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Office of the
Vice President for Facilities
The Office of the Vice President for Facilities provides leadership and support to the departments in the division. In the previous planning phase, members of the office established a number of goals and priorities to be completed. Some priorities are constant and will continually be a focus of our office.

- The Division of Facilities A+ Awards for Service Excellence program was established in 1998. This function serves not only as an avenue for recognizing employees, but as an opportunity for the employees to learn about other department employees and build camaraderie and team spirit within the division.
- The Division also plans and supports a division-wide “Fun Day” at the Recreational Sports Center for employees and their families to enjoy the benefits of the center while allowing for interaction with others while “off-duty”.
- Communication between the Vice President’s office and the departments is strong and has naturally been enhanced through technology including email and departmental web pages. Further, these tools have enabled the division to provide increased service to the entire University community.
- Our administrative staff continues to serve as important liaisons between the cities of Bryan and College Station and Brazos County.

**Goals**

The goals of the Office of the Vice President for Facilities are established in alignment with, and in direct support of, the goals and priorities of the departments. Further, many of these goals will provide a foundation for addressing the imperatives of *Vision 2020*.

- Monitor all construction and renovation on the campus proper to ensure that the Campus Master Plan recommendations are followed.
- Concerted energy conservation efforts, both at the systemic level by Physical Plant and at the user level throughout the University, will facilitate the reduction of energy consumption, thus reducing energy costs and freeing up resources for other purposes.
- One of the main focuses of the current administration is the need for a deferred maintenance program. The University recently conducted a Facility Condition Analysis and the results must be reviewed and a plan developed for how we will proceed with the recommendations.
- Continue to support the Office of Sustainability to ensure that our University remains aware of current campus initiatives and create interest in new sustainability programs that involve our students, faculty and staff.
Supporting Vision 2020

This office focuses on the support of the facilities utilized by the faculty as they focus on the University’s mission of discovery, development, communication and application of knowledge in a wide range of academic and professional fields. The division plays a vital role in the Council on Built Environment, which serves to offer recommendations to the President regarding new facilities and their sitings, and the usage of existing space. These actions are vital in the support of the following imperatives:

1 -- Elevate Our Faculty and Their Teaching, Research, and Scholarship
2 -- Strengthen Our Graduate Programs
3 -- Enhance the Undergraduate Academic Experience

In the years since the inception of Vision 2020, the undergraduate and graduate student populations have increased and, as a result, there will be an increased demand for additional academic facilities to facilitate their learning environment and equally as important, housing for them. This office also realizes the importance of building liaisons with the student community to ensure effective communication of not only their needs but of how the University can assist them in ways that they are not aware of. This is done through the Facilities Student Advisory Board and other committees of interest to graduate students.

With the reactivation of the project to build the new Liberal Arts and Arts & Humanities Facility, the staff of this office will be actively involved in overseeing this construction project that will provide much needed space for Liberal Arts departments and additional interdisciplinary classroom space. Additionally, the completion of the Interdisciplinary and Life Sciences Building and the Mitchell Physics Building will help provide much needed and technologically advanced space for our teaching faculty and researchers. These new facilities are in direct support of Imperative 4: Build the Letters, Arts and Sciences Core.

The administration of the division will actively support Imperative 6: Diversify and Globalize the A&M Community, by encouraging the departments in the division to recruit individuals from diverse backgrounds as employment opportunities arise.

The entire division has dramatically improved the web information that is available to our customers. It will continue to be a high priority for all our departments to continually update and explore new technologies to enhance their current operations which is in direct support of Imperative 7: Increase Access of Knowledge Resources.
**Imperative 8: Enrich Our Campus** speaks not only to the appearance of our campus, but also to the quality of worklife for the employees of the University and the quality of student life for our undergraduate and graduate students. The departments in this division are continually encouraged to improve the working conditions for employees and to provide them with an atmosphere that is conducive to working, but also one that is pleasant and safe. The Division of Facilities is vital to the appearance of our campus, not only for the maintenance and upkeep, but for its appearance. This office has a strong presence on the Council for the Built Environment, a university-wide committee that assists the President and Provost with decisions about such items as the aspects of new construction, usage of existing space and policies and planning relative to **Vision 2020**. Our office works closely with the Design Review Board, which is comprised of faculty, staff and students who represent the University community and ensure that physical changes to the campus meet the intent of the Campus Master Plan and reflect the high qualities and values of the university. A project to construct another grade separation on Wellborn Road is under way and should be complete in 2012. The underpass will provide pedestrian and vehicular traffic with a safe passageway between the two campuses. Several new facilities are currently under construction that will provide better teaching, learning and research space and will allow the University to recruit top individuals in their fields to continue their endeavors. New residential facilities for the students are in the planning stage and these will be designed as learning/living environments.

Many of the departments in the division currently maintain effective working relations with various entities in the community which aligns with **Imperative 9: Build Community and Metropolitan Connections**. Additionally, this office will maintain its on-going interfaces with the cities of Bryan and College Station and with Brazos County, as well as seeking out new relationships with other external constituents. The Vice President is an active member of the Metropolitan Planning Organization Policy Committee, the policy decision-making body responsible for the continuing cooperative and comprehensive transportation planning for Brazos County.

Improved communication with our customers and active participation in University-wide committees is essential for maintaining strong relations with other divisions and upper administration. In complying with **Imperative 10: Demand Enlightened Governance and Leadership**, the Vice President’s office is committed to providing increased support to the directors of the departments to ensure that their needs are being met. Increased cooperation between the departments is also essential in support of this imperative.
As this division aligns with *Imperative 12: Meet Our Commitment to Texas*, the departments will be encouraged to focus on stewardship, efficiency, and accountability with regard to expenditures of tax dollars and student funds to ensure that the citizens of Texas are receiving the maximum benefit from their investment in Texas A&M University.
Aviation Services
Departmental Mission

I. Mission Statement
The mission of Aviation Services is to provide a gateway to the world for the students, faculty, and staff of Texas A&M University, and the citizens of the Brazos Valley.

II. Vision of Aviation Services
- To become a respected role model for the aviation industry
- To create a work environment that promotes a culture of ownership and pride.
- To focus on the significance of the customer and strive to exceed their expectations.
- To provide an airport that excels in safety, security, cleanliness, convenience, friendliness, and efficiency.

Environmental Assessment

The Federal Aviation Administration (FAA) and the Transportation Security Administration (TSA) influence all airport operations through funding and regulations. Financial impact occurs due to changes in funding based on erratic federal legislation. Changes to regulatory requirements affecting safety and security are based on current FAA and TSA administration priorities, and again, federal legislation.

The activities of the commercial air carriers also influence airport operations. Ticket prices, flight delays and cancellations all affect the number of passengers wanting to fly into or out of Easterwood. All of these factors can have a positive or negative influence on airport operations.

Another important factor the airport will be facing in the next few years will be decisions made by the University’s administration concerning future support, expansion, and location of the regional airport.

