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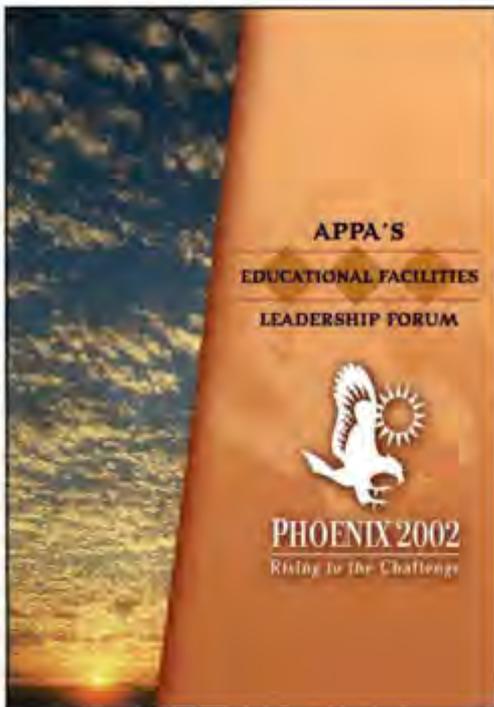
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Global Partner in Learning

by Steve Glazner

Walter Simpson Wins Third Rex Dillow Award

Walter Simpson, energy officer for the University at Buffalo, has become the first three-time recipient of APPA's



Rex Dillow Award for Outstanding Article in *Facilities Manager*. Walter's article, "A Facilities Manager's Guide to Green Building

Design," appeared in the March/April 2001 issue of *Facilities Manager*. Walter had previously received the Rex Dillow Award in 1995 and 1997.

In his award-winning article, Walter clearly gives definition to "sustainable" and "green" building design and explains how to approach the concept on your campus. His wide-ranging expertise and logical presentation makes for an article worth revisiting. You may do so by reading the article on APPA's website at www.appa.org/resources/Facilities_Manager/010304/greenbuild.html.

The Rex Dillow Award is an annual recognition of the author of the best article published in *Facilities Manager* magazine during the previous calendar year. Eligible authors are those who are full-time employees of an APPA-member institution, and the recipient is selected by the Information and Research Committee based on a rating scale. The award, first presented in 1987, is named for APPA member emeritus Rex O. Dillow, who contributed much to the development and improvement of APPA's publication and education programs during his active membership in the associa-

tion. There were 19 eligible articles published in 2001 for this year's award.

Our many congratulations to Walter Simpson for receiving the 2002 Rex Dillow Award for Outstanding Article in *Facilities Manager*!

As a result of a valuable collaboration with CSHEMA, the Campus Safety Health, and Environmental Management Association, APPA has published *Environmental Compliance Assistance Guide for Colleges and Universities*. The book, prepared by a task force of APPA and CSHEMA members, provides extensive guidance on current environmental and regulatory issues that every campus needs to know. We thank John DeLaHunt of the Colorado College and Jack Dempsey of the University of Illinois/Urbana-Champaign for their leadership and dedication through the development and writing of the *Environmental Compliance Assistance Guide*.

And we are very pleased to announce the publication of *Maintenance Staffing Guidelines for Educational Facilities*. This is the third book in our trilogy of staffing guidelines publications, following *Custodial Staffing Guidelines for Educational Facilities* and *Operational Guidelines for Grounds Management*. Many thanks to the task force members and the leadership of co-chairs Matt Adams of the Adams Consulting Group and Ted Weidner of the University of Massachusetts/Amherst.

Both books are now available from APPA and can be purchased online at www.appa.org/publications. We hope you enjoy these new information resources from APPA. 🏠

President's Report

by Gary L. Reynolds

[Ed. Note: The following reports are from APPA 2001-02 officers for activities and services provided this past year. The officers are listed by their 2001-02 titles.]

This past year has been both a challenging one and a rewarding one. The challenges included navigating a prudent path for the association in the current economic climate, managing membership and staff activities, and launching the new Center for Facilities Research (CFaR). The rewards included experiencing a wonderful trip to South Africa, meeting many new (to me) members of APPA at the regional meetings, and seeing the beginning steps of CFaR take place.

Internationalization— Becoming Global Partners in Learning

This year started out with some interesting opportunities. As approved by the Board, John Harrod, Immediate Past President, Robert Kelly, AAPP President, and I attended the Tertiary Institutional Maintenance Conference (TIMCON) in Cape Town, South Africa. The reason for our attendance was to explore the potential relationship of southern African institutions of higher education with APPA. Ferdi Pieterse and Stan Dennis attended the 2001 Educational Conference and 88th Annual Meeting in Montreal where they made a presentation to the APPA Board and extended an invitation to the Board to attend their conference in September 2001. TIMCON is not an official organization but rather the name of the annual conference that is attended by 20 to 30 institutions from a half dozen countries in southern Africa. They have been meeting for a number of years and are interested in

becoming an officially recognized organization with the potential to be affiliated with an international organization in the future.

Ferdi Pieterse and Stan Dennis (along with many others) were excellent hosts and made us feel very welcome. At TIMCON we had an opportunity to make several presentations to the attendees about APPA and AAPP. John gave a presentation about APPA—who we are, our history and vision, mission, and desired outcomes. Robert then spoke about AAPP's experience as they transitioned from membership in PCAPP to a region in their own right. I then made a presentation about APPA's products and services with an emphasis on the benefits to TIMCON members, even across an ocean.

Since that visit, the institutions involved with TIMCON have created and accepted a constitution, set dues, and are in the process of adding members under their new organizational name—Higher Education Facilities Managers Association-Southern Africa (HEFMA-SA). Because there are several Australian institutions with campuses in South Africa, Robert Kelly and AAPP have been supporting this group. The current organizational model allows for institutions that are members in HEFMA-SA to be able to become members in AAPP at a reduced cost. (This is similar to the way PCAPP supported AAPP in their formative years.) APPA is currently exploring ways to allow HEFMA-SA members to also become members of APPA in a manner and cost that recognizes the current economic and geographical environment. We all recognize that this will be a slow building process, but I am encouraged by the initial progress that

has been made and I look forward to APPA, AAPP, and HEFMA-SA becoming true global partners.

How APPA continues to address the internationalization of our organization will be an important part of future discussions. We now have a region in Australasia, a strategic alliance with AUDE in the United Kingdom, an interest in southern Africa, ongoing discussions with ATA in Germany on a potential strategic alliance, and interest from Japan.

In this past APPA election an Australasian member was a candidate for the APPA presidency. It will be important to look at our Bylaws, organizational structure, communication processes, membership classification, and dues structure, for example, to ensure that we have the flexibility to respond to our increasing international membership and collaboration.

As a footnote, we were attending TIMCON on September 11, 2001. And while we were appalled to learn of the events, we were overwhelmed with the heartfelt condolences and expressions of concern for us and our country by our many new friends in southern Africa. My sincerest thank you to everyone who looked after us and made sure we felt welcome and safe until we were able to return to the United States.

Regional Visits— Desired Outcomes

I had the wonderful opportunity to attend four regional meetings this past fall (Eastern, Southeastern, Central, and Midwest). I want to thank each of the regions and their host committees for their wonderful hospitality. Several regions allowed me time to present the "Leadership is Personal" program that I presented at the annual meeting

in Montreal and I very much appreciated that opportunity. I was struck by several things during my visits. First, the excellent, dedicated, and energetic leadership that is working hard to make their regions a valuable resource for their members. The regions are truly at the heart of APPA's mission of sharing and networking. Our members get their most valuable information from their peers who face similar regional or state issues. Second, the regional meetings themselves were extremely well run and rivaled APPA's annual meeting in quality and experience. Kudos and thank you to those hard working host and program committees. Finally, I was pleased that there were no "earth shaking" issues or concerns from the regions about APPA's initiatives or direction. I believe we are starting to see the benefit of the development of the vision, mission, and desired outcomes by keeping the membership informed and on the "same page."

Center for Facilities Research—Our Mission of Research

The Center for Facilities Research (CFaR) continues to move forward with excitement. A retreat was held last fall and attended by a number of people representing a broad cross-section of APPA's stakeholders. Vision and mission statements for the program have been developed and a preliminary research structure was identified. This past spring work on a draft of the business plan was completed. This plan includes a management structure, a staffing plan, an operational plan, a technology plan, a financial plan, and a schedule for implementation. The final piece, a marketing plan, will be developed this summer and fall. A number of pieces of the business plan have already been implemented including parts of the technology plan, staffing changes, and the recently approved name change of the Information Services Committee to the Information and Research

APPA continues to explore partnerships with a number of organizations. This past year APPA created a strategic alliance with the International District Energy Association (IDEA).

Committee. The schedule, per the original Business Plan Request, calls for continued development of CFaR during the next year with full implementation and roll-out during the 2003 Educational Facilities Leadership Forum.

Strategic and Other Alliances—Collaboration

I had an opportunity to attend the Council of Higher Education Management Associations (CHEMA) this past January. This organization consists of representatives from over 30 nonprofit organizations that support higher education (i.e., APPA, NACUBO, SCUP, ACUHO-I, CUPA-HR, etc.) APPA has been playing a leading role in identifying collaborative issues and promoting partnerships where appropriate. As a result of our association with CHEMA, we have participated in several publications, cosponsored numerous conferences, and will be co-hosting several annual meetings with NACUBO and SCUP in the future.

APPA continues to explore partnerships with a number of organizations. This past year APPA created a strategic alliance with the International District Energy Association (IDEA). This organization brings together professionals involved with distributed heating and cooling systems that are used on many of our campuses. I am sure that this will be a valuable alliance for APPA's members.

Budget—APPA Stewardship

Finally, I am concerned about the impact of the current economic climate on APPA. As I visited with many of our colleagues around the country, it is clear that most state schools and many private schools are facing budget decisions this year and are being told to plan budgets for next year with 5 to 15 percent reductions. In addition, a number of states have implemented out-of-state travel bans. Because of the concerns raised by these events, the February APPA Board meeting had extensive discussions about the potential impact of the economic climate. The APPA staff did an excellent job of preparing and providing supporting data for various scenarios. These scenarios ranged from the economic climate having a significantly negative impact to only a moderately negative impact. The result of these discussions was a prudent budget that is sensitive to our members, budgets and considers the impact of membership retention, program attendance, and business partner support while still allowing APPA the ability to carry out its mission.

This mission includes moving forward in several significant areas. The APPA office has realigned several staff members with new duties to address the increasingly important technology support. Also, we are continuing to address technology needs through the addition of new software. These continuous improvements will allow APPA to meet the upcoming needs of CFaR, e-commerce, international communication, and other APPA initiatives.

APPA Programs

Each of the Vice President reports contains exciting accomplishments, and I do not want to steal their thunder. However, I do need to acknowledge the great work they have done over the past year. The Education Committee has completed a total

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transformation of the annual meeting into the Educational Facilities Leadership Forum. This is not just a name change but a complete revamping of the educational experience. In addition, the Education Committee has been working diligently with NACUBO to organize next year's co-located meeting in Nashville, Tennessee.

The newly renamed Information and Research Committee has developed a technology plan and has begun implementing it. Archiving APPAinfo list conversations for future reference, creating a database and search engine that is Web enabled, and full e-commerce of electronic (PDF) files (important to our international membership) are just a few of the things already available or soon to come. In addition, they have been successfully shepherding the development of CFaR.

Archiving APPAinfo list conversations for future reference, creating a database and search engine that is Web enabled, and full e-commerce of electronic (PDF) files (important to our international membership) are just a few of the things already available or soon to come.

The Professional Affairs Committee is totally redoing the Facilities Management Evaluation Program, complete with handbook, training guides, and a training program for the team members. The Awards and Recognition Committee has worked hard to organize the inventory of awards and to oversee the award process.

The Membership Committee has worked tirelessly to accomplish an excellent renewal rate that is most amazing in this economic climate. It is particularly pleasing to see that these accomplishments continue to remain tightly focused on our strategic plan, ensuring that we are using our resources wisely.

Finally, I wish to acknowledge and thank Lander Medlin and the APPA staff. Having worked very closely with them for over a decade, I can honestly say that APPA is truly blessed with a focused and hardworking staff dedi-

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cated to making APPA an outstanding organization.

It has been an honor to represent APPA at a number of venues during this past year and to work and participate in the leadership of APPA with so many wonderful people. I look forward to serving APPA in the future.

Immediate Past President's Report

by John P. Harrod Jr.

This report has been a challenge for me to write. Not for lack of interest, but because it will bring to closure my terms as APPA's President-Elect, President, and Immediate Past President. The past three years have been filled with wonderful

experiences, a few challenges, and unfortunately, an international tragedy. During that time, I have come to appreciate more and more the dedication of APPA staff, the unselfish commitment of the APPA leadership, and the loyalty of our membership. I am thankful for the opportunities you have given me to get to know so many of you.

Last year, the theme of our annual meeting was Moving Beyond Boundaries. During my oral and written reports I often suggested that we all should "reach out and touch someone." The goal was to extend membership and partnership in our association to others outside of our traditional circle of associates, and to "bring along" the next generation of individuals into our profession. I truly believe that alliances with other professionals and the development and inclusion of the next generation will enhance our organization's ability to better serve our members and our member institutions.

We continue to be a dynamic association. Even during these challenging economic times, our membership has remained relatively stable, and new alliances continue to be established. We are recognized as an association of professionals with whom others want to be affiliated. It is important that we not stand on our accomplishments; we must continue to "reach out...!"

In September of 2001, I was privileged to be part of the APPA delegation that traveled to Cape Town, South Africa to meet with the membership of TIMCON, a group of facility managers from southern Africa who were interested in aligning with APPA. That group has since reorganized and is known as Higher Education Facilities Management Association-Southern Africa (HEFMA-SA). Robert Kelley, from the Australasian Region, has been working closely with the HEFMA-SA group, guided by Ferdi Pieterse and Stan Dennis, who have assisted them

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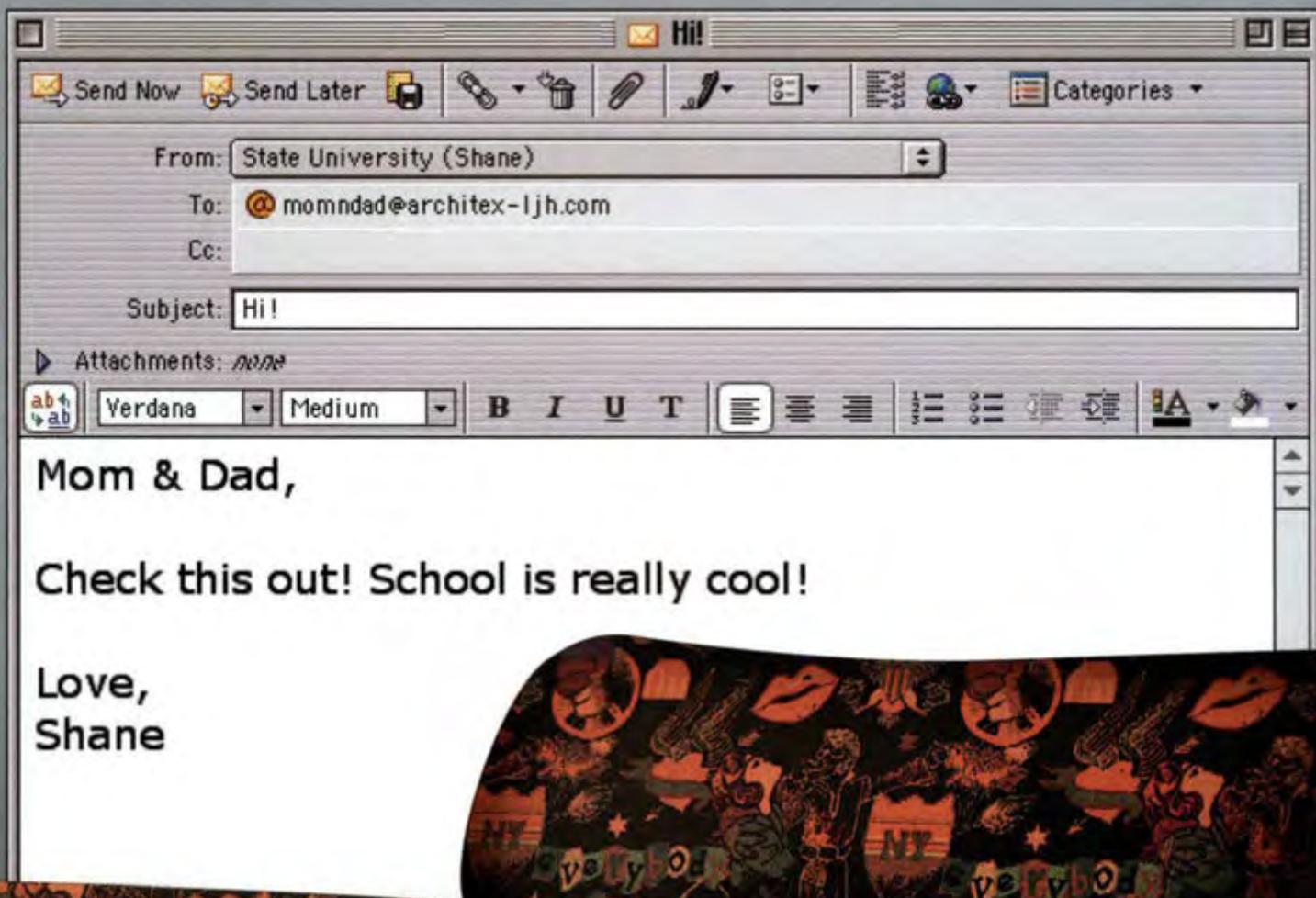
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during the organizational and developmental stage. Great progress is being made!

We often talk of partnerships, professional networks, and the lasting friendships that develop among APPA members. I know from experience that such talk is true. I also know that "Moving Beyond Boundaries" pays great dividends. The APPA delegation was in South Africa on September 11, 2001. Shortly after receiving word of the terrorist attacks and hearing that American travelers should take extra caution, I commented to one of the meeting attendees that, "I guess that I should start watching my backside." He replied, "Don't worry, we will take care of you." And take care of us they did! We were so very fortunate to have friends ready and willing to assist us while we were grounded so far from home. As you can imagine, our visit was a very emotionally moving and truly rewarding experience.

The South Africa visit is an example of how these past three years have been—emotionally moving and truly rewarding. At times, it is a bit difficult to think that all of it is coming to an end. But I know that the best part will never end. The sights we have seen, the spectacular events we have enjoyed, and the friends we have made will always be a part of our life. Jane and I have fond memories of this great experience. We have been honored to serve APPA. We thank you for the opportunity!

President-Elect's Report

by Philip L. Cox

My 'official' duties as President-Elect were to begin in September 2001 when I arranged to attend the RMA regional meeting in Tucson. My flight was scheduled to depart Ithaca the afternoon of September 11, 2001. When flights were grounded across the United States for several days following the terrorist attacks of Sep-

tember 11, my plans to visit RMA vanished. I look forward, however, to attending the 2002 RMA regional meeting in Banff this fall.

AAPPA

Some degree of normalcy was restored to air travel by late September 2001, which allowed my wife Marsha and me to travel to the annual AAPPA meeting in Australia. We visited Auckland, New Zealand before arriving in Sydney. Our travels also took us to Australia's capital, Canberra, where the joint AAPPA and ATEM meeting was held; then on to Adelaide, and finally to Perth.

I came away from our visit convinced that APPA must find ways to increase our Web-based communications to overcome the geographic distance that separates AAPPA from the North American regions.

