the entire campus physical plant and infrastructure should be periodically updated. There is no universal agreement on what this update cycle should be, but it should take place frequently enough to ensure that major needs are identified and prioritized appropriately. Some campuses update all information every year or do a percentage of the campus square
footage every year. The review team recommends that FM update past reports on facility conditions after discussion with campus administration and that this update coincide with reporting requirements to the UM system processes. Mutual agreement on this schedule that meets the campus total facilities needs requirements would be the desired outcome. Funding resources are not adequate to support a level of facility maintenance and repair that prevents deferral of major maintenance and repair. The VFA facilities condition audit serves to document this fact. High impact needs; those projects considered critical are supported by the FM list of highest priority needs.

- Although individual and specific utility infrastructure studies have been done and resulted in the electrical distribution and transformer replacement project identification, a comprehensive master utility plan has not been done. Facilities management staff members are aware of any vulnerability and risks that might exist in the utility infrastructure, and especially in the electrical and mechanical systems. FM has provided a listing of 13 high-priority projects designated as “high impact projects” eligible for UM deferred maintenance funding estimated to cost $1.3 million. Included on this list are several campus buildings that have a large amount of water infiltration that cause damage to the building structures and have a very negative impact on building occupants and programs. Water leaks are through the roofs, exterior walls, caulked joints, general building envelope, and windows. Several buildings have visible signs of masonry deterioration of structure and exterior stairs.

- The campus senior administrative officers and the FM executive director can serve the campus well if they would work together as strong advocates for addressing campus facility capital renewal and deferred maintenance needs. There is a need for a strong coalition of campus leaders who can work together, advocate and make decisions on priority facility needs. The campus capital renewal and deferred maintenance needs are not simply a FM problem. This is a campus problem. A key facilities financial benchmark is defined and its common use described in Section 7.0 of this report and gives a perspective on the overall condition of the USM facilities.
1.0 LEADERSHIP

The facilities organization’s senior leaders should set direction and establish customer focus, clear and visible values, and high expectations in line with campus mission, vision, and core values. Leaders inspire the people in the organization and create an environment that stimulates personal growth. They encourage involvement, development and learning, innovation, and creativity.

Facilities management leadership roles and responsibilities are clearly defined. The facilities management organizational chart given to the review team provides a graphic representation of the organizational model and alignment of the functional areas of the department services. The review team noted however that the FM organizational chart contained on their website is not current and does not provide campus faculty and staff members a good representation of how the organization functions.

The organizational chart patterns and arrangement are designed around functional specialties and include the executive director of facilities management, administration and information systems, facilities maintenance, environmental services, and engineering and architectural services. The review team found that the current organizational
structure is not the most optimal structure. The manner in which the FM staff interacts in its attempts to achieve synergy and to foster collaboration and coordination is undermined by management practice of assigning leadership roles and responsibilities inconsistent with the organizational structure. This practice also impacts areas of accountability and in turn inhibits support of the department mission. There is a need to clarify roles, responsibilities, and accountabilities in a number of the organizational functional areas.

A number of FM directors have indicated during the interview process their suggestions for improved organizational alignment, and mentioned that the topic of organizational structure has been discussed on several occasions at FM department staff meetings.

**Recommendation 1A**

*Recommendations on organizational structure and alignment are also contained in Section 8.0: Other Considerations, criterion 8.1, of this report.*

*Roles, responsibilities, and accountabilities need to be made clear for the following areas: executive director, engineering and architectural services, administration and information systems.*

*The roles and responsibilities of the executive director are not clear. Currently the executive director and the director, engineering and architecture share capital project responsibilities including project administration roles and responsibilities, and to whom the project manager reports, and performance evaluations of project managers. There is also a need to clarify and align roles and responsibilities for energy management and conservation, and ownership of the deferred maintenance program responsibilities. Although these two critical functions are structured within engineering and architectural services, there is a great need for these functions to have high-quality contact and working relationships within the facilities maintenance unit.*

*In administrative and information systems, roles and responsibilities for work management, the work-order system, and customer services need to be made clear. These administrative service functions also require a close working relationship with facilities maintenance in order to be effective.*
With the retirement of the director of facilities management and the resignation of the assistant director of the Portland campus, the executive director and his team of directors have an opportunity to work together to shape the organizational structure and alignment that compliments the skills and abilities of each other.

Leadership system refers to how leadership is exercised, formally and informally, throughout the organization—it is the basis for and the way that key decisions are made, communicated, and carried out. It includes structures and mechanisms for decision making; selection and development of leaders and managers; and reinforcement of values, directions, and performance expectations. An effective leadership system respects the capabilities and requirements of employees.

The review team found that the executive director is afforded clear recognition of his position by members of the department’s workforce, but a number of staff expressed their disappointment in the level of management’s interest and participation in helping to solve their work problems. In some cases the workers themselves crave a clear definition of goals, more orderly scheduling of work, better coordination, and, in some cases, more precise assignment of work. More effective two-way communication is essential for proper functioning of the leadership system—the leader-follower relationship. The schedule of departmental meetings, their frequency, and the type of meeting seem sufficient in number when considering the relatively small size of the department and the frequent opportunities for informal communication, which does take place. There are indications, however, that the quality and effectiveness of the meetings, the agenda of topics discussed, and the understanding by meeting participants of the purpose of the various meetings could be improved. During our interviews, many front-line workers expressed a desire to have more information provided to them or have leadership to talk to them more. There may be a need for more informational meeting with front-line workers.

During the course of our site visit, the review team tested the staff understanding of the various organizational relationships and inquired about communication, relationships between management and front-line staff, and how work gets done. Our findings indicate a very high volume of day
Recommendation 1B

Communication will likely continue to be the number one challenge for the Facilities Management Department. All managers are encouraged to give high priority to effective communications and decision making. The informal and the formal processes that are currently being utilized should be reviewed for effectiveness as a communication tool. There is need to improve the formal meeting and communication processes.
Monthly meetings that are currently held within facilities management include:
- director staff meetings
- supervisory team meetings with all supervisors and directors present
- project review meetings where department performance is reviewed

One-on-one meetings between the executive director and directors were reported to be done frequently.

Because of the multiple campus sites and various work shift requirements, facilities management has “built-in” special communication challenges. Also, in today’s facilities management world and that of higher education, the demands on leaders in top roles are outdistancing the capabilities of any one person—no matter how talented. This fact magnifies the need for top quality organizational communication practices.

It is recommended that management rethink its description of the leadership/management team and to structure meetings by creating a compelling purpose for the particular meetings, review the meeting groups to ensure that the right people are attending meetings, and to plan and prepare for each meeting to help ensure meeting success.

Facilities management has articulated a mission statement that is aligned with the institutional mission. Successfully achieving the mission will position facilities management as a viable and sustainable organization for the university. The mission statement contains many attributes that describe the organization’s purpose and reason for being. The mission statement does state the department’s purpose very well.

We are committed to providing a safe, healthy, clean, comfortable, and favorable learning, living, and working environment for students, faculty, staff, and visitors. Our efforts are to be achieved by building an empowered, creative, and socially responsible workforce, with a culture and philosophy to continuously improve the quality and efficiency of our services. Facilities management’s goal is the active involvement, participation, and commitment of all staff members. The end result being that our members of facilities management and our customers are able to take great pride in our university.

1.3 The organization has clearly aligned its mission, vision, and values statements with those of the campus. Regularly communicates with employees, customers, suppliers, and other stakeholders.
Recommendation 1C

The mission statement is posted on the department website, but the review team did not see the mission statement displayed in prominent places throughout the facilities management work areas. The department mission should be displayed throughout the workspaces and should be a topic of periodic discussion at staff meetings. Since the university is undergoing a leadership transition, the mission statement should be reviewed with the chief financial officer and approved to help ensure alignment of FM department purpose and service emphasis.

It is recommended that consideration also be given to developing a service theme derived from the lengthier and full-body of the mission-statement. A service theme is a simple statement which, when shared among all employees, becomes the driving force of service. It is simple enough that most can carry it in their heads, and therefore is easy to remember. This service theme can also serve as a rallying flag. It aligns staff efforts and establishes a foundation for their behavior toward customers. For managers, the service theme becomes a guiding precept. Every decision can be measured against it. Whether a decision supports the service theme is an important managerial litmus test. Facilities management leadership can improve communications and department morale by being visible examples of the mission statement through their behavior and actions. The portion of the mission statement that is especially applicable to this recommendation is “Our efforts are to be achieved by building an empowered, creative, and socially responsible workforce, with a culture and philosophy to continuously improve the quality and efficiency of our services. Facilities management’s goal is the active involvement, participation, and commitment of all staff members.”

The major elements of the FM department’s purpose or reason for existing meaningfully described in the mission statement should be incorporated in the development and execution of department goals and strategic initiatives.

Facilities management has not developed a vision statement for the department.

Recommendation 1D

Facilities management leaders are encouraged to develop and to take steps to execute a vision statement for the organization and to time this activity and align this to the
vision of the new leadership of the USM. The development of vision, if done properly, can create a picture of the destination for the organization for all staff to keep in mind as they work together in providing facility services to the campus. At a time of transition this sense of clear direction is especially important and management has a responsibility for setting organizational direction.

Facilities management has developed core values for the organization. These core values or guiding principles were seen displayed in several locations in the department work spaces.

**USM Facilities Management Guiding Principles**

- Our staff is the most important resource.
- Provide an atmosphere of respect for all.
- Provide training and development opportunities so that all staff can reach their full potential.
- With proper tools, training, and methods, provide maximum service in the most efficient manner to our customers.
- Provide timely and effective technical support.
- Promote excellence and continuous improvement as a way of life.
- Be progressive, innovative, and proactive.
- Provide recognition and positive reinforcement to jobs well done as each member lives up to their responsibilities to the team.
- Plan, schedule, and notify the community of operation/work in their facility.

**Recommendation 1E**

_It is recommended that the guiding principles be utilized for evaluating management behavior and practices. These principles could be incorporated into the performance evaluation process for everyone who serves in a leadership capacity. Management behaviors and visible actions in support of these principles or core values are critical for organizational success._

**1.4 Facilities management leaders spend time on a regular basis with their customers and front-line staff.**

Throughout the normal course of conducting daily business there are ample opportunities for some of the facilities management leaders to have contact with customers and front-line staff. Because of the nature of the department’s services, regular contact with customers is required in the form of meetings, consultations, and discussions of service work or project work. Some members of the department are also active participants on numerous campus committees. This level of involvement and participation on campus
ensures regular contact with customers for most of the directors. However, the executive director is not as visible, both on the campuses with customers or within the Facilities Management Department with front-line staff.

Front-line supervisors are defined as “working-supervisors” and spend a large portion of their time in the field with staff members and do an excellent job of being available and accessible to them. Regular meetings held with staff members and the department’s active training programs provide additional opportunity for supervisors and managers to spend time with their staff.

Recommendation 1F

It is recommended that the executive director spend more time with customers and with front-line staff. Having discipline in managing the calendar to ensure that regular time is set aside for this important management function is essential. Scheduled time for the executive director to meet with various FM work groups in their workspaces or to tour jobsites and be available for general questions and answers is recommended. This should be done for all shifts and will improve communications, understanding of important issues, and will serve as an expression of management’s interests in the workforce requirements.

The executive director is performing duties that distract him from providing strategic leadership, guidance, and direction. Such duties as project manager are contributing to his lack of visibility among front-line workers and customers.

Recommendations for the executive director to spend time with customers are described in Section 3.0: Customer Focus.

1.5 Performance measures at each level of the organization are clearly defined.

Although each person in facilities management has a position description and annual performance reviews are now being conducted (until recently annual performance evaluations were not being done), job performance measures can be much more clearly defined at all levels of the organization. The review team received information that the department is beginning to work toward ensuring annual evaluations get done for all employees, but they are still not there yet. They do not have a process in place to centrally track performance evaluation completion and seem to hold the opinion that since there is no merit pay driven by performance evaluations, that employees do not care much about
performance evaluation. This is a flawed view of the value of a good performance evaluation process.

There are few signs of formal statements of service expectations. The department has not developed measurable service quality standards or defined performance measures at each step of the department’s service processes. Strategic goals and objectives for core processes and critical services are not defined or emphasized in such a manner that performance measures are meaningful to service personnel.

Recommendation 1G

The department’s current performance management process and procedures should be examined more closely for effectiveness. Measuring service performance has not been a part of the workforce culture. There will likely be an increasing need to improve understanding of what is important for the organization to measure in order for the department management to be positioned to respond effectively to increasing change and the increasing need for accountability.