Progress on Last Plan

GOAL – Provide the resources and maintain the flexibility necessary to fulfill compliance requirements with the ever changing standards and regulations of the FAA and TSA

ACHIEVEMENTS
- Created Airport Safety Coordinator position to serve as liaison with College Station Fire Department for Aircraft Rescue and Fire Fighting (ARFF).
- Contracted with College Station Fire Department to provide ARFF services.

GOAL – Continue to upgrade runways and safety areas to ensure a high level of safety for the aviation community and the traveling public.
PROGRESS
• Rehabilitated Runway 16/34 and 4/22.
• Completed final extension of Taxiway H.
• Upgraded runway safety areas for Runway 16/34.
• Constructed North Perimeter Road.

GOAL – Beautify and improve the interior and exterior environment of Easterwood Airport, including the McKenzie and General Aviation terminals, to enhance the experience of the aviation community and the traveling public.

PROGRESS
• Designed phased landscape plan for McKenzie Terminal. Phase 1 and 2 completed.
• Installed art sculptures on the exterior and interior of McKenzie Terminal.
• Replaced passenger waiting lobby furniture in both McKenzie and the General Aviation terminal.
• Remodeled Customer Service/Reception area and Crew Lounge area of General Aviation Terminal and lobby areas of McKenzie Terminal.
• Repainted the exterior of GA Terminal.
• Installed jet boarding bridges and constructed restroom in sterile area at McKenzie Terminal.

GOAL – Provide a level of customer service that exceeds the expectation of the aviation community and the traveling public.

PROGRESS
• Provide wireless access free of charge to passengers at both terminals.
• Provide computer access to pilots at the General Aviation terminal.
• Remodeled GA flight planning area.
• Purchased new ground handling equipment to service charters.
• Purchased new bus and golf carts to transport customers to and from aircraft more efficiently.
• Installed high mast lighting on both the McKenzie and General Aviation ramps.
• Customer feedback tracked through surveys has been overwhelmingly positive.

GOAL – Increase the Brazos Valley communities’ awareness of the value and contribution of Easterwood Airport to the entire area.

PROGRESS
• Created a television, radio and print airport marketing program in cooperation with Research Valley Partnership.
• Hosts Chamber of Commerce Business After Hours annually.
• Developed new logo and airport identity for marketing.

**GOAL** – Create a work environment that enables employees to find professional and personal fulfillment in their responsibilities while completing the mission of the airport.

**PROGRESS**
- Enrolled Airport Line Attendants in nationally recognized training program.
- Provided CPR/AED training for airport employees.
- Host employee appreciation events regularly.

**Priorities**

Aviation Services will focus on risk management, facilities and equipment maintenance, and customer service during the next four year period.

I. Risk Management
Risk management for the airport includes safety, security, fiscal responsibility.
- Safety is always a priority at Easterwood. Safety involves the protection of human lives and the safeguarding of public and private property. Safety is an “attitude” and Aviation Services will always work to keep this attitude positive and foremost for every employee.
- Security is of utmost importance to the airport. Passengers and tenants rely on the airport’s diligence regarding security to protect them and their property. World events have escalated the requirements of the airport security force to perform their duties.
- Fiscal responsibility is critical to ensuring the airport’s viability. Because the airport’s operating and maintenance budget is self funded, carefully managing the finances of the airport mitigates the risk of loss of the airport and its service to the community.

II. Facilities & Equipment Maintenance
Aging facilities and equipment require an aggressive preventative maintenance and replacement plan. Ensuring that sufficient resources, both financial and personnel, are available to maintain the facilities and equipment are critical to the level of safety and customer service provided by the airport.

III. Customer Service
Improving customer service to a level that exceeds customer expectations is another priority. Meeting the needs of all customers, including airline passengers, tenants, military personnel, transient pilots, and each other will be the focus of all airport employees.
Departmental Goals

Risk Management

- Provide a safe environment for employees and customers
- Provide a secure environment for employees and customers by staying in compliance with all federal, state, and University regulations regarding security and providing educational training opportunities for security staff.
- Ensure financial soundness of the airport by carefully monitoring expenditures and fully capitalizing on outside funding opportunities when available.

Facilities & Equipment Maintenance

- Ensure facilities and equipment are functional by employing preventative maintenance and equipment replacement plans.

Customer Service

- Provide a level of customer service that exceeds the expectations of the aviation community and the traveling public by providing facilities that are first rate and training employees on the value of quality customer service.

Financial Considerations

Changes to regulation or priorities by the FAA, TSA, the State of Texas, or the University could create new resource requirements.

Due to the heavy traffic at both terminals and the age of all the buildings on airport property, the maintenance, replacement, and repair costs are increasing and will continue to increase. Financial resources will be required to perform these functions.

The current demand for more facilities such as hangars and office space than is presently available now will continue to require additional resources well past the next four years.

Contribution to the Imperatives of Vision 2020

Aviation Services strives to support Vision 2020 whenever possible.

- Easterwood Airport provides a convenient gateway to the world for faculty, staff and students of Texas A&M University. By providing this opportunity, Aviation Services supports the following imperatives:
Imperative #1 *Elevate Our Faculty and Their Teaching, Research and Scholarship.*
Imperative #3 *Enhance the Undergraduate Academic Experience.*
Imperative #4 *Build the Letters, Arts, and Sciences Core.*
Imperative #5 *Build on the Tradition of Professional Education*
Imperative #6 *Diversify and Globalize the A&M Community*

- Aviation Services has and continues to seek out opportunities to partner with research facilities at the University to better utilize the airport environment. This activity supports Imperative #7 *Increase Access to Intellectual Resources.*

- Aviation Services has implemented a plan to beautify the airport properties, both interior and exterior. This plan will support Imperative #8 *Enrich Our Campus.*

- Easterwood Airport is a critical link in the transportation infrastructure of the Brazos Valley. Aviation Services supports Imperative #9 *Build Community and Metropolitan Connections.*

- Easterwood Airport is an important part of the strong Texas airport system. This participation supports Imperative #12 *Meet our Commitment to Texas.*
Facilities Coordination
MISSION

The Office of Facilities Coordination (FCOR) provides and analyzes facilities and land use information to support the decision and planning processes of Texas A&M University and its many constituencies, which include the TAMU System components headquartered at the College Station Campus and located state wide.

ENVIRONMENTAL ASSESSMENT

The TAMU-CS community will continue to demand access to management information. This demand will further be pressed by the user’s desire for direct access to information. In response to this need, FCOR will continue the development of web-based information systems. In part, this will include the runway use scheduling of the resources at the Riverside Campus, enhancement of the current facilities inventory system to include update and reporting capabilities, web-based access to facilities and land use reports, and others as needed. The operational budgetary support of the office will greatly affect the degree to which FCOR’s mission is accomplished.

PRIORITIES

Space Inventory
FCOR will continue to collect, maintain, report, and analyze the facilities data in support of the daily operational needs and the strategic planning decisions for the university.