During this opportunity of a lifetime, I learned many things about our AAPPA colleagues. As many people had predicted, I discovered first-hand that the hospitality shown by the people of New Zealand and Australia is second to none in the world. What most impressed me about the members of AAPPA was their leadership. They are providing tremendous services to their membership through benchmarking, networking, recognition, and the offering of excellent educational opportunities.

I came away from our visit convinced that APPA must find ways to increase our Web-based communications to overcome the geographic distance that separates AAPPA from the North American regions. When we do this, we will be better able to share resources with other members.

Globalization

APPA's vision is to become a "global partner in learning." It was the *global* part of the vision that was discussed at length during the mid-year Board of Directors meeting. The Board is starting to realize that our global vision is coming true in a number of ways, such as our Australasian membership and our strategic alliance with the Association of University Directors of Estates (AUDE) in the U.K. In addition, APPA is in the process of forming a relationship with higher education facilities professionals from several southern African countries and from Mexico. Plus another U.K. association and a German association have expressed interest in forming ties to APPA. And for the first time ever, a member from the AAPPA region ran for President-Elect in the last election. All these advances toward greater globalization have raised the urgency for determining how we can better connect with our AAPPA members and how we will collaborate with other international associations in the future.

Strategic Plan

The desired outcomes of APPA's strategic plan are *competency, credibility, and collaborative relationship-building*. One important way in which these outcomes are being pursued is through participation in the Council of Higher Education Management Associations (CHEMA). I had the good fortune to take part in updating CHEMA's strategic plan and to examine the trends, challenges, and opportunities facing all of us in higher education. CHEMA is a perfect example of how professional associations can team up to do more for their constituents than they could ever hope to do alone.

Diversity

In the coming year of my presidency, I believe the time is right for our association to take a look at itself and examine the lifeblood of our organiza-

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tion—the membership. Not only do I hope that our membership base can grow and be strengthened by this growth, I also hope that we can increase our diversity. In the areas where our differences may be limited, I want to remove barriers to inclusion in APPA and in the facilities profession that we serve. As we move to increase the diversity of our membership, I believe we should pay particular attention to gender, race, age, and, in the interest of our globalization movement, nationality. By building on our many strengths, I am convinced we can broaden our diversity to more closely reflect the inclusiveness that is so highly valued by our constituent institutions.

Secretary-Treasurer's Report by Jack Colby

The fiscal year ending March 31, 2002, has been a very challenging period as APPA responded to the immediate economic impacts of the September 11 attacks as well as the long-term impacts of the recession. Only through aggressive scenario planning and staff actions to control costs have we been able to once again meet our budget while making a contribution to reserves.

Graph 1 depicts a six-year history of revenues and expenses for our association. The 2001/2002 fiscal year ended with a modest \$70,900 surplus thus allowing a \$70,000 contribution to reserves for capital and operating expenses. This year's contribution brings us closer to our goal of having our liquid assets be equivalent to 25 percent of the operating budget and a capital reserve of 10 percent of the

estimated replacement value of property and equipment.

A portion of the reserves is invested in equities based on the new investment policy approved by the Board last year. Although these investments saw the expected decline when the economy faltered, they have rebounded and we expect the modest recovery to continue.

There are many factors that impacted our financial performance. The

Only through aggressive scenario planning and staff actions to control costs have we been able to once again meet our budget while making a contribution to reserves.

annual conference in Montreal, although very successful from a program perspective, experienced higher costs and lower revenues than expected. The Fall Institute had to be canceled and rescheduled for November which added additional administrative expenses. Other educational programs were also impacted as travel was slow to recover and the effect of the declining economy was evidenced in declining enrollment in these programs. The implementation of a recovery strategy by the APPA staff provided higher than expected revenues for publications, advertising, and job listings. This, in conjunction with significant reductions in expenses, allowed APPA to meet its obligations and realize a modest surplus. Revenues for the year by source are displayed on Graph 2.

Graph 3 indicates how funds are used by the Association to support educational excellence by providing quality leadership and professional management to our members through education, research, and recognition in the educational facilities field.

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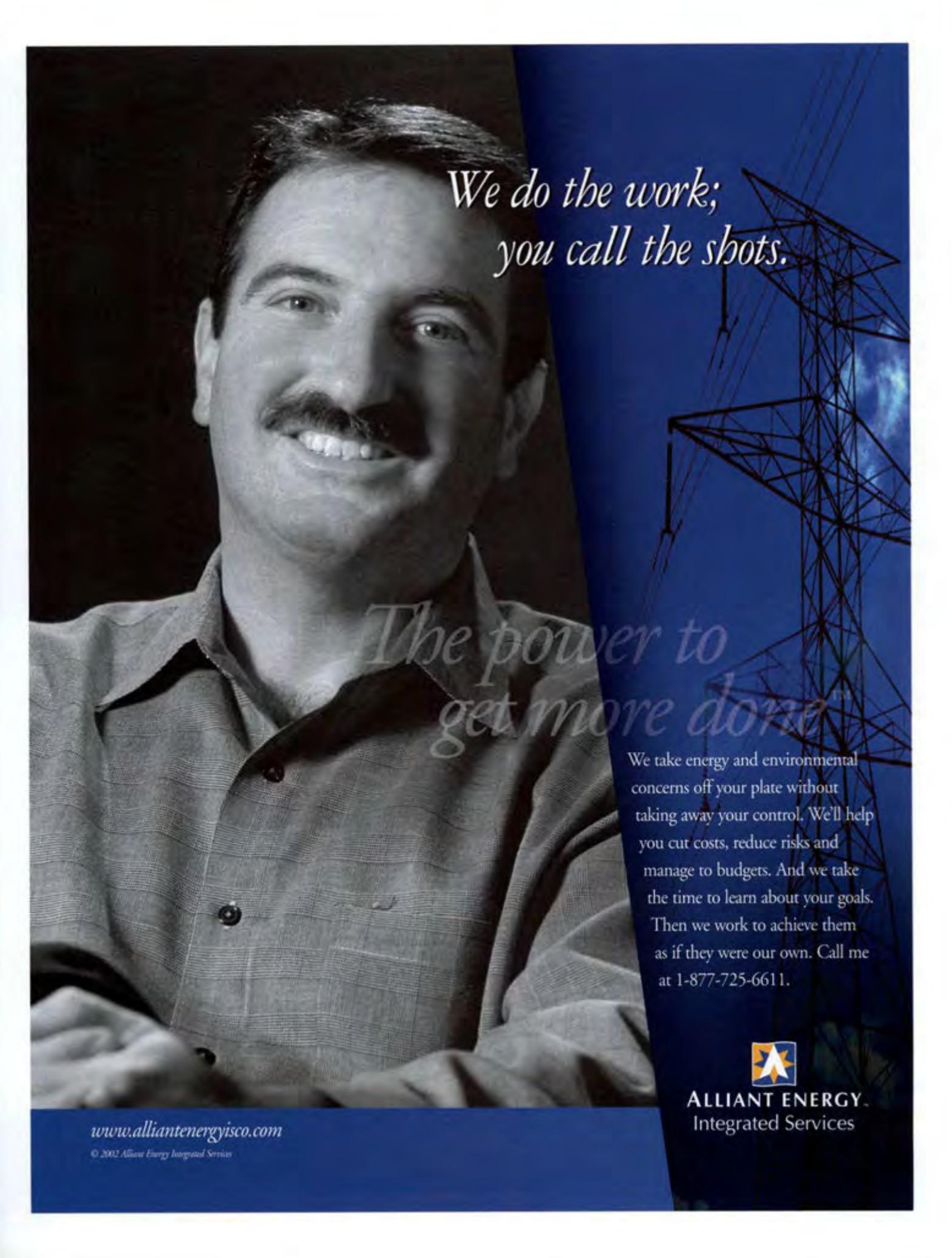
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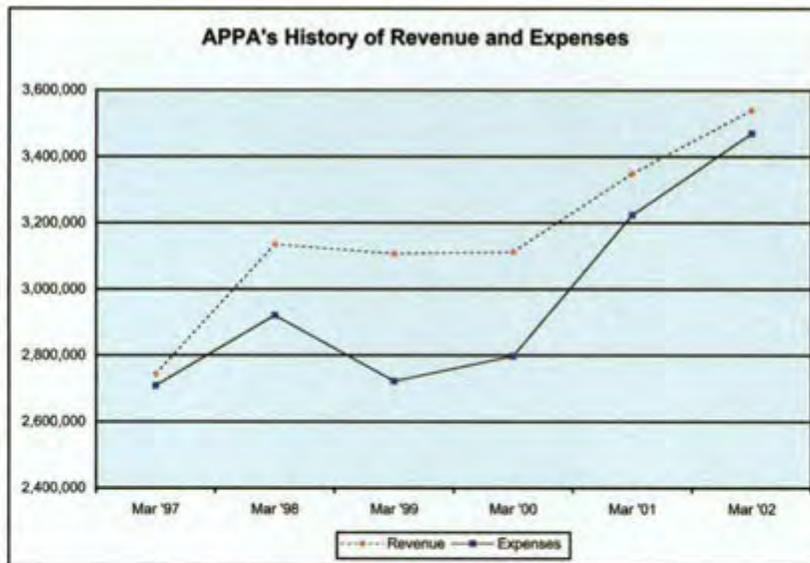


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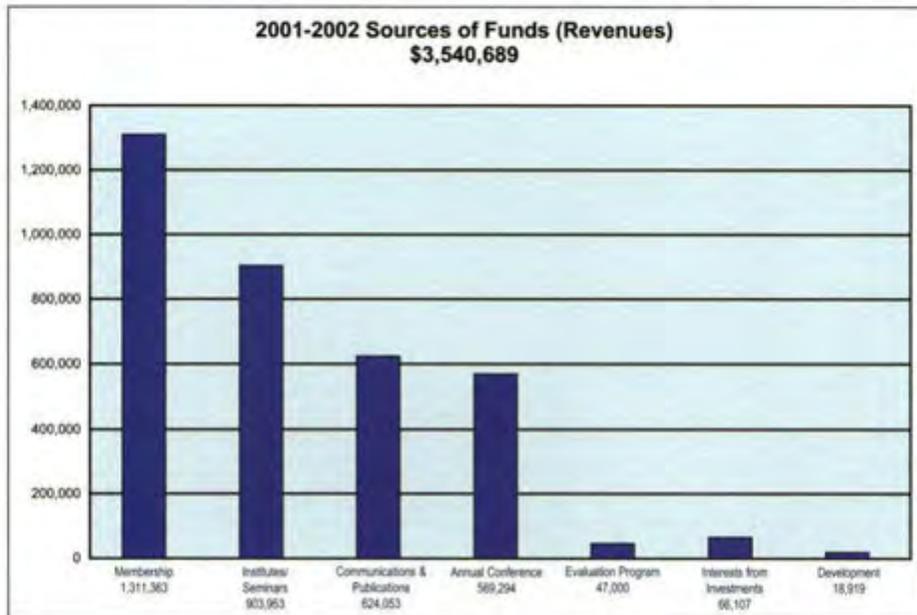
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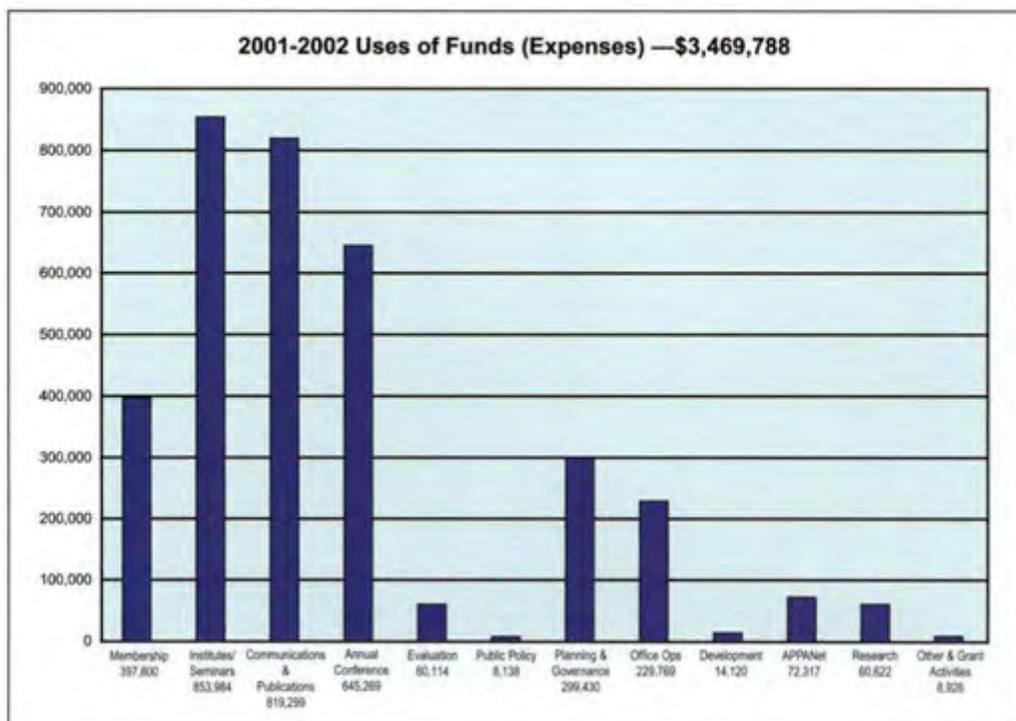
Graph 1



Graph 2



Graph 3



Although the bulk of our spending is focused on education, member services, the annual meeting, and publications, we continue to provide support for research in educational facilities through our investment in the Center for Facilities Research and other ventures. Ongoing efforts to create valuable tools for our membership such as SAM, *The Strategic Assessment Model*, *Operational Guidelines for Grounds Management*, *Maintenance Staffing Guidelines*, *Environmental Compliance Assistance Guide for Colleges and Universities*, and others demonstrates the value of APPA to our profession.

This year the membership approved Bylaws changes that provided the President with discretion in setting committee terms to allow for the establishment of staggered renewal of committee membership by each region. Also, the name of the standing committee for Information Services was changed to Information and Research to reflect the changing emphasis of its mission.

For further details of APPA's activities, members may find the Board of Directors meeting minutes online at www.appa.org/about/minutes/.

Vice President for Educational Programs

by Jim Roberts

First, let me start by commending the APPA staff for all they do to make things happen for Educational Programs. Andria Krug and Suzanne Healy have been our mainstays in preparing for and providing all our educational professional development needs. With the addition of Deirdre Bourke (although we will miss some of Suzanne's time with the realignment) we are prepared to move forward, providing for the changing needs of our organization. Lander Medlin's support and assistance is invaluable in finding presenters and

contacting organizations to financially support our increased cost of doing business. That leads me to thank the business partners who make us successful through their presentations, morale, and financial support.

The charge of the Educational Programs Committee is educational program development and oversight. This includes the Educational Facilities Leadership Forum, the Institute for Facilities Management, and the Leadership Academy. It is this committee that makes these programs the quality they are. We are lucky to have such excellent members providing strength and guidance to this charge. For the year of 2001-2002, our members were Carol Trexler, Rutgers University (ERAPPA); Travis Weatherly Jr., Georgia Perimeter College (SRAPPA); Chris Ahoy, Iowa State University (MAPPA) Pat Apel, Maryville University (CAPP); Mary Vosevich, University of New Mexico

(RMA); Mark Hunter, California Polytechnic State University (PCAPPA); Greg Simpson, University of Auckland (AAPPA); Dr. Sam Polk, Tennessee State University, 2003 Host Committee Chair; Jay W. Klingel, University of Virginia, At-Large; and Douglas Christensen, Brigham Young University, At-Large.

Institute for Facilities Management

In retrospect, we survived the September 11 disaster rather well by rescheduling the September Institute to November. Although the numbers were down, we were able to meet the needs of the organization and provide this important piece of our program to our members. In January we felt some decline in registration. Although numbers were down slightly from other January programs, it was not overwhelming and attendance should easily come back to full stature by the

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beginning of 2003. Jay Klingel, University of Virginia, has taken the reigns of the Institute for Facilities Management. Emily Wren will continue teaching at the Institute but has asked to be relieved from the leadership duties. We appreciate what Jay does as a Dean and look forward to his guidance with this key program. Charlie Jenkins will also be stepping down from his Dean's role but we have been blessed with the addition of Mary Vosevich as our Dean of General Administration and Management. We owe a great debt of gratitude to Emily and Charlie for their leadership. Thank you both for being so generous with your time and efforts.

Professional Leadership Academy

The Leadership Academy is continuing to develop nicely. In its third year with the new format, the program for

this past June had 131 registrants. We continue to work with other organizations to support this program through advertisements to their members and commitments from their boards. This program can be as successful as the Institute if we develop a market that needs this level of leadership involvement. It will happen.

Educational Facilities Leadership Forum

The Educational Facilities Leadership Forum is making its debut during this year's meeting in Phoenix. The education committee has worked since July 2001 making a major overhaul in the old annual meeting program. For the Forum, the committee developed a program consisting of six perspectives, with each examining a critical area within the educational facilities organization. The six perspectives are: Customer Service;

Innovation & Learning, Internal Processes, Financial Stewardship, Technology Management, and Knowledge Management. Each perspective is then examined by industry experts within the following framework: Vision, State-of-the-Industry, Effective Practice, Critical Issues Panel, Industry Best-in-Class, and How To.

To appropriately develop these perspectives and guide the Forum, the committee has put together a statement about each area to help the attendees understand what they will find when they attend. Each perspective has stated "Learning Outcomes" to again clarify this new program to our attendees. As you will see, this is truly a different conference than we have provided in the past. It should be one of the best conferences available for facility professionals. We are excited about the potential of this program.

Other Programs

We have been able to provide another joint program with NACUBO—the Institute for Facilities Finance. This year, the program exceeded our expectations, with attendance as well as quality. It remains important for us to provide different opportunities to our membership and this program has been an excellent indicator of what we can do with other organizations.

Closing Thoughts

It is the committee's intentions to focus on the programs we have in place and provide them within the budgets set before us. I am proud to be a part of APPA. I look forward to another year expanding our programs and developing new opportunities for our membership and education facilities professionals. Thank you for allowing me the opportunity to serve.

Continued on page 18

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Vice President for Information and Research

by Vickie DeWitt

Beginning with a name change for the committee to reflect our expanded focus, you can see that the year has been one of growth and development. The changes that were made are aimed at member interests, increased member participation, better international accessibility to information, increased recognition of member accomplishments, and increased ability to find information electronically. We hope that you will be as pleased with the accomplishments and continuing plans as we are. Current members of the committee include: Joseph M. Lalley, Cornell University (ERAPP); C.R. Lyons, Florida Gulf Coast University (SRAPP); Thomas Dale, University of Saint Thomas (MAPPA); Scott Turley, University of Arkansas (CAPP); Harvey D. Chace, University of New Mexico (RMA); Debbie Aguilar, University of Southern California (PCAPP); Alan Egan, University of New South Wales (AAPP); Maggie Kinnaman, University of Maryland/Baltimore, At-Large Member; and Vickie DeWitt, Kansas State University, Vice President.

Comparative Costs and Staffing Survey

The utility section of the survey was the most troublesome the last time we collected data. We looked at the problem and determined that improving several of the definitions, adding definitions where needed, and clearly linking the MBTU calculator to the utilities questions will improve the instrument. We wish to emphasize completing what can be done easily and make the salary information optional. We will still produce a book, a CD, and hope to get to the Web tools that will allow users to produce custom reports. We

will explore the possibility of adding a "green" section and one on capital renewal/crumbling classroom info.

Strategic Assessment Model

The SAM Task Force continues to move ahead with implementation guidance for members. Specific tasks they have accomplished include updating the Web presence and the publication of an article in *Facilities Manager*. Still ahead is the development of a Web survey format for the next time data is collected. This task force will also present a session at the Educational Facilities Leadership Forum, focusing on the importance of measurement and how the SAM self-assessment tool can assist members. Case studies with a financial perspective will help explain the process.