It is recommended that facilities management develop a short list of the most important performance measures for the department to meet its core services and processes. These measures should be presented in a “dashboard” fashion or like an executive summary of meaningful metrics. By doing so, actual performance results for a given period and performance trends can be readily seen in a single place by management and by the workforce. Key performance indicators that measure progress toward achieving the department’s goals should also be included when these goals are developed.

There is no apparent history of identification of strategic goals and performance results in meeting the stated goals in facilities maintenance, administrative and information systems, and environmental services. Engineering and architectural services has developed meaningful measures of capital project performance and has captured essential data to develop additional measures of performance. Some of these measures include project schedule on time, on budget, within scope, on quality, number and amount of project change orders, soft costs, and measures of sustainability (LEED) requirements.

This topic of performance measures is covered in additional detail in Section 6.0: Process Management and Section 7.0: Performance Results.
1.6 Senior leaders establish and reinforce an environment where shared values support self-direction, innovation, and decentralized decision making.

The review team found that the department directors for the most part promote an environment that supports self-direction, innovation, and decentralize decision making.

Recommendation 1H

Management is encouraged to continue to look for opportunities to improve the work environment that is conducive to utilizing the best of every person’s capabilities. The challenges that the department faces in having to do more with less resources and to maintain a high level of quality services underscores the strategic importance of creating a productive work environment.

Throughout the facilities management profession, there is a growing trend in thinking about the leadership responsibility for establishing a quality work environment. There is an increasing conviction supported by results that the purposes of the organization are best served when leaders help staff develop their own initiative, strengthen the workforce in the use of their own judgment, and enable people to grow and to become better contributors.

1.7 Informed of current trends and practices in the industry.

Facilities management keeps up with current trends and practices in the industry through attendance of professional meetings, membership in professional associations, participation in University of Maine system facilities meetings, and presentations by suppliers.

The licensed trades staff members attend code update classes to keep their licenses current.

1.8 A succession plan is in place to ensure continuity of leadership.

There is no formal succession plan to ensure continuity of leadership.

Recommendation 1I

It is the review team’s collective experience that few university Facilities Management Departments have been successful in developing a true succession plan. It is recommended that FM increase opportunities for staff members to be cross-trained and to review professional development activities that are specific and relevant to the requirements of leadership positions for the facilities management profession. To the extent that leaders can develop others, they are then creating something that can survive their own departure.
2.0 STRATEGIC AND OPERATIONAL PLANNING

Strategic and operational planning consists of the planning process, the identification of goals and actions necessary to achieve success, and the deployment of those actions to align the work of the organization. The facilities organization should anticipate many factors in its strategic planning efforts—changing customer expectations, business and partnering opportunities, technological developments, evolving regulatory requirements, and societal expectations, to name but a few.

Facilities management does not have a strategic plan.

2.1 A strategic plan exists that includes the goals and objectives of the department.

Recommendation 2A

It is recommended that the facilities management executive director enlist assistance in developing a strategic and operational plan for the department. A practical approach fitting for a small university campus service department should guide the process. It is recommended that participants in the plan development be representatives from the Facilities Management Department and also include external participants. The planning process should focus on strategic thinking as different from tactical thinking, based on the organization’s strengths, weaknesses, opportunities, and threats. There is a need for a Facilities Management Department “game plan.” The following steps are suggested:

- Perform a situational analysis—based on the organization’s strengths; weaknesses, opportunities, and threats (SWOT Analysis);
- Write an annual and longer term strategic plan;
- Focus on strategic thinking;
- Develop clear and thoughtful goals and objectives linked to the organization’s vision and any additional challenges the organization faces; and
- Develop plans that address all aspects of performance including financial, customer, process, and employee learning and growth.

Initial work should include stakeholder surveys/communications of some form that capture stakeholder needs and expectations. Facilities management should take the lead in identifying the needs and expectations that should be serviced by FM and continue discussions with stakeholders until both parties clearly understand each other in a win/
As FM develops strategies to meet the needs and expectations that have been identified, frequent communication with stakeholders on progress and receiving their feedback will ensure full development of those strategies.

The chief financial officer has a role also and should decide if the FM strategic plan will be a separate document or if it is integrated into a comprehensive finance division plan—either way, he should take the lead in seeking approval and embrace the plan by the administration.

See findings and recommendation criterion 2.1 above.

The strategic direction to incorporate customer needs and expectations has not been clearly established and set by department leaders. The historical sense of “customer” in the Facilities Management Department at USM has been blurred, inconsistent, and shows signs that it has been plagued with a sense of favoritism. In previous years, some customers were treated to extraordinary lengths, and some customers were treated below minimal standards or not clearly thought of as customers. The good news is that the CFO understands that all customers must be treated fairly and equally and is taking solid steps to integrate that concept into the FM organization and the campus community.

The review team heard comments from a number of deans and department heads that if they personally take an interest in their facilities then they are likely to receive the attention from FM which they need. Those department heads that are not aggressive in identifying their needs and expectations for service are likely to receive less service attention.

Facilities management will benefit greatly from being proactive in developing a stronger customer orientation that incorporates the elements of a comprehensive customer service strategy. The identification of the different customers, the development of definition and scope of “customer” throughout the FM organization and campus community is needed. A focus on communications between customers and FM that clearly relates needs to area responsibilities and produces realistic expectations that can be communicated to FM staff members as minimum performance standards is
also needed. Identifying and anticipating future customer needs and how FM will respond to those needs must also be addressed in all facilities management’s strategic planning efforts.

A recommendation on the development of a customer service strategy for FM is described in further details in Section 3.0: Customer Focus.

### Recommendation 2C

**2.4 Goals and key performance measures are understood by all and periodically reviewed.**

Because FM does not have an approved strategic plan, it is unable to consistently set or identify strategic goals that can be measured and reviewed. A formal FM department operating goal-setting process has not been applied in the past. An effective and consistent performance goal setting and review process by the facilities management leadership is not done.

**2.5 Performance measures at each level of the organization are used to meet goals.**

Identifying key performance measures consistently in the department and in operating units separately have not been a priority in the past. Understanding of those performance measures, communicating those performance measures, and review of those performance measures consistently at each level has been lacking for various reasons.

**Recommendation 2D**

As in criterion 2.4, the opportunities for improvement are huge. Setting, communicating, understanding, and reviewing of performance measures on each level of the organization is just as important as the department as a whole. Some, if not all, facilities management service areas have informal or personal forms of performance measures for individual staff members in place, and many staff members have a good understanding of customer service and possess positive attitudes.
One concern in this area is that performance measures that are being used are not consistent across the department and that they are not formally tied to goal setting, communicating expectations, and performance review of individuals and operating units. Facilities management leadership should make extra efforts to ensure consistent application of goal setting and performance measurement efforts at each level and within each respective service area.

Currently, FM does not have a formal internal budget development process—the budget and allocation of financial resources have been largely based on historical expenditures and closely held in the executive director’s office. It has not been a departmental practice to involve other directors and members of management in the development of the budget for purposes of capturing their input. Because facilities management has not been directed in the past to set strategic and operational goals or to allocate resources to support these goals, there has been no development of budget performance measures. In some cases, FM performs work that is billed to customers, charged back, and in some instances, facilities management services are provided by other departments such as student life, athletics, and some facility services at the Lewiston/Auburn campus. The executive director is working more closely with the CFO on understanding these issues, and they have made positive changes in the overall budget management processes.

The executive director of FM should provide the leadership to develop an internal budget process that is linked to strategic planning and operational requirements. The executive director should involve active participation of all directors, assistant directors, and supervisors in identifying internal budget needs and in communicating financial and budget development information.

While developing the FM strategic plan, special attention should be applied to identifying budget skills and time resources required to effectively manage the internal budget process. Both budget development and expenditure monitoring and management should be included. Collection of sufficient and accurate data in timely fashion, analysis of that data, and presenting that information to internal FM management and external stakeholders by members of the administration and information systems staff could require additional information system tools, as well as skilled and talented staff.

2.6 A budget is developed with input from staff that reflects historic expenditures, an analysis of needs, effective allocation of available resources to support the organization’s goals and objectives, and seeks new and innovative measures to leverage resources.
Operational performance standards for the department or individual units are not formally defined. Level of service definitions, standard methods and procedures, and resource utilization standards are not readily available or consistently applied. Campus standards for equipment systems and equipment are generally informal and hit or miss. Campus landscape standards in those areas under FM responsibility have been nonexistent or inadequate.

Recommendation 2F

FM should create an internal review process for comparing its performance standards with applicable published standards. Systems and equipment standards and landscape standards can be expanded according to FM goals and resources available. Alignment of performance standards in FM with existing or future campus performance standards is desirable. There is a need to develop and define performance standards for operational units and staff members.

2.8 A campus master plan is in place, current, and utilized for decision making.

The university has a campus master plan for the Portland campus although it is in need of updating. There is no master plan for the Gorham campus. A master plan for the campus at Lewiston/Auburn was done three years ago.

Recommendation 2G

The University of Southern Maine may want to include campus physical master planning in the development of its strategic planning work. The master planning can be centered in FM or at a higher administrative level with significant FM involvement. Regardless of primary responsibility, all internal and external stakeholders should be included to some degree. Consideration should be given to the formal establishment of a standing campus facilities committee that represents a large spectrum of stakeholders. The campus master plan should include guiding principles that can be easily updated and effectively utilized for campus physical plant decision making.

Components that are typically included in a comprehensive campus master plan include the planning for each campus site, a residential master plan including dining services, a landscape master plan, an athletic facilities master plan, and a utility/infrastructure master plan. These components can be assembled and applied initially as stand alone plans, but they should be connected to a comprehensive campus master plan and reviewed and updated accordingly.
2.9 The operational units participate in the development of the construction program and are active participants in the acceptance of completed projects.

The findings for this criterion depend on who one talks to about the participation and quality of the capital project plan review process. The review team received mixed responses that suggest a need to review what the reality of the process is. There is no documented or written procedure, and the indications are that the process is inconsistently applied. It appears that the project managers may approach this in different ways and with different levels of importance. The O&M staff members participated in the programming, schematic drawing, and design drawing review for the LEED and all Gorham projects. Some FM operational units have not traditionally been involved in the development of the campus construction program nor have they been active, upfront planning participants in the university acceptance of completed projects. There appears to be a solid foundation of technical skills and experience to some depth in most operational units that could be applied to construction program review. There also exists a serious desire by many staff members to share their knowledge relative to, and concerns about new construction and renovation work on campus.

Facilities management leadership should design an internal review process for the construction program on campus. All operating units, including skilled trades, grounds, custodial operations, and administrative services should be involved in the review, along with the usual mechanical, electrical, and architectural program review. Time investments of staff and timeline constraints of the project must be considered and planned for.

Operating unit participation in identifying facility needs and impacts of proposed change in the schematic design phase of construction projects should be encouraged. Continuous involvement through construction documents phase should be maintained; final bid documents review by operating units prior to construction should be a minimum. In addition to design review, the active participation in project acceptance by FM units will produce long-term benefits in the operation and maintenance of the project.

2.10 Strategies and processes are in place to ensure continuity of functions in the event of staff turnover or other disruption.

Operating units are expected to cover routine needs with existing resources in the best way possible as the situation arises. Facilities management leadership succession capabilities are in similar status.
Recommendation 2I

Facilities management should include succession planning for leadership positions and key staff members within its strategic planning efforts. Identification of key responsibilities and skills required in order to ensure succession of personnel with minimal disruption to FM operations and the least impact to the university community should be documented. Analysis of needs and the existing skill sets available for succession should be performed periodically. Disparities should be addressed through staff training, considering succession needs in the hiring of new employees, and identifying possible candidates external to FM personnel resources, both within USM and outside. Continuity of operations planning is addressed in criterion 2.11 below.

2.11 Emergency response plans are in place, current, and communicated to facilities employees and the campus community as required.

USM maintains an emergency response plan that addresses the most common emergency situations. Emergency response plans are current and are communicated to the facilities employees and campus community if and as required.

The review team was informed that the Portland community has a long history of providing excellent emergency response to severe weather situations and the more usual emergency situations, such as police first response, medical calls and fire alarms. We did not determine the local community situation at the other campus locations. Cooperation between facilities management staff members, university police, and other USM departments with external emergency responders appears to be good.

Recommendation 2J

Facilities management should review emergency response expectations of the campus community for each operating unit and document situational policies and procedures as necessary. FM leadership should produce an internal emergency operations plan that fully supports and is linked to the university emergency operations plan. Similar to other strategic planning efforts, FM must involve internal and external stakeholders in this planning and documentation effort. All campus community sites should be included.