Floor Plans
In support of the operational needs associated with the Facility Condition Analysis, the individual departmental/colleges, and the campus-wide planning effort, the floor plans of the facilities of the TAMU-CS campus will be developed, maintained and presented as required.

Land Use Inventory and Information
FCOR will compile, maintain and present spatial information related to the land in use by the TAMU-College Station campus. Mapping of the campus will be organized to allow the understanding of the current and future possibilities for the use of land.

Space and Land Use Analyses
Analyses of the space and land at the College Station Campus will be provided as needed. This could include application of the Space Needs Assessment and Planning System (SNAPS), provision of ad hoc data request for space and land and other synthesis as required.

- Space Needs Assessment & Planning System (SNAPS)
  - Current and future space needs will be calculated through close interaction with the college/departmental interest.

- Classroom & Teaching Laboratory Utilization
  - Scheduling and overall management of the university’s classroom and teaching laboratory inventory will be supported through analyses targeted
to assist the Registrar and Departmental users in optimizing the experience of the university’s students and faculty.
  o These analyses will also focus on optimizing the state-wide ranking and other related review of the use of these space resources by the state.

• Enrollment Management Planning Support
  o To address the university’s strategy to achieve its instructional and research missions, FCOR will serve to support the university’s analysis of current and future enrollment growth trends. Information will be provided to optimize the use of classrooms, teaching labs, and to understand the total impact on the growth of the student enrollment.

Campus-wide Logistical Operation and Long-Term Planning
In support of the Council for the Built Environment (CBE), FCOR will provide information, analyses and logistical support to assist the decisions and strategic direction of the CBE. This could include the assessment of space needs (SNAPS), facilities use information (i.e. square footages by unit and/or buildings), land use, and other points of information as needed.

State-Wide Space and Land Use
FCOR will monitor, analyze and participate in state-wide facilities and land use data reporting and review of the university’s space use. This will primarily involve working closely with the staff of the Texas Higher Education Coordinating Board (THECB) to represent the TAMU-CS Campus on related issues.

Information Technology Development & Support
FCOR intends to continue to support and upgrade its Informational Technology (IT) operations. This includes supporting the current IT partnerships with the Offices of the Vice President for Facilities, the Aviation Department and others to optimize and otherwise leverage the methods to compile, maintain and report the mission related information of the office and our partners.

Support of Campus-Wide Information Needs
University Police Department (UPD)
FCOR will continue to support the facilities and land use information needs of the UPD. Web-based systems will be provided to allow UPD officers to accomplish their security-related missions. In part, these FCOR products include: access to university floor plans, web map applications to support 911 calls, and other daily operations.

Emergency Response Support
As the need to respond to emergency situations develops, FCOR will partner with the emergency management leadership to support their decisions in a time of crisis. This will, in part, include the development and access of facilities and land use data applications to enhance the emergency response. Academic and research partnerships with university departments will be developed to provide access to meteorological data, posted to the web map, to support the university’s response
to an emergency. FCOR will continue to participate in the GIS application development for use at the community Emergency Operations Center (cEOC).

**Campus Web Map**
FCOR will continue to seek and support the partnerships where the Campus Web Map application would be beneficial. The initial focus will include:

- **Registrar**: Provide mapping to highlight the class locations of students based on their semester schedule and provide web accessible panorama-type photos of classrooms.
- **Communications**: Provide mapping to support the University’s primary web mapping interface.

**REFERENCE**
- Space and Land Use Management (41.05.02.M1): [http://rules-saps.tamu.edu/PDFs/41.05.02_M1.pdf](http://rules-saps.tamu.edu/PDFs/41.05.02_M1.pdf)
- TAMU FCOR Web Site: [http://fcor.tamu.edu/](http://fcor.tamu.edu/)
Office of Sustainability
Office Vision
Our vision is to be recognized as a national campus leader in sustainability, to develop long-term programs around environmental, social, and financial stewardship for our earth that have measurable results, and for every member of the Aggie family to incorporate sustainable practices into their daily lives.

Office Mission
Our mission is to educate on the importance of sustainability. We will accomplish this by promoting sustainable practices both on and off campus in academic and non-academic settings, providing resources and support for those who wish to incorporate sustainable practices into their work and life, and advocating for sustainable programs and initiatives.

Environmental Assessment
The roots of sustainability in institutions of higher education can be traced back to the early 90’s and its rise has quickly escalated since the turn of the millennium. The Association for the Advancement of Sustainability in Higher Education (AASHE) was officially launched in 2006 and has emerged as the premier organization for institutions to join. Today there are 600+ institutions that maintain membership status. Organizations such as AASHE strive to empower higher education to lead the sustainability transformation.

As a higher education institution, we have a responsibility to lead by example and create an environment where faculty, students, and staff recognize and honor the interconnectedness of environmental, social, and economic forces. Prime reasons that sustainability is storming the halls of higher education include climate change, resource scarcity, and changing expectations from students on how we conduct ourselves and our institutions.

Sustainability Program Priorities for Fiscal Year 2010
Several steps need to be undertaken to make TAMU’s Sustainability Program nationally competitive. As we make efforts to formalize TAMU’s Sustainability Program, the 2010 program year should emphasize the following priorities:

1. Benchmark with Comparable Institutions
2. Establish a Visible Presence for Sustainability
3. Create a Sustainability Master Plan
4. Engage the Students
1. **Benchmark with Comparable Institutions**
Higher education sustainability programs started as early as the mid 90’s. While no two institutions manage programs in the same manner, this benefits TAMU by having several programs to review and cultivate the successes from established programs. We will review the programs of 10 of our 15 Vision 2020 benchmark institutions. These institutions can be found in Appendix A.

2. **Establish a Visible Presence for Sustainability**
The University community should be educated about our sustainability initiatives and the importance of creating a sustainable campus. A comprehensive marketing campaign is a means of increasing our sustainability brand identity. Key mechanisms for spreading the message include maintaining a quality web site, utilizing Facebook, generating brochures and making presentations in applicable forums.

**Web Site**
Staff needs to maintain a sustainability web site that educates about the many programs A&M currently practices that support our sustainability initiative. The web site address will be [http://sustainability.tamu.edu/](http://sustainability.tamu.edu/) and as a start, should include the following:

- Identify existing A&M sustainability efforts
- Identify sustainable studies and curriculum
- Incorporate web links to A&M student organizations
- Include links to sustainable practices within the local community

**Facebook**
Electronic forms of marketing are one of the best ways to reach students and former students. In particular, Facebook provides an opportunity for the Office of Sustainability to inform and interact with campus affiliates. The current A&M Sustainability Facebook should be further cultivated to reach target audiences. This forum provides a low cost means of keeping Facebook fans informed of campus events, activities, and program information.