Website

Many of the new programs and changes that are occurring throughout our organization are reflected in the updates to our website (www.appa.org). Perhaps the most important change is the reorganization of personnel within APPA's office. Suzanne Healy, Medea Ranck, and Steve Glazner will make up the new Web Team. They will focus on keeping the website up-to-date and implementing advances in archiving and conversion of files to downloadable PDF files. This new focus will bring alive some of the ideas we have had about searching archives, downloading information, providing quick availability to international members, and offering a more user friendly website. A technology assessment survey has recently been completed to determine the level of usage and interest from the members.

Publications

We are delighted to welcome Betsy Colgan to fill the role of publications manager for APPA. Steve Glazner will still retain overall responsibility for the magazine and the publication schedule. Between July/August 2001

and May/June 2002, we had 19 first-time contributors to *Facilities Manager*: Sarah Bieck, University of Wisconsin/Madison; Garry Bradley, RMIT University; Thomas W. Brady, Fairfax County Public Schools; Jeff Buenting, University of Illinois/Urbana-Champaign; Patrick S. Daly, University of Massachusetts; Robert P. Dillman, University of Virginia; Shari L. Ellertson, Iowa State University; Elaine Gossett, Emory University; Jacqueline Hall Kelly, University of Missouri System; Bill Lucksted, Grand Valley State University; Derrick Manns, Madonna University; Con Mozjerin, RMIT University; Ron Opp, University of Toledo; David W. Polensky, Gage-Babcock & Associates; Robin Smith, Emory University; William Stauff, Erskine College and Seminary; Mike Thompson, Gage-Babcock & Associates; Janet Walls, Grand Valley State University; Richard L. Walter, University of Delaware. We appreciate their input and look forward to further contributions.

The Rex Dillow Award is presented to the author of the best article published in *Facilities Manager* during the previous calendar year. Eligible articles are those written by a full-time employee, from any department, of an APPA member institution of higher education. We are honored to name Walter Simpson from the University at Buffalo as this year's recipient of the Rex Dillow Award.

We are very proud of the number and quality of publications that have been published this year. Sales have been tremendous. New publications available in July include the long-awaited *Maintenance Staffing Guidelines for Educational Facilities* and the *Environmental Compliance Assistance Guide for Colleges and Universities*. *Facilities Finance* will follow in the fall. Future planned publications include the 2001-02 *Comparative Costs and Staffing Report* and *Facilities Supervisor's Tool Kit: Nuts and Bolts of Supervision*. A space planning anthol-

ogy and a building commissioning book are in the planning stages.

Center for Facilities Research

With a vision to be "an internationally recognized resource supporting learning environments" and a mission of "advancing the body of knowledge of facilities management through research, discovery and innovation," the Center for Facilities Research is moving ahead in its development. We plan to roll out the program at the 2003 Educational Facilities Leadership Forum in Nashville.

There have been two meetings during which the basic structure for research and research projects has been developed. This process is ongoing, with the foundation fairly well established for about half of the level for research. Web enhancements are essential to the sharing and distribution of information related to research. An advisory council and a research review panel have been

With a vision to be "an internationally recognized resource supporting learning environments" and a mission of "advancing the body of knowledge of facilities management through research, discovery and innovation," the Center for Facilities Research is moving ahead in its development.

established to assist with flow and content. Methods to measure success are being developed and enthusiasm mounts as we move toward a "ready" date.

The Information and Research Committee is looking forward to the work we have before us during the coming year. Your input and ideas are welcome and will help steer us in directions that make our organization stronger for you.

Vice President for Professional Affairs

by Michael Besspiata III

New Leadership

Chris Christofferson resigned from the position of Vice President for Professional Affairs during the February 2002 Board Meeting. After a Board vote, I was elected to fulfill the remaining term (through July 2003). My first meeting in this position was April 4-5 with the Professional Affairs Committee (PAC), followed by a meeting with the Awards & Recognition (A&R) Committee on April 6. I want to thank Jack Colby for coming to these meetings to help in the transi-

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tion and for keeping me updated on all processes. I will have a busy year trying to catch up on the combined workings of these two committees. My main goal has been to have a member packet ready by the Educational Facilities Leadership Forum in Phoenix for all current members and for new members. This packet will contain the responsibilities of committee members and provide some detail on how the committees work in

evaluating either institutions or individuals.

Facilities Management Evaluation Program

The revamping of the Facilities Management Evaluation Program (FMEP) is nearing completion and final drafts are expected from the FMEP Task Force during the Forum in Phoenix. I want to pay special recognition to the following task force

members: Charlie Jenkins, Ron Hicks, Jim Christenson, Val Peterson, Doug Christensen, Jack Hug, and Task Force Chair David Cain. These members have done an excellent job in this process. David Cain made a presentation on the FMEP update at the PAC meeting in April. The new procedures should be in print for the 2003 Forum for both institutions and team members. There was discussion of using a "CD" business card for FMEP evaluators that would contain the entire process and also contain information that could be used as a promotional tool. Dates and scheduling of FMEPs were discussed to prevent quick turn-around requirements.

Award for Excellence Program

The newly designed Award for Excellence Program has gone through its second year of submissions under the new format. Three schools have applied for the award for 2002. The new guidelines are excellent and APPA encourages all institutions that excel in their operations to apply.

Effective and Innovative Practices Award

This is the first year for the Effective and Innovative Practices Award and if the number of submissions is any indication, it was a great year! There were 26 submissions for this new award. Several institutions submitted multiple papers for considerations. The selections were narrowed down to Cal State Long Beach for "Mobile Integrated Facility," University of Oklahoma for "EVAL 2000—Performance Evaluation System," Florida State University for "Facilities Maintenance Storefront Partnership with Grainger," University of Missouri for "Volume Purchase of Bid-Documents," and University of Miami for "Using a Formal Asset Management Program to Improve Communication and Maximize the Value of Renovation and Improvement."

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Strategic Alliance

I want to thank Chris Christoffer-son for his work in obtaining the strategic alliance agreement between APPA and International District Energy Association (IDEA). The value added through our alliance with IDEA will be beneficial to members of both organizations.

Meritorious Service Award

The Awards and Recognition Committee evaluated and rated ten Meritorious Service Award nominations. Two people were selected and their names were forwarded to the Board for approval.

Pacesetter Award

The Awards and Recognition Committee evaluated and rated ten Pacesetter nominations. Six nominations were submitted to the Board for the Pacesetter Award.

Electronic Submissions

The Awards and Recognition Committee discussed the use of electronic submissions for the nomination process. There will always be a need for face-to-face discussions to evaluate the nominations. But committee meeting time could be shortened by having the nominations submitted "online" before the meeting starts. Online forms could be sent to the regional representatives electronically or be available on the website. One of the goals of the PAC will be to streamline the nomination process by making it more electronic.

I want to thank all the members of the committees for their work during this transition period. Professional Affairs Committee members are: Joe Rubertone, Greg Fichter, Robert Kelly, Bob Hutton, Eakle Barfield, Dan Johnson, and David Cain. Awards & Recognition Committee members are: Ken Bolig, Alan Bigger, Darryl Crider, Tony Ichsan, Greg Wiens, and Darrel Meyer. I also want to thank the staff liaison, Medea Ranck, for her help.

Executive Vice President's Report

by E. Lander Medlin

This has been both a sobering and an exciting year. A sobering one given the tragedy of September 11, 2002, with its impact on human life and the corresponding impact on the economy. Yet, despite these horrific events, APPA has remained the "association of choice" by its members to meet their professional development needs. APPA has also been blessed with the added diversity of emerging international members. Our vision of becoming a "Global Partner in Learning" is continuing to take form. In addition, our diverse portfolio of programs, products, and services has served us well financially. Given the circumstances, we are pleased to have achieved a year-end surplus of over \$70,000. These monies will be placed in our

operating and building reserves funds which represents 50 percent of our long-term cash reserves goal.

As I mentioned in last year's report, our strategic plan is not only driving the association toward the achievement of the three desired outcomes of competency, collaboration, and credibility, we are thriving as a result of its focus and direction. Progress toward these outcomes is focused ultimately on our ability "to increase the awareness of the facilities profession with senior institutional officers." In essence, this is what an international association can and should do on behalf of its members. Therefore, "to increase the awareness of the facilities profession with senior institutional officers" requires a focus on and support of both the institution/organization and the individual facilities professional.

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Competency

In this regard, APPA is serving its members and their institutions best by setting the guidelines and standards by which facilities management is measured. These guidelines and standards can be found in such tools and resources as the *Strategic Assessment Model (SAM)*, the *Comparative Costs and Staffing* report, the trilogy of staffing guidelines for the custodial, trades, and grounds areas, the *Environmental Compliance Assistance Guide for Colleges and Universities*, statistics from *A Foundation to Uphold*, and the Facilities Management Evaluation Program review (FMEP). FMEP has been significantly revised to align with the Award for Excellence in Facilities Management and now reflects components of SAM, and the Baldrige criteria. The trick is setting out a plan to best implement these standards and guidelines at your institution. APPA offers its institutions this plan—a framework for the planned vision,

direction, performance measurement, and continuous improvement of the organization. Through the application of these tools and techniques, guidelines and standards, you will be assured of collecting relevant data, reviewing strategic management information and reports, and using this information to make knowledgeable decisions, to tell your story effectively to senior institutional decision makers. Indeed, the best way to compete is to have clearly defined products with demonstrable performance metrics. Voila! What are you waiting for? APPA is ready to assist!

However, there is still much to be done to increase the amount of credible data and information you need to make knowledgeable and informed decisions for your institutions. Our new Center for Facilities Research (CFaR) will serve as the structural mechanism for APPA to keep the flow of new information coming and to develop effective and innovative practices. This will allow us to stay abreast

of the changing world in which we live. The duties and responsibilities of several key APPA staff have been realigned this year to reflect these knowledge management needs. Hence, our website is being transformed to ensure that the technology infrastructure is in place so that this type of credible data and information is easily and readily accessible.

As for APPA's present services, I am pleased to report our educational programs (the Institute for Facilities Management, Leadership Academy, and the Forum) continue to hit the mark in both their content and appeal. And, the availability and flow of relevant information regularly occurs via the *Facilities Manager* magazine, APPA's website, and the APPAinfo list. Yet, there has been a gap in the availability of a basic, entry-level supervisory training program within the collection of superior educational programs presently available to APPA members and their institutions. This gap will be closed in mid-2003 as we introduce a foundational facilities supervisory training program which will be delivered internationally and locally right at your institution.

Additionally, given your input and feedback, we are looking at the pros and cons of developing a certification program. Because a certification program has serious implications financially, legally, and administratively, we are proceeding with a great deal of care and caution. A survey of the membership will be forthcoming and will guide our efforts and direction during the coming year.

Collaboration

As an international association located in the Washington, D.C. area, we have significant and fruitful opportunities to build and nurture strong ties with other associations and governmental agencies on behalf of our member institutions. With respect to

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Who is Affected by this Notice?

Asbestos Property Damage Claimants

Individuals and entities that own or manage commercial, public and high-rise residential buildings that have asbestos-containing products may be affected including schools, hotels, government buildings, theaters, airports, churches, and other public facilities.

Asbestos Property Damage Claims include, among other claims, the cost of removal, the diminution of property value or economic loss, etc., caused by asbestos in products manufactured by Grace or from vermiculite mined, milled, processed, or sold by Grace.

What Types of Products are Involved?

Grace Asbestos-Containing Products

Grace produced and marketed vermiculite products containing added asbestos primarily to the commercial construction industry. From 1959 to 1973, Grace marketed Mono-Kote 3 (MK-3), an asbestos-containing, wet, spray-applied fireproofing

product used to provide fire protection for the enclosed steel structures of large buildings. Other Grace products included Zonolite Acoustical Plastic, and other acoustical plasters and texture products used primarily on interior ceilings and walls.

Grace Vermiculite Products

Grace mined, produced and marketed vermiculite products, some of which may have contained naturally occurring asbestos. The products were sold to the building construction, agricultural/horticultural and consumer markets. These products included Monokote Fireproofing, Zonolite Concrete Roof Decks and Zonolite Masonry Insulation.

How Do I File a Claim?

To preserve your claim, you must file the appropriate Proof of Claim Form with the Claims Agent so that it is received by March 31, 2003. Failure to file a Proof of Claim Form by the Bar Date may result in your claim not being considered for payment.

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1-800-432-1909 or visit www.graceclaims.com

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our relationship with NACUBO, we experienced an extremely successful collaboratively delivered Institute for Facilities Finance this past March. In addition, a book on this topic will follow and is planned for publication this fall. Delivery of two energy strategies seminars were coupled with our governmental strategic alliance partner, the Department of Energy/Rebuild America (DOE/RBA), this past May and June. Our Leadership Academy was fully subscribed and correspondingly attended by several members of the National Association of Education Buyers (NAEB). Thus, our efforts to deliver a collaborative leadership program for the professions within the higher education institution are beginning to bear fruit. Indeed, individuals across all

departments will gain immensely from the practical application of these essential people skills. Finally, we will continue to work diligently on our 2003 and 2006 Annual Meeting/Forum co-location plans with NACUBO and NACUBO/SCUP, respectively.

Credibility

Interest in APPA from international corridors has exploded this past year. In September the presidents' visited the southern Africa-HEFMA (Higher Education Facilities Management Association), which is expected to become a chapter of the AAPPA Region. Last fall, we greeted a large contingent from Japan at the APPA headquarters office where much dialogue ensued about the facilities profession and the guidelines and approaches used by APPA members

on behalf of their institutions. In March, I visited the United Kingdom to find a strong and viable relationship with AUDE (Association of University Directors of Estates) and much interest on the part of AUE (Association of University Engineers) along with our higher education counterparts in Germany. And finally, I just returned from a four-day visit in Mexico City with a wonderful group of folks from Mexico's Monterrey System of 30 campuses and sponsored by the Tec de Monterrey campus. All of this exemplifies the fact that we are no longer a "local" association (i.e., experienced by the U.S. and Canada alone), but a "global" association being experienced by educational facilities professionals and their institutions worldwide. By identifying with this diversity in our membership, we have the hope of both illuminating our differences and further enlightening our perspectives.

As always, our only competitive advantage is the fact that you continue to choose to become members and remain members. As such, we ask your patience during the coming year as we engage you in short feedback surveys, targeted focus groups, program evaluations, and specific survey research. These activities help us determine future offerings and modify our delivery approaches to better meet your needs from your perspective. All these activities taken together ensure that our focus remains on you to further meet your needs and your expectations. Through these offerings, APPA can help you gain that competitive edge and enhance your professional image. 🏠

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Membership Matters

Looking for Value?

by Don Briselden

APPAs membership, including the membership within the Eastern Region, is looking healthy after a serious decline some years ago. There are many reasons for this current success that go beyond the hard work of convincing members to continue in the association or to join in the first place. Fundamentally, our present and future members need to sense value in joining or sustaining membership, and they need to realize that APPA offers a menu of resources sufficient to satisfy any facilities professional.

One clear aspect of the value of APPA membership resides in the high-quality, high-value meetings that APPA provides, including the annual, regional, and chapter meetings. The annual meeting in Montreal in July 2001 provided an excellent education program. The meeting was well organized, had an impressive layout of business partners, and was held in a thoroughly enjoyable location. This year the format of the annual meeting has been changed. It is now called the Educational Facilities Leadership Forum. Many of you may be attending this meeting in Phoenix even as you read this column. If not, please see the meeting agenda and proceedings, which are posted on APPA's website (www.appa.org). It shows that this meeting was designed to fulfill a wide array of expectations.

Don Briselden is director of facilities management, Phillips Exeter Academy, Exeter, New Hampshire, and is Membership Chair of the Northern New England Chapter ERAPPA. He can be reached at dbriselden@exeter.edu.



Last fall the Eastern Region meeting was held in Hershey, Pennsylvania. It was an excellent meeting and followed up on the 2000 regional meeting in Burlington that was hosted by northern New England chapter. Both of these meetings were rated as excellent. This year the 2002 regional meeting will be held in St. John's, Newfoundland, September 29 through October 2, 2002. Certainly, in terms of professional level meetings, the membership receives an excellent value for attendance.

Closer to home, we can reflect on the well-run chapter meetings that occur twice a year in the northern New England chapter (Maine, New Hampshire, Vermont). Our spring meeting, hosted by Bill Gardiner and the Bowdoin College facilities department, provided a valuable educational

experience for more than 150 attendees. The fall chapter meeting will be held at Colby College on October 14 and 15. Please see our chapter website for details (www.erappa.org/nne).

Understandably, few people can attend all of the meetings. However, the geographic rotation of the Forum and regional meetings will provide a periodic attendance opportunity for many. Hopefully, the chapter meetings will provide another distinct and valuable opportunity to a wider base of people that will be more convenient and affordable for them. Overall, the meeting opportunities (the Forum, regional meetings, and chapter meetings) provide something for everyone. This mix of educational programs and the opportunity to exchange ideas and experiences with other APPA attendees provides real value to our members.

Please keep the collective value of APPA's meetings in mind when discussing membership. With your continued membership interests and assistance, I'm convinced that we will see an increase in membership in 2002-03.

Thanks for your help! 🙏

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Executive Summary

The Value of Co-locating APPA's Forum with NACUBO in 2003

by Lander Medlin

The value of co-locating APPA's Forum with NACUBO's Annual Meeting in 2003 (and for that matter, jointly meeting with NACUBO and SCUP in 2006) is captured in APPA's strategic plan. First, our vision of becoming a "Global Partner in Learning" is surrounded by the importance of achieving three desired outcomes of competency, collaboration, and credibility. As such, progress toward these three outcomes is enhanced by our ability to increase the awareness of the facilities profession with senior institutional officers. In essence, this is what an international association can and should do on behalf of its members. A collaboratively held meeting of this type provides an unprecedented connection and opportunity for communication and informal dialogue that can and should enhance the credibility of each profession to the other.

Competency

As funny as it may sound, it is still true, "An educated customer is our best customer!" What better way to educate and inform such an essential stakeholder as the business officer? And, what better way to become more educated and informed about the language and perspective of the business officer ourselves? Co-locating our Annual Meeting/Forum gives both associations the opportunity to share, expand, refine, and transfer the body of knowledge of our respective professions—facilities management and business/financial management—to



one another. In addition, we have the opportunity to enhance our leadership position as well. So often when we are selling a program or telling our story to the business professional, we talk in "project- or engineering-ese" rather than the language of business and finance.

The combined educational content of these two meetings, captured under one roof—Opryland Hotel, Nashville, Tennessee—gives the facilities professional an enormous advantage in becoming more educated in important business acumen;

provides the business officer a corresponding opportunity to become more educated in the language of facilities and construction management; and gives all attendees the opportunity to examine issues of institutional policy in a way never before explored together. The timing of this event could not be more appropriate, albeit essential given today's educational environment, future needs, and issues.

Collaboration

With reduced resources available at the state and institutional levels, what better time to collaborate or partner on issues and concerns that are essential to the survival and success of the

institution! Here, we will have the opportunity to focus our attention on the importance of facilities management relative to such concerns as: institutional policy, academic planning, budgeting and finance, community building, higher education policy, and physical planning.

From these concerns, it is clear there are four critical issues that not only face higher education, but provide significant opportunities for APPA and NACUBO members to make important contributions. They are: 1) attracting and retaining students and faculty; 2) community-building; 3) the cost of education; and 4) the impact of changing technologies. For example, when it comes to attracting and retaining students and faculty, the quality and character of the *physical campus* continues to be noted as one of, if not the most important, determinants of students who choose a given institution.