Facilities management staff members should be trained in emergency first response efforts.

The Facilities Management Department should expose itself to continuity of operations planning—what do they do after the emergency response phase and how do they help ensure university operations continue with the least disruption to
customers and stakeholders. Continuity of operations planning should be included in the FM strategic planning efforts.

The university should embrace FM in its overall emergency planning work, emergency procedure and policy reviews, and training and practice exercise efforts. Facilities management should be considered a key player in continuity of operations planning for the university.

3.0 CUSTOMER FOCUS

Customer focus is a key component of effective facilities management. Various stakeholders (faculty, students, staff, and other administrative departments) must feel their needs are heard, understood, and acted upon. Various tools must be in place to ensure customer communication, assess and assimilate what is said, and implement procedures to act on expressed needs.

3.1 Surveys, tools, and other methods are used to identify customer requirements, expectations, and satisfaction levels.

The facilities management self-evaluation indicated that there was no formal structured mechanism for customers to provide feedback other than the customer taking initiative to e-mail, call, or write a note to the department. This process only works for those who are in regular contact with FM or in contact with a particular project or issue. Some customers get better service than others based on either complaining louder or by having better relationships with the staff. In general, it doesn't allow for the campus customer a means to identify how they feel about general service provided over time and the quality, timeliness, and appropriateness of that service. Without engaging the customer directly, FM may well be providing service in areas that are not the priority of its customer base.

When the review team asked facilities management about customer feedback, they indicated that “they were such a small campus that they knew what their customers were thinking.” This is probably not a good way to direct FM’s limited resources to servicing the campus. The department does not have a proactive customer focus.

Recommendation 3A

Facilities management would benefit greatly by providing structure and discipline in the conduct of its customer service role. The following steps are recommended:
- Work hard on customer relationships and spend time with customers to understand needs and requirements.
- Define measurable customer service standards and measure service performance against them.
- Develop a practical customer satisfaction survey instrument based on clearly identifying customers, their differences, and the different campus segments that they represent. Use a variety of methods to identify customer requirements and priorities, including written survey instruments, telephone surveys, and personal contact.
- The executive director especially needs to be much more visible to core customers. Regular meetings with deans, directors, academic and support services departments such as campus environmental services, business services, library campus information technology, university advancement, police and parking, student government associations, residential life, athletics, and other customer constituents to ensure customer awareness and to stay on top of customer expectations and the quality of services required. This will require more attention to the maintenance and operations services provided by FM including the development of service-level standards.
- Make it easy for customers to get information.
- Track all complaints, no matter how minor, and take steps to quickly resolve complaints.
- At least one annual presentation to the university administration or presidents cabinet on the campus master plan, major construction update, deferred maintenance update, and any other important facility topics that the key campus leaders and stakeholders need to be aware.
- FM strategic goals and objectives should include customer service goals and, as with other strategic goals, should be developed by aligning with the campuses strategic plan. The alignment of limited FM resources will require specific and targeted application aligned with each campus division pulling in the same direction, with that direction informed by the strategic plan and vision of the institution.

3.2 The roles, responsibilities, and services provided by the facilities department are well defined, communicated, and understood within the department and by all communities served.

Facilities management staff members stated their belief that roles, responsibilities, and the various services provided by the department were well understood within the department, but those customers who have little contact with FM had problems. There was little evidence that FM roles and responsibilities are well understood in any areas of the
In its self-evaluation, FM identified confusion among campus customers with what the executive director is responsible for and the responsibility of other FM directors. The review team found that even within the department, it wasn’t always clear who was responsible for what. Staff members identified this ongoing issue as the “passing the buck” scenario.

**Recommendation 3B**

While most faculty, staff members, and students receive service from FM regularly, many customers will be infrequent requestors—one-time or other nonroutine services. It is essential that FM understand that they are responsible for actively communicating to the customer who they are to contact for work and services.

There is a need to clarify facilities management position roles and responsibilities on the website and to make the website user friendly so that it serves as a resource of accurate information for campus customers needing service.

During staff meetings (which should be mandatory and held at regular times), reviews of customer-related problems on this topic should be discussed with front-line staff (who generally deal with the frustrated customer) so that patterns can be discerned and appropriate actions taken.

Facilities management’s self-evaluation indicated that “Employees are expected to meet or exceed customer expectations and usually try to. However, achieving these levels is exacerbated by the lack of staff members, age, condition of the facilities, and a very limited funding.” Nowhere during the site visit and interview process did the review team see any description of service quality standards for FM staff members or any tracking matrices for work performed. There was little understanding of and no use of work-order cycle time or a real understanding of work-order backlog or any process for prioritizing work. Although facilities management at USM has participated in the 2006-2007 APPA Facilities Performance Indicator (FPI) Survey, which contains work-order management measures and metrics, there was no evidence that the data collected over the past years is being utilized to identify, address, prioritize, or correct work management issues. In spite of this, customers seem to have an understanding view of the limitations of FM service and believe this is due to budget and staffing constraints. It would appear that the customer base has generally accepted a reduced level of service. This acceptance of lower expecta-
tions is not uniformly accepted by campus departments. For example; the dean of Applied Science, Engineering, Technology, expects a higher level of service, and it is generally provided.

An example of how a culture of acquiescence can blunt customer expectations is the following story by a customer during the interview process. The customer told the custodian the area of his office that needed vacuuming (I believe it was during the presidential office complex move), so the custodian brought a vacuum and gave it to him to use to clean his office. If this can happen in the president’s office area, it can happen anywhere on campus.

A similar example of lack of customer focus was shared with the review team. During the renovation of the president’s house, the president’s office person appointed to work with facilities management met with a management representative to identify what changes were desired and was told across the board that the changes requested could not be done. The president’s office representative insisted on the changes, demanded the work be performed, and the work consequently was performed without any undue problems.

During the interview process with customers, there was regular feedback from a number of customers being told that certain things could not be done, either without explanation or based on some vague “policy reason.” The most popular reason given by FM for not doing the work requested was, “there isn’t sufficient staffing.”

**Recommendation 3C**

*It is recommended that levels of service for different types of facilities and spaces be developed by facilities management, and that these service levels be communicated to the campus customer constituency. These levels of service should be developed only after detailed discussions with building occupants or designated building representatives. This process will give the executive director and the respective Facilities Management Department manager/supervisor an opportunity to discuss with the customer the constraints and limitations of available resources and the “trade-offs” in services provided, if necessary, to provide levels of service that the customer desires. A customization of services may be appropriate in some circumstances. Some customers such, as the self-supporting and auxiliary enterprises, may be willing to pay for additional or special services.*
A data-driven argument for resources levels must be made by facilities management. A data-driven argument based on peer campus comparisons of costs and resources available can go a long way in achieving mutual understanding of realistic service levels and, in turn, the customers’ service expectations. Management tools should be used to determine adequate staffing levels and resources to meet or exceed customer satisfaction. This determination would be extremely useful in making the case for additional staffing and resources needed for the department to align its mission with that of the university.

The APPA Facilities Performance Indicator data can be used to help develop a plan for how to distribute the resources that are available to FM.

As indicated in other sections of this report, the executive director needs to spend more time on leading and managing the department’s customer focus. There is a need to be much more visible on campus and have regular interactions with the key customers. The executive director is responsible for setting the direction and managing the FM resources proactively. Regular customer feedback on work quality and priorities on resource distribution need to be used.

With training provided by facilities management staff members, customers have the ability to submit work-order requests to FM through the website. Currently, there is no system for customers to monitor progress of their work requests other than by calling the FM office. The department’s self-evaluation indicated that, “since most of the work is in the area where the person is working, the customer is usually aware if the work has been completed.” While some basic painting and carpentry may take place regularly within the work space of the customer, much of the mechanical and electrical trades work may be in remote areas of the campus.

An example of poor understanding by a customer of how to get work done and poor customer service was a move in the president’s office complex. The customer and his staff met with a number of FM personnel to identify the work needed. Part of the work got done expeditiously, and part didn’t. When the customer’s office called to see what the hold up was, they were told, “you didn’t put in the required work orders.” Because it is common for infrequent users to
not know the system for getting things done, it is incumbent on facilities management to ensure that the processes are clear and then track the work they agreed to do.

Recommendation 3D

The Facilities Management Department has a major gap in its organizational structure, alignment, and description of roles and responsibilities relating to customer service and work management. It needs a functional work management system. The details of this system are covered in this report in Section 8.0: Other Considerations and includes a recommendation for FM to designate one telephone number for work authorization and to make sure that staff are trained in work control, responsible for and capable of tracking work orders, and for providing customer service. Additionally, FM maintenance staff should be provided either post-ums or door hangers that indicate that work has been performed and the status—either finished or in some other state (parts on order, etc.). If not finished, an approximate time of completion should be given. Whatever notification is used should be signed by the maintenance technician responsible so that they can be contacted if necessary.

3.5 Customer feedback is used to build positive relationships, drive processes, and effect improvements in services.

Although the facilities management self-evaluation indicates that “customer feedback is used to build positive relationships and improvements,” there is no evidence of any customer feedback process except what happens in ordinary customer encounters. There is no department-wide understanding that customer input and feedback should be actively pursued, and customer feedback is not routinely used to drive processes improvement.

Recommendation 3E

Customer service needs to be developed as a core competency for the department. All staff members should receive appropriate training, and department managers and supervisors should nurture customer service and be visible practitioners of good customer relationship management.

3.6 Campus users have a clear understanding and positive view of the services provided by the facilities organization.

As stated earlier in this report, facilities management customers seem to have an understanding view of the limitations of FM operations and maintenance service shortcomings because of budget and staffing constraints. Because there appear to be no expectations by either customers or FM management, and because there are no tracking data on cycle time and quality or any customer feedback processes, it is difficult to define FM service. Customers have a positive view of FM workers’ empathetic attitude when responding
to their issues, and they seem to believe that the workers as individuals are reasonably competent and want to be helpful.

There is a lot of discussion throughout facilities management about the lack of resources and how it affects the service they provide. What there appears to be is a lack of understanding that service levels can still be tracked and quality service can be delivered, based on the resources provided.

Customers who had recent experience with the capital project processes and services were very complimentary about their experience. Numerous comments from customers highlighted the services provided by engineering and architectural services. Positive comments from customers included a number of service attributes, which customers identified as having value to them. These include easy to work with, knowledgeable about the project processes and willingness to explain the process, excellent communication skills and decision making before and during construction, and responsiveness to customer requests and needs. Some customer criticism, however, was directed toward engineering and architectural services project managers. Some of the customers that were interviewed stated that they were not always certain that the project managers are representing the customer and the university as owner, or if the project manager is representing the interests of the contractor.

**Recommendation 3F**

*Operations and maintenance services provided by competent workers in an organized and controlled environment, with good communication and support from good systems and a good management team is still possible in an environment of reduced resources. The appropriate, efficient, and effective use of available resources to enhance the quality of the service provided is the responsibility of FM leadership.*

*Facilities management can use the FPI survey data to determine how the resources that are available to FM are best allocated and the data can be used to compare against similar campuses to see if and where there are, in fact, limited resources. Quantifiable data needs to be utilized.*

*Facilities management operations and maintenance would benefit by capitalizing on the customer service practices that are being practiced by successful facilities management departments throughout the profession.*
4.0 INFORMATION AND ANALYSIS

Information and analysis is used to evaluate performance and drive future performance improvements. Of interest are the types of tools used (for example, peer comparative data clarified and validated through benchmarking), and how the tools are used to enhance organizational performance. Various aspects of information include facilities inspections/audits, financial/expenditure reports, utility data, and other relevant measures and indicators.

The USM Facilities Management Department does not have a systematic process in place for identifying and prioritizing performance indicators, comparative information, and benchmarking studies in most of its areas of operation. There are no documented performance indicators in use by the USM facilities management organization. No peer institutions have been identified to visit or collaborate with for comparative analysis purposes. The review team recommends FM for participating in the APPA FPI survey; however, the review team did not find evidence of widespread use and analysis of the APPA FPI data to drive decisions. Additionally, while the APPA FPI database is a very good source for strategic benchmarking, it is does not substitute for routine operational tactical performance indicators.

A computerized maintenance management system (CMMS) or work-order system usually is a key element of a good performance indicator system since it serves as the repository of data needed to support performance indicators review and analysis. The computer based work-order system (Infor MP2) is not being used to its advertised capacity because it is believed to be too complex and user unfriendly by USM users (see criterion 4.7).

Facilities management should involve staff members from all levels of the organization to develop relevant performance indicators and benchmarks for all of its functional area. Data collection for these indicators should be integrated into the day to day standard operating procedures as much as possible.

