Rocky Mountain Views
Rocky Mountain Association of Higher Education Facilities Officers

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Upcoming APPA Events

Mid-Atlantic Renewable Energy Expo
Apr 13-14 at Bel Air, Maryland

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Lean Management Models for Capital Projects
And Facilities Management
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Improving Energy Conservation/ Efficiency
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Research Buildings 2007
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COAA Spring Owners Leadership Conference
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Science Buildings Canada 2007
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APPA 2007 Conference
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NACUBO 2007 Annual Meeting
Jul 21-24 at New Orleans, Louisiana

APPA 2007 Institute for Facilities Man-

President's Message

As I noted in my Inaugural address, my two goals during my tenure would be getting the new organization as well as the 14'ers Club up and running.

First, I'd like to focus on our new organization and its committees. We have some great folks sitting as chairs to the various committees and they are in desperate need of your support to fulfill the needs of our RMA. As you can see from the matrix (see inside back page) we have plenty of great opportunities for your involvement.

If you have an interest in becoming more involved in any of the committees, please do not hesitate to contact the chairperson. Our goal is to have a committee representative from each state/province.

Just look at RMA's involvement in APPA's Executive Committee:

- Polly Pinney (Arizona State University) - VP of Educational Programs
- Mark Shively (University of Wyoming) - Senior Regional Representative
- Harvey Chace (University of New Mexico) - Candidate for President
- Nancy Hurt (Colorado State University) - Candidate for Secretary-Treasurer.

If we get out and vote, 50% of the Executive Committee would be from the RMA region. Maybe we should consider relocating APPA Headquarters to Montana! Thanks again for your support and being the best region in APPA.

Sustaining a Balanced Mission

October 10-13, 2007, Albuquerque, New Mexico

APPA Report

Correspondent: Jill Amstutz

Former Senator John Glenn to Deliver Keynote Address at APPA 2007 Back to the Future

Senator John Glenn, a man who listened to the passionate voice within himself and literally shot for the stars, will speak on The Importance of Leaving the World a Better Place for Future Generations at APPA 2007's opening session.

Senator Glenn's career has been one of taking risks in order to make an impact on the future. He will draw upon his extraordinary life experiences to illuminate educational facilities professionals with the values and leadership needed to take the educational facilities management field to the next level.

Currently, Mr. Glenn heads the John Glenn Institute for Public Service and Public Policy at Ohio State University. He is also chairman of the National Commission on Service Learning, which focuses on integrating service to others with classroom instruction in grades K-12. He served as a democratic U.S. senator from Ohio for 24 years.

APPA's 2007 Elections Are Open

Voting is open to primary Institutional and Affiliate representatives only. Please note the following guidelines:

- The candidate page includes biographical information and a platform statement for each candidate.
- Only the primary Institutional and Affiliate representatives may vote, with only one vote per institution.
- Vote for only one candidate for each office. A space is available for write-in candidates.
- You must type your name and institution in the spaces provided before submitting your ballot.
- A Tally Committee will tabulate the results, which will be announced by April 23. The successful candidates will take office at the APPA 2007: Back to the Future conference in Baltimore, Maryland July 15-17.
- All ballots must be completed and received by APPA no later than 2:00 p.m., Eastern, Wednesday, April 18.

Visit APPA's election pages for more information on the candidates and to vote. *Editor's Note: RMA has two of our finest in contention, Harvey Chace and Nancy Hurt. Get out there and support our candidates!*

State/Province Reports

Arizona Report

Correspondent: Dave Brixen

Arizona State University

By Skip Derra, National Media Relations Office

A delegation from ASU recently traveled to Germany to learn more about German solar energy efforts and how ASU can tap into its solar future.

The group's members – Jon Fink, vice president for research and economic affairs, Rob Melnick, associate vice president for economic affairs, and Govindasamy Tamizhmani, an associate professor at ASU Polytechnic – also were acting as ambassadors for the state of Arizona .

Solar energy and other renewable energy sources are getting greater scrutiny in light of growing concerns over global warming and fossil fuel emissions. For example, the U.S. Department of Energy recently announced 13 winning teams in the Solar America Initiative research competition, which aims to bring down the cost of solar-generated power. All teams are industry-led, and ASU has a role in two of these projects.

For the Germany visit, the ASU team wanted to learn more about what it would take for Arizona to take its rightful place at or near the top of states engaging with the solar industry. "Germany leads the world in solar, even though they lack one important ingredient: sunshine," Fink says.

With more than 330 days per year of sunshine, Arizona has plenty of the Germans' missing ingredient. Arizona also could be an early entry point for German companies into U.S. markets. What the Germans have is know-how in engaging the solar industry.