As for community building, the most successful institutions are those considered critical to the cultural and economic development of their local and/or regional communities. The cost of education cannot be evaluated without addressing the significance of the cost of building and maintaining campus facilities.

And, finally, the impact of technology is dramatically changing the way education is delivered and is also driving the character of new and existing facilities. By working collaboratively, APPA can have enormous impact on these critical, strategic issues at the institutional policy level.

Credibility

By focusing our knowledge and expertise on some of the specific issues that affect the four "environments" mentioned above, APPA can

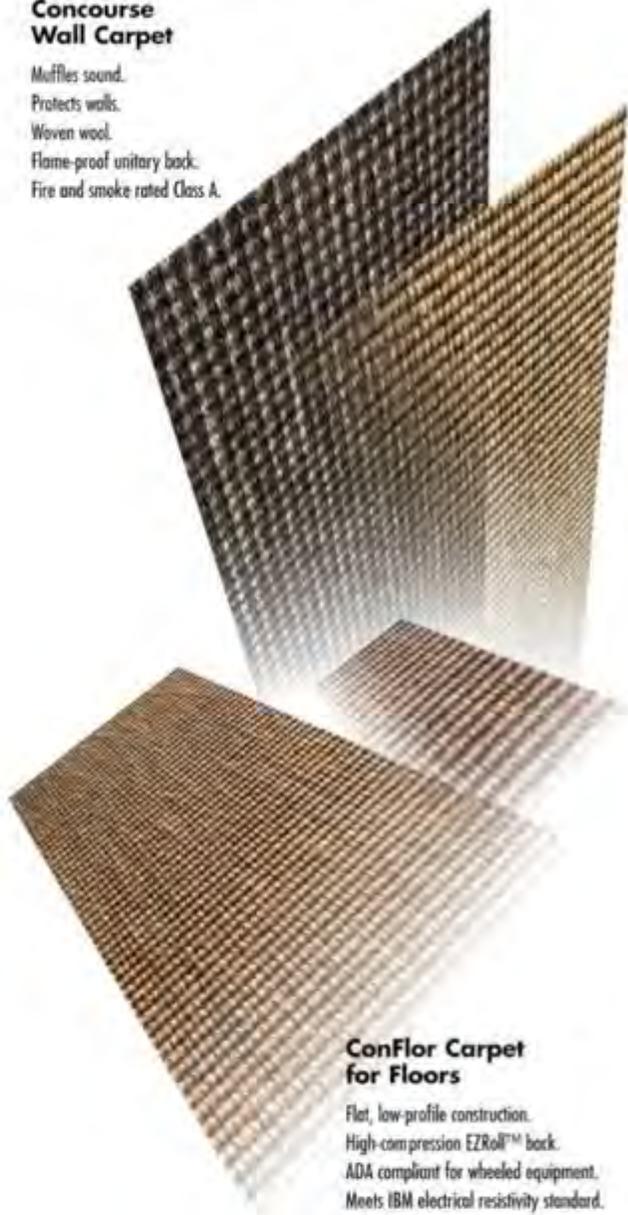
Lander Medlin is APPA's executive vice president. She can be reached at lander@appa.org.

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become more influential in effecting decision making at the most critical institutional levels. A joint meeting enhances APPA's position and capability in determining how best to integrate facilities-related issues into the discussion of institutional policy. In this way, APPA professionals are leading and directing the institutional agenda rather than only reacting to it. In essence, we must showcase just how important it is that facilities management issues be an integral part of the higher education discussion agenda with all institutional officers. These concerns must be demonstrated in a compelling way so that APPA's concerns are everyone's concerns. Our joint meeting in 2003 and the one to follow with NACUBO/SCUP in 2006 allows APPA to promote and represent an issue-oriented strategy and agenda that will enhance the role of the facilities professional in institutional decision making.

In establishing joint meetings and programs, APPA is able to bring your efforts and interests to bear more directly with institutional decision makers. However, you have a choice—attend, participate, and engage in a dialogue that has the potential to continue in a fruitful way when you return to your institution; OR, choose not to attend and miss these opportunities.

I hope you will choose to attend and further the ultimate goal of increasing the awareness of the facilities profession with senior institutional officers. For it is through your attendance, and active involvement and participation, that you will increase your competency, improve your collaborative abilities, and enhance your credibility. 🏢

In the preparation and writing of this column, the author wishes to give enormous credit and thanks for the advice, guidance, and previous writings of Rod Rose—an APPA At-Large Board member and principal with the JCM Group located in California.



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PERSPECTIVES FROM THE ANNUAL FORUM RISING TO THE CHALLENGE



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Trends and Opportunities: What are the Pressure Points for Asset Management?

by Brenda Norman Albright

Colleges and universities operate in a complex environment. They are affected by political realities, fiscal realities, and competitive realities, and these realities change from year to year and decade to decade. What are the realities now and what do they mean for next year? The year after? Five years after? Ten years after?

Political Expectations

What do political leaders expect from higher education? Recent surveys of governors and legislators show three major expectations. First, **accountability**—When political leaders talk about accountability, they mean that they want to hold institutions responsible for meeting state priorities and local and regional needs. The emphasis is on service, which represents a paradigm shift. Rather than the states providing resources to meet the needs of the institutions, the institutions are expected to meet the needs of the states and its citizens.

Political leaders are responding to citizens' expectations for a high quality of life. Higher education is seen as an entry point to an individual's future quality of life, both financially and socially. Political leaders are responding to employers' expectations of well-qualified individuals entering the workforce. A well-educated workforce is recognized as essential for strong national, state, and regional economies.

Second, **collaboration**—When political leaders talk about collaboration, they want to achieve closer collaboration between policymakers and education leaders, among colleges, within education, and with other public services. They expect colleges and universities to be problem solvers in addressing state needs in the areas such as improving public schools,

building a stronger economy, and having a cleaner environment. In a sentence, political leaders want colleges and universities to share their human and physical assets with the citizens of the state and the community.

Third, **performance**—When political leaders talk about performance, they focus on funding. They believe that specific institutional performance measures should be tied to funding and that institutions should be rewarded or penalized for their performance on these measures. Thirty-six states now link some share of their tax-dollar support to performance. Even states that do not allocate funds based on performance periodically grade the performance of institutions through report cards or benchmarks or performance reporting. This parallels reporting of performance for public schools; this parallels performance reporting for other services. Performance funding and reporting is not unique to education. Even states are receiving higher education report cards. In 2000, the National Center for Public Policy and Higher Education issued a "report card" grading each of the 50 U.S. states.

When political leaders are asked, "What should colleges do to cope with increased demands?" their responses include a belief that colleges and universities should use technology to deliver more course offerings. Colleges and universities should "go to" the student, rather than expecting the student to come to them. Political leaders believe that technology will result in significant cost savings and will want institutions to use these cost savings to respond to increased demand.

Second, political leaders believe that colleges and universities should reallocate within their institutional budgets to improve efficiency. In other words, do more with less. In a recent conversation with a governor's budget director, who was very supportive of colleges and universities, he asked, "Have colleges and universities done all that they can to make cost reductions?" He was reflecting a general sense that higher education has not done all that it can to effect savings. Some external leaders see higher education as richly funded; this perception is strengthened with media reports on com-

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pensation packages of key institutional leaders and athletic coaches.

Third, because of public concern about rising prices, political leaders want to see colleges and universities limit tuition increases. In the past decade, college prices have outpaced inflation by about three percent a year; for the current year, the gap will be even greater. All public surveys show that the public believes that higher education is not affordable and that their children will not be able to attend college because of the cost. Given the plethora of financial aid available from the federal government, state government, institutions, and private sources, many see higher education as affordable. Families and students may have a number of misperceptions about price, but concerns about affordability are realities and they will not go away.

Some Colleges' Views

Many trustees of colleges also see accountability, collaboration, and performance in much the same way as political leaders. However, colleges' internal leadership, presidents, senior administrators, and faculty have a different perspective.

Accountability. Colleges believe that they are accountable, and that most accountability efforts are too cumbersome and the measurements for performance too imprecise to truly reflect their efforts. While colleges routinely measure what students learn, when legislators and others external to higher education talk about accountability, colleges and universities usually respond with, "Trust us" or "Leave us alone" or "But we do a good job, and accountability is measured through our rigorous accreditation process."

Collaboration. Colleges and universities view each other as competitors and see academic collaborative efforts as threatening because they "give away the competitive edge." They believe that collaboration is difficult to implement and that the greatest potential may be for smaller institutions. Colleges and universities are willing to consider collaboration in administrative functions such as purchasing. They believe collaboration works best when it is natural and non-threatening, for example, when institutions within a geographical area negotiate for snow removal. Collaboration outside of the academy is even more complex. In areas of shared responsibility, such as teacher education, higher education is reluctant to take responsibility for collaboration.

Performance. Many colleges believe that performance funding and performance reporting will go away, that they are merely fads or trends. Because institutional comparisons are often made when performance indicators are reported or used to allocate financial resources, performance is a threat because it has the potential to present a negative image. This in turn may affect the college's ability to attract students, particularly the students it desires.

Technology. Colleges see technology as an ever-increasing expense, rather than a tool for cost savings. They believe that to be competitive they must make investments in technology and are not sure how to keep up with constantly increasing

expenses. Colleges and universities are concerned about instruction integration, user support, faculty reward and recognition, planning, commerce, and service.

When asked, "Can you be more efficient?" colleges and universities usually respond with "What about quality?" Similarly, tuition restrictions and caps limit institutional flexibility and are a threat to delivering high-quality programs.

Fiscal Realities

When budgets are cut, higher education is likely to absorb greater cuts than other state-funded programs. This trend is certainly clear in the current year. Thirty-seven states face a budget deficit for 2002-03. The deficits are dramatic. California faces a \$17 billion deficit, about 17 percent of its overall budget. This is the biggest shortfall since World War II. To make ends meet, lawmakers are taking aim at higher education where funding levels are not mandated by federal and state legislation and where investments are viewed to be somewhat discretionary. After all, colleges and universities have other sources of revenue, or so the thinking goes.

How does higher education respond? Colleges and universities are likely to raise prices to students and families to cover these shortfalls. An important reality for higher education is that almost all institutions are becoming more tuition-driven. Families and students are objecting to these increases, and, to attract students, many colleges are emphasizing tuition discounting. It is not clear to what extent these trends are affecting student choice and institutional competitiveness in attracting students. Fiscal realities differ by type of institution. Demand for the most prestigious colleges is growing, while less selective colleges are offering more tuition discounting and larger aid packages to entice students to enroll.

To what extent has higher education financial strength been eroded? One indicator is a business' view. Earlier this year Moody's bond-rating agency changed its outlook for private colleges from "positive" to "cautiously stable," and for public universities the rating was revised from "positive" to "stable." Moody's expects to downgrade the bond ratings of some institutions in the upcoming year—those that entered the current downturn in a relatively weaker position in terms of student demand, financial resources, and net operating revenues, and those that significantly increased leverage in order to finance competitive campus facilities. For many institutions, growing debt to build facilities in order to attract students limits their flexibility to make investments in important areas.

Since higher education is seen as essential to a high quality of life, enrollments are growing in many places. Nearly all seniors in high school expect to continue their education. Nationwide projections are that the number of undergraduates will grow by 19 percent through 2015—from 13.4 million in 1995 to about 16 million. Additional analysis shows that 80 percent of the new students will be minorities, and that many of these students will be first-generation college students. A recent publication by the National Center for

Education Statistics showed that these first-generation students are likely to be less academically prepared for college than other students. The National Center for Education Statistics has a wealth of information about these trends on its website at <http://nces.ed.gov>.

In summary, fiscal realities are: 1) limited resources available from state coffers; 2) student fee increases, and 3) greater demands from students, states, and communities. Students will likely be less well prepared for college which means that more human and fiscal resources are needed to assure their success. The most important question facing higher education is, "How can colleges and universities respond to these realities?"

How Do Colleges View These Fiscal and Educational Realities?

A recent series of interviews with leaders from public and private and two- and four-year institutions revealed ten challenges that they face:

1. The health of the economy and growing demands on state and local tax funds, including tax relief
2. Maintaining strong external support
3. Setting priorities that address state, local, and institutional needs
4. Being competitive and responsive to customers' needs
5. Addressing technology issues
6. Serving students better by addressing non-traditional students needs

7. Addressing affordability and access
8. Addressing enrollment increases, declines, and retention, particularly for minority students
9. Addressing growing regulations and restrictions in areas such as procurement, capital development, and collective bargaining
10. Unfunded mandates, or external directions that institutions should use funding increases for a specific purpose.

How can facilities managers respond to these political, fiscal, and demographic realities and challenges and still protect human and capital assets? In an interview with management guru Peter Drucker, Max De Pree, author of *Leadership Is an Art*, asked what is the duty of a leader and what does leadership mean. De Pree said that the first duty of leaders is to define reality. What is reality for a liberal arts college with 2,500 students? One reality might be that it is a tuition-driven college. If you don't identify tuition-driven as a reality, then you may not put the right amount of emphasis on the recruitment and retention of students.

The first step is to understand not only the realities facing all of higher education, but also the realities of your own institution. The remaining steps are being discussed at APPA's Educational Facilities Leadership Forum in Phoenix, within the focus on Financial Stewardship. 🏛️

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INTERNAL PROCESSES

What Will Facilities Professionals Need to Know?

by Jeffery L. Campbell

The Learning Pyramid

Jenna Jones is a facilities manager who works for a Fortune 500 company. Jenna graduated with a degree in architecture from a prestigious school in the Midwest. Jenna's dream of designing magnificent buildings that would leave her mark on the world was unexpectedly changed when upon graduation she discovered that the demand in the job market had shifted from architectural design to the more generalized field of facilities management. She interviewed with several companies and accepted her current position as an assistant facilities manager with responsibility for five buildings totaling 2.3 million square feet. Before she knew it, she was doing much more than she had been trained to do in architectural school. Now she is preparing budgets, managing projects, performing regulatory and safety compliance audits, overseeing custodial contracts, etc.

Jenna's story is not uncommon. Times have and will continue to change. Jenna has realized that although she has a good understanding of building design and systems, there are many other areas of knowledge that she must still acquire. Thus, the concept of being a lifelong learner will be important to her.

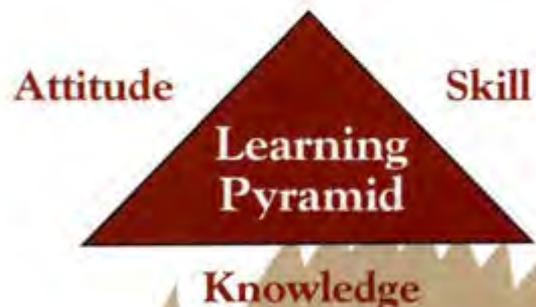
Upon graduation she realized that while she had some knowledge in certain areas (i.e., negotiating contracts), her skill level in these areas was minimal. She learned quickly that knowledge did not necessarily translate into an immediate skill and that her skill level will only come from seasoned work experience.

Jeffery Campbell is the chair of the Facilities Management Program at Brigham Young University, Provo, Utah. He currently serves on the National Academies of Science committee that is researching business strategies for public capital investment. He can be reached at jcampbell@byu.edu. This is his first article for Facilities Manager.



Through the transition, she also recognized the importance of having a learning and cooperative attitude. In her first year, she watched a colleague in a similar position and with a degree in engineering, dig in his heels and refuse to learn and grow in his job. He had not learned that although he was bright and had a good knowledge base, that without the right attitude he would never succeed in his current position.

In order to be prepared for the facilities management demands of the future, the triangle of knowledge, skill, and attitude form a power model that needs to be understood and practiced by facilities professionals.



Trend in University Facilities Management Education

Most universities are still rooted in the traditional disciplines such as engineering and architecture that have not changed for the last 30 years. Some of these traditional disciplines have experienced declining enrollments and lower starting salaries. During this same time, facilities management has emerged as a professional discipline, but very few university programs have adopted this new profession.

The future will require that facilities professionals be well educated in technical disciplines and also receive management training. Currently, there are two models for facilities professionals majors that are being offered in colleges

and universities in the United States. The first model is to earn a professional degree in a technical area such as engineering, construction management, architecture, interior design, and related areas, followed by an advanced management degree that specializes in facilities and management. There are several universities that are offering this model because of industry need and demand.

The second model is to earn a professional degree that incorporates technical facility and property management competencies along with a general management degree at the baccalaureate level. There are only a handful of universities that offer such a degree but they all appear to be very successful. The reason for their success is that they provide graduates with the knowledge, skill, and attitudes needed in the facilities management field.

These two models will continue to grow and develop as the industry continues to demand more specialized training in facilities management.

Current and Future Trends in FM Practice

Facilities managers now need to have a broad array of skills and talents in many areas. Here is a brief look at ten of them:

1. *MasterBuilder*. In the 17th century, the MasterBuilder oversaw the complete delivery of a project. Then, because of the Industrial Revolution and the development of the

assembly line, business operations moved to a divided, separate entity to provide goods and services for the production of building projects. Now architects, engineers, and contractors step forward when it is their time to perform in the assembly line. This is the design/bid/build model of construction. In the last 15 years, the design and the building of a project has evolved under the same roof. As life-cycle planning and budgeting become more important, the industry is moving to the design/build/maintain model. This new model is returning to the MasterBuilder concept and is being filled by facilities managers. Architect, engineers, contractors, and operations/maintenance companies are becoming lesser players in the overall delivery and maintained life of a structure. This building life delivery system maximizes the value of the physical asset. Its practice will continue to grow.

2. *Human, Environmental, and Safety Management*. Ergonomics, safety planning, regulatory compliance, security systems and management, and disaster recovery planning have immediately become more important. Once again, facilities managers must step up and take the leadership role in providing safer places to work.
3. *Space Planning and Design*. This applies to both interior and exterior space. Space planning employing reusable modular furniture systems is being used more often because space needs are constantly changing. Along with

those space needs comes a change in technology for each move. Many organizations are measuring more closely the income and cost per square foot of space. Thus, effective and efficient use of space will continue to grow in importance. Churn rates for space are increasing, as the knowledge worker demands that space be multifunctional.

The knowledge worker of today and in the future wants personalized control of their environment in order to enhance productivity. Space design is and will continue to be an important factor in attracting and maintaining a talented work pool. In the future, planning and design must not only integrate data, power, voice, and video but also lighting, sound, airflow, and temperature. Knowledge workers will want the same conveniences that they experience in their automobiles. Exterior space must also be carefully planned through effective landscape design and by managing resources such as irrigation and electrical lighting use.

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4. *Operations/Maintenance and Outsourcing.* Operations and Maintenance (O & M) is the basic function of facilities management. Technology drives the way that we manage and monitor building systems for preventative and predictive care. Trained experts to maintain these systems will continue to be important. Bathrooms will still need to be cleaned and fan belts will need to be changed. New technology will allow O & M to monitor systems more closely and to be better informed as to their status. Work order processing will be done through wireless personal digital assistants on a regular basis. Much of O & M is now outsourced. Outsourcing is determined on the premise of cost/saving, quality, performance, proprietary knowledge, safety and security, and reliability. There will not be a wave of massive outsourcing, but there will be a growth in outsourcing companies that will try to deliver better overall value to their clients. Every facilities department should be looking at themselves as a separate entity that deals with internal or external customers.
5. *Contracts and Ethics.* In 2001, 74 percent of high school students admitted to seriously cheating. That is more than double the percentage since 1969. Americans cheat the government out of \$195 billion each year in paying taxes. This moral decay is beginning to dramatically affect business relations and costs. Instilling integrity and ethics among employees and contracted companies will continue to be a challenge.
6. *Finance and Real Estate.* Finance departments currently drive and will continue to drive facilities management. For many reasons, there is a big disconnect between finance and facilities. Facilities managers must take a leadership role in bridging this gap. One of the best opportunities might be the creation of a reliable and defensible asset management tracking system that financial managers can understand and believe.
The acquisition, management, and disposal of real estate are an important part of facilities management. The ability to conduct highest- and best-use studies and due-diligence studies is a must. The future will require that better space, real estate, and asset strategic and master planning take place since there are the frontiers that have not been adequately controlled.
7. *Communication and the Delivery of Quality Facility Services.* Because the facilities department is so often viewed as a cost center, its operations must be streamlined, efficient, and effective in order to be viewed as one of the best-run departments in the organization.