Facilities management should formalize analysis and review of the performance indicator data. Adjustment in focus and attention should result from review and analysis of the
performance indicators. Unless the FM leadership and management team institute formal review and analysis sessions, performance indicator data will not serve the intended purpose of driving operational decisions.

The review team recommends FM institute a two-tier, metric review and analysis process. Such a process should involve the directors holding meetings with key people in their work unit to review and analyze performance indicator data on a regular and scheduled basis, after which the executive director holds meetings with the director and key people in the director's work unit to review performance indicator data for the same period. The review team recommends that formal presentations be prepared for the meetings and that the presentations contain information about the most recent period, along with cumulative data for the fiscal year. Cumulative information provides more useful information than single data points for a particular period, because cumulative information affords management the ability to spot trends and make projections.

Identify other institutions with profiles similar to USM as peer institutions for making benchmarking visits and sharing information on best practices.

Identify key higher education facilities management standards and compare them to USM facilities management methods, processes, and practices.

4.2 Benchmarking results, comparisons and performance indicators are tracked and used to drive action within the organization.

Benchmarking results, comparisons, and performance indicators are not tracked and are not used to drive action within the organization. Facilities management does not have a formal system of tracking performance against established standards. Most actions within the organization are driven by reactions to current situations, rather than analysis of data and information.

Recommendation 4B

Collect and analyze performance data based on the key performance indicators and conduct performance indicator review sessions with the facilities management leadership team (director, assistant director, and supervisors) monthly or at least quarterly (see criterion 4.1).

The facilities management executive director should take his leadership team out of the day to day reactive routine and periodically hold strategic planning and continuous improve-
4.3 The department ensures that data and information are communicated and accessible to all appropriate users. The required data and information have all the characteristics users need, such as reliability, accuracy, timeliness, and appropriate levels of security and confidentiality.

The department does not ensure data and information are communicated and accessible to all appropriate users for most of its operational functions. The backbone for information accessibility for most facilities management organizations is a CMMS or computer-based work-order system with a customer web-based self-help interface. Facilities management’s Infor MP2 computer-based work-order system is not serving the department’s internal information needs nor is it serving the customers’ information needs. During interviews with facilities management staff members and customers, many complaints were heard regarding the complexity and user-unfriendliness of the Infor MP2 system (see criterion 4.7).

Other means of providing access to information include regular staff meetings, customer meetings, customer visits, and the department website. During interviews with staff members, many of them noted that they do not get enough information about what is going on in the department. They expressed a desire to have management talk to them more about current departmental events and issues. There does not seem to be a series of scheduled internal meetings or information exchange events to keep facilities management staff members well informed. Interviews with customers revealed that there were regular customer meetings being held by the director and assistant director of facilities; however, both of these positions are now vacant and customers expressed concern about what would happen to the customer meetings.

Recommendation 4C

Review the various methods currently in use to make data and information available to staff members and customers. Take steps to determine what data and information the staff needs to do its job and what data and information customers need to make use of the services facilities management provides. Determine the most appropriate method for providing the required data and information and implement procedures to make data and information accessible to staff members and customers.

Facilities management is small enough to hold regular all-hands meetings or sessions on a quarterly basis to keep the
staff informed, recognize high performing personnel, and allow for staff feedback. The review team recommends that management conduct all-hands meeting with prepared agenda or program for two-way communication with the facilities management staff.

Facilities management does not have a regular facilities audit and inspection program in place. In 2004-2005, an inspection of all education and general (E&G) facilities (classroom, office, library, athletic, etc.) was conducted by in-house personnel that identified and quantified building conditions. The University of Maine System selected the Vanderweil Facilities Associates (VFA) program for tracking all capital renewal/deferred maintenance on its seven campuses. All information gathered from the inspections of the E&G facilities was entered into the VFA system and estimates were created using this system. The review team commends the department for the wealth of facilities condition information contained in the VFA database. However, this information will easily become outdated since there is no process in place to update the data based on completed work, and there are no ongoing inspections.

Additionally, there is no systematic process of operational inspection of facilities to identify day to day maintenance and repair requirements. There seem to be an over reliance on customers’ requests to identify repair requirements.

Recommendation 4D

Establish a process to keep the VFA facilities condition data up-to-date by ensuring that completed work and new deficiencies are enter into the database.

Establish an appropriate cycle to perform comprehensive condition inspection of all facilities. One consideration could be to inspect one-third of the facilities every three years or some other scheme appropriate for the USM local situation.

Establish a process to inspect facilities on a regular basis to identify day to day maintenance and repair requirements to reduce reliance on customer requests for maintenance and repair work.

Perform an analysis of the maintenance and repair work order and trouble calls to determine what percentage of work is generated by customer calls, as opposed to internally generated. A high percentage of customer calls would
facilities management is operating in a reactive mode, instead of the more desirable proactive mode.

Facilities management does not have a practice of including subunit managers in the budget formulation and execution process. While the director of Administration and Information Systems does distribute an expenditure report to subunit managers, the reports are not used to make financial or operational decisions. There appears to be little connection between the resource needs of subunits and the budget process. The budget appears to be based on historical expenditures adjusted by current budget constraints, and subunit managers are not managing their operations based on budgeted resources.

Provide budget and financial management training for subunit managers and involve them in the budget development process for the next budget cycle. Require subunit managers to demonstrate their budget resource needs based on the level of service their subunit is required to provide. Delegate expenditure authority commensurate with the budget and hold subunit managers accountable for operating within their budget and for providing analysis and justification for resource requirements that exceed the budgeted amounts.

As noted in the self-evaluation, the department does have an effective system of measuring and recording electrical utility data for much of the campus. Utility data is used to establish trends, minimize costs, and identify excessive usage, and this is done by the department through its Energy Watch Dog program. This information is not widely distributed. The department also currently has a contract with Hirnak Energy Services to read and analyze the utility submeters at the Gorham site. Part of the services provided in the contract is to analyze trends and to provide feedback regarding usage, trends, excessive usage, and to provide monthly reports and a quarterly analysis. The department charges the auxiliary services for their utility usage.

The facilities management utility budget for campus E&G facilities for 2008 is $2.56 million, which represents over 30 percent of the total FM operating budget. Energy management and conservation will continue to be a major challenge as prices continue to escalate.
Recommendation 4F

A campus with a large number of aging buildings and old mechanical and electrical systems is a special challenge. Newer buildings such as the bio-sciences building are high-energy consuming facilities. The campuses also have substantial need for upgrades in central heating plants, distribution systems, and for additional metering of steam, high-temperature hot water, and chilled water.

It is recommended that facilities management increase its efforts at identifying energy management and energy conservation opportunities. A comprehensive approach including a revisit of all energy audits previously performed is recommended. Because of the current situation with the escalating costs of all energy commodities, all opportunities for energy savings should be considered, including those opportunities for savings that were not considered cost effective when energy costs were not as high as they are today.

Management of energy for the university should definitely be a strategic initiative for facilities management and the appropriate measures, metrics, and reporting are an essential part of this strategy. FM has talented and knowledgeable staff members and an energy management effort that can be improved with better organization, collaboration and cooperation, and direction between those currently designated as energy managers and those staff members who are operating the campus energy consuming systems and infrastructure. The review team would like to see FM provide a complete energy report that can serve to inform FM staff members, engineers, and the campus community about campus energy consumption and costs on an on-going basis.

Large energy-saving opportunities need to be identified, and serious consideration for capital projects with attractive financial payback accomplished through partnerships and the use of an Energy Savings Company (ESCO) specializing in campus energy savings projects should be done.

4.7 The organization has a process to ensure that hardware and software systems are user friendly, reliable, up-to-date, and meet the needs of all users.

The USM campus information system department works with facilities management to ensure hardware and generic software is kept up-to-date. Desktop and laptop computers are on a three-year replacement cycle, which is more than adequate to ensure that personal computers and software are up-to-date. However, the FM MP2 work-order system (which should be the backbone of the FM work management system) is not being used to its advertised full capabil-
ity because of the widespread belief of the FM leadership and staff members that it is too complex and too user unfriendly. The review team visited the MP2 website to review its advertised functionality. MP2 is owned by a company called Infor (http://www.infor.com/industries/facilities). Below is quote from the Info MP2 website:

Infor has years of embedded industry expertise acquired by partnering with global facility management companies with implementations at more than 60,000 customer sites worldwide. Our business-specific, integrated computer-aided facilities management solutions are tailored for organizations that need to manage critical functions such as work requests, purchasing, inventory, and preventive maintenance so they can extend the longevity of their assets, improve productivity almost immediately ... and be more enterprising.

Within the scope of the FMEP, the review team was unable to determine whether FM’s dissatisfaction with MP2 is due to lack of software functionality or user resistance caused by an inadequate initial implementation or inadequate training. Inadequate initial implementation or inadequate training are often as much a contributor to dissatisfaction with software packages as is lack of functionality or user unfriendliness. It is usually expensive and resource-intensive to switch from one enterprise software such as MP2 to a different one. Once substantial investments of time and resources have been made in a work-order system, much care and deliberation is needed before making the decision to abandon the package.

According to the self-assessment, the university’s information system department does not support the MP2 application, and there are no information system professionals within FM dedicated to the system. This lack of involvement by information system professionals may be a contributor to the department’s inability to obtain the advertised functionality from the system.

**Recommendation 4G**

*Before abandoning the MP2 system, conduct a systematic evaluation of the reason for the widespread dissatisfaction with the system. There is a possibility that this dissatisfaction is due to initial implementation and training issues, rather than lack of user friendliness or lack of functionality. Research should be conducted to find out if there are other organizations with similar profiles as USM using MP2 to determine if they are having similar issues. If not already*
done, full and open discussions should be held with the MP2 vendor to ensure that the vendor is completely aware of the dissatisfaction with the system. Specific shortcomings should be documented based on actual system deficiencies rather than a collection of anecdotal comments that might be the result of personal preference or lack of training.

If it is determined that MP2 is in fact deficient then a methodical approach should be taken to select a CMMS that is appropriate for the USM size and complexity. A one-size-fits-all approach is likely to end up with a similar situation that currently exists. USM is not a very large campus, and there are scalable CMMS on the market with proven track records on campuses comparable to USM. In selecting a new system, heavy weight should be given to systems that are currently working well at similar campuses. Field trips to campuses currently using the system of interest are the best way to verify system performance and user satisfaction.

5.0 DEVELOPMENT AND MANAGEMENT OF HUMAN RESOURCES

An organization’s success depends increasingly on the knowledge, skills, innovative creativity, and motivation of its employees and partners. These criteria address the ways in which the facilities organization ensures a continuing learning environment through communication, policies, recognition, training, professional development opportunities, and other methods.

5.1 Staff positions are properly classified and allocated in adequate numbers to meet the standards for the targeted level of service.

Interviews with HR and facilities management indicate that job descriptions and classifications follow USM procedures. It appears that generally the individuals holding the positions in FM are classified appropriately. Some additional effort may need to be made to assure that job descriptions accurately reflect the work that is performed as organizational changes are made or new and different services are added.

The self-evaluation indicates that because of a lack of sufficient funding for the FM operating budget, staff numbers do not meet the level of expectation that customers would prefer. While individual maintenance workers appear to be credited with working hard at resolving problems, it is clear that many of them are limited to “stamping out fires.” There
is no preventive maintenance program being pursued nor have maintenance standards including descriptions of tasks and frequencies been developed for custodial, grounds and general facilities maintenance. Without maintenance standards, it is not possible to determine appropriate staffing levels.

Maintenance Standards and staffing levels are addressed in Section 6.0: Process Management.

Recommendation 5A

_Staffing and resource support for FM is spoken of as “not having enough and needing more.” During discussions with facilities management, campus administration, or customers, there was no quantification of numbers of staff or clear justification to support the need for additional staffing. Facilities management would be well served by developing maintenance and operational standards and use the FPI information it has by participating in multiple FPI surveys to develop a clear picture of where staffing resources are lacking. This information can be developed by performing a comparison with other UM campuses as well as other peer campuses who participate in the FPI survey._

5.2 Training programs provide for new employee orientation and technical skills enhancement for all staff.

There is new employee orientation training provided by members of key campus areas. In interviews with management and staff, it was clear that additional training was available for employees, especially technical training where licenses were concerned. The university also has tuition remission for staff and their families. What appears to be lacking is any plan for management levels to build a professional development plan for staff members. Opportunities for development clearly exist as was highlighted by the letter from the state of Maine Board of Licensure for Professional Engineers representing that Brian Labrecque had passed his test and would be issued a license as a professional engineer. There is risk to the department that without a professional development plan, generally only “self starters” will take maximum advantage of the training and educational opportunities that currently exist.