"Germany went from having very little solar industry to having the largest in the world in a period of just a few years," Fink says. "We wanted to get firsthand information about how this transformation took place, to see if there were lessons that would be relevant to Arizona."

The attraction between Germany and Arizona is mutual, says Bud Annan, the former leader of the U.S. Department of Energy's solar energy programs who worked with Fink on shaping the Germany visit.

"Germany is at the cutting edge of solar markets," Annan says. "Electrical growth in Arizona is second to none in the United States. We have two-thirds more sunshine than Germany – and, with master-planned communities, Arizona is a market where cost reductions of solar energy can be realized through economies of scale."

The ASU delegation met with several German counterparts, with each having their specific areas to cover. For example, Melnick wanted to find out if there was interest among German companies to expand into U.S. markets – and if they would consider making ASU SkySong a base for their operations. Tamizhmani wanted to meet with the German equivalent of ASU's Photovoltaic Testing Laboratory and speak with companies that use them.

The group met with Herman Scheer, a longtime member of the German Bundestag (parliament), who led the successful effort to change German laws and regulations making them more favorable to the solar industry. Scheer, who has been most influential in moving Germany toward "green energy," recently came to ASU as part of a book tour, the direct result of the ASU visit.

The ASU group learned about solar technology and industry from Winfried Hoffmann of Schott Solar GmbH, Alzenau, Germany, who talked about the economic factors that can influence the transition from fossil fuels to renewable energy sources. Gerhard Kleiss, of SolarWorld, Bonn, spoke to the ASU contingent on how to market solar technology and expand associated business opportunities.

The group visited the second-largest manufacturer of solar cells in the world, Q-Cells AG, Thalheim. Q-Cells has a research program in solar cells and is interested in research and

design collaborations with ASU. Officials at SolarWorld also are interested in collaborations with ASU.

What ASU can provide these companies, Melnick says, includes early entry into an expanding Arizona solar energy market with improving tax incentives and a technically proficient work force.

"Arizona provides relatively cheap and close access to California , an important market for the German solar companies," Melnick says. "So we made the case for SkySong – the ASU-Scottsdale Center for Innovation and New Technology – as a potential platform from which these companies could operate in the United States."

Fink adds that ASU could fill several additional roles for the German companies, including:

- Helping in the discovery and characterization of new photovoltaic materials.
- Helping develop new manufacturing techniques and testing of modules, inverters and other finished products.
- Aiding in the deployment of solar in large-scale communities.
- Helping assess the policy aspects and economics of distributed versus centralized power generation.

Fink says the groups continue to exchange ideas, and several valuable lessons have been learned already.

"We should continue to grow across the spectrum of solar technology and policy in order to preserve and expand our position as one of the most comprehensive solar programs in the world," Fink says. "We should strengthen our ties to U.S. national laboratories, especially the National Renewable Energy Laboratory, Golden Colo., and we should expand the scope of the Photovoltaic Testing Laboratory, taking advantage of its excellent reputation across the United States and overseas."

Colorado Report

Correspondent: Vacant

University of Colorado at Boulder

By John P. Morris, Director, Facilities Operations

Outdoor construction on the University of Colorado at Boulder campus came to an abrupt halt starting in late December. If there was any doubt, three major snowstorms in as many weeks, high winds, and a deep cold snap were certain proof that winter had arrived. December 2006 turned out to be the second snowiest month since 1970, and the total snowfall for this winter season alone has nearly exceeded the snowfall total for the past two winters combined. It is not uncommon to get more than 40 inches of snow in one month in Boulder, it has occurred at least 5 times in the last 40 years. However, the combination of the snow, high winds, and freezing weather are unprecedented causing campus closures, and presenting the campus community with trying conditions.

First and foremost, I would like to thank the staff of Facilities Management, who worked through these declared campus emergencies with amazing diligence, positive attitudes and patience, making campus streets and sidewalks navigable in the face of over 115 inches of snow. Many front-line staff have worked practically non-stop to keep roads, pathways and buildings open. They showed great pride and responsibility, time after time, and their efforts are to be commended. Without their help plowing and hauling snow, shoveling sidewalks and building entryways, pushing others' stuck cars, cleaning clogged filter banks, responding to building system freezing and water leaks, clearing roofs, and working together as a community, the University of Colorado would be more difficult to travel through and certainly would not function like the wonderful campus we enjoy serving.