Is there any question that the facilities manager must be a master communicator? After all, this is a people business. Client loyalty and retention become the final yardstick in determining how successful a facilities manager really is.

8. *Project Management.* Studies show that over 50 percent of a facilities manager's time is spent on managing some type of construction project and the associated programming activities. Given the variety of new project delivery systems and risk sharing, this area will only become more complicated.
9. *Power and Water.* The growth of our economy has drained our resources and severely impacted our infrastructure. The cost of resources that have been taken for granted will continue to increase; thus, facilities managers must be more efficient in their use.
10. *Information Technology.* With the blending of facilities and technology, it is becoming more difficult to determine where Information Technology stops and facilities start. Historically, there has been a separation between the two. In the future, there must be more shared knowledge and cooperation between these two groups.

Lifelong learning, adapting to continuous change, and delivering services more efficiently will be the driving forces for facilities professionals in the future. 🏠

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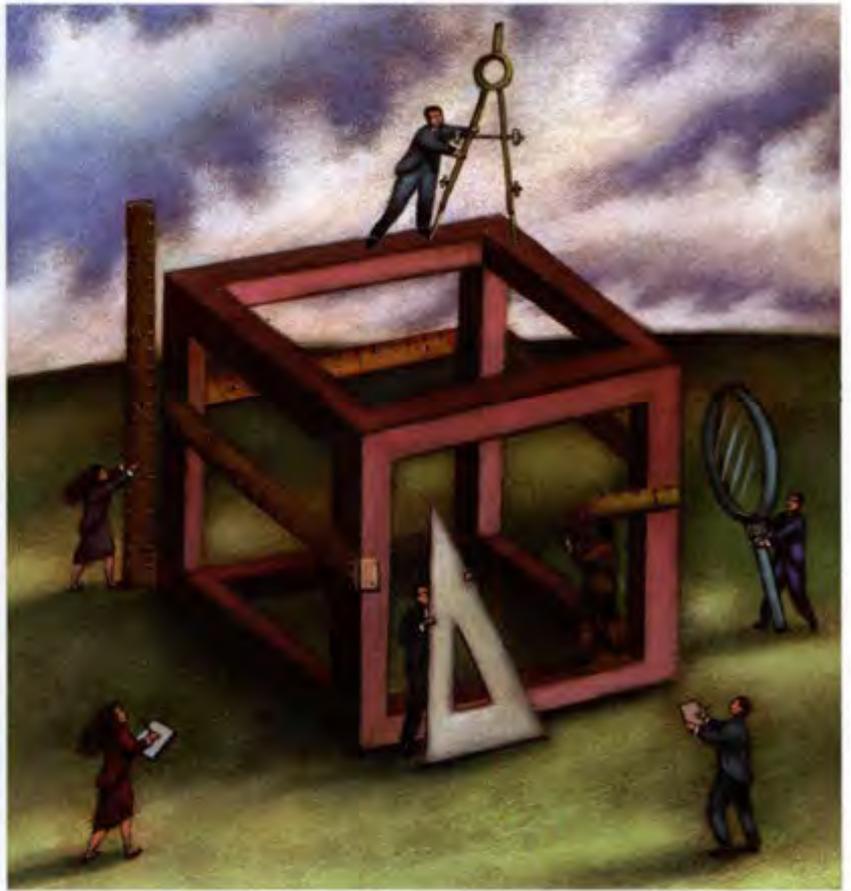
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INNOVATION & LEARNING

Creating Value Through Innovation

by Deb Naughton

Will higher education be the same in ten years? Can you envision how learning will change or how your student population will change? Does your institution consistently ask what it can do better?

If you are not asking these questions today, rest assured that there are innovative competitors who are. The new reality is that innovation is more than the key to success. It is the key to survival.

Advances in technology, changing customer needs, shorter product life cycles, and global competition are making innovation not just a luxury but a practical necessity. Outside-the-box thinking, once a radical notion, is rapidly becoming a cliché. Change agents are transforming today's workplaces, allowing people in innovation leadership positions to take their seat at the table along with other top managers. And on campuses everywhere, online learning and growing numbers of older students are forcing institutions to take a fresh look at who they serve and how they serve them. The lesson is clear: innovate or fall behind. Envision the future, imagine your role in it, and chart a course to make it happen based on what you do best. Now is the time to convert challenges into opportunities.

Understanding Innovation

Although more organizations are talking about innovation, many do not have a real sense of how to achieve it. They create new ideas without focus, or even worse, without creating value. The fact is, innovation is a process of generating fresh ideas for the purpose of creating value for your customers. It is a systematic process that should be aligned with your business strategy and should grow out of your core strengths.

Deb Naughton is senior vice president at Sodexo USA, Downers Grove, Illinois. She can be reached at dnaughton@sodexhousa.com.

From the largest public corporation to the smallest private college, the requirements for successful innovation are the same:

1. *Leadership with vision.* The most innovative organizations are run by leaders who not only see the possibilities of the future but who know how to communicate that vision to their employees.
2. *Deeply rooted values.* An organization's values provide the foundation for its strategy and strategy provides the road map for innovation.
3. *Inclusive culture.* The most innovative cultures empower employees, welcome ideas, celebrate success, and tolerate risk.
4. *Focus on the customer.* The secret of value-added innovation is to put the customer at the center of everything you do.
5. *Open communication.* Innovation thrives with the free flow of information from the top to the bottom and visa versa.
6. *Collaboration.* The best innovation comes from interaction and the power of teamwork that makes the whole greater than the sum of its parts.

Changing the Culture

It has been said that innovation doesn't come from a few brilliant people but from getting the most out of many ordinary people. Time and again, we have seen this notion proven in successful companies who encourage innovation at all levels of their organizations. These companies know that good ideas can come from anywhere. Their secrets of fostering a more innovative culture are not complicated. In fact, they are surprisingly straightforward:

- Equip every employee with the tools to think more creatively and make those tools accessible online.
- Develop a system and process to collect ideas and information throughout your organization.
- Educate your employees so they understand the system and how their ideas can add to the customers' value experience.
- Make it easy for your employees to learn and implement best practices from other organizations.



Most importantly, never stop encouraging your employees to innovate. Empower them with more autonomy and optimal challenges that fuel their interests and intrinsic desire to succeed. Real creativity and innovation comes from people doing what they love and loving what they do.

Following the Leaders

From company-wide training programs to open-door policies, companies are adopting a wide variety of approaches to instill creative energy and foster innovative mindsets in their cultures. 3M lets company technicians spend an allotted amount of time pursuing their own pet projects and visions. Sony gives its designers direct access to the CEO and other top executives.

At Sodexho, where we have a long history of innovation and a strong entrepreneurial culture, we have regularly sponsored Innovation Forums. These events, directed at our internal audience, showcase, promote, and reward a wide variety of Sodexho innovations. This year's Forum "Experience Sodexho" will be held in six locations in the United States and Canada. The Forum will give our employees the chance to share their ideas and expertise while experiencing



the depth, range, and diversity of Sodexho's products and services.

In addition to leaders who have built innovative cultures, there are many leaders who have built innovative business models. Some companies, such as Dell Computer, identified new customer segments and capitalized on the underserved market for online computer purchases. Some innovators, such as Wal-Mart, leveraged their powerful brand, resources, and customer base to expand their product line and move into the grocery business.

Yet another of today's leading innovators revolutionized the buying experience with an unprecedented level of online customized service. Consider how Amazon.com's self service business model has become better than the full service model of many of its competitors.

While these innovators saw and seized new opportunities, they were blessed with competitors who never looked beyond the status quo—whose narrow focus prevented them from seeing the unmet needs of customer segments that offered major opportunities for growth.

Similarly, we are seeing more innovation in higher education. Carnegie Mellon's Center for Innovation in Learning strives to develop innovative curricula to advance the field of instructional science. The Center works with other campus organizations that focus on improving faculty teaching, students' learning skills, and the use of technology in the classroom to enhance the college education experience.

Whether on campuses, in the workplace or the marketplace, today's innovative leaders are envisioning the future, leveraging their core strengths, empowering their people, and focusing on what matters most: creating value for their customers. Sodexho's President and CEO, Michel Landel, put it best: "The ultimate power in business lies with the customers. Understanding the consumer's needs and creating an organization that successfully delivers a product or service that meets that need is something that the successful business person never loses sight of."

In the end, that is what successful innovation is all about. 🏠



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Are You Providing High Quality Service to Your Campus Customers?

by Dean Kazoleas

Across the United States, organizations and their internal units have been moving to customer service models where the keys to value-based management are found in delivering value to the customer and/or stakeholder. This trend is also increasing among facilities units today as they are being held accountable to their campus customers and increasingly face the issue of outside competition. Has your facilities organization adopted a customer service model or a "customer first" set of values? Even if your unit has moved in this direction a second question needs to be asked.

Is your unit providing value to its campus customers? This is a question that almost every facilities manager and administrator would like to answer with a resounding yes! However, are you sure that your campus customers would say that you do provide value? More important, are you sure that you and your customers both define value in the same way?

Research indicates that often customers may define value in a different way than the service provider, which results in a gap between what the customer expects and what is delivered. The end result is dissatisfaction. Having dissatisfied customers on a campus can lead to complaints, frustration, low morale among facilities employees, and in the end may lead to calls for increased competition with outside vendors. The key to satisfied customers is to understand a simple but yet complex formula:

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Customer Satisfaction = Performance/Service – Expectations

While this makes satisfying customers look easy, the truth is that determining how campus customers define quality and responsive service can be difficult to do. It is equally difficult to determine their expectations regarding the services of their facilities personnel. Add to this decreasing budgets and staffing shortages in a post-September 11 economy, and a recipe for dissatisfaction emerges.

APPA's session on customer service at the Educational Facilities Leadership Forum will help you build a customer-service oriented unit that is designed to provide a high level of responsiveness and quality service by remaining in tune to the needs, desires, and expectations of campus customers. Specifically this program will present:

- A definition and examples of customer service models
- A discussion of the general needs and expectations of campus customers
- Methods of monitoring the needs, desires, and expectations of your customers
- Methods of determining customer satisfaction and quality service
- Communication strategies that keep customer expectations in line with budgetary and resource based realities.

These are the facilities models of the future that you will not want to miss. 🏠



Transforming Information into Knowledge

by Paul Meyer

Knowledge shrinks as wisdom grows.

—Alfred North Whitehead, British philosopher

In today's information rich society, the yellow flashing sign reading **Information Overload** is incessantly blinking. Institutions, corporations, communities, and individuals are constantly challenged with information overload. We are continually asking the questions, "Are we making better decisions as a result of the availability of all this information? Are we saving time? Are we saving money?" These and many other questions focus on our ability (or inability) to transform information into useful knowledge and, ultimately, to wisdom.

Information creates a framework for developing knowledge, knowledge drives good decision-making, and wisdom upholds the culture to sustain decisions. A focused effort on the transformation of information to knowledge and knowledge to wisdom is the soul of a successful knowledge management system. Whether your knowledge management system is set up to organize e-mail messages or to integrate the needs of a facility's complex web of users, the fundamentals are basically the same—the ability to organize, interpret, communicate, and make decisions using multiple sources and bits of information.

Knowledge is information combined with experience, context, interpretation, and reflection. It is not just the sum of

what is known that is important, it is the ability to both create and effectively use knowledge that will distinguish successful organizations in the future. Knowledge creation is the act of taking relatively random data from across a broad spectrum and translating that data into a meaningful insightful context.

Knowledge is more than the accumulation of random facts and data relevant to a particular topic. Knowledge is not merely information. It is the transformation of information into a meaningful and insightful context through study, investigation, observation, and experience. Wisdom is the ability to sustain and integrate the collected knowledge through developed cultural norms and common understandings.

Transforming information to useful knowledge that will lead to good decision making is an awesome task. The use of technology as a storage and retrieval tool is widely discussed as the answer to this challenge. New systems and platforms are constantly being introduced providing greater integration, increased storage, and faster retrieval causing greater frustration, increased confusion, and faster tempers for those responsible for these efforts.

Technology and all its positive attributes is definitely leading the charge in assisting organizations in the transformation process, but technology alone is not enough. In addition, a greater understanding of the ultimate application and strategic outcomes as well as an understanding of the application by the end user is vital to the success of a knowledge management system.

Whether the decision maker is constructing a new facility, designing a new product, refining an existing procedure or developing a new business line, there are consistent elements of a successful knowledge management system and process that need to be considered. These elements combine the importance of *technology* as the tool, *strategy* as the driver, and *people* as the ultimate user and customer of the created knowledge.

Paul Meyer is the principal partner for Tecker Consultants, Clifton, Virginia. He can be reached at pmeyer@tecker.com. This is his first article for Facilities Manager.

Develop a Strategy and Create a Clear Definition of Success

All successful initiatives start with a thoughtful plan and a clear definition of what success will look like. At this stage, stakeholders are identified, needs are assessed, and resources are examined. It is not uncommon for this stage to take longer than expected. The end product should include a strategic plan with expected outcomes and a clear understanding of the resources needed to successfully complete the project. In addition, the plan should identify how the knowledge management system supports and links to the overall strategy of the organization. In other words, what is the relationship between the knowledge management strategy and your business objectives?

Create an Information Flow Chart

This is a chart that identifies the flow of information from its original collection point to its transformation to knowledge and, ultimately, to wisdom. This chart would have obvious branches and potential decision points that would guide the organization in deciding what to save, what to discard, and what to continue moving down the chart. As data passes down the transformation chain, it is likely to have increased human interaction, recognizing that it is through increased communication that information is transformed into other forms. For example, customer satisfaction data is transformed into valuable knowledge when it is interpreted by a group of individuals and compared with other sources of information.

Organize a Cross-Functional Team

Information is transformed into knowledge through the interaction of multiple disciplines and perspectives. A cross-functional team should be organized early on in the process so that all the appropriate voices are heard. Cross-functional teams are also used throughout the knowledge management and interpretation process so that information is interpreted through the lenses provided from a variety of perspectives.

Install a Relational Database

There are plenty of off-the-shelf customer relationship management systems and platforms and there are a variety of consultants that can assist in assessing the appropriate system for your needs. Basic, but important considerations are the ability of the system to carry out the outcomes you identified in your strategy and to interface with existing platforms and databases.

Technology is foundational to a solid knowledge management system. It is important to remember that it is merely a warehouse that collects and compiles data from many sources and displays the information at your fingertips, it cannot completely transform information to knowledge.

Technology is foundational to a solid knowledge management system. It is important to remember that it is merely a warehouse that collects and compiles data from many sources and displays the information at your fingertips, it cannot completely transform information to knowledge. In other words, do not assume that the relational database alone will create a successful knowledge management system.

Conduct Multiple Pilot Programs

Pilot tests can be conducted during a variety of stages of the knowledge management process. Before significant resources are expended on elaborate knowledge management systems, several pilots using existing information and processes should be conducted. For example, gather a group of cross-functional employees operating a central facility on your campus to review the data you have collected from user satisfaction surveys. Compare the data with the campus population demographic information and allow the group to provide feedback on their observations of the data. This begins the process of transforming information into knowledge and allows you to pilot the process without expending considerable resources. Pilots should be conducted as new systems and processes are put into place. They will assist the organization in collecting, analyzing, comparing, integrating, funneling, contrasting, communicating, and integrating data through an organization.

In most organizations there is too much to know. There is more data, information, knowledge, and wisdom than we have the capacity to maintain, organize, and interpret. Setting the strategic direction upfront with clarity, focus, and purpose will assist you in managing the right information and avoiding the **Information Overload** blinking sign. 🚧



TECHNOLOGY MANAGEMENT

Emerging Building Technologies: Open Systems

by Ron Bernstein

Today's open systems marketplace is forcing the buildings industry to rapidly change how business is being done. Manufacturers are embracing the concept of open systems at a staggering rate and the benefits are being realized daily. On the forefront of the emerging technologies are the control systems that combine multi-vendor product and multi-subsystem integration into a common, cohesive building system architecture. The advantages of a single infrastructure reach into almost every aspect of a facility including reduced up front construction costs, lower life cycle costs, improved system management, enhanced back office reporting, better service, and proactive maintenance.

As technologies improve and become more widely adopted, the benefits become realized quicker and by a larger segment of the facility. Much like when a facility puts in an Ethernet network infrastructure, all areas of the facility can now take advantage. Facilities can expand and contract at will because they are not locked into long-term contracts, single source product suppliers, or closed tool-sets. If you want to add a workstation, you can purchase one from any number of companies, plug it in, and it works. You can't turn the corner without finding a certified computer engineer lately. Our kids have become our tech support center. Why? Because of open systems and open standards.

Ron Bernstein is the manager of the Open Systems Alliance program for the Echelon Corporation, Encinitas, California. He has been involved with defining and promoting open systems and automation for 20 years and can be reached at rbernstein@echelon.com. This is his first article for Facilities Manager.

Building Automation Systems Are Undergoing Major Changes

The same concept is making sweeping changes in the facility management and controls sector. Technologies like LONWORKS Control Networks, Ethernet, XML, SOAP, and a host of others are opening doors that, in the past have been tightly closed by the system suppliers. In the past, if you wanted to enhance your facility with a Building Automation System (BAS) you might have hired an engineer to write a specification based upon the perceived needs of the facility. The engineer would present the specification for bid and provide a "qualified" bidders list.

More often than not, this list consisted of the recognized major manufacturers of control systems and possibly a few local companies that were "friends" of the facility or the engineer—folks that had proven themselves by installing functional systems at the facility in the past. For the most part, each of these major companies would respond to the bid with a system design consisting of products from one vendor—theirs! If they did not make a product, it most certainly would not be part of the submittal. Or, they may manufacture a product that is outdated or inferior to an alternate, but it is the only option.

Designing Into a Corner

If we learn from the computer market, it is obvious to see that controls manufacturers must make a change away from this type of system. Whatever happened to the large computer manufacturers of the 1980s? Most of them are gone, swallowed up or merged with more progressive companies. The progressive companies have realized that in order to stay competitive, they need to offer choices and to supply what the customer wants and needs, rather than just what they happen to have on the shelf.

Today's successful computer companies offer products from dozens of manufacturers that they simply "integrate" into a system and offer it to the customer. These systems are fully customized based upon the individual requirements of the



user. The real value is that building up a PC today is significantly easier than the big computers of the past.

Why? Because of standards and defacto standards. How did the mouse port on a PC become "the mouse port," that round connector also called a PS2 port? Someone (IBM) invented it, put it into their systems, and the rest of the world eventually went along with it. A defacto standard evolved into an open standard. The same is true for the monitor connector, the RS-232 port, the RJ-45 Ethernet port, and the phone plug. All started as one company's idea that was then adopted by everyone.

Evolution and Innovation

In the building control market, the same evolution is taking place. Standards are being adopted from defacto standards—from ideas and products brought to the market by companies.