**Generate Public Information Handouts**
A Sustainability brochure will provide educational literature that students, faculty, and community members can take with them and easily share with others. The brochure should include information regarding the Sustainability Advisory Committee, the definition of sustainability, A&M’s sustainability mission and vision, and education with respect to our initial goals for the Sustainability program.
Flyers that emphasize various sustainability initiatives can also be generated when appropriate. For instance, Earth Day is a great time to spread the message of sustainability. Flyers explaining our practices can be placed around campus in high traffic areas or on kiosks by student groups.

*Making Presentations*

An important grassroots approach to spreading the word is through making presentations about TAMU’s sustainable practices. Many of the sustainability related courses at TAMU serve as good venues for educating our students. It will also be important to share information with the faculty and increase the level of buy-in and acceptance of sustainable practices.

3. *Create a Sustainability Master Plan*

The Sustainability Master Plan document will be the ultimate tool used to guide our program. The plan will provide the framework for which future sustainability planning and program decisions will be made. It will be important to create a viable document that meets the challenges associated with TAMU and that honors our institution and traditions.

4. *Engage the Students*

Students are a driving force within the global sustainability movement. There are several active organizations on our campus that incorporate sustainability into their mission. It is beneficial to reach out to these groups for input, learning and leadership opportunities, and to share best practices for our campus.

2010 Office Goals

1. Create brand identity awareness for sustainability on campus.
2. Enhance the sustainability website by simplifying navigation, incorporating a calendar or link to calendar events, and make more interactive with the Sustainability and Environmental Management Committee and the Sustainability Council.
3. Enhance the sustainability Facebook page and increase the number of fans. The 2010 goal for number of fans will be equivalent to 5% student population (2,435 fans - official A&M enrollment as of December 2009 is 48,703).
4. Work with Sustainability Council to determine campus priorities.
5. Provide superior customer service to any individual or group seeking the assistance of the Office of Sustainability.
Financial Considerations

The Office of Sustainability has limited financial resources which may limit the ability to generate a comprehensive Master Plan. Furthermore, it will need to establish a reliable income source to accomplish the outlined goals.

Some common funding sources include cost savings from operational units such as energy and utilities, institutional funding, and the creation of endowments dedicated toward sustainability.

Recent policy changes by Federal leadership may potentially alter the way the university operates in terms of energy efficiency and energy related expenses. Specifically, the introduction of a carbon cap and trade or carbon emission standard may have long term financial impacts on our campus. With an uncertain future on the horizon, the university must remain responsive to a changing regulatory environment.

FY09 Accomplishments

1. The Office of Sustainability (OS) worked with Environmental Health and Safety (EHS) to amend the charge and membership of the pre-existing Environmental Management Committee. This group was originally tasked with developing environmental management system (EMS) policies for our campus. The committee had several key members that were ideal candidates to serve in an advisory role to the OS. Rather than asking members to serve on two committees, OS and EHS worked together to increase the committee membership to represent critical campus areas not already involved. Ultimately, the committee name was changed to the Sustainability and Environmental Management Committee (SEMC).

2. The SEMC finalized and proposed a Sustainability & Environmental Management Policy for campus. It was approved by Dr. Elsa Murano in December 2008. This policy represents the first unified environmental policy for our flagship institution. The policy is included as Appendix B.

3. The Office of Sustainability created a student Sustainability Council. This forum meets monthly during the Fall and Spring semesters and generally has 12-15 students from as many as eight campus organizations. The meetings serve as a communication link between students and the Vice President for Facilities Office.

4. The Office of Sustainability, Utilities and Energy Management, and Landscaping worked together to introduce the Big Belly Solar Compactor and Recycling units in 10 locations
across campus. This program was the first visible display of plastic recycling on campus and has been well received by students, faculty, staff, and campus visitors alike.

5. The Office of Sustainability worked with many campus partners to gather survey data for the 2010 Sustainable Endowments Institute (SEI) Green Report Card. SEI is a non-profit organization founded in 2005 and is engaged in research and education to advance sustainability in campus operations and endowment practices. SEI has generated a College Sustainability Report Card for 2007-2009 where TAMU had rated C, C-, and C+ for the respective reporting years. In the most recent report card, A&M improved to a rating of B-.

6. The Office of Sustainability and Residence Life received a $10,000 grant from Johnson Controls, Inc. to be used in the Spring ’09 residence hall energy efficiency competition.

Contribution to the Imperatives of Vision 2020
1. The Office of Sustainability increasingly serves as a clearinghouse for sustainability matters. As such, students, faculty, and staff look to the office for guidance and support with projects, course-related research, and leadership with respect to how A&M is sustainably managing its resources. This action supports:

   Imperative 3: Enhance the Undergraduate Academic Experience
   Imperative 7: Increase Access to Knowledge Resources

2. The Office of Sustainability will provide leadership and assistance to undergraduates and graduates through the Sustainability Council (SC), which is open to any interested student organization. The SC meets monthly during the Fall and Spring semesters. The Council provides an opportunity for diverse organizations with common interests to learn about the sustainable aspects of both our campus and community, network with other student groups, and provide input to the Division of Facilities regarding student sustainability priorities. By providing this opportunity, the Office of Sustainability reinforces the following imperatives:

   Imperative 3: Enhance the Undergraduate Academic Experience
   Imperative 6: Diversify and Globalize the A&M Community
   Imperative 7: Increase Access to Knowledge Resources
   Imperative 8: Enrich Our Campus
   Imperative 9: Build Community and Metropolitan Connections
Imperative 10: Demand Enlightened Government and Leadership

3. The Office of Sustainability provides opportunities for students to communicate their ideas and concerns with upper administration. These communications help build our students’ leadership skills and understanding of how the campus operates, plans, and prepares for the future. This important communication helps ensure we are meeting the students’ needs as well as ensuring that our institution is competitive and responsive. As a result, our open dialogue regarding campus sustainability keeps A&M in line with campus environments at peer institutions.

Imperative 3: Enhance the Undergraduate Academic Experience

Imperative 10: Demand Enlightened Government and Leadership

Imperative 11: Attain Resource Parity with the Best Public Universities
Appendix
## Appendix A

### Vision 2020 Benchmark Institutions Used for Comparative Analysis

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<td>1</td>
<td>Georgia Institute of Technology</td>
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<td>University of California, Berkeley</td>
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<td>University of California, Davis</td>
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<td>University of Florida</td>
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<td>University of Illinois, Urbana Champaign</td>
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<td>9</td>
<td>University of North Carolina</td>
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<td>10</td>
<td>University of Texas</td>
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Appendix B

Texas A&M University Sustainability and Environmental Policy

In line with our mission of teaching, research, and service, Texas A&M University is committed to conducting our activities as responsible stewards of the environment. Therefore, we commit to sustainable practices that protect our assets, respect the health, safety and well-being of our community, maintain strict accountability for the natural resources entrusted to Texas A&M and promote educational activities to enhance environmental awareness, safety, and action.