Recommendation 5B

_Each supervisor and manager should be required to work with their staff to develop a professional development plan as a part of each annual performance evaluation. These plans may range from basic training to professional and technical training to formal degrees._
Training needs should be assessed across the entire organization. Each area should have access to its professional associations. Where the budget is limited for travel to educational seminars and conferences, those resources should be shared so that all interested parties get an opportunity to attend on a rotational basis. And during times of restricted travel, webinars and professional publications can be used to augment development.

Management’s commitment and action in support of the department’s people needs for learning and growth should be measured. Measure training and development as a percentage of annual salaries (investment %) and as training and development programs completed as compared to a needs assessment for training, education, and development. Training and development curriculum should be developed for all key functions and job skills, licensing, or certification update requirements.

5.3 An effective communication system exists within the department to ensure that each employee knows his or her role in the department, the role of related areas, and the overall role of the department.

A new employee’s role in the department and the overall role of the department are reviewed with candidates during the interview and hiring process. Supervisors also review their roles after they are hired at preshift and/or shop meetings with their employees.

As stated earlier, a number of the staff complained about the issue of “passing the buck,” where it either wasn’t clear who was responsible for a task or where there was task avoidance going on. This was clearly frustrating to the administrative staff trying to assign the work to someone so that it would be taken care of. Also, a number of the administrative staff desired more communication with management, both verbal and through staff meetings. They very often feel that they are completely out of the loop.

Interviews with both facilities management staff members and customers indicate that there is a lack of visibility on campus of upper FM management, especially the executive director. Good communication starts by being visible and accessible to both staff as well as customers. The tougher the times, the more important it is for leaders to be accessible to those working hard to provide good service to customers who also are trying to get their work done in an environment of reduced resources and difficult circumstances.
Meetings with administrative staff should be set up for the benefit of communication.

The existing staff meetings being held by the executive director and his management team should be formalized by requiring attendance, issuing agendas beforehand, and taking minutes that include action steps and accountability identification.

See recommendation in Section 1.0: Leadership.

There is a good relationship between EH&S and facilities management regarding safety policies and procedures. Safety policy and procedures are reviewed with new employees at orientation and by supervisors during regular safety training sessions. There is excellent understanding of the importance of good safety practices reported by all staff members who participated in the interview process.

Establish goals for safety based on USM campus comparisons for accident and injury on the job. Continue with opportunities to address safety in a prevention-based approach. Assure that all safety training is documented.

Standard procedures for reporting and completing accidents reports are followed. EH&S seems to work very closely with facilities management in this area. It was indicated that if an incident appeared to be of a serious nature, either the director of EH&S would investigate or ask the FM supervisor to do so.

All accidents, regardless of perceived seriousness, should answer the question, “How could this accident have been prevented?” This is standard practice in the industry. By asking the question, there is a natural process to question the way work is performed and to ensure that work is being performed safely.

As indicated in a prior section of this report, facilities managers are supportive of training, especially technical training required for license continuation. Also, fee waiver at the university allows employees to continue their education by taking up to two educational courses a semester. Employees are encouraged to attend trade and equipment shows, vendor training and product shows, and educational conferences, although the budget levels are restricting attendance.
at some educational and professional conferences and training.

There didn’t appear to be any management driven expectations of rotational assignments or mentoring for management or staff development. As indicated before, there is no professional development plan process that management and supervisors uniformly use to work with their staff. Also, there was no evidence of an apprenticeship program available for staff development.

Input from campus customers indicated they would like to see more cross training for those working on the building automation-HVAC systems. Library staff for example noted that the library’s special collections rely heavily on the HVAC system working properly, and they are concerned about the small number of people who can operate and repair the systems, especially when some of the mechanics are on vacation.

**Recommendation 5F**

There should be a formal process in place for cross training for critical functions in all areas as a part of staff development. This is an easy thing to do at little or no cost. Cross training is extremely helpful in developing coverage during times of reduced resources and frozen positions.

As indicated in an earlier section of this report, managers and supervisors should work with their staff members and jointly work on professional development plans during annual performance evaluations.

To assure that training resources are equitably distributed, training should be tracked. Training targets should be identified for educational conferences, technical training, etc., so that the areas most in need of training get it.

Customers should be engaged in discussion regarding their special needs and their concerns for levels of staff trained in areas of particular importance to them.

5.7 Career development is supported through involvement in job-related and professional organizations, and opportunities to advance within the department.

See findings and recommendations in criterion 5.2
Although attendance seems to be tracked and used in performance evaluations, work performance metrics are not used. The work-order system is not used to track work-order cycle time, nor is there any tracking of quality or call backs for work orders. No customer feedback system is in place, either formal or informal, to track work quality or quantity.

During the interview process with facilities management customers, there was general acknowledgment that the work-order system was either not adequate or that it could not be utilized properly to track work-order progress. Regardless of the problem with the work-order system, some customers still believe that the responsibility is on FM to track work orders, rather than have the customer constantly call for updates.

The work-order system has the capacity to track work-order backlog and cycle times. Effort should be made to utilize its capabilities. It is not clear that the work-order system is capable of doing a lot more than it is currently doing or not. Many times when a software system doesn’t operate up to its capacity, it is due to a lack of training for those using it. It is easy enough to check with other users to see if anyone is using the program up to its capacity. Onsite visits could verify the programs ability to perform. Additional training for select FM staff members could develop more completely the use of the work-order system on campus.

Until the work-order system either becomes functional or is replaced, supervisors should track work-order cycle times and backlog manually to ensure that their staff members are working up to capacity and performing work by priority need, rather than cherry-picking work because it isn’t being tracked.

Facilities management’s FMEP report indicates that it utilizes informal ways to determine employee well-being, such as “being a small organization, the supervisors and crew leaders know how their employees are feeling and if they have issues.” When the review team asked staff to indicate what percentage of employees they felt where unhappy, the answers ranged from 50 percent to 100 percent. It is hard to reconcile FM’s practice of utilizing informal employee assessment as an effective methodology for determining employee satisfaction.
It is never a good practice to assume that you know what people are thinking. Employee climate surveys are a much more reliable way of determining employee morale, employee satisfaction, and employee well-being.

An employee satisfaction survey should be done to determine a base level of employee satisfaction immediately. Then the results of the survey should be addressed by the management through meetings with staff in groups to work out particular issues. Just the attention alone to hearing about their needs will increase morale. A number of staff indicated that they just wanted to have a voice—to be heard.

As it stands now, the management team does not have any factual information on how it is really doing.

Facilities management holds an annual recognition breakfast each fall to recognize achievement; the university holds separate breakfasts for staff and professionals to recognize years of service; and there is a breakfast at the beginning of the new academic year with some recognition as well as to welcome new employees.

What is lacking based on interviews with staff members is any direct and local or on-the-spot recognition of work done well. In interviews with staff members, there were a number of statements that indicated that FM managers, including the executive director, do not spend sufficient time with the staff and do not know what they do nor how they spent their day.

All supervisors and managers need to be in the field regularly, reviewing the work that people are performing. There is a successful practice process for “catching people doing something right,” but it can only happen when management spends the time to spot check the work of their staff. In some areas, work output is obvious, but in many areas of facilities management, the work performed is in basements, mechanical rooms, on roofs, and behind the scenes. If the areas are not checked by those who supervise, the work goes unnoticed unless there is a problem.

Simply saying “thank you” to staff members or sending them a thank you note goes a long way to build morale, because people feel that their work is noticed and that it is important. Without regular recognition, the only thing left is...
working daily in an environment of reduced resources and a sense of being taken for granted at best.

There are no processes in place to determine the effectiveness of recruitment and retention programs and to identify areas of improvement. The self-evaluation indicates that there is a stable workforce in facilities management except in the custodial services area. Facilities management indicates that HR does exit interviews to learn why people leave so that retention can be improved. There was no indication that FM management worked with HR after the exit interviews to determine why its employees left. There appears to be a wage disparity between USM and the private sector, as well as with other educational institutions in the area. More than one case of a USM employee leaving to go to the community college to make more money was shared with us during our interviews. In the case of a custodial employee, that difference in pay was $2 per hour.

But not all employee loss is due to money. Work conditions and how people are treated can make up for money. It was a consistent feeling in the custodial ranks, including the director of Environmental Services that custodial staff were not respected and were frequently treated as second-class citizens. The prevalence of this feeling creates discontent and can be a substantial contributing reason for employee turnover.

In the areas where there isn’t much turnover, it isn’t clear that the employees stay because they enjoy their work and work environment, or if there isn’t anywhere else to go.

Recommendation 5J

Facilities management should consider conducting its own exit interviews to determine the state of its employee’s morale and work closely with campus HR on the findings.

The department needs to be more interactive and communicative with staff members at all levels of the organization on matters of workforce issues and staff retention. The use of an employee climate survey, as mentioned earlier in this report, is recommended under this criterion also. A properly designed instrument and professionally administered assessment is needed to close the gap between management and worker perception of the FM workplace.

The APPA-FPI program has developed a survey instrument and members of the review team have experience with
several assessment tools that can be made available to the university and facilities management. Experience has proven that regular practice by management to collect data on a wide variety of measures of employee satisfaction and taking action on assessment results, is effective in building and maintaining a loyal and dedicated workforce.

6.0 PROCESS MANAGEMENT

Effective process management addresses how the facilities organization manages key product and service design and delivery processes. Process management includes various systems such as work management, performance standards, estimating systems, planning and design of new facilities, and other key processes that affect facilities functions.

The review team did not find processes to ensure equipment is programmed and included in the budget based on needs and equipment life cycle. Equipment is replaced as it becomes nonserviceable on an as required basis. This results in equipment being kept in service beyond its service life when it becomes less efficient and more costly to operate. While facilities such as shops, storeroom, and administrative spaces seem only marginally adequate, the review team did not find a plan or strategy for upgrading or expanding the facilities management complex. The review team recognizes in light of USM’s budget situation that adequate FM space will most likely be a low priority in university’s capital program, however, legitimate facilities needs for maintaining and operating the university should be documented in the same manner as all other facilities needs.

6.1 Processes are in place to ensure that departmental facilities and equipment are adequate for the provision of effective and efficient services.

Recommendation 6A

Develop an equipment replacement program based on life cycle of existing equipment inventory with a focus on replacing and acquiring equipment with state-of-the-art labor saving devices to help offset the adverse impact of reduced staffing. Organizations that do not include a budget line in their budget specifically for an equipment replacement program will often find that they are spending more money maintaining out of date equipment or wasting labor hours working with inefficient equipment.

Determine the operating and workspace that facilities management needs to maintain and operate the campus and document this requirement, along with all other facilities needs.
6.2 An effective work management system is in place to identify, report, correct, and document substandard conditions and maintenance requirements.

Recommendation 6B

6.3 Work authorization and scheduling procedures have been established that are consistent with the identified role of each work unit and achieve an equitable distribution of resources.

Facilities management does not have an effective work management system in place. The current MP2 work-order system is considered too complex and user unfriendly (see criterion 4.7).

See recommendation for criterion 4.7.

According to the self-evaluation, generally the maintenance supervisors review work orders and direct them to the appropriate shop. The maintenance supervisors set priorities for work and review and coordinate assignments at the morning meetings. The review team, within the scope of the FMEP, was not able to validate equitable distribution of resources; however, the team did not see evidence of a structured resource allocation protocol. Considering the three campuses and no methodical resource allocation protocol, there is a possibility of imbalances in resource allocation among campuses and among functions. Resource imbalances can easily occur during time of budget constraint and recruitment freezes. One example is the number of FTEs assigned to the cleaning function on the Gorham campus compared to the Portland campus. While the cleaning function on the Gorham campus is being performed very well, the 21 FTEs allocated to the residential life function might be excessive. However, staffing judgments should only be made after application of a methodical staffing protocol based on achieving a specific service level.

Recommendation 6C

Based on current budget constraints, make a decision regarding service levels the department is expected to achieve. The three APPA staffing guidelines for custodial services, landscape services, and maintenance and operations are good sources for assistance in determining service levels and staffing levels required to achieve them. This activity will not only help to determine what service level is reasonable to expect based on current staffing, but it will also help in achieving balance resource allocation.

6.4 An effective preventive maintenance (PM) program is in place to provide regular inspection and servicing of facilities equipment to assure maximum service life, reliability, and operation.