Arguably the widest sweeping change in the building controls market has been the definition and promotion of an open standard device-level protocol for communication. Much like PCs talk to each other over Ethernet using Internet Protocol (IP) as a standard, device-level manufacturers are building devices with internal communications that will allow their products to talk with other products from other manufacturers without the need for custom design, reengineering, or closed tool-sets. There are numerous examples of technology that over the past few years has emerged as a good idea and

evolved into widely deployed systems or technologies throughout the world. And frankly, it looks like it is just getting started.

And when you marry these technologies in innovative ways, the sky is the limit on what you can accomplish. Anyone with an imagination and a little bit of training can take a fundamental concept and confidently deploy a fully working, fully integrated system with products from hundreds of manufacturers.



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The Birth of the Open Systems Integrator

No longer are facilities managers going to rely on the product manufacturers as the sole source of bidders on their projects. New products that are more cost effective, offer better performance, and have more features will take the place of the traditional suppliers. As the market opens up, competition will follow and innovation will become paramount.

Through all of this change, who do we rely on to make this technology work for us? Welcome the Systems Integrator! This is the person that you have been working with to install the closed systems hardware you have been purchasing for years. The independent systems integrator is a great source of knowledge and experience and can take on the role of advisor and technology partner.

No longer are these companies limited to what products they supply. As the open systems market will dictate, may the best integrator win! May the best product from the best supplier win! And savvy integrators will be able to research and provide the best options for their customers. In the end, if something doesn't work, you call the local integrator to come fix it. He is the one taking the responsibility for your system.

These independent system integrators will act as your local source for the latest technology, latest products at the best price, and the latest skills to integrate more and more of your facility into one flat, open architecture. Their abilities will grow just like the computer geek you used to know from high school who now runs a Fortune 500 Information Technology department. They will expand their system offerings to include more than the traditional controls components. We'll see HVAC systems tied in with lighting, access, security, lab equipment, irrigation, asset tracking, elevators, process control, energy management, and more.

As more companies adopt an open standard, more products and more innovation will enable greater use of the core infrastructure. Fifteen years ago, who would ever have thought that the Internet would be what it is today. No one could ever predict such a thing with certainty. But we are on the verge of a similar transition.

Education is the Foundation

So where do you go for more information, for more training, or advice? Organizations like APPA and EDUCAUSE are a great source of information on these emerging technologies that are bound to change the way we do business. Attend the industry trade shows and forums. Attend an online or live seminar. You can surf the Web for more information or take classes from various training centers around the planet. There is even a new textbook available that covers the basics. Maybe the best idea is to call your local integrator or controls company and ask them to share with you what they have learned about open systems.

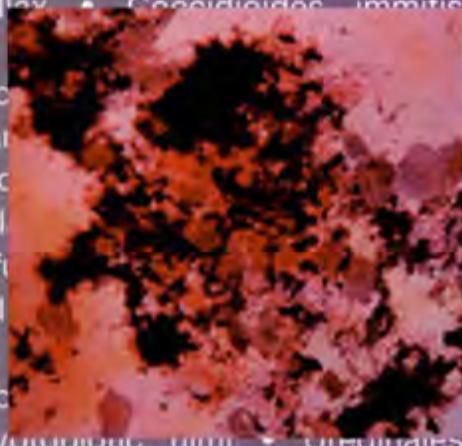
Good luck and happy integrating! 🏠

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Departmental Reengineering

Improves Service at Miami-Dade Community College

by Alfredo Menendez

In 1995, Miami-Dade Community College (MDCC) took its biggest step into corporitization. It was then that all MDCC staff, faculty, and administrators got their first exposure to the cold, real world. MDCC, like most higher education institutions, had been shielded from hardcore business management principles. Our new president was charged with the energy of change. Dr. Eduardo Padron made it the college managers' mission to reengineer all department operations and to lower costs while increasing services to students. This change was needed to free operational funds for educational programs and to bring the college onto a more stable financial footing.

College managers began the reengineering by looking into all departments on the how, and why, of what they were doing. The process was tedious and controversial, but it revealed that there was a lot of room for improvement. One of the most difficult decisions Dr. Padron has had to tackle was to eliminate a number of positions and academic programs. In the maintenance department, all open positions and the in-house motor pool operation were eliminated, and the contracts for the facilities dean and maintenance director were

not renewed. Can anyone imagine the tremendous effect of this decision on a maintenance department supporting the largest community college in the United States?

The department's interim dean called a senior staff meeting to appoint an interim director to help with the possible outsourcing. He asked for a volunteer for the job, and I was the only one crazy enough to take on the challenge. This is how I was given the "once in a lifetime" opportunity to reengineer the plant maintenance department and improve our credibility that had previously failed at accountability and customer recognition. Maintenance was so occupied with keeping the facilities operating that it neglected planning, strategies, training, and, most important, recognizing its human assets.

We began by removing workflow barriers, improving communication, centralizing management and purchases, and most importantly, launching an internal public relations campaign to all senior administrators. In the past, all trade staff had the responsibility to buy parts and supplies for their daily projects. These constant purchases diminished the effectiveness and lowered the productivity of the staff. By centralizing 80 percent of the purchases, we were able to lower cost and increase the productivity of most trade personnel.

Our department's only method of communication was through pagers, with an average response time of 45 minutes per call. With the introduction of two-way radios, the Nextel system, and e-mail, the average response time is down to less than 15 minutes. By centralizing the management function, we were able to create a call and work center where all work

Al Menendez is director of plant maintenance at Miami-Dade Community College, Miami, Florida. He can be reached at amenende@mdcc.edu. This is his first article for Facilities Manager.

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is input into the electronic work order program and routed to printers in the trade shops. All payroll information, leave forms, personnel matters, and reporting would now be handled from this location. Purchases were procured and scheduled for all the trade staff.

This new structure required new managers with more business training and skills to be hired. Five new positions were developed to handle the new demands of coordination and accountability. The college was divided into four work zones with each zone headed by a manager. The five new positions consisted of one contract manager who is responsible for the administration of all contracted services, and the four zone managers. One zone, designated a district zone, was responsible for all fiscal, financial, mail, deliveries, and purchases for the department. The other three zone managers were responsible for all the day-to-day operations, personnel management, planning, and communication for each zone.

The work and culture adjustments have been difficult, but slowly improvements of all operations are taking place. Most of the employees that were considered trouble or difficult have become part of the team or have pursued other interests.

Presently, we are in the process of upgrading the department's technology infrastructure, recruiting new staff, and implementing a college-wide energy retrofit (with initial energy savings expected to average over \$500,000 per year). The new infrastructure will allow us to gather more information in order to predict failures, lower cost, and properly account for expenditures.

No strategy or plan is perfect, and the introduction of measuring instruments into any organization will create questions and discussions. I am a strong believer that any task or job that is important to the operation of the organization needs to be measured and benchmarked, allowing for service improvement and cost reduction. 🏠

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SUPPORT SERVICES AT SMSU

by Thomas Lee

Southeast Missouri State University, a public university, is located in the heart of historic Cape Girardeau, Missouri. Founded in 1873, the university has evolved into a comprehensive institution offering more than 150 academic programs. The main university campus has over 80 buildings on more than 400 acres and had a Fall 2001 enrollment of 9,352 students. Along with the university farm, the Kelso Bird Sanctuary, and the River Campus, which is the future home of the College of Liberal Arts, Southeast Missouri State is close to 900 acres.

The campus comprises 20 national social fraternities and sororities, and athletes at Southeast compete in the NCAA Division 1 Athletics. It boasts outstanding programs in education, business, healthcare, and liberal arts. The university has more than 150 student organizations and numerous on-campus student supported services. Southeast Missouri State also has locations in four other Missouri communities: Malden, Sikeston, Kennett, and Perryville.

Cape Girardeau, a community of some 40,000, is conveniently located in the heart of America. St. Louis, Chicago, Memphis, Nashville, Kansas City, and Little Rock are easily reached in less than a day by car. Bordered by the states of Illinois, Kentucky, Tennessee, Arkansas, Iowa, Nebraska, Kansas, and Oklahoma, the state of Missouri is uniquely situated. The city of Cape Girardeau is the largest city between St.

Louis, Missouri, and Memphis, Tennessee. With this kind of location, the growth potential for Southeast Missouri State is astronomical.

Serving the Campus

The size of campus, the number of buildings, and the student population brings us to the questions, "How do we support all the events on campus, and how do we establish credibility to our department and get all the work done in a timely and professional manner?" How better to establish credibility than to bring competence, campus support, and creative solutions to the issues that we were facing. We needed to be viewed as a facilities management department with the whole campus picture in mind. We needed to stay focused on the reason for our existence. We needed a group who knew that the main goal of any job is the importance of services to others. Hence the name Support Services.

The Support Services group was developed in the early 1990s. Until that time, it was difficult getting the routine custodial and grounds work done because of the extra work involved to support special events and functions. Before Support Services was formed, the grounds department handled all the moving and hauling jobs. The custodial staff came in and did the set up and tear down part of the event. After studying the assignments of both groups, we broke down the time spent on event work versus routine custodial and grounds work. We then spoke with both bargaining groups and presented the idea of forming a special crew that would support maintenance, grounds, and custodial operations and do the majority of the set-up work. This crew would also unlock the buildings in the mornings, perform the moving and hauling jobs, set up tables and chairs, support and clean up after spe-

Continued on page 52

Tom Lee is assistant supervisor for fleet, grounds, and support services at Southeast Missouri State University, Cape Girardeau, Missouri. He can be reached at tlee@semovm.semo.edu. This is his first article for Facilities Manager.

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significant short-range challenge is to overcome the inadequate staffing within the Support Services area. This will help reduce the stress that is sometimes felt by everyone in this area. Adequate staffing is essential to meet the challenges of the continuing expansion on campus and the increased number of set ups and moving jobs.

The most significant long-range challenge is to secure the resources needed to achieve this staffing. Another challenge is to educate customers on proper procedures to assure that their events and jobs are completed in a timely and correct manner. Daily challenges might include a customer's failure to plan their events or moves, unrealistic completion dates or times for set ups or moves, last-minute requests from customers without regard for other customers or schedules, failure to maintain accurate communication among customers, management, and employees, and the effect of employee vacations, sick leaves, and emergencies, on scheduling.

How do we deal with these challenges? One way is to hold regular meetings with key people. Providing staffing and equipment for all moving and hauling jobs, coordinating the set up of special events such as athletic events, music events, commencements, honors program, nursing pinning, building dedications, community concerts, and open houses, requires many meetings, several phone calls, and continuous checking and rechecking details of the events. Some of the key contacts

might include deans, faculty, staff, students, project managers, directors, and the campus reservationist. This is done to assure customer satisfaction on all events and jobs. Outstanding special event management creates loyalty, good will, and support from our constituents.

We have also established some helpful guidelines to assist our customers in their move and to receive feedback on our work. A moving and hauling manual was developed to send to the customer before their move to help them make the move and pack their materials. It shows everything from what to pack and how to pack it safely. Information in the manual includes moving guidelines, packing suggestions, how and where to get your new keys, and how to transfer the phone line and get your address changed. A customer services card was also developed to receive input on our services during a move or during a special event. We also developed a moving and hauling manual for the staff to show proper procedures for moving different types of furniture and items, such as pianos, bookcases, computers, copiers, desks, lateral and vertical file cabinets, podiums, tables, and chairs. Safety is our number one priority.

All the accomplishments of the Support Services group didn't happen by accident. They are the result of a hard working, dedicated group of people with the same goal in mind, which is to make each and every move, set up, and event a success and to make each and every customer happy. Service is important because that is the main reason we are on campus—to help students, faculty, and staff. Concentrating on service is

just a simple matter of practicing the Golden Rule. The aim of treating people as we like to be treated shows them that they are a valuable part of campus and shows appreciation for their contributions to the workplace. Our goal is to do everything we can for everybody we can, the best that we can.

In the September/October 2001 issue of *Facilities Manager*, APPA President Gary Reynolds said that one challenge is to be "efficient and effective at the same time." Support Services at Southeast Missouri State University is this and more. Our motto has become, "We didn't know it was impossible, so we did it anyway." 🏠

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IMPLEMENTATION OF TOTAL ASSET MANAGEMENT AT THE UNIVERSITY OF TASMANIA

By Matt Smith



The implementation of total asset management (TAM) at the University of Tasmania grew from the vision of the deputy principal (equivalent to the vice president or vice chancellor) to transition the then-office of physical resources, and primarily its maintenance area, from a “doing” role to more of a “managing” role.

The university has recognized that the three major cost drivers are staff, students, and space. With the ever-increasing pressure on resources, the university saw that managing the physical assets would allow resources (financial and physical) to be apportioned in a more focused and informed manner, cognizant of the university’s strategic plan. Better cross-func-

Matt Smith is the director, asset management services, and the University of Tasmania, Tasmania, Australia. He can be reached at m.a.smith@utas.edu.au. This article is adapted from a presentation to the Australasian annual conference in 2001 and was selected to receive the AAPPA Best Paper Award. This is his first article for Facilities Manager.

tional liaison between sections within the deputy principal’s division was also necessary to ensure improvement in the management of all organizational assets from a portfolio-basis perspective.

The functions of the physical resources department at the university were largely outsourced (maintenance, capital works, cleaning, grounds, security, parking, audio/visual). Operations were regionalized in Hobart and Launceston and operational systems were “home grown.”

Maintenance and capital works were mainly reactive and had little reflection to the broader strategic direction of the university. This is now changing. There was little policy or procedure to support maintenance activity, and a documented register of fixed plant and equipment was lacking. The university drawing documentation was in relatively good shape.

Why Total Asset Management?

The decision to implement TAM principles grew from the need for a computerized maintenance management system, primarily to track maintenance requests. Adopting TAM was attractive to the university as it represented a strategic

approach to managing all assets, offered a reduction in duplication of effort between functional areas within the university, could be linked to the strategic plan, was deemed a contemporary approach, and provided senior management with data for informed decision making when allocating resources. Asset management specialists were engaged to partner with the university in the implementation of total asset management at the University of Tasmania.

The principles of TAM adopted by the university are:

- Service delivery guides/asset practices and decisions;
- Asset planning and management are integrated with business planning, budgeting, and reporting processes;
- Asset management decisions are based on assessment of alternatives, life cycle costs, benefits, and risks;
- Ownership, control, accountability, and reporting requirements are implemented; and
- Asset management activities are undertaken within an integrated policy framework.

The objectives of implementing TAM at the university include:

- Provide an asset base that matches business needs;
- Consolidate existing assets and improve space utilization;

- Meet statutory and regulatory compliance requirements (e.g., fume cupboards, pressure vessels, confined spaces);
- Align asset ownership costs with business planning and service delivery requirements;
- Apply best practice asset management policies and procedures; and
- Implement systems to support aims.

The management structure for the project included a steering committee and a project team. The importance of having adequate resources with the appropriate stakeholders involved in the process cannot be overstated. At the University of Tasmania, the deputy principal saw the value in the project and communicated this to senior management and the administration. The project team are the "doers" and need to be supported, encouraged, and given appropriate resources to ensure project success.

The implementation of TAM saw a restructure within the physical resources department. Asset and facilities management activities and capital works were split into separate sections. The importance and need for communication between all staff during the restructure cannot be overstated. In addition, a close liaison with the human resources department was required to ensure a successful transition. Rationalizing the maintenance services has also required a shift from doing to managing, and this has had an impact on the maintenance staff.

Where to From Here?

The year 2001 was a transitional period for Asset Management Services, Design, and Acquisitions. Implementing structural and procedural changes on this magnitude will cause a rethink on how we look at assets from an organizational perspective. The challenges for 2002-03 include:

- Policy and procedure development;
- Continued communication of the new direction;
- Review existing maintenance procedures and update in light of maintenance delivery strategy;
- Implementation of the systems and data integrity;
- Development of the strategic master plan; and
- Management reporting/benchmarking.

Conclusion

The years 2002-03 will be consolidation years for Asset Management Services to make the above challenges a part of the daily activities. Communicating the objectives of TAM will be a continuous process and seen as a critical step in beginning the cultural change required to adopt the principles and objectives of program. 🏏

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The "Nutritional Value" of the Outdoor Environment

by James E. Christenson

We are molded into a people by the thing we live with day after day.

—Jens Jensen, from *Siftings*

APPA President Gary Reynolds has repeatedly urged facilities officers to be stewards of the institutional mission. If part of the institutional mission is to grow society's future leaders, what can those in the facilities management business contribute to the quality of that leadership?

Landscape architect Jens Jensen (1860-1951) would say that the greatest contribution is to surround these future leaders with nature. Psychologist Stephen Covey would agree. Both suggest that human beings draw wisdom, renewal, and balance from natural surroundings.

My wife, Karen, and I returned from a visit to the Far East recently. We revisited cities we had first seen in 1964-65, visited some new places, and even took time to stop by the house in Saigon/Ho Chi Minh City where our family lived during that time. The overriding impression formed in our minds during these four weeks of roaming was of the extraordinary efforts by many people to use creative landscaping to soften the harsh, dense construction and strangling traffic of the area.

Shanghai, with more than 88,000 people per square mile (34,000/square kilometer) still found a bit of room for green space. The expressway between Shanghai and Suzhou is lined with well-tended shrubs and flowers. Crowded Hong Kong has strategically

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placed colorful pockets of landscaping throughout the city. Although the Vietnamese could do well to copy America's roadside trash-abatement efforts, they too are beginning to show great skill in creating attractive landscapes. Singapore, with four million people crowded onto a tiny island, prizes its large botanical garden and nature reserve. Korea's denuded hills have been replanted with trees. In Japan, every house with a few square meters of adjacent soil boasts a special niche of plants combining tasteful natural color, texture, and placement.

Japan's Shizuoka Prefecture's University exemplifies what higher education should strive for in creating a nurturing outdoor environment. The university is sited on the slope of a small mountain. It overlooks a heavily populated metropolitan area, but most of the views from the campus are of the heavily forested and topographically varied mountains across the valley. The campus is a sea of various textures and shades of green, with color at strategic points. Wide pathways built of hundreds of thousands of small paving stones curve up the slope through a pleasing combination of natural landscaping and sculpture.

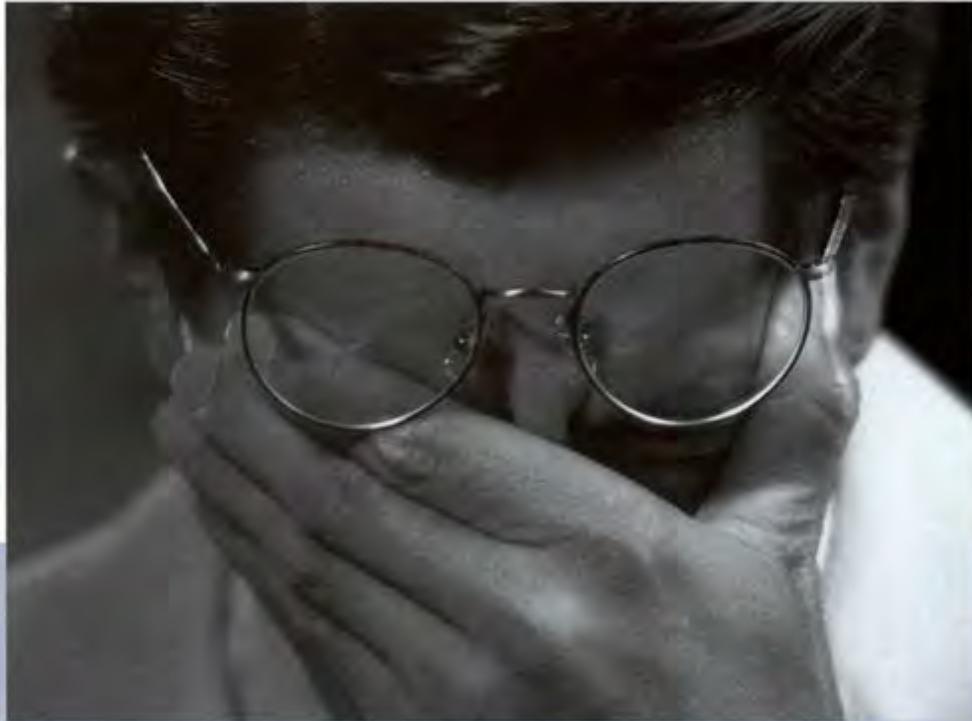
We saw a few professors and students sitting on thoughtfully placed benches—reading, thinking, talking, or just observing their surroundings. At the crest of a hill is an art museum with a window wall providing an unobstructed view of a pool sprouting an angular, many-armed contemporary metal sculpture slowly moving in the breeze, and of the green mountains beyond. Adjacent open woodland covers a large part of the same slope. It too is scattered with benches. While we were there, families from the community were having picnics in the woods with their children playing nearby. It was an idyllic, peaceful setting within walking distance of the noise and traffic of dense development.