During the week of December 18, 2006, the combination of a major snow storm with the need to complete finals and continue with Fall Commencement called for a response beyond the norm. In this situation who do you call? Facilities Management of course! As expected the department pulled together and the mission was accomplished. I credit a great staff for doing everything possible to keep the campus on schedule. In order to accomplish this task, on December 20, 2006, we had 88 employees that willing spent the night on campus in order to ensure the University could continue with final exams on December 21. I commend and extend my deepest gratitude to those individuals. We also owe our thanks and appreciation to Housing and Dining Services for assisting with meals and the Recreation Center for assisting with sleeping accommodations. We have received numerous letters of appreciation from the campus community and administration for our efforts during this event. I am proud to be associated with such high caliber individuals.

Preliminary figures show that more than 150 employees, along with two subcontractors, worked rotating shifts with more than 50 pieces of equipment to provide snow removal efforts during these various storms. Additionally, there were more than 75 supervisors, managers, dispatchers and mechanics working throughout the storms coordinating efforts and ensuring building systems performed properly.

During the first weeks of storms, Facilities work crews invested over 3,600 hours related to the snow removal and related storm conditions. Crews cleared snow from over 4 miles of campus streets, over 130 parking lots and over 14 miles of sidewalks, multiple times. Crews also had to haul and dump off campus approximately 12,000 cubic yards of snow from the main campus — equivalent to one football field covered in over 2 feet of snow. Staff is putting together final costs to be submitted to the Federal Emergency Management Association for reimbursement of expenses for the first blizzard, declared a federal disaster. At this time, although not finalized, it is estimated that the cost of these three snow storms for our department may be over $300,000.

We still have plenty of work to perform before we have totally recovered: continue to plow, collect and remove snow, ice and slush; repair damage caused by the snow removal process; clean-up of downed tree limbs; existing and potential pothole repair; repairs and restoration from water leaks and frozen pipes; and yes - possibly gear up for the next spring storm. I know the campus can continue to rely on us to perform these duties with diligence and pride.

Many of our services are typically behind the scenes and often go unnoticed, but in times like these past few months our services are at the forefront, and are greatly appreciated. I am proud of our employees' professional response, willingness to be flexible, and the ability to pitch in during

such emergencies.

Although our snowiest months are still ahead, with longer days, warmer weather, sunshine and blue skies, and warm Chinook winds the snow is finally melting. Spring is in the air and I can hear the construction crews getting back to work.

Idaho Report

Correspondent: Anna Weskerna

University of Idaho

By Brian Johnson, Assistant Vice President, Facilities

Like many institutions, the University of Idaho is challenged with substantial facility and utility infrastructure needs that have been under funded for a great many years. Our routine maintenance and minor repairs are funded through state general fund allocations and a portion of the student matriculation fee. This funding has fallen to less than 0.6% of current replacement value (CRV) in recent years, far below the desirable target of 1.5% CRV. This level of funding serves to shorten the useful life of major building systems and components, and hastens the need for major repairs and renewal.

Our major repair and renewal needs are funded largely through allocations from the state's Permanent Building Fund (PBF). These PBF allocations have dwindled over the years and most recently amount to approximately $2 million per year for the University of Idaho. When possible, these funds are augmented with internal university funding to provide an overall major repair and renewal budget of approximately $2.4M, or less than 0.4% CRV.

These chronic funding shortfalls have resulted in a growing backlog of deferred maintenance needs, now valued at over $100M for general education needs on campus. This total comes from a list of projects developed with input from our maintenance and service personnel, as well as from campus planners and the Facilities Management team. The list is updated and prioritized at least annually. Given the very limited resources, we've been challenged to address projects beyond only those most critical; there is little opportunity to address needs on a larger whole-building or system-wide scale.

It is clear that current fund sources do not adequately support the physical plant needs. State resources are anticipated to continue to decline, further exacerbating the challenge. Alternative funding sources could include additional student fee support, private fundraising, corporate sponsorship, and internal university funding redirected from other needs. Outsourcing or public/private partnerships for limited campus operations may also be considered. Each alternative presents its own challenges in terms of practicality and in implementation.

One definitive step we have been able to take is in the implementation of an energy-savings performance contract on campus. We recently expanded the ongoing technical audit, and we look to augment basic energy-saving measures with some broader utility distribution system needs. The campus executive leadership supports the concept of an additional capital infusion in order to address a portion of the utility infrastructure deferred maintenance needs. Overall, we hope to accomplish up to $30M in energy measures and infrastructure improvements.

The university recently formed a small team of faculty and staff to discuss the wider set of campus deferred maintenance needs, both on the general education and auxiliaries sides of the house. The team is considering alternative funding sources, the risks posed to campus operations, the need to educate the wider campus community, and ultimately to change the campus culture to recognize the importance of consistent adequate investment in buildings and infrastructure for the long term health and viability of the university. The work of this team will emerge over the coming weeks and will likely represent initial small steps taken in a long journey to adequately fund the maintenance, repair, and renewal needs of the campus.