Facilities management does not have a preventive maintenance program. The staff members at most levels of the organization understand the importance of an effective preventive maintenance program, but they believe budget constraints prevent them from staffing such a program. In addition, some are of the opinion that the MP2 system does not support a PM program. The review team verified that
the MP2 program does have a PM module with the ability to produce PM work orders, but that this feature is not being used. Equipment failures and reactive maintenance will continue to dominate the department’s workload unless an effective PM program is put in place.

Reevaluate the judgment that budget constraints prevent staffing a PM program. Theoretically, resources applied to preventive maintenance reduce the resources required for breakdown and reactive work.

Evaluate the number of labor hours being used to respond to equipment breakdown and determine if some of these labor hours should be redirected toward a PM program.

According to the self-evaluation, estimates are prepared for all project work by the engineering and architectural department and by the trades’ supervisors for major maintenance activities or project work that they may be undertaking. Project work is often performed by the maintenance shops as their department funding is dependent upon earning a significant portion of their payroll costs from other university funding sources, including academic department accounts as well as project accounts. The facility managers and supervisors are under pressure to have facilities classified staffs perform as much project work as possible to make up the gap between the department budget and the actual costs of staff and materials.

During customer interviews, the review team heard from some customers that they would like to see estimates that are more accurate. This is especially true for those organizations that charge other customers for the services they provide. An example that was cited involved support to a student event where the actual charge was twice the estimated amount. The review team saw no evidence of a system to evaluate estimated costs after the fact to determine the causes of significant deviations between actual costs and estimated costs.

Review the volume of work that require estimates to determine if it is cost effective to invest in a more sophisticated cost estimating system. Since it requires resources and labor hours to provide estimates, it is not cost effective to provide estimates for all work. Additionally, the amount of estimating time and resources needed to produce estimates are directly proportion to the level of desired accuracy of the

Recommendation 6D

6.5 An estimating system is used that provides accurate estimates of labor and material requirements in order to plan and schedule the execution of work and to determine the causes of significant deviations between actual costs and estimated costs.

Recommendation 6E
Facilities management engineering and architectural services has developed construction standards for equipment, materials, surfaces, finishes, systems, etc., which are provided to the design firms to follow as they prepare contract documents. These guidelines were developed with input from the facilities maintenance staff. One member of the engineering and architectural services staff is responsible for keeping these standards current. All UMS system campuses are required to follow LEED guidelines in the design, construction, or renovation of all facility spaces.

The review team commends facilities management for its achievement in its application of LEED to the new construction on campus. While good design guidelines and construction standards are the key to success factors for construction projects, involvement of maintenance and operation personnel in all phases of construction projects is also very important. During interviews, the review team learned that while maintenance and operation staff members are involved in some of the new construction projects, they are not always invited to key milestone project events. Personnel interviewed did note that as of late they have become more involved than in the past.

Ensure that maintenance and operation staff members continue to be involved in all phases of new construction and major renovation. Maintenance and operation staff members can provide valuable insight into appropriate finishes, equipment and configuration of systems and subsystems from the viewpoint of maintainability and reliability.

Subunit managers do not control expenditures based on budgets. It is not clear to the review team whether responsibility has been delegated or not. However, The director of Administration and Information Systems seems to be the only facilities management official with the exception of the executive director involved in budget activities (see criterion 4.5). The austere budget situation seems to be the reason given for not being more proactive in budget activities.

The executive director should review what is expected of subunit managers regarding budgetary responsibility and ensure there is not lack of clarity. See recommendation under criterion 4.5.
7.0 PERFORMANCE RESULTS

The facilities management organization’s performance can be assessed through campus appearance, employee satisfaction and motivation, effectiveness of systems operations, customer satisfaction, financial results, and supplier/business partner results. Where feasible, it is helpful to have measurement tools in place to assess performance in these areas.

Without exception, campus administrators, key university stakeholders, and numerous people who inhabit the campus daily who were interviewed during this review made it a point to emphasize how important the appearance of the campus buildings and grounds is to them and to the image of the institution. The appearance of the campus landscape plays a strategic role in creating and maintaining the university’s image. Numerous studies have shown that nationwide, the majority of admissions applicants were most influenced by the appearance of the campus buildings and grounds. In today’s competitive educational marketplace, the appearance of the campus is absolutely critical to the university’s success. The review team experienced first impressions at both the Portland campus and the Gorham campus, and one member of the team traveled to the LAC.

To the campus visitor and casual observer coming onto the campus, the Portland campus is difficult to find. Part of the challenge is that there are several entry points onto the campus, and there is not sufficient monument signage at the various entry points to help find the place. Once on campus, it is not easy to determine where you are or to determine the names and functions of the buildings.

The campus appearance on arrival is one of a busy place in the middle of an urban setting. Older buildings on campus show their age and present a tired look and general lack of institutional pride in campus facilities. Upon walking around the campus and close inspection through the trained eyes of the review team, there are many opportunities for improvement in campus appearance. There is an obvious absence of maintenance level standards for both buildings and landscape maintenance.

Campus grounds maintenance demonstrates an absence of edging and trimming, sweeping, inadequate weeding, areas in the landscape with poor surface drainage, damage to turf...
areas from snow removal operations, and poor maintenance of landscape fixtures and landscape furniture are some of the areas that need improvement. There are many differences in choices of materials, surfaces, colors, and finishes of planters and benches that visually impact the campus appearance.

In fairness to the grounds crew, the review team was informed that the grounds workers serve as the campus labor pool and that they are frequently reassigned to campus special event set-up requirements. It appears that the grounds maintenance staffing numbers are low. However, there is a glaring absence of grounds maintenance information pertaining to the number of acres maintained and pertaining to the area (square footage) by type of landscape area such as lawn area, shrub bed areas, numbers of trees and plantings that need regular maintenance, and amount of sidewalks, streets, plazas, and patios. Information was not provided on trash collection activities and campus recycling efforts for which grounds maintenance staff may provide support. Without this information that in essence represents an inventory of what needs to be maintained, and without a description by type of landscape space, it is not possible to accurately determine maintenance workload, and staffing levels.

The review team’s consensus is that there are many areas on campus that do not yet meet an acceptable minimum standard. Landscape fixtures such as benches, trash cans, lighting fixtures, and building entrance areas are not very well maintained. The overall appearance of the campus is below what we would expect to see at USM and below the level of a national norm for colleges and universities.

Cleaning the exteriors of a number of campus buildings needs attention and if done, would remove detraction from the overall appearance and first impression.

**Recommendation 7A**

*The University of Southern Maine campus appearance of grounds and buildings matters greatly and it serves as a tangible expression of the institutional identity. It speaks to the campus community expectations and says something important about it.*

*A well-maintained campus appearance is not only important to the students it serves but to the faculty, staff and the community and employer groups that come to the campus.*
good campus image and quality facilities can be a deciding factor for students. For some, the appearance makes a statement that USM is a place where learning takes place.

The campus could benefit greatly from a way-finding analysis. In its most literal sense, way-finding is the ability of a person to find his or her way to a destination. It can also be defined from the standpoint of the campus administration that is seeking to improve the function of the campus environment. The results for visitors can be a campus and facilities that create a strong first impression and improve visitor satisfaction.

It is recommended that facilities management give campus appearance a higher priority in its planning for operations and maintenance services and the allocation of resources. Given the current context of the university and the many challenges it faces, the appearance of the campus physical plant is a strategic issue for USM.

The review team believes that there are many small things that can be done to improve the campus appearance that will not cost much. It is recommended that facilities management perform a campus appearance inspection and list those things that can be done to improve appearance for building exteriors, grounds, and landscape elements. A list of improvements needed can be prioritized and addressed as resources permit.

The condition and cleaning of the facilities at the Portland campus can be described as only moderately clean. There appears to be an effective floor care program in place as stained carpet and dull and stained hard floors were not overly evident. However, general cleaning is beginning to show the signs of reduced staffing and reduced frequency of performing certain cleaning tasks. The review team recommends facilities management for having a written document describing safety and cleaning procedures for the cleaning function. The document also documents the square feet coverage per person for the Gorham and Portland campuses. However, with the turnover and hiring freeze, the square feet coverage has likely fallen out of balance. Even though there is a document prescribing the cleaning tasks and frequencies, because of the actual or perceived staff shortages, individual custodians have to make personal judgment about which tasks to skip or discontinue. The
custodians appear to be sufficiently trained and properly supported with proper equipment, products, and tools.

While the review team did not inspect as many spaces on the Gorham campus and it did on the Portland campus, interviews with the Gorham campus residence halls management team suggest that the residence hall cleaning program is well run, very effective, and fully meeting the needs of the customers. The review team understands that there are 21 FTEs assigned to the residence halls cleaning work unit. This level of staffing might be disproportionately high relative to the total cleanable square feet associated with residence halls and the dining facilities. The review team found the LAC campus to be very well cared for both inside the facility and throughout the grounds areas.

**Recommendation 7B**

In light of the actual or perceived staff shortages, review current staffing levels in all cleaning work units and apply an appropriate staffing workload protocol, based on cleanable square feet. From this protocol, determine what cleaning level is achievable for the current level of staffing. Adjust tasks and frequencies to achieve a realistic cleaning level without compromising health and safety. Use the same workload protocol to ensure staff allocation has not fallen out of balance because of turnover and hiring freeze.

7.3 Building systems and infrastructure are maintained and operated at a level of reliability that contributes to the successful implementation of the institution's mission and programs.

The review team heard again and again from Facilities Management Department staff members that it is imperative that building systems and campus infrastructure function well and consistently without major interruption in services. This is a very positive indication by staff members of their recognition of the importance of reliable and uninterrupted operations.

Facilities management utility and building systems operating staff provided details of the department's efforts to keep the systems and infrastructure operational. Specific engineering studies of the campus high-voltage distribution system and equipment has been done and the critical needs have been identified for the Portland campus. In addition, no critical comments or significant concerns were heard from building users about the reliability of heating, cooling, or electrical systems. Interruptions and outages were described as infrequent.
The challenges of controlling temperatures in many buildings, however, were cited by a number of those interviewed as the single most frequent building systems issue.

The facilities management executive director, supervisors of the HVAC, and electrical shop expressed a determined effort to obtain appropriate redundancy in critical systems and equipment. Priorities have been identified for upgrading electrical service and transformers, steam and hot water distribution systems and components, and building automation systems in an effort to address building system operations and energy management. Facilities management staff members are aware of any vulnerability and risks that might exist in the utility infrastructure and especially the electrical and mechanical systems. The department has provided a listing of 13 high-priority projects designated as “high impact projects” eligible for UM deferred maintenance funding estimated to cost $1.3 million.

Several campus buildings have a large amount of water infiltration that cause damage to the building structures and have a very negative impact on building occupants and programs. Water leaks are through the roofs, exterior walls, caulked joints, general building envelope, and windows. Several buildings have visible signs of masonry deterioration of structure and exterior stairs.

Some of the facilities management workspaces need attention, and there are a number of service functions that have totally inadequate workspaces. Custodial services workstations and supply closets in some areas are totally inadequate. Grounds equipment maintenance workspace is totally inadequate and inhibits efficient and effective services.

**Recommendation 7C**

*It is recommended that a comprehensive master utility study be done as a component of the master planning process in order to ensure the condition of the existing utility infrastructure and the capacity for meeting future utility loads. Although individual and specific utility infrastructure studies have been done that led to the electrical distribution and transformer replacement project, a comprehensive master utility plan has not been done. This plan should include at a minimum for all campuses the following: electrical, chilled water, steam, and/or hot water heating, sanitary sewer, domestic water, and storm sewer requirements. The status and needs of the utility infrastructure elements will be*
especially important as the campus master plan initiative takes place.

The campus senior administrative officers and the facilities management executive director can serve the campus well if they would work together as strong advocates for addressing campus facility capital renewal and deferred maintenance needs. There is a need for a strong coalition of campus leaders who can work together, advocate, and make decisions on priority facility needs. The campus capital renewal and deferred maintenance needs are not simply a facilities management problem. This is a campus problem.

Facilities management leaders should give high priority to create appropriate work space for custodial and grounds maintenance functions.

7.4 Funding resources are effectively used and are adequate to support a level of facilities maintenance that prevents the deferral of major maintenance and repairs.

Funding resources are not adequate to support a level of facility maintenance and repair that prevents deferral of major maintenance and repair. The VFA facilities condition audit serves to document this fact. High impact needs or those considered critical are supported by the department’s list of highest priority needs.

The facility condition audit for the entire campus physical plant and infrastructure should be periodically updated. There is no universal agreement on what this update cycle should be, but it should take place frequently enough to ensure that major needs are identified and prioritized appropriately. Some campuses update all information every year or do a percentage of the campus square footage every year. The review team recommends that FM update past reports on facility conditions after discussion with campus administration and that this update coincide with reporting requirements to the UM system processes. Mutual agreement on this schedule that meets the campus total facilities needs requirements would be the desired outcome.