If we are molded by our surroundings, the outdoor environment of a university can contribute positively to the molding of those who learn, those who teach, and those who conduct research. Very few of you have heard of Jens Jensen. Yet, upon his death, the *New York Times* referred to him as the "dean of American landscape architecture." He is credited with developing the "Prairie Style" of landscape architecture, a style based on restoration or duplication of the native mid-Western prairie landscape. He designed the landscaping for many of the creations of architects Louis Sullivan and Frank Lloyd Wright and also Fair Lane, Henry Ford's estate in Dearborn, Michigan. His public landscaping work included the design of Chicago's Humboldt and Columbus parks.

Jensen's philosophy, though, is what should interest facilities managers today. Much like W. Edwards Deming, father of the Japanese post-war indus-

Continued on page 60

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trial revival and leading quality guru of the United States. Jensen was a man of very strong views. He intensely disliked the "beehives" of the large cities and had specific and sometimes unpopular ideas about how to make them more livable. Much of what he said and wrote about has direct application to campuses. The quotations that follow are from Jensen's autobio-

graphical work, *Siftings*; they summarize his philosophy of design.

"Art must be a guide, a leader, in the evolution of mankind toward a higher spiritual goal. None of the arts is more able to do this than that of the garden. It is a living expression of peace and happiness, and therefore a great influence in the forming of a people." Jensen was convinced that creativity in any scholarly discipline is

stymied when people are surrounded by only bricks and concrete, no matter how magnificent the design. He maintained that people must be in daily contact with plant life. Nature, for him, was a deep well that people should draw from to live each day.

"Every plant has its fitness and must be placed in its proper surroundings so as to bring out its full beauty. Therein lies the art of landscaping... The skill of the landscaper lies in his ability to find the plant which needs not be maimed and distorted to fit the situation... Nature talks more finely and more deeply when left alone..." Jensen disdained those who introduced exotic plants. He always used materials that were native to the soils and climate of the site. He objected strenuously to those who felt they must adjust the natural shape of shrubs and trees by pruning them into new forms. In the current times of reduced budgets, these views are worth considering. What grows naturally in the locale usually incurs the lowest cost for procurement and for maintenance. If these materials have such benefits and, in addition, thrive better than materials imported from different sites, we have a double win.

To ensure contact between people and nature, Jensen advocated small parks scattered throughout neighborhoods. London is an excellent example of the application of that philosophy. At most educational institutions, we have a luxury of space to surround the campus community with natural materials. But we also need to provide some incentive for people to stop occasionally and soak in these surroundings. We would do well to build in "people pockets"—places where people can gather, where they can sit and take time to enjoy the natural environment that the landscape team has provided for them. From such an environment, Jensen would argue, will come the enlightened, creative leaders of tomorrow's world. 🌱

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The Shared Language of Business Officers and Facility Managers

by Matt Adams, P.E.

The budget of the physical plant department has always been at risk for two reasons. First, it was one of the biggest in an institution and second, it was one of the least understood. This is an uncomfortable combination during budget-cutting times. Unfortunately, it is a bad combination during good financial times as well. When asked about the reality of physical plant budgets, responses have been completely different depending on whether a person came from the facilities management side or the business administration side. Several repeating patterns of miscommunication emerged during the last decades that ultimately proved harmful to both parties as well as institutions as a whole. Recently, both facilities management professionals and business administration professionals have reviewed communication strategies and have begun thinking out-of-the-box in order to bridge communication gaps between the two groups. Mastery of this new "shared" language will prove to be a critical skill for successful facilities managers and business officers in the future.

In the past, communication was made difficult due to the assumption that engineers and accountants do not speak the same language. During planning and budgeting sessions, this



communication handicap was magnified by the inherently complex nature of facilities management. In other words, facilities management is not just one, two, or even three functional activities; it is more like 11 or 12 activities. You really can't blame the business officers, since if they don't understand what facilities managers do, what it costs to do it, or why facilities managers don't speak in terms that they can understand, then the business relationship is spoiled.

Facilities managers are some of the most devoted, productive, and yet humble professionals. We all know that the world is not fair, but still, why are physical plant people so often given a hard time? In fact, facilities people really only want and request (though only recently) the basics within the institutional environment. Their most important request is that they not get treated with a different standard in the budgeting process. It makes sense. Give the facilities management budget the same scrutiny that other budgets receive. Don't come back from a NACUBO conference with all of the answers based on some guy that sat next to you from a different institution.

Benchmarks are fast becoming the most frequently abused business prac-

tices and for good reason.

The level and breadth of service at individual institutions varies greatly and there are many real variables that must be considered. Any knee-jerk comparison of one institution's facilities management department to another's without detailed knowledge of each, is risky as best—often damaging.

Even worse is a last minute test to determine if outsourcing is an option. In the past, outsourcing decisions have originated from the business office. As you might expect, this does not provide confidence to the physical plant managers.

The physical plant is just one of many operations under the business office. As such, business administration professionals have considerable responsibility to the institution. The "art" of the business officer profession is one of quick study and interpretation of summary data. It is in this environment of interpreting, summary data that shared communications must occur.

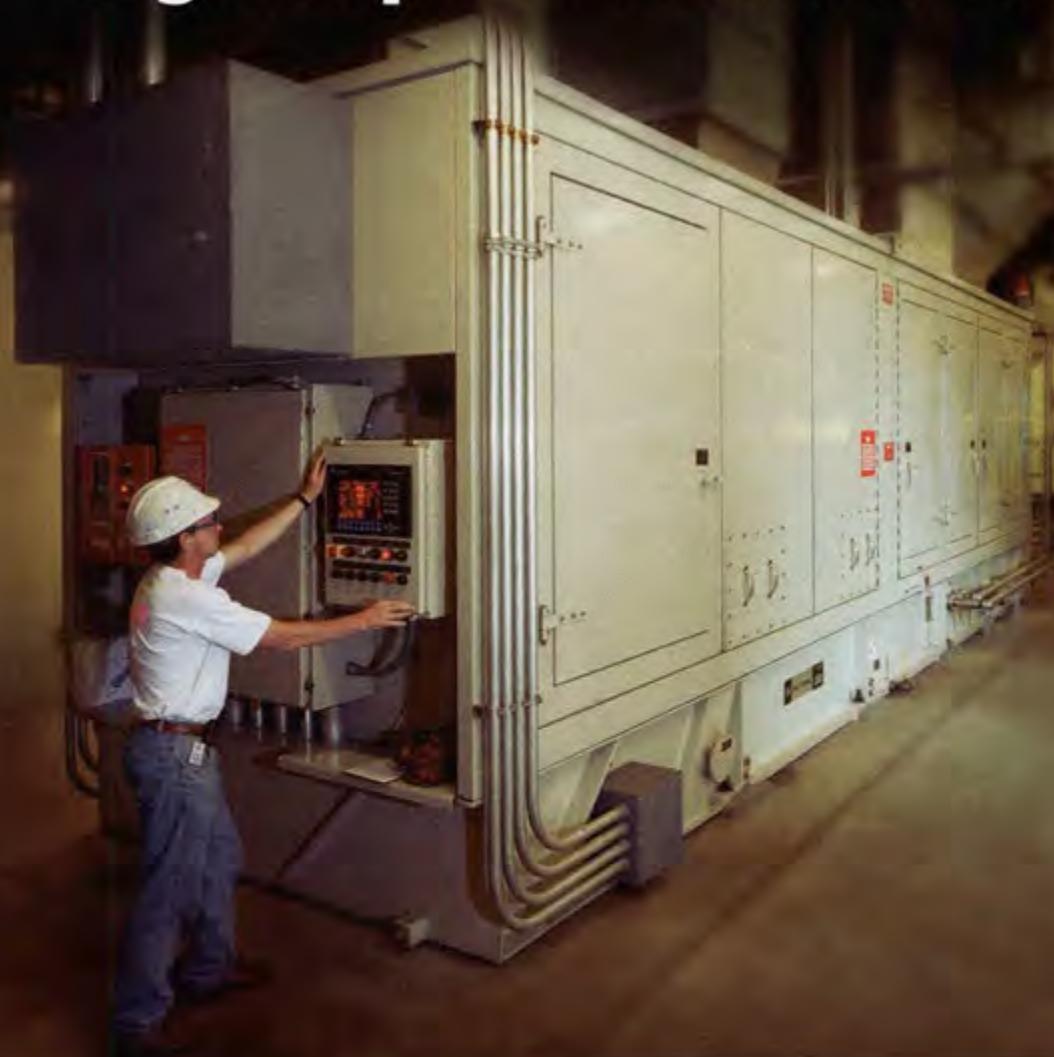
The communication difficulty for the professionals in our industry is the failure to remember that not everyone on campus wants to know all of the details of our work. In addition, the complex nature of the facilities management profession encourages us to report data that is inconsistent with the "fast-paced" decision style of senior administrators. Our leaders are looking for simple judgments and decisions. If we can provide that information and make their jobs easier, our jobs will probably get easier too. 🙏

Matt Adams is president of The Adams Consulting Group, Atlanta, Georgia. He is co-chair of APPA's Trades Staffing Guidelines Task Force and can be reached at matt@adams-grp.com.

Basic Communication “Rosetta Stone” for Facilities Managers

Misunderstood Facilities Management Message	Share Language Translation	Sr. Administration Message Understood
Multiple, independent reports (financial and technical specific to place and time). Considerable use of internal facilities management jargon. Holistic presentation is confusing at best.	Ongoing and repeatable data presentation template in lay terminology and simple and concise goals and proposals with supporting data attached.	Continual report on summarized performance variables of facilities management department with identification of most important new initiatives, goals, or requests.
Repeated requests for budget increases justified on previous decreases or campus expansion.	Presentation of distinct facilities management service centers’ performance levels described in common terms. Budget increase requests by service center with clear description of change in service level of measurement/ verification of same.	The professional standard of care for one or more service centers has fallen below acceptable threshold limits. The cost to remedy this deficit is “X” and the results will be “Y.”
Ongoing requests for new positions of various types within the organization. Each seems desperate and like a long-overdue emergency.	Reprint of basic productivity measures for the particular service center that requires a new position. Clear achievement of target productivity levels coupled with a demonstrated change in work load or attrition is used to illustrate the need and corresponding cause-effect relationship. Possible alternatives to filling a new position are presented and evaluated briefly but proactively.	The existing staff of the facilities management service center is productive and efficient. A demand staff change necessitates addition of another person without diluting the productivity of the center.
Traditional customer service surveys coupled with direct reports from faculty to the administration.	Simplified and redesigned 360 degree stakeholder service reviews. Facilities management reviews are often too general and the data becomes anecdotal. Multiple classifications of stakeholders, including internal, are routinely surveyed on between five and ten metrics that are most meaningful to that each respective group.	Ongoing scoring by stakeholders in the weighted, yet shortened format presents a snapshot of trends and gaps.

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Setting the Stage for a Training Program

by Santo Manicone

The quality of employees and their development through training and education are major factors in determining long-term safety and understanding of their job. If you want to hire and keep good employees, it is good policy to invest in the development of their skills in order to increase productivity and maintain a safe work environment. Over the past year, I have trained over six thousand 6,000 employees in job safety and environmental compliance. I cannot imagine that all 6,000 employees will take my training to the limit and follow all safety and environmental procedures. It is difficult to get through to all employees with this important message about safety, but when you reach a majority of them, it feels good.

Training often is considered for new employees only. This is a mistake because ongoing training for current employees helps with the adjust to rapidly changing job requirements and keeps the focus on their job duties.

The main reason that a facilities director should focus on a training program is to emphasize the potential growth and development of employees to handle a number of situations.

I have always believed in the logic of:

- Creating a pool of readily available and adequate replacements for personnel who may leave or move up in the organization

Santo Manicone is president of Facility Support Services, Hamden, Connecticut. He can be reached at support@snet.net.



- Enhancing the company's ability to adopt and use advances in technology
- Building a more efficient, effective, and highly motivated team
- Ensuring that employees have the knowledge for expansion into new programs.

Employees frequently develop a greater sense of self-worth, dignity, and well being as they become more valuable to their employer and to coworkers. Generally, they will receive a greater share of the material gains that result from their increased productivity. These factors provide a sense of satisfaction through the achievement of personal and school goals.

The Training Process

The following these basic steps are necessary in the training process:

- Establish a need or objective
- Be selective of the trainees
- Select the training methods and mode
- Choose a means of evaluating the trainer
- Establish a set schedule of training
- Evaluate the training.

Your school should have a clearly defined strategy and set of objectives that direct and drive all the training decisions. Facilities that plan their

training process are more successful than those that do not. Most facilities directors want to succeed, but do not engage in training programs that promise to improve their chances of success. I have found that over the years training problems seem to be related to:

- **Time**—Facilities managers find that time demands do not allow them to train employees.
- **Getting started**—Most managers have not practiced training employees. The training process is unfamiliar.
- **Broad expertise**—Managers tend to have broad expertise rather than the specialized skills needed for training and development activities.
- **Skepticism as to the value of the training**—Some managers believe the future cannot be predicted or controlled and their efforts, therefore, are best centered on current activities.

A well-conceived training program can help your facility succeed. A program structured with a strategy and objectives has a high probability of improving productivity and reaching goals that are set in the training mission. A facilities director should take the lead in the training program and establish goals that employees can reach.

For any facility, formulating a training strategy requires addressing a series of questions.

- Is the program regulator run?
- Who needs this training?
- Do we have the time for this training?
- Who will manage the training?

The purpose of formulating a training strategy is to answer two relatively simple but vitally important questions. 1) Are my employees trained to do their job? and 2) What is the schools liability? Armed with the answers to these questions and a clear vision of its mission, strategy, and objectives, a facility can identify its training needs.

Identifying Training Needs

Training needs can be assessed by analyzing three major human resource areas; the organization as a whole, the job characteristics, and the needs of the individuals. This analysis will provide answers to the following questions:

- Where is training needed?
- What specifically must an employee learn in order to be safe?
- Who needs to be trained?

Begin by assessing the current status of the facility how it does what it does best and the abilities of the employees to do their tasks. This analysis will provide some benchmarks against which the effectiveness of a training program can be evaluated. Your department should know where it wants to be in five years and have a long-range strategic plan. What you need now is a training program to take your school from here to there.

Second, consider whether the facility is financially committed to supporting the training efforts. If not, any attempt to develop a solid training program will fail.

Next, determine exactly where training is needed. It is foolish to implement a school wide training effort without concentrating resources where they are needed most. An inter-

nal audit will help point out areas that may benefit from training. Also, a skills inventory can help determine the skills possessed by the employees in general. This inventory will help the school determine what skills are available now and what skills are needed for future development.

Once you have determined where training is needed, concentrate on the content of the program. Analyze the characteristics of the job based on its description—the written narrative of what the employee actually does. Training based on job descriptions should explain how the job is performed on a task-by-task basis. Actually doing the job will enable you to get a better feel for what is done.

Individual employees can be evaluated by comparing their current skill levels or performance to the organization's performance standards or anticipated needs. Any discrepancies between actual and anticipated skill levels identifies a training need.

Selection of Trainees

Once you have decided what training is necessary and where it is needed, the next decision is who should be trained? For a small school, this question is crucial. It is important to carefully select which employees will be trained.

Training programs should be designed to consider the ability of the employee to learn the material and to use it effectively, and to make the most efficient use of resources possible. It is also important that employees be motivated by the training experience. Employee failure in the program is not only damaging to the employee but a waste of money as well. Selecting the right trainees is important to the success of the program.

Training Goals

The goals of the training program should relate directly to the needs determined by the assessment process

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Facility Assessments

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Our online Facility Assessment Toolbox at www.3di.com/assessments is part of 3D/I's Web education series. Browse the site to learn how a facility assessment is conducted and how to use the findings to efficiently manage unfunded backlog and future renewal needs. Download RFP and RFQ templates in Microsoft Word format to help you get started. Email our facility experts at assessments@3di.com if you need additional information.

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outlined above. Course objectives should clearly state what behavior or skill will be changed as a result of the training and should relate to the mission and strategic plan of the company. Goals should include milestones to take the employee from where they are today to where the school wants them to be in the future. Setting goals helps to evaluate the training program and also to motivate employees. Allowing employees to participate in setting goals increases the probability of success.

Training Methods

There are two broad types of training available to schools: on-the-job and off-the-job techniques. Individual circumstances and the "who," "what," and "why" of your training program determine which method to use.

On-the-job training is delivered to employees while they are performing their regular jobs. In this way, they do not lose time while they are learning. After a training plan is developed, employees should be informed of the details. A timetable should be established with periodic evaluations to inform employees about their progress. On-the-job techniques include orientations, job instruction training, apprenticeships, internships and assistantships, job rotation, and coaching.

Off-the-job techniques include lectures, special study, films, television conferences or discussions, case studies, role-playing, simulation, programmed instruction, and instructor training.

Orientations are for new employees. The first several days on the job are crucial to the success of new employees. This point is illustrated by the fact that 60 percent of all employees who quit do so in the first ten days. Orientation training should emphasize the following topics:

- The school's history and mission
- The key members in the organization and how they will interact with them
- The key members in the department and how the department helps fulfill the mission of the company
- Personnel rules and regulations.

Some facilities use verbal presentations for training while others have written presentations. Many small schools convey these topics in one-on-one orientations. No matter what method is used, it is important that the newcomer understand his or her new place of employment.

Lectures present training material verbally and are used when the goal is to present a great deal of material to many people. It is more cost effective to lecture to a group than to train people individually. Lecturing is one-way communication and, as such, may not be the most effective way to train. Also, it is hard to ensure that the entire audience understands a topic

on the same level; by targeting the average attendee you may under-train some and lose others. Despite these drawbacks, lecturing is the most cost-effective way of reaching large audiences.

Job rotation involves moving an employee through a series of jobs so they can get a good feel for the tasks that are associated with different jobs. This method is primarily used to train supervisors. The employee learns a little about everything. This is a good strategy for small schools since employees may be asked to perform many jobs.

Apprenticeships train employees to do many different tasks. Apprenticeships involve several related groups of skills that allow the apprentice to practice a particular trade. They take place over a long period of time during which the apprentice works for and with the senior skilled worker. Apprenticeships are especially appropriate for jobs requiring production skills.

Trainers

Who actually conducts the training depends on the type of training needed and who will be receiving it. On-the-job training is conducted primarily by supervisors; off-the-job training, by either in-house personnel or outside instructors.