For further information or questions, please contact Brian Johnson at johnsonb@uidaho.edu.

Idaho State University

By Anna Weskerna

Idaho State University (ISU) received a $25,000 grant from the prestigious Kresge Foundation to supplement construction planning for the new Center for Advanced Energy Studies (CAES) Building, adjacent to the ISU-Idaho Falls campus. The principal investigator for the grant was Syed Hashim, Environmental Specialist with Facilities Services. Dr. Larry Ford is the Interim Chief Research Office for the University and a member of the CAES Steering Committee.

The Kresge Foundation provides a one-time only, competitive grant for developing a sustainable "green" building, as part of their Green Building Initiative. This private foundation was founded in 1924 and is known primarily for its challenge grants for capital projects. They encourage green or environmentally sustainable buildings that have a minimal draw on non-renewable resources and give high priority to respecting the physical and natural environment.
The CAES project is a partnership between the State of Idaho, the Idaho University Consortium (Idaho State University, Boise State University and the University of Idaho) and the Idaho National Laboratory. When completed in 2008, the CAES Building will be a Leadership in Environmental and Energy Design (LEED) Silver certified green building. Its mission is to address critical science and engineering issues that will help resolve the challenges associated with providing an appropriate mix of energy technologies needed to address critical U.S. and global energy needs. Advanced energy sources to be researched include nuclear, hydrogen, fossil fuels (coal, oil and gas), and the full spectrum of renewable energy sources.

CAES is also developing its research agenda to advance the education of the next generation of scientists and engineers, engage in long-term university-based research activities, and host a range of national and international events. The Center will serve as a hub for Idaho universities to network and as a gateway for developing collaboration, partnerships and connectivity between researchers.

A public groundbreaking ceremony for the $17 million, 55,000 square foot center was held on February 20, 2007, and included local, state and national government officials and representatives from the Idaho National Laboratory and Idaho's universities. ISU will supervise construction of the Center, and manage it after completion.

The grant monies was used to facilitate the CAES planning efforts and to pay for professional consultation, and initial costs and energy analysis.

For more information on this premier international facility, visit www.caesenergy.org.

ISU Electricians Certified as Fire Alarm Technicians

Idaho State University Facilities Services Electricians, Michael Toler and Ian Pitcher (left to right), have been certified by The National Institute for Certification and Engineering Technologies (NICET) in Fire Protection Engineering Technology/Fire Alarm Systems/Level II.

Obtaining this certification is an extensive training process which required many hours of studying for the certification exam. The exam covers over 30 different course elements such as building codes, power supplies, sensing detectors, alarm appliances, construction plans, etc.

The NICET certification is extremely difficult. This certification will save the University thousands of dollars by not having to outsource the inspections and maintenance of campus fire alarms. Mike and Ian did an outstanding job in passing the examination and their expertise will be a great asset to the University.

Montana Report

Correspondent: Jonathan Ford

Montana State University

By Jonathan Ford, Manager of Environmental Services

This newsletter's suggested topic of "campus and building renewal" proved to be one of those subjects that rapidly get more complex the longer one spends muddling over it. It quickly became apparent that it would be challenging enough to try to describe what Montana State University's approach was to this topic without trying to wade through the subtleties of some of the other Montana campuses' terminologies, accounting and budgeting practices. What follows pertains to MSU – Bozeman only, and outlines some progress made in recent years toward better management and stewardship of the University's physical assets.

Montana State University has seen significantly more success at obtaining funding for campus and building renewal in the last decade due to a number of major initiatives to improve our processes. The most hard-won and valuable aspect of this progress is also the most fragile: we have increased our credibility as effective stewards of the University's facilities at many levels of state government. This has been accomplished through a persistent series of well-documented presentations to University and State officials based on a transparent, pragmatic process. By carefully telling our story, we establish the current condition of the facilities, their maintenance and renewal needs or deficiencies, the consequences of action or inaction, and the estimated costs of both. There is no embellishment, exaggeration or alarmist tone, just the facts stated plainly. This approach, over time, has paid dividends: decision-makers in the university and state hierarchy are beginning to believe what we say, and we think there has been more success at obtaining funding as a result.

There are four elements to MSU's capital asset management: the Facilities Condition Inventory, Major Maintenance, the Long Range Building Program, and the MSU Tomorrow Campus Master Planning Project.