In order to avoid long-term facilities decline, it is necessary to recognize that campus facilities will deteriorate over time. Building and infrastructure components have a finite life cycle, and many of the buildings on the campus have exceeded at least one cycle of depreciation. Only through a program of constant reinvestment in order to offset the predictable decline of building components can an institution expect to avoid major problems. Inadequate funding levels
for maintenance and operations force the deferral of small repairs that cause escalating consequences when left unattended. Experience has demonstrated that it does not take long until a leaking roof that needs to be replaced begins to cause ceiling and structural building damage. The longer the problem is left unattended, the faster the cost for restoration grows.

Key Financial Benchmark Indicator

- Current replacement value of the campus facilities and infrastructure (CRV).
- Facilities Condition Index (FCI). The FCI is a useful tool that has come into common use to express the overall condition of facilities. The FCI is the ratio of the total cost of correcting deficiencies to the facilities CRV.

\[
FCI = \frac{\text{Cost of Correcting Deficiencies}}{\text{Current Replacement Value}}
\]

Over the past decade, the FCI has become a generally accepted measure of capital renewal, deferred maintenance, and modernization planning. One standard used to establish the overall condition of a single facility or an entire campus using the FCI is as follows:

<table>
<thead>
<tr>
<th>FCI Range</th>
<th>Condition Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;0.05</td>
<td>Good</td>
</tr>
<tr>
<td>0.05-.10</td>
<td>Fair</td>
</tr>
<tr>
<td>&gt;0.10</td>
<td>Poor</td>
</tr>
</tbody>
</table>

Facilities management has utilized the UM system definition and guidelines for calculating the current replacement value that specifies that property insurance schedules be utilized for calculating CRV. The APPA FPI survey and recommended definition for calculating CRV specifically recommends against using insurance schedules for calculating CRV, as these schedules typically understate the actual cost of replacing a facility. Using the UM guideline, the E&G CRV for USM is calculated at $329,383,966. This methodology provides consistency in calculation among the UM system institutions but does not allow an accurate comparison with institutions outside the system that participate in the Facilities Performance Indicator Survey (FPI).

The self-evaluation materials shared with the review team reports an estimate according to the VFA deferred mainte-
nance report for E&G space of $59,548,763 and does not include infrastructure or soft costs. Soft costs and a 10 percent project contingency typically account for 30 percent of total project costs. Including these, E&G deferred maintenance can be estimated at $100 million. Facilities management has calculated the campus E&G deferred maintenance FCI at 30 percent. By utilizing the property insurance schedule for calculating the CRV, it is likely that this 30 percent FCI is significantly overstated.

It is recommended that FM calculate its FCI by utilizing the APPA definition and calculation as described in the FPI survey instructions.

Additional key financial measures for help in determining effectiveness and efficiencies as defined in the APPA FPI survey should be used to measure overall financial performance. These measures include Facility Operating CRV Index ($/CRV), Facility Operating Gross Institutional Expenditure Index ($/GIE), Facility Operating Index ($/GSF), and Total Needs Index, which includes the combined needs or the total dollars needed for deferred maintenance, capital renewal, and plant adaptation.

The review team findings on this critical performance result for the department is disappointing. Our findings are summarized as follows:

- There is pride in the workforce, however, it is mainly institutional based rather than departmental based.

- There is commitment among some staff members to improve, but not enough to bring about meaningful continuous improvement. Given a clear direction and the tools to accomplish new expectations, the group can perform better. As with any group of veterans, however, change will not come easy and it is incumbent on FM leadership to set the direction and align all staff constituencies.

- Staff members want to have a quality operation and are frustrated with having to be mostly reactive to reoccurring problems resulting mostly from poor communications, inadequate work management, uncertainty about purpose and strategy, a belief that budgets are inadequate, and a perception of constraints caused by policy and inadequate support needed to get the job done.

7.5 Staff is highly motivated and productive, and takes pride in the accomplishment of their duties.
Overall, internal communications within the Facilities Management Department are not good, and there is a need to improve communications on the changes that are taking place and on critical goals and issues for the department. There is a noticeable absence of clearly defined and communicated goals and objectives for the FM organization.

Recommendation 7E

To achieve a condition where staff members are motivated, have pride in their work and department, and in the accomplishment of their duties, it is necessary to create and maintain a high-performance workplace, to set clear direction and goals, and to provide the necessary resources to do the job right the first time. These resources include the financial aspects, the equipment and supplies, the appropriate staffing numbers, and the appropriate staff skills.

As recommended in Section 5.0: Development and Management of Human Resources of this report, facilities management is encouraged to develop and administer an employee climate (employee satisfaction) survey and to conduct the survey annually or at least every two years.

Strong leadership is needed to address these requirements.

7.6 Customer satisfaction measures ensure that the levels of service are consistent with customer needs and requirements and within the facilities department’s capability.

FM has no effective means to listen to the “voice of the customer.” The general practice and attitude has been that if the customers are not complaining then everything must be alright. Management has a large opportunity to place an emphasis on the importance of identification and understanding of the customer needs and requirements, customer expectations for service, and customer satisfaction and dissatisfaction. Additionally, the Department needs to improve its communications about its services with campus customers.

Recommendation 7F

On the campuses of USM, face to face discussion about services between facilities management managers and customers will work better than formal written customer surveys or electronic survey methods. It is recommended that a planned approach to assessing customer satisfaction be developed. Customer service is a strategic need for the department and should be considered a major indicator of the department’s success.

This plan should include first the identification of the various customer groups (academic departments and schools, USM...
libraries, athletics, student life, etc.). Personal contact with individuals or the use of group discussions in the form of “focus group” methodology could be employed. Standardized questions should be asked about the various services which the Facilities Management Department provides as well as questions that allow the customer to suggest areas for improvement or the need for new or additional services. The FM leadership must be prepared to respond to the customer comments and to take appropriate actions to address the customer suggestions and comments on service improvement needs.

Everyone within FM should be asked for customer service improvement ideas. The staff can be an excellent source for service improvement ideas. Staff members should be asked the questions such as, “Why is our service quality what it is? And how can we get better?”

The use of telephone surveys is also appropriate for certain services including follow-up on completed work-order requests.

7.7 Managers and supervisors stay in touch with the needs of higher education.

Facilities management clearly understands the importance of managers and supervisors staying in touch with the facility needs of higher education and the need for continuing education, training, and development. Management supports these needs to the extent and levels of resources available to meet the needs.

The department is behind in its adoption of information technology, its energy management and conservation activities, and its development and use of performance measurements that are most meaningful, and in its strategic and operational planning processes. A major deficiency exists in the department’s work management and preventive maintenance processes. These practices are essential ingredients for improving services to the university.

The FM engineering and architectural services on the other hand has been quite innovative and has been a leader in LEED and overall sustainability efforts. The development of the integrated design deliverables and testing (IDDAT) as an alternative to the traditional capital project delivery approach when utilized serves the institution very well.
Opportunities to participate in conversations and communicating forums with key administrators and academic department heads are encouraged. Discussions about the distinct mission, vision, and strategies of individual schools and colleges can particularly be helpful in understanding departmental needs and in identifying what facilities management can do to help meet these needs.

It is recommended that members of the Facilities Management Department management team continue to be active participants in APPA and the Eastern Regional Association of Physical Plant Administrators. This should be an ongoing commitment of active participation for the executive director and all other directors. Other important professional organizations where participation is encouraged include:
- The Professional Grounds management Society (PGMS)
- The International Executive Housekeeping Association (IEHA)
- The APPA Institute for Facilities Management and the Leadership Academy

8.0 OTHER CONSIDERATIONS

At the request of the institutional representative this section would include any items or subjects that are not covered by the criteria in Sections 1 through 7. These items may include those things that are specific to the campus.

8.1 Organization Structure

Organizational design is influenced by size, strategy, technology, and institutional context among other considerations. These factors dictate the most appropriate form of organization and the combination of these dimensions creates the general environment or context within which the organization must operate. In the continually evolving effort to develop and maintain an effective organizational structure, facilities management leaders are encouraged to be mindful of the following.

- There is no one best way to design an organization. The review team is aware that when it comes to organizational structures, there are numerous ways to put the pieces together, and that there is no “one right way.”
- Factors that influence organizational design change over time.
Key constituencies, strategic initiatives, and information requirements are major considerations in designing an organization to meet modern facilities management service requirements.

The structural forms in use today at our colleges and universities are greatly varied. Even though similarities exist among institutions of comparable size and classification, there is little consensus among facilities administrators with regard to which organizational form works best. Because of the ever-changing requirements for services, especially at an institution that is undergoing considerable transition, the organizational structure for facilities management will likely require a strong measure of flexibility and adaptability to change.

Organizational design work is hard work and time consuming, and any meaningful organizational change usually involves difficult decisions.

The review team members’ view on this topic is not one that is stuck in past practices nor overly influenced by someone’s idea of the perfect organizational alignment and structure. Many factors were taken into consideration before advancing these suggestions, including effective and efficient utilization of resources, organizational goals, challenges, the organizational history, the institutional context, and the work culture of the offices and departments mostly affected. Communication requirements, business practice requirements, and the institutional mission and vision for the future were also considered. Additionally, prevailing professional facilities management practices, practical experiences of the review team members, and organizational structures that have proven successful at similar kinds of institutions were carefully considered.

A critical missing piece for facilities management at USM that is essential for good organizational design is strategy. As mentioned in Section 1.0: Leadership and Section 2.0: Strategic and Operational Planning, there is a need for a clear and concise Facilities Management Department strategic direction—strategy shapes structure.

In the absence of FM strategic direction, the review team is at a disadvantage in proposing specific and detailed organi-
zational design. We have given consideration to the CFO's expressed interest in key issues.5

What is the optimum organizational structure? Does it support or inhibit the effective use of HR? How should existing HR and financial resources be allocated?
1. Distributed vs. Centralized Model
2. Service and Communication

The Current FM Organization Structure
The review team found that the current FM organizational structure and alignment has a number of shortcomings that inhibit communications and overall organizational performance. Some of these include:

- Spans of control regarding manager to supervisor and supervisor to worker ratios are narrow.

- Alignment of functions—environmental services, facilities management, engineering and architectural services, administrative services, including finance, HR, IT, and work service center.

- Awkward flow of information—vertical, horizontal, and downward in the existing hierarchy. The manner in which the department operates promotes a “silo” mentality or individual “fiefdoms.” Many people see themselves in the context of the specific service, which they provide. Learning to look at facilities management from the outside in, from the customers’ perspective, will be a major triumph. Part of the present management challenge is to break down the barriers between the different functions and to build better teamwork and cooperation within the organization.

- Missing critical functions—work management, preventive maintenance, customer service center function.

Organizational Design Considerations
The size of the FM Department and the overall square footage and acreage for which FM is responsible is relatively small. The multiple sites including Portland, Gorham, and LAC adds some small measure of complexity but not enough to approach the organizational design as separate facility management entities. It is recommended that the facilities management organizational design be considered

as “One Facilities Management Department” (1-FM) in concept and in practice, and that, the decisions to centralize or decentralize functions be designed with a goal to achieve the best productivity and performance value. This could include athletics, residential facilities, and the LAC campus as opportunities for change to occur, and as the Facilities Management Department improves its ability to deliver wanted and needed high-quality services that these departments have declared as absolute needs for success of their respective programs. Facilities management is currently not able to deliver these stated requirements for service.

The future emphases for facility management services are likely to be concentrated in the traditional operations and maintenance functions with de-emphasis on capital projects; especially new construction starts. Therefore, management emphasis on strengthening of the operation and maintenance service functions has strategic merit. Capital projects that are funded for addressing deferred maintenance/capital renewal needs can easily be managed by the operations and maintenance (O&M) functional areas. The need for specialists or engineering support on occasion for deferred maintenance/capital renewal projects can be contracted as needed and project management provided by the operations and maintenance supervisors or midlevel managers. Because of the limited funding available for these types of projects, the workload should not be overwhelming for the supervisory/midlevel managers to manage some projects and simultaneously take care on their O&M responsibilities.

**Make the Difficult Decisions First**

The engineering and architectural services are at full staff with seven positions assigned to this unit. With the major capital construction program winding down, this functional area should be reviewed for appropriate sizing. The talent in this unit should be assessed and evaluated for best fit for reassignment where there is a legitimate need identified for particular skills and abilities in O&M. In this report, the review team has suggested that all functions associated with energy management and building automation controls and systems be aligned with O&M because of the many interdependencies between these functions and the facilities maintenance functions. In addition, FM is greatly in need of improving its use of IT and urgently needs a CMMS. There
is staff expertise within the engineering and architectural services that can do this work.