In accordance with this commitment, we will conduct our affairs in a manner that complies with applicable laws and regulations and:

- Conserves, protects, and maintains our natural resources;
- Minimizes adverse environmental impacts;
- Safeguards our community’s environmental health, safety and well-being;
- Encourages the purchase of renewable, reusable, recyclable and recycled materials;
- Reduces risks associated with the use and storage of hazardous substances;
- Promotes strategies to minimize the generation of wastes and encourage reuse and recycling;
- Supports environmentally responsible teaching, research and outreach;
- Inspires environmental research and assessment;
- Encourages individuals to be aware of environmental and sustainability issues; and
- Provides open communication about the environment and sustainability.

Approved: 

President, Texas A&M University Date 11/5/08
Physical Plant – Facilities, Custodial and Administration
I. **Departmental Mission and Vision**

**Mission**

The mission of the Physical Plant Department is to provide safe and functional facilities and utilities so that the members of The Texas A&M University System located in College Station can perform their missions in an environment of excellence.

We believe the mission statement of an organization must relate to the end products or services provided in such a way that each employee, whether a gardener, custodian, maintenance worker, trades person, accountant, support staff, planner, architect/engineer or manager can identify with these end products and services with a sense of true pride and mission accomplishment.

**Vision**

The goal of Texas A&M University’s Vision 2020 is to continue the academic evolution of Texas A&M so it is generally considered one of the ten best public universities in America by 2020, while retaining, or even enhancing, many of the unique features that have differentiated the University in the past. To enable the University to achieve its Vision 2020 goal, the Physical Plant Department will continue to accomplish its three primary goals which are to (a) Delight the Customer, (b) Have a Great Place to Work and (c) Waste No Resources.

- Guaranteed customer satisfaction with the Physical Plant’s products and services or *Delight the Customer!*. Key areas of emphasis are:
  - Quality
  - Timeliness
  - Value
  - No hassle

First and foremost, our key thrust and focus is, “Guaranteed Customer Satisfaction with All Physical Plant Products and Services.” In other words, “DELIGHT THE CUSTOMER.” To ensure accomplishment of this goal, we must; 1) produce a quality product or service; 2) perform the service or produce the product in a timely manner according to the customer’s time schedule; 3) give the customer a bargain for his or her money; and finally, 4) make it easy for the customer to have access to our services. If customers feel that it is a hassle for them to do business with us, they will prefer to take their business elsewhere.
Absolute employee satisfaction with the Physical Plant’s quality of work life, or, A Great Place to Work! Key areas of emphasis are:

- Physical environment
- Human relations environment
- Sense of contribution
- Reward and recognition

Secondly, our employees must be satisfied with the quality of their work life. Stated another way, the Physical Plant must be “A GREAT PLACE TO WORK.” There are four basic building blocks upon which this type of workplace can be built: 1) The creation of a positive work environment. In this type of environment, the rights and feelings of each individual are respected. We shall continually strive to rid the workplace of discrimination, harassment, unjust discipline and the abuse of power. 2) The physical environment must provide the opportunity for work to be accomplished in a safe manner, using available equipment and tools that are on the cutting edge of technology. 3) Each employee should have the feeling that his/her presence makes a difference. The motivation to participate and desire to be empowered basically begins with the individual, but the creation of the environment in which these concepts can thrive is the responsibility of each level of leadership. 4) The accomplishments of employees will be recognized and rewarded as appropriate. Conversely, the lack of success must also be addressed in an instructive, non-threatening manner through positive performance management.

Efficient use of available resources, or, No Waste! Key areas of emphasis are:

- Eliminate policies that limit efficiencies
- Eliminate organizational barriers that limit efficiencies
- Refine processes

The third goal of our vision is to make efficient use of available resources. Simply stated, this means, “NO WASTE.” There are three basic building blocks associated with this portion of the vision. 1) Policies will be constantly reviewed with a view toward modifying or even eliminating those that constrain efficiency and/or effectiveness. We must not be reluctant to change restricting policies that are within our control. Those beyond our control should not be viewed as “Beyond Our Control.” Rather, they should be elevated to the level where they can be changed. 2) Our organizational structure should not be allowed to constrain innovative actions. Just as in the case of restrictive
policies, we are willing to change the organizational structure when it stands in the way of using resources most effectively, even when such action reduces our size. 3) Work processes will be constantly reviewed and analyzed with a view toward serving the customer. When a task in the process cannot be tied to a customer, we should quit doing that task.

II. Environmental Assessment

A. Local economic development and technological advances

- Increased competition
- Recruitment
- Hiring
- Non-competitive wages
- Retention of qualified staff

As Bryan/College Station has become more diversified in job opportunities, the University is experiencing increased competition to obtain and retain qualified technicians, craftsmen, first line supervisors, middle managers and engineers. We have difficulty in hiring qualified individuals in both classified and non-classified positions because of low entry salaries.

We also continue to have difficulty filling lesser-skilled positions in landscape, custodial and building maintenance. We are experiencing similar problems hiring trained craftspeople, ie. electricians, plumbers and air conditioning refrigeration mechanics to perform maintenance and repair work. To offset these problems we invest heavily into training programs for these higher skilled trades, but once trained we find it difficult to retain them and lose a large number to the private sector. Offering non-competitive salaries contributes to this problem, but we are also competing for qualified individuals that are lost to the information technology industries which are less physically demanding and dirty.

Without the ability to offer competitive wages, the Physical Plant cannot compete with the private sector for quality people.

B. Infrastructure

- Deferred Maintenance - We are confronted with an increased deferred maintenance backlog as the building and infrastructure components that were completed in the 1970’s and 1980’s are added to that of earlier facilities. The
major subsystems of many buildings, i.e., heating, ventilation and air conditioning; electrical and lighting systems; plumbing; fire protection; interior finishes; roofs; and exterior wall systems are approaching 40 plus years of life and have not been replaced. We must also begin to deal with the major infrastructure systems that were constructed in the 1970's i.e., walkways, landscaping and irrigation systems. Many of these systems require major repair or replacement. A recently completed Facility Condition Analysis of approximately 17.5M square feet of educational and general and auxiliary space indicated an overall Facilities Condition Needs Index (FCNI) of 0.33. It is estimated 1.8% of plant value would need to be reinvested annually into facilities renewal to maintain the current FCNI.

C. Legislature/Regulatory

- A program has been initiated to identify, install, test and inspect backflow prevention on the campus domestic water system. This effort requires us to implement a program to test and inspect existing backflow prevention devices and complete a campus-wide survey to identify potential contamination points. This will then require a comprehensive program to ensure documented annual testing and inspections.