Facilities Condition Inventory

Montana State University might be called mid-sized as far as its physical plant goes. It is small enough for facilities managers to still keep a "hands-on" approach to maintenance and renewal to some degree, but large enough to have the resources to implement some of the cutting edge capital asset management techniques available. Perhaps the most formalized and important program we have implemented is our Facilities Condition Inventory (FCI) system, which was presented last fall at the RMA conference in Billings, MT. This is a streamlined, straight-forward system that is akin to taking a snapshot of the condition of our facilities. It allows us to compare buildings across campus with regard as to the level and number of their deficiencies, providing a rational means for establishing maintenance and renewal priorities. It must be emphasized, however, that FCI does not, nor is it intended to, generate monetary project estimates in order to establish maintenance or capital renewal liabilities. Instead, like a barometer, it merely benchmarks current condition, which allows us to compare the state of each of our buildings with each other, and see if our efforts are producing positive or negative change in the overall condition of the physical plant.

One of the most tangible side-benefits of the FCI program is where the "hands-on" aspect of our approach comes to pass. Simply the act of taking a multi-disciplined team of craftsmen, occupational health and safety specialists, architects, and engineers on a cyclic tour of each of the buildings makes everybody involved aware of what is happening to building condition over time. The inspections provide what is perhaps the single greatest source of information for compiling the next element of our campus and building renewal program: our major maintenance list.

Major Maintenance

MSU's major maintenance (MM) list is continually being added to and adjusted as information comes in from a variety of sources. Aside from FCI inspections, where items identified as outside the scope of our operational maintenance budgets are noted and brought to the table, we also go into our work order history and red flag particularly troublesome and repetitive repairs to the buildings. Custodians also turn in repair reports, which are compiled and then queried in the same way. Craftsmen are encouraged to make note of building components that they think are at the end of their effective lifecycle or particularly problematic. A facilities space utilization analysis team comprised of facilities planning people and representatives from across campus sometimes identifies needs for altered or additional space.

There are several organized secondary lists that feed into the Major Maintenance list. A running, prioritized maintenance, repair and replacement list of mechanical (HVAC primarily), electrical and plumbing systems in all the buildings is kept up-to-date and is incorporated into the MM list as appropriate. Similarly, items needing attention and management pertaining to the grounds, streets, service drives, and underground and surface utilities are collected and incorporated. Parking lots are funded from parking permit revenues, but their replacement and renewal is managed similarly with assistance from MSU's maintenance arm. Any item that goes onto the list has an estimated cost attached to it, as well as a funding source when one is obtained.

Several times a year, in roundtable discussions among facilities managers that represent all the different disciplines of Facilities Operations and Maintenance, and Planning Design and Construction, the MM list is prioritized, funding levels are set, and the work is scheduled to the degree possible.

Between FCI and MM, we can say that we have gone a long way toward establishing our *deficiency* backlog, but because of our method of accounting and the way we categorize the work, we do not have a *deferred* maintenance backlog according in the strictest sense of the APPA definition. Instead, we have a mix of deferred maintenance, adaptive renovations, replacements and renewals.

Some of these identified facility deficiencies are mitigated outside of our purview. Various programs, research primarily, need to update their facilities ahead of a normal renewal cycle. Program funds often cover the smaller of these types of improvements or alterations to the facilities.

Some of the larger scale items that are encountered in the creation of the MM list are converted to capital projects. This leads us to the next level of our campus and building renewal: the Long Range Building Program (LRBP).

Long Range Building Program

This program was created in 1965 by the Montana Legislature to provide funding for construction and maintenance of state-owned buildings. Each state agency, of which MSU is but one, goes through a biennial process during which building project needs are listed, reviewed, and prioritized and submitted to the Commissioner of Higher Education and the Board of Regents of Higher Education. There, all the competing requests are reviewed, prioritized and approved/ disapproved, and it is sent on to the Executive Branch, the Office of Budget and Program Planning, and finally to the State Architecture and Engineering Division where all the surviving agency requests are compiled and formatted for analysis and distribution of funding by the State Legislature.

The LRBP comes closest to the APPA definition of Capital Renewal and Replacement, but again, not all of the LRBP projects neatly match that definition. Besides new construction, Montana's LRBP also includes land acquisition, adaptive upgrades, adaptive reuses, historically sensitive renovations/ restorations, standards compliance liability, major maintenance projects generally over $250,000, and deferred maintenance projects generally over $250,000. General guidelines for priority ranking of needed projects go like this: 1) Health/Life Safety, 2) Major Maintenance, 3) Code Compliance (including ADA), 4) Energy Conservation, 5) Adaptive Renovation, and 6) New Construction/Land Acquisition.

While we are yet bound by the State system of renewal and replacement definitions described above, it will be impossible for MSU to completely transition to the work distinctions recommended by APPA, and unfortunately the differences will continue to work their way down into some of our most basic accounting and organizational processes at MSU. We are capturing the information and managing the work quite well, but we are just not coding things exactly as APPA would have it in a perfect facilities world.