Facilities management needs to declare its overall maintenance management plan and then perform a trades staffing analysis. It is recommended that the APPA Maintenance Staffing Guidelines be utilized for this analysis. A preventive maintenance (PM) program function with a dedicated PM team should be designed into the organization. All building electrical and mechanical equipment and systems and utility infrastructure should be included. CMMS should be utilized to its fullest capability for recording equipment inventory, maintenance history, and materials and parts management. PM work-order status and completion analysis should be performed regularly to ensure adherence to work plan, schedule, and maintenance priority.

An initial part of this declaration of a maintenance management plan is the FM approach and decision on how to provide remodeling and alteration services. How will these services be provided—in-house workforce or contracted? Moreover, who will manage remodel and alteration projects?

It is recommended that environmental services (custodial, grounds, refuse) be considered as an operations and maintenance function with alignment and reporting lines the same as and equal to facilities maintenance. Facilities maintenance should include the utility plant operations and all skilled trades.

There is a need for administrative and IT services to strengthen its IT and HR functions. There is also a need to develop a work management center for work reception into the department, work authorization, and work priority. This work service center should also serve as a single point of contact for customers, customer information on status of work requests, information on departmental services offered, and in general take a lead role in customer service along with the director by proactively outreaching to the campus customer constituencies. This service center function should have a close working relationship with the operations and maintenance functions, the director, and the

various facilities maintenance managers and supervisors on all campuses.

In summary, the following functional alignments are recommended:

**Administrative Services**
- Financial services, including budget, accounting, and billing
- Information technology systems and support
- Human resources and labor relations, including training education and development
- Work service center, including work management and customer service functions
- Motor pool

**Architectural Services**
This functional area should be scaled to meet capital program needs and departmental and campus architectural service needs and include traditional functions for management of capital projects, role in space database management, planning, specifications and architectural guideline development and update, and liaison with UM system facilities office.

**Facilities Maintenance**
Facilities maintenance services to all university properties, including all maintenance services provided by skilled trades and environmental services, including operations and maintenance of campus utilities production, distribution, building automated systems, and energy management and conservation.
In many higher education institutions, a department that delivers services to other departments may charge a fee to the budgets of receiving departments. These internal charges are often referred to as recharges or chargebacks. Chargebacks are often used to target service departments such as facilities, catering, print service, and information technology, and they apply to only selected services. For facilities management the services charged back are generally defined as nonmaintenance services.

It is the review team’s experience that those institutions that use chargebacks comprehensively have developed and refined campus budget philosophy and policy over the years to allocate all costs to the unit that incurs them.

The use of chargebacks for facilities management varies by institutional Carnegie class and institutional governance (public or private). The use of chargebacks appears to be higher among public institutions than private institutions, although neither the review team nor APPA has conducted any extensive research on this topic. The driving forces for use of chargebacks seems to be the institutions budget philosophy where the use of chargebacks to fund internally provided services is a basic part of their management culture and tradition. Interestingly, the reverse is also true. A primary reason institutions do not use chargebacks is that they have not historically been used at the institution or are inconsistent with the institutional budget philosophy.

Most state-supported institutions charge back for internal services that are provided by facilities management to campus auxiliary enterprises and other campus service units that are not included in the institutional definition of education and general (E&G). With some variation, campus facilities at state-supported institutions are provided funding for maintenance by the state for E&G defined facilities and services. Capital expenditures and nonmaintenance services to E&G facilities are typically recharged services.

For facilities management, nonmaintenance services generally include remodel and alterations, departmental equipment hook-ups and installations, keys and lock changes as a result of lost keys or breach of security, signage, special events and set-ups, moving, and small nonmaintenance requests such as bookshelves and painting.
Clear definitions of maintenance and nonmaintenance are required for this to be successful as well as a clear statement of why the recharge is necessary, campus policy, or campus budget philosophy.

Pricing models, cost allocation, and rate development for chargebacks for facilities varies also among institutions. Some institutions utilize a fully burdened chargeback model for labor, material, supplies, and overhead. Others use a variation of this approach and may charge only a percentage of actual costs for providing the service. A number of institutions utilize a campus recharge rate review committee. Here is an example of such a committee utilized at the University of California, San Diego.

**Recharge Rate Review Committee**

This committee is advisory to the controller that reviews and recommends approval or disapproval of requests to establish new recharge and other income-producing activities, establishment of new recharge rates or revisions to existing recharge rates as submitted by recharge and other income-producing activities, and proposed corrective action presented by staff in response to an annual review of all existing recharge rates and recharge and income-producing activities. The committee will review university and other policy proposals affecting recharge and other income-producing activities.

**Ex Officio Departments**

- Director of Financial Analysis, Resource Management and Planning (chair)
- Controller & Assistant Vice Chancellor—Business and Financial Services

**Appointed Departments**

- Scripps Institution of Oceanography
- Student Affairs
- Auxiliary & Plant Services (Facilities Management)
- Business and Financial Services
- Medical Center Administration
- Campus Budget Office
- Development & University Relations
- School of Medicine
- Academic Affairs
Where campus departments such as facilities management are not provided funding for nonmaintenance type services, an alternative to the use of chargebacks is for the institution to provide funds from a “pool” of campus funds in order to pay for these services. Funds available for maintenance and operations of the USM physical plant are minimal and the funds that are provided should be fully utilized for maintenance work.

With decreasing state funding for facilities operations and maintenance, increasing costs for almost everything that facilities management purchases, and with a substantial need by the Facilities Management Department to invest dollars in a number of important service areas (many of which are recommended in this report), the initiation of a more robust chargeback system may be appropriate.

Members of the FMEP review team have had various experiences in working with a variety of chargeback systems at a number of different institutions. Team members will be available for any questions on chargebacks for facilities management services and will be available to provide additional resources, contacts, policy examples, and processes that may be helpful.

8.3 Capital Project Construction Contract Administration

On a university campus, construction work attracts the attention of almost everyone on campus as students, faculty, staff, alumni, and the general public witness the growth and evolution of the campus physical environment. Tremendous energy and effort go into the planning and design of a project as months and years of planning, raising funds, and designing culminate in a construction project. It is during the construction phase when the majority of the project funds are expended. It is also “crunch-time” when the project schedule no longer floats and campus commitments are starting to be built around the project completion date. It is a phase of the project when the administration of the project is intended to ensure that the contractor delivers the quality required by the plans and specifications, on time, on budget, and within the scope of the project intent.

To ensure that a construction project meets these fundamental requirements, the university should have a system in place for effective construction contract administration.

In our interviews within the engineering and architectural services unit, the review team was presented with a descrip-
tion of the construction administration process that is in place for managing construction projects. The process describes industry professional practices, and when followed and applied by skilled project management professionals, should reduce the risk of serious problems with capital construction projects.

Typically, construction contract administration is the responsibility of the head of the Architectural Services or Construction Management Department, with the administrative responsibility over the entire construction program. When responsibilities are shifted as was apparently done with the Bio-tech, Wishcamper, and Osher Library, the institution must be careful where to draw the lines of authority. In any event, to enhance the effectiveness in managing the project, the construction manager should be the central contact point for all project communication during the construction phase. All communications between the contractor and architect/engineer should absolutely pass through the construction manager, as must any communication from the campus client, future building occupants, or donor.

To help avoid future project management problems, the construction managers’ responsibilities should cover all aspects of contract administration, including the following:

- Review of contract documents during design phase
- Negotiations, where applicable, with the contractor during the contract award phase
- Management of the project budget
- Management of project schedule
- Inspection of the work for adherence to the contract
- Liaison between the architect/engineer, contractor, campus client, and other campus departments
- First line negotiator of contract disputes

The review team reviewed the issue associated with the fact that some facilities maintenance and operation functions are being performed by organizational units external to facilities management. At the Gorham campus, cleaning services for residence hall and dining facilities is being performed by residence halls, and athletic field maintenance is being performed by the Athletic Department. Additionally, at the LAC campus, cleaning services and minor day to day

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8.4 Multiple Facilities Management Departments—Student Life, Athletics, LAC

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maintenance functions are being performed by a small work unit reporting to the dean. The review team does not find this to be uncommon. Because of the student and event driven nature of residence halls and athletic operations, coupled with the geographical separation of Gorham and LAC from the Portland campus, along with the history of how the arrangement evolved, the current arrangement may very well be the best arrangement at this point in time. Care must be taken to ensure that the scope of these work units do not expand into the area of renovation, electrical, and mechanical work that could subjected the university to code and compliance issues.

Additionally, periodic reviews should be made to ensure that imbalance of resources do not occur over time without sound reasons. Certain budget controls might need to be put in place to ensure resources intended for facilities maintenance and operation activities in fact are used for the intended purpose. Certain accounting procedures might also be needed to ensure that expenditure against facilities maintenance and operation activities are in fact accounted for as such. Because of the geographic separation of the campuses, there is no immediate “physical synergy” such as ease of sharing of personnel and equipment that would occur by consolidating the function as a direct responsibility of facilities management.
Conclusion

The University of Southern Maine is a challenging environment that contains all of the complex elements that require application of professional facilities management practices. Anything less will shortchange the institution.

It is likely that this report has called attention to a number of the fundamental issues of the past. Management must find a way to address these issues and to engage in activities that will produce a change from the past, and a change from the status-quo. The university faces a facilities stewardship challenge not entirely unlike that which is faced by universities throughout the country. Facilities stewardship at USM requires diligent leadership, and facilities management in collaboration with the senior leadership of the institutions must define a course of action for its facilities that is sound enough to endure as the campus moves forward.

Many of the challenges that USM facilities management is facing in its work to improve facility conditions should not be seen as the sole responsibility of the Facilities Management Department. The university is facing a formidable backlog of space that is in need of renewal. USM is confronted with built in costs of deferred maintenance, renovation, and renewal. Numerous campus facilities have outlived the functions that they were originally designed to accommodate. The need for rehabilitation of existing facilities is not just a matter of aging, but with keeping up with the ever-changing code requirements, compliance with ADA, environmental regulations, energy conservation measures, and new mandates for security improvements. Years ago, many of the campus buildings had gone past any reasonable
cycle of depreciation without major upgrading. In fact, without funding for operation and maintenance of new space, the university is facing fast track depreciation of its new buildings when it opens the doors. USM has many similarities with other institutions in the Northeast and other regions of the country, struggling to meet an increasing array of budgetary demands while revenues have declined or not kept up with rising costs. USM’s institutional and financial challenges are inextricably tied with its capacity to sustain the quality of its physical environment. It is incumbent of FM leadership to ensure that the department does not become insular from the larger view of institutional needs. It will be increasingly important that each member of the Facilities Management Department—from the front-line staff to the executive director—continue to champion campus facility needs, but at the same time look outward at the larger needs of the university. Facilities management must become a more visible player in the campus plan going forward and increase its role as participant, collaborator, and supporter of needs described in the campus plan. There is a need for FM leaders to think holistically about its departmental organizational design in order to increase more productive interactions, both internally and externally to the department.

There is clearly an opportunity for facilities management to strengthen its basic operations and maintenance services, to continue to find ways to do more with less, to also see the big picture needs of the campus, and to develop and implement its operational strategy accordingly. It will be important for the department leaders to find ways to become more effective in management of resources, including financial resources, HR, and its physical resources.

To accomplish this successfully, the FM organization must embark on a continuum of change that, at a minimum, matches the changing environment of the university. This kind of change or transition for the organization will require the fullest attention and focus of management. Additionally, management must recognize and understand that the magnitude of change will require all the sensitivities of a major change initiative. It will be necessary for management to develop a clear and compelling vision and strategy for the department with goals and objectives linked to this strategy—goals that are actionable and achievable. Management must effectively communicate this vision and strategy,
establish a sense of urgency, form a strong management team with the authority and responsibility to make decisions, empower others to act on customer service improvements, and seek out and find new approaches to getting the necessary work done. This transition must also include better use of technology, relevant performance management and measures, and a stronger dose of collaboration within FM and with campus departments.

In the course of this review, we were constantly reminded of the numerous challenges facing those who work in the Facilities Management Department. It is our sincere hope that the people of the University of Southern Maine campus will find a way to work together and overcome the cumulative affects of its many campus physical plant challenges.

All members of the APPA review team—Jack Hug, Ernest Hunter, and Dan Johnson—found the review to be both challenging and professionally rewarding.