- The state’s Historically Underutilized Business (HUB) Program, administered by the Texas Procurement and Support Services (TPASS) Division of the Texas Comptroller of Public Accounts, encourages the use of HUBs by adopting HUB rules implementing policies enacted by the Texas Legislature. These rules outline “good faith efforts” that must be made by both the state agency and the vendor. In accordance with Chapter 2161 of the Texas Government Code (TGC) and Section 20.14 of the Texas Administrative Code (TAC), state agencies shall make a good faith effort to utilize HUBs in all purchases or contracts with an expected value of $100,000 or more. The Physical Plant’s efforts will be to carry out policies governing purchasing and contracting that foster meaningful and substantive inclusion of HUBs, continually work to make a good faith effort to eliminate barriers for HUBs, purchase from HUBs whenever possible, and ensure that HUBs are provided the information needed to be responsive to contracting opportunities. Efforts will also be made to find innovative ways to expand the Physical Plant’s “good faith effort” to maximize opportunities for HUB participation. In order to support these efforts, the Physical Plant has added a full time position whose primary responsibilities will be to administer the interagency HUB and contracting functions. The estimated fiscal impact of this FTE is $30,000 annually.
D. No growth in available funds

- We reviewed the levels of services funded by Educational and General (E&G) and determined Custodial Services and Landscape and Pavements Maintenance could not continue to provide A+ levels of service at current funding. Custodial Services has reduced the frequency of cleaning in E&G buildings. Further reductions in frequencies of cleaning and number of personnel may be required. Landscape Maintenance reduced the fertilization of lawns and mowing of non-irrigated areas by 50 percent. The number of annual beds was also reduced by 50 percent and many high priority areas were reduced to routine maintenance. We will continue to review the level of services funded by E&G to determine if additional reductions in service must be made. The relatively flat growth rate in available funds and the campus growth challenges us to increase capabilities through more efficient use of resources and departure from the status quo.

III. Priorities

A. Employees

- Compensation - Although constrained by funding, we are continuing to review positions to ensure they are properly titled and, where possible, appropriate adjustments to salary are being made.

- Award/Recognition - We are pleased that merit money has been made available to provide financial rewards to our valued employees. Also, we strongly encourage and fully support the Division of Facilities A+ Awards for Service Excellence program, which recognizes each year five individuals and two teams for their achievements of superior customer service and other outstanding contributions to the University. However, we understand that, along with financial rewards, there are other incentives that are important to employees. Although we have ongoing efforts to recognize outstanding work, we plan to identify and establish other substantive ways to reward and recognize our employees. Programs, such as annual receptions for custodial employees during National Housekeeping Week and recognition of Custodial of the Year, will be expanded to include Employees of the Year from all areas of the department (i.e., Custodial, Administration, Facilities, and Utilities and Energy Management).

- Turnover - Employee turnover rates are reviewed by our Personnel Representative to provide management: (1) actual turnover rates; (2) areas affected by turnover; and (3) reasons for termination of employment. With this information, we can evaluate what changes are necessary to reduce the turnover.
B. Public Relations/Marketing

- We believe one of the first steps in enhancing the reputation of the department is to communicate clearly to customers the variety of valuable services provided. The Assistant Vice President for Physical Plant will continue to meet with Deans and Department Heads to discuss how we might better serve their respective areas.

- A customer feedback contact was implemented on the Physical Plant homepage and a voicemail number to help gather comments, suggestions, concerns, or specific issues regarding recent incidents or any project involving the Physical Plant. The Physical Plant Work Control Center is currently monitoring this site and functioning as a customer service representative. Presently work orders completed by the Physical Plant in-house construction and renovation crews are followed with a service questionnaire that is returned by the customer to Work Control.

C. Custodial Services

- Custodial Services sets the example of excellence in custodial stewardship and customer satisfaction, providing a University environment that promotes a healthy campus community through communication, training and professional development, green cleaning practices, and environmental conservation.

- Due to budgetary constraints, it was necessary to reduce the frequency of cleaning in E&G buildings. With additional budget cuts, further reductions in frequencies of cleaning and number of personnel may be required.

- Priority is given to reducing the exposure of building occupants and maintenance personnel to potentially hazardous chemical contaminants that adversely impact air quality, occupant well-being, and the environment. Through the use of environmentally-responsible green-cleaning products, practices, and techniques, Custodial Services will ensure compliance with the requirements of LEED certification in LEED-certified facilities on campus.

- Custodial Services has established written Standard Operating Procedures (SOPs), rewritten its training manual and developed mandatory staff training, selected sustainable products and equipment, documented proper chemical handling and storage, created an ongoing evaluation system, developed communication strategies, promoted hand-washing and use of protective
equipment, and supported campus conservation programs.

IV. Departmental Goals

Some of the following goals pertain to all workgroups under the Physical Plant umbrella. Others are more specific to individual areas.

➢ Address Diversity in the Workplace
  • Develop and implement strategies to better understand diversity issues so we can capitalize on people’s differing talents and use the multicultural nature of the work force to accomplish organization goals.

➢ Increase Customer Awareness
  • See III, B. Public Relations/Marketing

➢ Review Departmental Organization
  • Facilities Maintenance and Renovation - Review the organization of facility maintenance and renovation with the goal of improving project management effectiveness, funding alignment, and technical complexity of the facilities.
  
  • Custodial Services - Review the organization of Custodial Services with the goal of better realigning assigned space. Implement a team-cleaning pilot program to become more efficient with current staff levels and funding.

➢ Ensure Accurate/Appropriate Billing
  • Services - We will continually review the services we provide and the costs to provide these services so we can adjust our cost recovery rates as necessary, and more importantly, verify that we are providing effective and economical services.

➢ Information Management Services
  • Implement the web-based Facility Management System. A web-based system will improve the interface with customers, leading to more efficient, timely customer service. In addition, purchasing, inventory, preventative maintenance, work requests and billing processes will be streamlined.
• Migrate onsite and offsite backups from tape media to an online hard drive backup solution. This will allow for easier accessibility to backup data, faster nightly backups, and more secure storage of data.

• Replace staff PCs on a 4-year replacement cycle. Replacements are necessary to keep the equipment operational and compatible with campus at large. As software and operating system complexity continues to increase, up-to-date hardware must be available so the needs are met efficiently.

• Implement a University recommended document management system. The Physical Plant is in need of a computerized system and software solution to store, manage, and track electronic documents.

➤ Custodial Services

• Custodial Services implemented a team-cleaning pilot program in a campus facility in FY09. Custodial Services management will assess the initial team-cleaning program and will reorganize and restructure specific components of the program as needed to increase the program’s efficiency and effectiveness in relation to staff levels and current funding.