Because of their higher budgetary and social impacts, as well as the fact that final funded approval of these projects takes place at the Legislature, political forces weigh heavily on how the work gets accomplished, or whether it gets accomplished at all. For example, one of MSU's preeminent buildings, eight-story Leon Johnson Hall, built in 1972-73, was discovered in the mid-1980's to have exterior brick veneer improperly and inadequately tied to the underlying concrete structure. The multi-million dollar remediation effort was on the 1985 LRBP, but the resulting project only corrected three sides of the building due to lack of adequate funding at the time: namely, those sides that had entries and critical circulation areas underneath the potentially lethal falling brick. Competing projects from across the State that were more politically appealing than redoing something that was perceived by some as having been done wrong in the first place effectively pulled away the funds necessary to complete the brick replacement. The north side was simply fenced off to mitigate the life safety liability and left as it was, and it remains that way to this day. It has finally worked its way onto this year's LRBP and has the best chance in a long time of getting funded in 2007—22 years later.

Another example is that for two biennia, specifically the 2001 and 2003 sessions, the Legislature decided to not pursue the bonded programs to avoid going into debt. This left only $3 million dollars cash to be distributed across 22.6 million square feet of state facilities, or the equivalent of $0.065 per square foot for four years! The last session was austere also. Even though the bonded program was reinstated and produced an available $66 million for the state, $35 million of it was used up for new construction. It is always more politically glamorous to support building something new than merely taking care of what is already on the inventory.

While it is obvious how politics can occasionally override some of the pragmatic decisions facilities managers make with regard to the University's physical assets, it is more difficult to appraise the kind of power and influence the next component of our campus and building renewal, Master Planning, has over those decisions. It holds sway by setting up the context of our renewal and replacement thinking patterns.

The MSU Tomorrow Campus Master Planning Project

The final element in MSU's capital asset management effort is the master planning project. It provides another source of information to consider when managing our physical plant stewardship priorities. As the MSU Tomorrow webpage explains:

The primary purpose of the "campus master planning" project is to establish a consensus vision for the physical development of the campus environment over the next 25 to 50 years that is comprehensive, creative useful and most importantly— inspiring.

The project involves a broad, university-wide process which includes a campus-wide dialogue about our shared physical environment centered on questions such as these:

- *What do we like from the past that we have lost?*
- *What do we have in the present that should be preserved?*
- *What do we want our shared environment to be like in the future?*

Physical development of the campus over time will be guided by a set of principles derived from the planning process. These principles will ensure that the physical growth of the campus is aligned with the priority interests of our academic, research and service missions, and provides continuing support to the goals of the 5 year vision, particularly in the areas of recruitment and retention of quality students, faculty and staff. Adherence to these principles will protect against short term decisions that could impair long term opportunities and ensure that the university is making the most efficient use of present and future infrastructure in support of physical development.

A firm with a national reputation for specializing in design and planning for non-profit institutions with specific focus in higher education, Ayres Saint Gross, has been retained to provide guidance and technical assistance throughout the master planning process. What has transpired so far has been a campus-wide collaboration. There have been input sessions from major stakeholder groups across the general campus with comprehensive representation via an executive oversight committee, as well review and input from the University Facilities Planning Board, University Services and the School of Architecture. A set of project goals were developed, as well as a set of design and planning principles to form the foundations of the effort. All of the input and refinements from these public and departmental forums and partnering sessions were digested and reviewed by the project team over the summer of 2006. By last fall, their work culminated in the emergence of two preliminary, draft campus plans representing what the University might look like in the next few decades. There were distinct similarities between the two concepts along with their differences. Neither was presented as the "correct" version, but rather as starting points for what will be a several-month-long comment period. Individuals and groups providing input were asked to identify which "portions of the plans might best honor and preserve the University's history, while striving to support and advance its future aspirations."

Through a process of integrating many wide-ranging inputs into a coherent plan using the latest in design techniques and philosophy, the Master Plan almost subversively begins to influence our maintenance field tactics by establishing a global strategy. Without us noticing, it begins to change the way we think. It provides an essential context in which to make maintenance and renewal decisions for the already existing physical plant. On any given facilities decision, it is impossible to predict whether or not the Master Plan will be the factor tipping the final outcome. In most cases, almost certainly it will not be the deciding factor, but the influence will definitely be there. Just the input solicited from such a broad field of varying perspectives is sure to turn up useful information that can influence our approach to our campus and building renewal.

MSU's facilities managers are taking every opportunity to work towards the ideal management approach as presented by APPA. We are seeing improvements and progress in all aspects of our campus and building renewal. We expect that over time, the differences between what APPA recommends and how the State of Montana approaches the management of its capital assets will lessen, and we, as workers who study and strive to accomplish responsible stewardship of those assets, will play a major role in making that happen.

Utah Report

Correspondent: Brian Nielson

University of Utah

By Brian Nielson, Associate Director Buildings and Grounds

With the University of Utah's continued commitment to the environment and sustainability, and the support of student groups and various campus departments, it was time for Plant Operations to visit the recycling program. The current recycling program consists of individual department initiatives, performed on a volunteer basis. Individuals in departments can collect their office waste paper and place it in centrally located recycling containers. The Plant Operations custodial staff then moves the centralized containers to the curb for eventual pick up by the recyclers. With this minimal effort, the University has recycled 17% to 23% of its waste stream but receives minimal revenue to offset container and removal expense.

In order to enhance the recycling program, the University contracted with the Cascadia Consulting Group, in 2005, to perform a waste audit, a review of current recycling efforts, and identify opportunities for improvement. The audit was completed in October 2006, and their analysis determined that an expanded recycling program could capture 43% of the waste stream as recyclables. The audit suggested that the University should consolidate as much of the recycling effort as possible, focus on maximizing paper recycling, and cardboard recycling should be increased and coordinated throughout campus.

With the findings of Cascadia, the University's Plant Operations group implemented a test program during the fall of 2006, to develop a process to capture a higher rate of recyclables. Recycling containers were provided to office occupants in three test area buildings. The custodial staff empties and transports the recyclables on a weekly basis. Recycling containers were provided for all classrooms in the test area and custodians empty those containers when needed. A 40% average recycling rate was established in the test area, indicating that the test program could approach the yield anticipated by Cascadia and desired by the University.

Currently, Plant Operations has organized an advisory committee, which will facilitate a communication forum for recycling initiatives and activities. Common practices, contractors, and processes will be sought and developed. Establishing a campus wide recycling program, with Plant Operations as the focal management group, will provide the following opportunities:

- The ability to partner and enhance purchasing/ contracting power
- Achieve economies of scale
- Eliminate duplication of effort
- Unify marketing and public education
- Focus responsibility and expertise

The enhancement of the recycling program will require one time costs (purchase/placement of recycle containers, com-

pactors, etc.) and ongoing operational costs (changes in collection, transporting, disposing of recycled paper, etc.). The net change to operating costs are minimal since increased recycling revenues and decreasing disposal fees offset most of the increased collection, transportation, and labor costs. However, the one time costs are significant and a source of funding would need to be identified. In the University's case, a detailed proposal was developed by Plant Operations and presented to senior administration. Through the entire recycling fact finding process, senior administration has been supportive and committed to recycling enhancements. In January 2007, senior administration demonstrated their commitment to recycling and funded all start up costs associated with the enhanced recycling program, and gave the approval to proceed.

We are now moving ahead with an enhanced recycling program. Currently, we are reviewing, canceling, and amending current recycling contracts. We are identifying, pricing, and preparing to purchase the various types of recycling containers that will be required for the program. We are also developing a program to educate students, faculty and staff about recycling, and what they can do to help with the success of the program. Training for the Plant Operations staff for new procedures and responsibilities for recycling are being developed and finalized.

We look forward to the implementation and challenges we face with an enhanced recycling program. This program will place the University as a leader in the area of recycling, and we will be doing our part to help extend the life of our landfills and contribute to the overall improvement of the ecology.

Trivia Corner - Life in the 1500's

Most people got married in June because they took their yearly bath in May, and still smelled pretty good by June. However, they were starting to smell, so brides carried a bouquet of flowers to hide the body odor. Hence the custom today of carrying a bouquet when getting married.

Baths consisted of a big tub filled with hot water. The man of the house had the privilege of the nice clean water, then all the other men and sons, then the women and finally the children. Last of all were the babies. By then the water was so dirty you could actually lose someone in it. Hence the saying: "Don't throw the baby out with the bath water."

Houses had thatched roofs, thick straw, piled high, with no wood underneath. It was the only place for animals to get warm, so all the cats and other small animals (mice, bugs) lived in the roof. When it rained it became slippery and sometimes the animals would slip and fall off the roof. Hence the saying: "It's raining cats and dogs."

The floor was dirt. Only the wealthy had something other than dirt. Hence the saying "dirt poor." The wealthy had slate floors that would get slippery in the winter when wet, so they spread thresh (straw) on floor to help keep their footing. As the winter wore on, they added more thresh until when you opened the door it would all start slipping outside. A piece of wood was placed in the entranceway, which came to be called a threshold. Sometimes they could obtain pork, which made them feel quite special. When visitors came over, they would hang up their bacon to show off. It was a sign of wealth that a man could "bring home the bacon." They would cut off a little to share with guests and would all sit around and "chew the fat."