• A Custodial Services customer satisfaction survey for selected building representatives is conducted each month. This information is provided to management and other appropriate personnel. The survey was recently redesigned to produce increasingly useable and representative data. The survey distribution process will continue to be assessed in order to measure and then maximize its effectiveness.
Physical Plant – Utilities and Energy Management
Fiscal Year 2010 Strategic Plan

Overview

Utilities & Energy Management (UEM) is a division of the Physical Plant Department with utility plants and offices located on the campus of Texas A&M University in College Station, Texas. UEM manages a utility infrastructure valued in excess of $1 billion with production, distribution and processing of electricity, chilled water, heating hot water, steam, domestic hot water, sanitary sewer service, storm water service, solid waste service, recycling and energy management services serving over 21 million gross square feet of facilities. The production facilities include a Central Utility Plant (CUP) and three satellite utility plants (SUPs). A combined heat and power (CHP) plant is operated at the CUP which is being upgraded with the capacity to self-generate 50 megawatts (MW) of electrical power when the CHP Upgrade Project is completed in 2011. Campus peak electrical load is over 70 MW with all power for campus that is not self-generated supplied from the incoming power grid. The ability to both self-generate and purchase power on the open market provides greater flexibility to ensure competitively priced electricity and the important capability to meet essential University power requirements in the event of a regional power outage.

District cooling and heating is used to supply chilled water and heating hot water to approximately 18 million square feet of facilities on campus. Utility plant peak cooling production capacity is over 50,000 tons. The four utility plants on campus produce and deliver over 150 million ton-hours of cooling annually to campus facilities. Electrical power, thermals, water and other utilities are distributed through an extensive underground network serving the entire campus.

UEM operates and maintains an extensive water production, transmission, distribution and storage system that supplies domestic water to campus. The production wells are located off campus and water is transmitted to campus via redundant supply lines. Storage is provided in several above-ground storage tanks and in the centrally-located elevated tank on campus. Domestic water storage capacity is sufficient to supply the campus for 24 hours in the unlikely event of an emergency interruption of the water supply. The University domestic water system must pass the same rigorous testing required of all municipal water systems and is rated as a Superior system, which is the highest rating awarded by the Texas Commission for Environmental Quality (TCEQ).

Two sanitary sewer collection systems and wastewater treatment plants are operated and maintained by UEM – one system rated at 4 million gallons per day for the Main Campus and a
much smaller system for Riverside Campus. Solid waste disposal and recycling services are also provided by UEM for the University.

UEM is responsible for energy management services for the campus including management of the automated building control systems for over 10 million gross square feet of facilities, building retro-commissioning services, utility metering and billing, and management of the overall energy use for the University. UEM has the ability to remotely monitor and schedule many of the campus building HVAC systems to achieve higher operating efficiency as well as facilitate the identification and repair of technical problems that arise.

**Vision**

Utilities & Energy Management (UEM) at Texas A&M University will be recognized by the University community and stakeholders, other institutions, and industry as providing high level service while exceeding the needs and expectations of our customers by providing safe, reliable, efficient utilities and energy management services, providing accurate and timely information, excellent value, and setting the standard for continuous improvement through measurable results.

**Mission**

Provide world class support for the University mission through safe, reliable, efficient utility and energy management services including effective stewardship of resources and the environment.

**Organizational Structure**

UEM is organized under the leadership of the Director for Utilities and Energy Management and is subdivided into two primary areas of responsibility, led by an Associate and an Assistant Director (AD), both with four managers reporting to them. This organizational structure has proven effective over the past several years because it establishes responsibility for the production and distribution of utility commodities under one AD while organizing the technical, energy, administrative and analytical services under the other. This allows each AD to focus on their primary area of responsibility, while staying closely informed on the other. See organizational chart below:
Financial

UEM has direct responsibility for the personnel, O&M, and debt service portions of the budget which is approximately $30 million annually. Department of Finance (DOF) manages the purchased utility budget used to procure natural gas and electricity, which is $45 million in FY10. This overall budget of $75 million is recovered through the Utility Rate and Recovery Model (URRM) which is managed by UEM. The URRM is updated on an annual basis using the latest data and assumptions on utility plant performance. The most recent consumption and cost projections are used to develop the rates and cost allocation for each upcoming year. Auxiliary and Agency customers are billed directly using metered consumption data and calculated commodity rates. The remaining utility consumption and cost, that is not billed directly, is calculated and assessed to the E&G portion of the utility budget.
The FY10 rates for utility commodities remained fairly stable when compared to the previous year, with modest reductions in the cost for electricity and chilled water that account for 76% of the overall cost, and slight increases in the remaining commodity rates. See the table below comparing FY09 and FY10 utility rates.

<table>
<thead>
<tr>
<th>UTILITY</th>
<th>UNIT</th>
<th>FY09 RATE</th>
<th>FY10 RATE</th>
<th>% of TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electricity</td>
<td>Kwh</td>
<td>$0.117</td>
<td>$0.113</td>
<td>45.1</td>
</tr>
<tr>
<td>Chilled Water</td>
<td>mmbtu</td>
<td>$14.775</td>
<td>$14.582</td>
<td>30.9</td>
</tr>
<tr>
<td>Heating Hot Water</td>
<td>mmbtu</td>
<td>$17.374</td>
<td>$18.147</td>
<td>15.1</td>
</tr>
<tr>
<td>Steam</td>
<td>mlbs</td>
<td>$19.019</td>
<td>$19.896</td>
<td>0.8</td>
</tr>
<tr>
<td>Domestic Cold Water</td>
<td>mgal</td>
<td>$1.334</td>
<td>$1.567</td>
<td>1.6</td>
</tr>
<tr>
<td>Domestic Hot Water</td>
<td>mgal</td>
<td>$11.858</td>
<td>$13.822</td>
<td>1.2</td>
</tr>
<tr>
<td>Waste Water Treatment</td>
<td>mgal</td>
<td>$3.636</td>
<td>$4.277</td>
<td>3.4</td>
</tr>
<tr>
<td>Storm Drainage</td>
<td>msq ft/mo</td>
<td>$2.073</td>
<td>$2.077</td>
<td>0.5</td>
</tr>
<tr>
<td>Solid Waste &amp; Recycling</td>
<td>ton</td>
<td>$81.592</td>
<td>$92.870</td>
<td>1.4</td>
</tr>
</tbody>
</table>

In recent years, UEM has placed significant emphasis on the importance of high level service, budget stewardship and accountability. Each manager is assigned a budget at the beginning of the fiscal year and is expected to achieve agreed upon goals for their area of management.
keeping rates competitive and reducing operating cost while meeting all requirements is essential to successful utility rate management and overall utilities and energy management. Although the DOF manages the purchase of natural gas and electricity, UEM provides detailed projections to determine energy requirements and verifies that billing quantities match consumption. Energy consumption is closely managed from projecting procurement requirements through consumption.