In those old days they cooked in the kitchen with a big kettle that always hung over the fire. Every day they lit the fire and added things to the pot. They ate mostly vegetables and did not get much meat. They would eat the stew for dinner, leaving leftovers in the pot to get cold overnight and then start over the next day. Sometimes stew had food in it that had been there for quite a while. Hence the rhyme, "Peas porridge hot, peas porridge cold, peas porridge in the pot nine days old."

Bread was divided according to status. Workers got the burnt bottom of the loaf, the family got the middle, and guests got the top, or "upper crust." Lead cups were used to drink ale or whisky. The combination would sometimes knock the imbibers out for a couple of days. They were laid out on the kitchen table for a couple of days and the family would gather around and eat and drink and wait and see if they would wake up. Hence the custom of holding a "wake."

England is old and small and the local folks started running out of places to bury people. So they would dig up coffins and would take the bones to a "bone-house" and reuse the grave. When reopening these coffins, 1 out of 25 coffins were found to have scratch marks on the inside and they realized they had been burying people alive. So they would tie a string on the wrist of the corpse, lead it through the coffin and up through the ground and tie it to a bell. Someone would have to sit out in the graveyard all night (the "graveyard shift") to listen for the bell; thus, someone could be "saved by the bell" or was considered a "dead ringer."

Editor's Corner

Straight away, my apologies for the lateness of this newsletter. The pace of change at Arizona State University coupled with additional responsibilities recently given to Facilities Management has caused this lapse. Hopefully, this tardiness will not be repeated. However, if it should I give permission to reduce my RMA editor's salary!

The theme of this newsletter is building renewal, a concern that is always on the minds of facilities professionals. In particular, well written articles from Idaho's Brian Johnson and Montana's Jonathan Ford illustrate the challenges of renewing our campus facilities.

Please give serious consideration to Eakle's call to service within the RMA committees. Our organization is only as strong and viable as its members and we need our talented people to step forward and participate.

We did not receive reports from a number of regions for this edition, including my compatriots here in Arizona (the ASU report was shamelessly copied from an news release, although its content is relevant to the issue's topic). Please note that Colorado needs a new correspondent. I hope that everybody will sharpen their pencils for the June newsletter!

Until next time, I remain…

Your **N**ormally **A**greeable **G**azetteer - JM

RMA Committee Structure

Committee	Information & Research	Education	Professional Affairs	Awards & Recognition	Membership
Charter	Develop & coordinate Regional information and research programs.	Develop & coordinate Regional education programs.	Develop & coordinate Regional professional affairs/awards & recognition programs. Be responsible for business partner members & maintain membership records annually. Be responsible for the scholarship processes & solicit institutions for applications. Promote scholarships at annual meetings.		Develop & coordinate Regional membership programs. Working closely with the Sec/ Treasurer, maintain an up-to-date & accurate membership list by Institutions & Members.
	Support for the APPA Committee's various programs & ensure compliance with policies & procedures.				
Chair	Lorenzo Cotton lorenzo.cotton@pima.edu	Shari Philpott shari.philpott@colorado.edu	Dave Button dave.button@uregina.ca	George Stumpf george.stumpf@uchsc.edu	Nancy Hurt nhurtrmappa@aol.com
Arizona					
Alberta/Saskatchewan					Patsy Mang
Colorado					
Idaho	Jeff Madsen				
Montana			Lee Richardson		
New Mexico		Eileen Brinkerhoff			
Utah		Rob Reeder			Jimmie Grutzmacher
Wyoming					

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Rocky Mountain Views
Rocky Mountain Association of Higher Education Facilities Officers

Newsletter of the Rocky Mountain
Education Facilities Higher Education
Facilities Officers (RMA)

The ROCKY MOUNTAIN ASSOCIATION OF PHYSICAL PLANT ADMINSTRATORS OF UNIVERSITIES AND COLLEGES was organized in February of 1953 for the purpose of promoting the common interest in the planning, maintenance and operation of physical plants of Universities and Colleges in the Rocky Mountain Region: to foster a professional spirit among those engaged in this work; and to support and supplement the activities of its parent organization, the Association of Higher Education Facilities Officers (APPA). The Rocky Mountain Region encompasses the states of Arizona, Colorado, Idaho, Montana, New Mexico, Utah, Wyoming and in Canada the Provinces of Alberta and Saskatchewan and the Northwest Territories.

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FUTURE MEETINGS

2007 Annual Meeting	Albuquerque, NM	University of New Mexico
2008 Annual Meeting	Ogden, UT	Webber State University