**Key Performance Indicators (KPI)**

UEM has established and closely manages key performance indicators (KPI’s) to ensure effective standards are established and maintained in all primary areas of responsibility. The UEM KPI program was implemented in FY07 to measure specific areas of performance and provide feedback to the UEM staff and University management. The following is a partial list of KPIs reported monthly:

<table>
<thead>
<tr>
<th>Energy Forecast Accuracy</th>
<th>Administration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monthly Natural Gas Consumption</td>
<td>Invoice Payment Efficiency</td>
</tr>
<tr>
<td>Monthly Electricity Production</td>
<td>Vehicle Log Submission Timeliness</td>
</tr>
<tr>
<td>Monthly Electricity Purchases</td>
<td>Vehicle Log Accuracy</td>
</tr>
<tr>
<td><strong>Customer Service</strong></td>
<td></td>
</tr>
<tr>
<td>Service Availability Index - Electrical</td>
<td>Utilities Hiring Efficiency</td>
</tr>
<tr>
<td>Service Availability Index - CHW</td>
<td>Hourly Staff Resource Loading</td>
</tr>
<tr>
<td>Service Availability Index - HHW</td>
<td>Financial</td>
</tr>
<tr>
<td>Service Availability Index - DCW</td>
<td>Total Utility Cost ($/ GSF)</td>
</tr>
<tr>
<td><strong>Safety / Regulatory / Training</strong></td>
<td></td>
</tr>
<tr>
<td>Regulatory Permit Compliance</td>
<td>Total Utilities Cost ($/ FTE)</td>
</tr>
<tr>
<td>Safety Meeting Attendance</td>
<td>Total Purchased Utility Costs ($/ mmBtu)</td>
</tr>
<tr>
<td>Completion of Required Training</td>
<td><strong>Energy</strong></td>
</tr>
<tr>
<td>Safe Work Time Index</td>
<td>Total Energy Use (Billion Btu)</td>
</tr>
<tr>
<td>Lost Time Accidents</td>
<td>Energy Use Index (mmBtu / GSF)</td>
</tr>
</tbody>
</table>

**Major Projects to be Completed in FY2010**

- *Performance Optimization Program* - to measure, monitor, and optimize operation of equipment and systems in utility plants.

- *SUP1 Chiller Upgrade Project* - to install 7500 tons of new high-efficiency chillers and auxiliaries in Satellite Utility Plant 1.
• **CUP and SUP3 Upgrade Project** - complete major chiller, boiler and electrical system upgrades in the CUP and SUP3.

• **Campus Electrical Capacity Upgrade** - complete installation of a 25 MVA transformer to increase the capacity of campus electrical power supply.

• **Water Systems Modeling and Study** - to perform comprehensive modeling, condition assessment and study of major campus water systems, identifying capital and major maintenance projects that will be required within the next five years and beyond, allowing for effective long-range planning.

• **Phase 3 Campus Utility Metering Program** – to install revenue quality utility meters in campus buildings over 5,000 GSF, allowing for more precise tracking of energy and water resources, improved monitoring and billing capabilities, and improved ability to identify, implement, and verify energy consumption reduction opportunities.

**Major Projects in Design in FY2010**

• **Combined Heat and Power (CHP) Upgrade** - to install 45 megawatts of high-efficiency, high-reliability power generation capacity, 210 mlb/hr of steam generation capacity, and electrical system upgrades in the CUP and on campus.

• **Campus Electrical Distribution System Monitoring and Control Upgrade** - to install improved monitoring capability on campus electrical system with ability to remotely check system status, improve response time and increase reliability of service provided.

**New Programs In Progress in FY2010**

**Energy Stewardship Program (Pilot)** – With a growing campus and a multi-million dollar annual purchased utility budget, an active program to improve operating efficiency and reduce energy consumption remains a high priority. Efficiency improvements and consumption reduction initiatives have resulted in a reduction of consumption per square foot served to only two thirds of what it was seven years ago. This improved operating efficiency has resulted in a $90 million cost avoidance over the last seven years (FY02 through FY09), which has reduced operating expense and increased funding available to support teaching and research.

The purpose of the Energy Stewardship Program (ESP) is to work closely with various departments, building provosts and occupants to raise awareness and reduce energy consumption while meeting customer needs through proactive involvement of Energy Stewards assigned to specific facilities. The ESP pilot program has assigned full or part-time Energy
Stewards to specific facilities with a total of seven million gross square feet of conditioned space. In a relatively short period of time, this pilot program has successfully identified and implemented a number of energy consumption reduction and cost avoidance measures. Successes from the pilot program will help justify the recommendation to hire additional Energy Stewards to allow for implementation of a campus-wide program in FY11.

Energy consumption reduction capital improvements totalling $10 million in 17 facilities have been identified and justified based on payback from purchased energy cost reduction. The Texas State Energy Conservation Office (SECO) is managing a program offering low interest (2%) funding available to state agencies and institutions. An application will be submitted in December 2009 and if funding from SECO is approved, Facilities Planning & Construction (FP&C) will be requested to proceed to select an energy service company (ESCO) and award a design/build contract to implement the improvements identified.

**Challenges**

- **Financial** – emphasis to reduce operating cost while managing assets of increased complexity and number will remain a challenge in FY10 and beyond. UEM is focused on maintaining a strong financial position in FY10 and continuing to steward all resources in an effective and conservative manner. Ongoing efforts are underway to eliminate inefficiencies in the processes and systems to be in the best possible financial position in FY2011.

- **University Leadership Buy-In** – A strong case (both financially and environmentally) can be made for the programs and initiatives UEM has recommended for improving energy efficiency and upgrading systems (in both facilities and infrastructure) identified as a result of studies completed or underway. It is imperative that the leadership of the University continue to take a ‘long term’ view of the utility and energy systems that support the campus mission of education and research. This long term view is necessary to ensure the objectives and implications of the recommended programs are given the appropriate priority. The risk is that decisions can easily be deferred because funding is not immediately available, resulting in higher operating cost and negative long term consequences to service levels and reliability.

**Opportunities**

**Computerized Resource Management System** – A new resource management system, sometimes referred to as a computerized maintenance management system, known by its product name ‘AiM’, will be installed in FY10. This program will provide UEM and the Physical Plant with an improved capability to identify and eliminate inefficiencies in processes and
resource management. As a result, UEM and the entire Physical Plant should benefit from more efficient processes and also from a more robust system for management of work flow, billing, inventory, assets, data, information retrieval, financial and human resources.

**Energy and Environmental Efficiency** – The campus has many opportunities to make significant progress in several key areas that will allow Texas A&M University to provide world class leadership in energy and environmental efficiency. Some of these opportunities are:

- Development of a campus computing resources standard to begin the migration from multiple individual server rooms to a limited number of centrally-managed virtual server rooms.
- New buildings that not only meet LEED standards but that are designed from inception to be ultra energy efficient. Understanding and optimizing building design to reduce energy, financial and carbon footprints before facilities are constructed will pay dividends of reduced operating cost and environmental benefit throughout the life of each facility.
- Renewed emphasis on fume hood and lab safety and operating efficiency.
- Procurement specifications that require the purchase of energy efficient equipment.
- Job description modifications and a University policy that requires energy efficiency and conservation be made a shared responsibility of all faculty and staff.
- Increased awareness by University and departmental management of changes that will be needed to improve efficiency and reduce operating cost in campus buildings.
- Improved understanding of how energy efficiency improvements can be self-funding while reducing deferred maintenance and improving quality of service.