In-house training is the daily responsibility of supervisors and employees. Supervisors are ultimately responsible for the productivity and, therefore, the training of their subordinates. These supervisors should be taught the techniques of good training. They must be aware of the knowledge and skills necessary to make a productive employee. Trainers should be taught to establish goals and objectives for their training and to determine how these objectives can be used to influence the productivity of their departments. They also must be aware of how adults learn and how best to communicate with adults. Small schools need to develop their supervisors' training capabilities by

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sending them to courses on training methods. The investment will pay off in increased productivity.

There are many outside training sources, including consultants, technical and vocational schools, continuing education programs, chambers of commerce, and economic development groups. Selecting an outside source for training has advantages and disadvantages. The biggest advantage is that these organizations are well versed in training techniques, which is often not the case with in-house personnel.

Whoever is selected to conduct the training, either outside or in-house trainers, it is important that the school's goals and values be carefully explained.

Training Administration

Having planned the training program properly, you must now administer the training to the selected employees. It is important to follow

through to make sure the goals are being met. Items to consider before training begins include:

- Location
- Facilities
- Accessibility
- Comfort
- Equipment
- Timing.

Careful attention to these operational details will contribute to the success of the training program.

An effective training program administrator should follow these steps:

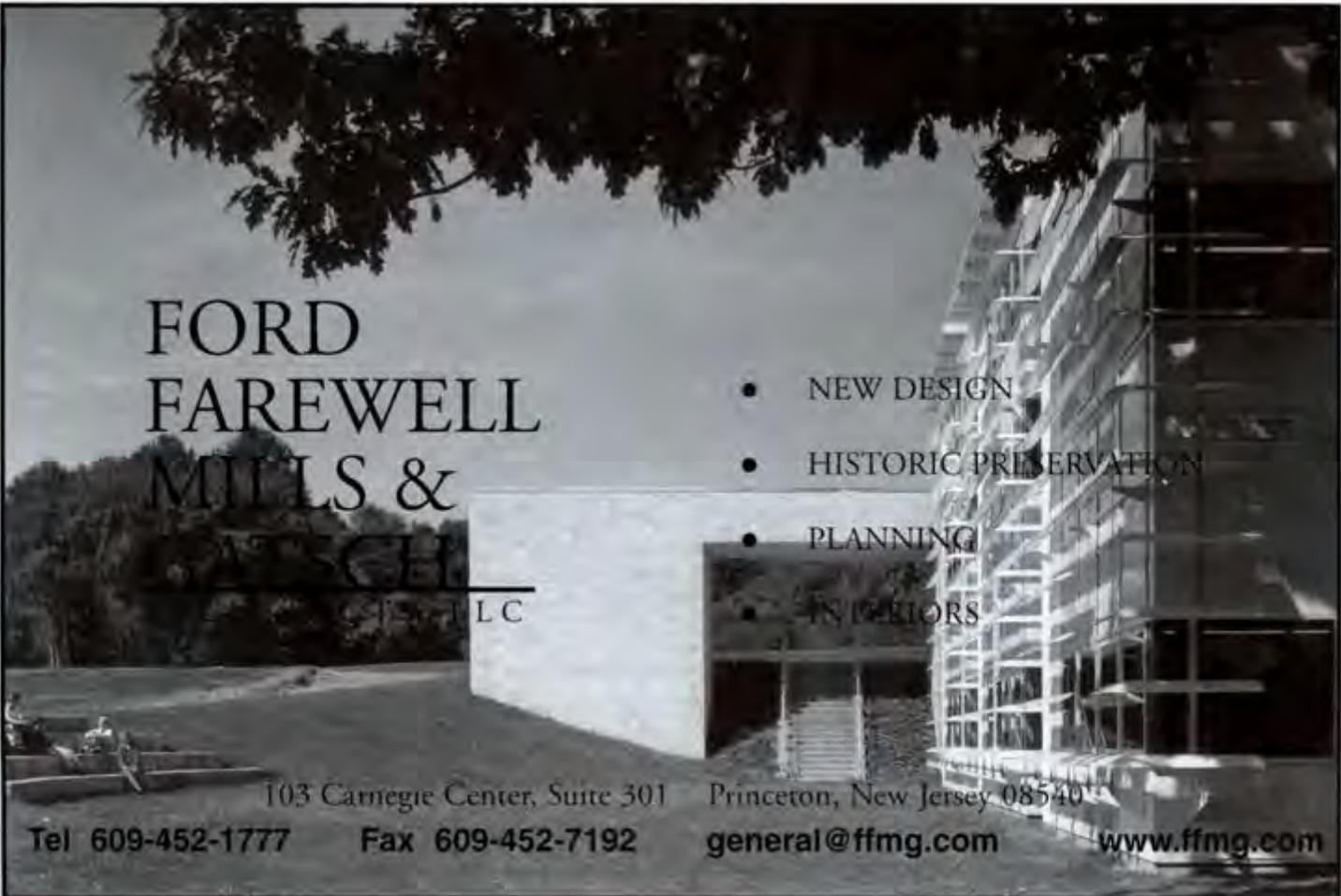
- Define the organizational objectives
- Determine the needs of the training program
- Define training goals
- Develop training methods
- Decide whom to train
- Decide who should do the training
- Administer the training
- Evaluate the training program.

Following these steps will help an administrator develop an effective training program to ensure that the

school keeps qualified employees who are productive, happy workers. This will contribute positively to the bottom line.

Evaluation of Training

The training program should be evaluated several times during the process. Determine these milestones when you develop the program. Employees should be evaluated by comparing their newly acquired skills with the skills defined by the goals of the training program. Any discrepancies should be noted and adjustments made to the program to enable it to meet specified goals. Many training programs fall short of their expectations simply because the administrator failed to evaluate its progress until it was too late. Timely evaluation will prevent the training from straying from its goals. 🏢



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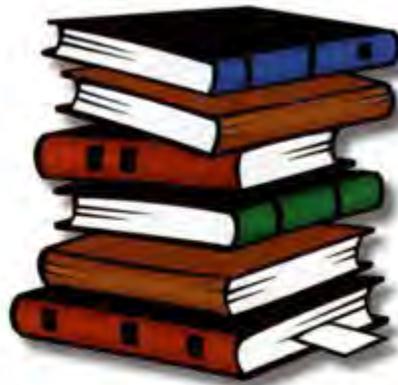
Every facility organization has customers; some we serve on a first-name basis and some through sophisticated Internet-based systems. The following book will help the reader understand the value of either level of technical solution (and solutions in-between). More important, it will tell the reader how to make the necessary changes in order to become more customer-focused.

Innovation in Student Services, Planning for Models Blending High Touch/High Tech, edited by Darlene J. Burnett, and Diana G. Oblinger. Ann Arbor, Michigan: Society for College and University Planning (SCUP), 2002. 269 pps, softcover.

Customer focus

Can take many forms in higher education, academia, facilities management, or student services. There have been many books reviewed in this column covering customer-focused changes in service delivery from a facilities perspective but none until *Innovation in Student Services*, supported by IBM, has brought the expertise of individuals and teams who developed service or-

Ted Weidner is associate vice chancellor, facilities and campus services, at the University of Massachusetts/Amherst. He is a co-chair of APPA's Trades Staffing Guidelines Task Force and can be reached at tweidner@admin.umass.edu.



organizations recognized as an IBM Best Practice Partner.

Similar to other books on innovative practices, this book gives several examples that show how several campuses improved their student service systems. Student services on every campus usually begin with the application process and end with either commencement exercises or yearly reunions. Despite the need for these systems, there is little uniformity in how campuses service their students. It isn't necessary to read every chapter, the first two chapters and the last chapter tie the book together giving twenty examples between them. Each chapter explains how an innovation at a different campus improved their student service delivery systems.

Some of these innovations deal with automation, others with process changes. They are held together by two formatting devices. First, there is a brief description of the campus. Second, and more interesting, there is a table showing elements common to each campus and identifying where the campus stands with its customer service focus. Is it in production,

being implemented, in the planning or design phase, or not intended? These responses address briefly the following areas: change and/or organizational management, student-centered services, one-stop service centers, web portals, etc. Each example does not address every service area

Similar to other books on innovative practices, this book gives several examples that show how several campuses improved their student service systems.

or technical level, but as a whole, they cover all relevant areas.

I have been on campuses that have claimed to have a student service focus that forced multi-stop servicing on students for years; I have also been on campuses that provided one-stop services when out of necessity it was people and/or paper-based and which now is done on the web. I have experienced the effects of both systems and know what I prefer. But changes to entrenched organizations are often difficult regardless of whether it is for student services or facility services. And that's why this book may be good for facilities officers. Although the examples may be out of the normal operating perspective or knowledge area of a facilities officer and the primary customers may be different, the importance of identifying and implementing customer-focused service changes are critical to all colleges and universities. 📖

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Maintenance Staffing Guidelines for Educational Facilities

Price: Member price = \$95, Nonmember price = \$150



What will you find in this book? Information on

- **Maintenance Terms**—Generally accepted terms and definitions used by facilities professionals.
- **Staffing Needs**—How to determine staffing needs based on the level of maintenance you require for your facility.
- **Levels of Maintenance**—What level of maintenance will you get with the staffing selected?
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- **Personnel Needs**—How to hire and retain staff.
- **Case Studies**—Apply what you've read to several examples of staffing needs.
- **Survey Data**—Compare these numbers to your institution.

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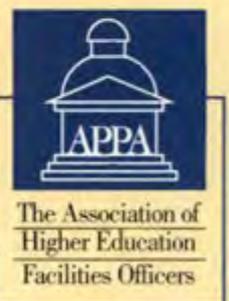
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Beadex Manufacturing, LLC
B-R Pipeline Company
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USG Industries, Inc.
USG Pipeline Company
Stocking Specialists, Inc.

YOU MUST FILE A CLAIM BY JANUARY 15, 2003

The United States Bankruptcy Court for the District of Delaware (the "Court") has established **January 15, 2003**, as the general claims bar date (the "General Bar Date") in the chapter 11 cases of the companies listed above (the "Debtors"). All entities, including governmental units, that wish to assert any claims against the Debtors are required to file proofs of claim on or before 5:00 p.m., Eastern Time, on **January 15, 2003**.

Who Must File a Proof of Claim

The General Bar Date applies to all "General Claims," which are claims of any kind against the Debtors that arose before June 25, 2001, except asbestos-related personal injury claims. General Claims include Asbestos-Related Property Damage Claims. The definition of an Asbestos-Related Property Damage Claim, as well as other important information and definitions, may be obtained from the USG Claims Website listed below.

If you wish to assert a General Claim against any Debtor, including any Asbestos-Related Property Damage Claim, you must file a proof of claim by **January 15, 2003**.

Additional Information

- Additional information about the claims process and the General Bar Date may be obtained from the USG Claims Website, the USG Claims Helpline, or the Claims and Noticing Agent listed below.
- Certain of the Debtors manufactured or sold, at various times from the late 1920s through the late 1970s, a number of products that contained asbestos. These products include some acoustical plasters, some wall and ceiling plasters, spray fireproofing, fire-rated ceiling tiles, decorative textures, joint compound, and industrial insulation. For more information regarding the Debtors and products containing asbestos that may have been sold by the Debtors, please refer to www.usgclaims.com.

Procedure for Filing Proofs of Claims

- If you wish to assert an Asbestos-Related Property Damage

Claim, you must use the Debtors' proof of claim form for Asbestos-Related Property Damage Claims.

- If you wish to assert a General Claim other than an Asbestos-Related Property Damage Claim, you may use Official Bankruptcy Form No. 10. You may not use Official Bankruptcy Form No. 10 to file an Asbestos-Related Property Damage Claim.

These forms can be downloaded from the USG Claims Website, or obtained by calling the USG Claims Helpline listed below.

A signed original of a completed proof of claim form, together with any supporting documentation, must be delivered to the Debtors' Claims and Noticing Agent: **Logan & Company, Inc., 546 Valley Road, Upper Montclair, New Jersey 07043, Attention: USG Claims Processing Department**, so as to be received not later than 5:00 p.m., Eastern Time, on **January 15, 2003**. The proof of claim form may be submitted in person, by courier service, hand delivery, or mail addressed to the Claims and Noticing Agent. Any proof of claim submitted by facsimile or e-mail will not be accepted and will not be deemed filed.

Consequences of Failure to File a Proof of Claim

Any entity that fails to file a proof of claim by **January 15, 2003**, as required by the Court's order establishing the General Bar Date and the procedures outlined in this notice, shall be forever barred, estopped, and enjoined from asserting any General Claim, including any Asbestos-Related Property Damage Claim, against the Debtors; or voting upon, or receiving any distributions under any plan or plans of reorganization in these chapter 11 cases in respect of such General Claims.

Failure to use the Asbestos-Related Property Damage Claim Form to assert an Asbestos-Related Property Damage Claim, or failure to include all of the information and documentation required by that proof of claim form, may lead to such claim being barred even if it was filed prior to **January 15, 2003**.

You may wish to consult an attorney regarding this matter.

For complete information, including all relevant forms, notices, and instructions, please consult:

USG Claims Website
www.usgclaims.com

USG Claims Helpline
1-866-233-9048

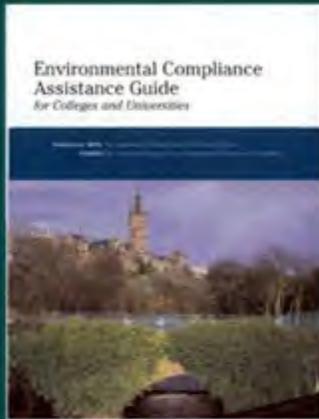
Write to: **USG Claims Processing Dept., Logan & Company, Inc., 546 Valley Rd., Upper Montclair, NJ 07043**

Environmental Compliance Assistance Guide

for Colleges and Universities



A Joint Publication from APPA:
The Association of Higher Education
Facilities Officers (APPA) and
The Campus Safety, Health and
Environmental Management Association



The idea behind the partnership of APPA and CSHEMA was to produce a guide that would assist colleges and universities in meeting the basic requirements of the environmental regulations. The *Environmental Compliance Guide* accomplishes this and much more!

The *Environmental Compliance Guide* will provide you with a basic understanding of the various obligations that the body of environmental law imposes on campuses and help you develop compliance plans for your campus.

In today's environment, colleges and universities seeking to meet the legal requirements from EPA must realize that the body of environmental laws is much broader than simply the disposal of chemicals or running an asbestos abatement program. Schools that meet the requirements set by the EPA or by state regulators are not simply doing one or two things right—they're doing everything right! Environmental compliance is constantly changing—with new laws, rules, and initiatives passed frequently and innovations being developed as everyone seeks more efficient methods for compliance. Institutions must constantly remake, expand, and improve their environmental programs. This guide will show you the way.

Environmental Compliance Guide for Colleges and Universities contains:

- A narrative chapter explaining the effective elements of an environmental management program and how implementing these elements may reduce the potential of an EPA inspection on your campus.
- Abstracts of programs derived from eight environmental statutes that were recently the focus of EPA inspections on campuses.
- An easy-to-read matrix highlighting areas of potential regulatory concern on your campus, in the areas of Academics, Student Activities, Operations, Maintenance, or Utilities.
- The inclusive Resources section gives key links to EPA documents that describe regulatory standards and provide assistance with them, as well as Web addresses for everything you ever need to know about compliance.

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The Safe Drinking Water Act (SDWA)
The Toxic Substances Control Act (TSCA)

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Appendix B: Abbreviations

Appendix C: Under the Microscope, EPA and States Pursue Colleges and Universities

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C&K Manufacturing and Sales Co., LLC features Moisture Magnet, a revolutionary, patented, five-layer water absorption system that draws in and holds moisture. The Moisture Magnet prevents dangerous puddles from forming on floors in entranceways, hallways, etc. This, in turn, reduces liability and labor costs. The mat's durable material also resists mold, mildew and rot, and the accompanying odors, resulting in a fresher appearance and a longer wear life. To obtain more information, call C&K Manufacturing and Sales Co., LLC at 800-821-7795.



Nature Vision, Inc. introduces its new Tool-Vu, a portable, self-contained video inspection system. Tool-Vu allows the completion of difficult jobs and tasks in tight-squeeze, hard-to-see, and low-light situations. Using Tool-Vu for construction, electrical, heating, plumbing, and many other service jobs saves time and sanity by solving the problem of being unable to see in tight spaces and dark places. Tool-Vu can also provide the "eyes" and "neck" for more thorough pre-job inspection and closer scrutiny of completed work. See Nature Vision, Inc.'s full line of viewing systems at www.naturevisioninc.com.



Hanovia presents its Glow-in-the-Dark Escape Route System. Needing no electrical connection or batteries to provide an instant guide for emergency evacuation in any building, the Hanovia Glow-in-the-Dark Escape Route System is activated by prior exposure to natural or artificial light. The system's vinyl tapes, signs, and paints begin to glow immediately when the lights go out, even in a smoke filled environment. The photoluminescent materials glow for up to eight hours or more. To find out more, call Hanovia at 908-688-0050.



Da-Lite Screen Company, Inc. has just announced the introduction of their newest addition to their Oravisual Lectern and Communication Cabinet Product line—The Providence. The Providence Series is a clean, modern design with one-quarter inch reveals that accent the basic lines of this beautiful new series. Available in both standard veneers and laminates, The Providence Series can also be designed with exotic veneers or custom-matched finishes and is available in four different sizes. Call Da-Lite Screen Company, Inc. to learn more 800-622-3737.



Bird-X, Inc.'s GatorGuard is a life-sized floating replica of an alligator head designed to scare geese, ducks, fish-eating birds, and small animals from the water areas they love. Unlike stationary owls that are ineffective because of their lack of movement, GatorGuard moves with the water and the wind and bounces all around the pond. GatorGuard works with all wildlife, even those that have never seen an alligator. The pests recognize predator-like patterns and flee instinctively. To hear more details about Bird-X, Inc.'s GatorGuard, call 800-662-5021.



RubbAir Door Division provides rugged impact traffic doors, combining the ease of operation with security. The steel-faced, double-acting Steel-lite traffic doors are engineered to expedite motorized and non-motorized material and personnel movement between areas in a facility while providing a high degree of security. The door's large vision panels are double-glazed, one-eighth inch thick, and UL listed as burglary resistant. The low maintenance and safe operation Doors are custom manufactured to precisely fit the specific door opening. For complete information, call RubbAir Door Division at 800-966-7822. 📞



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Jul 21-23—Educational Facilities Leadership Forum. Phoenix, AZ.

Sep 8-12—Institute for Facilities Management. Norfolk, VA.

Jan 26-30, 2003—Institute for Facilities Management. Ft. Worth, TX.

APPA Regional Meetings

Sep 15-17, 2002—RMA Regional Meeting. Banff, AB, Canada. Contact Steve Baldick, 403-220-8151 or baldick@ucalgary.ca.

Sep 28-Oct 3—ERAPPA Regional Meeting. St. John's, NF, Canada. Contact Cynthia Whelan, 709-737-3491 or cwhelan@mun.ca or www.housing.mun.ca/conf/erappa.

Sep 28-Oct 1—PCAPPA Regional Meeting. Reno, Nevada. Contact Buzz Nelson, 775-784-6514 or buzz_nelson@vpaf.unr.edu.

Sep 29-Oct 2—CAPP Regional Meeting. Spearfish, SD. Contact Art Jones, 605-642-6245 or artjones@bhsu.edu.

Sep 29-Oct 2—MAPPA Regional Meeting. Ames, IA. Contact Chris Ahoy, 515-294-8079 or ckahoy@iastate.edu.

Sep 29-Oct 2—AAPPA Regional Meeting. Brisbane, Queensland, Australia. Contact Brian Fenn, 61-07-3864-3778 or b.fenn@qut.edu.au.

Oct 12-15—SRAPPA Regional Meeting. Atlanta, GA. Contact Rita Tyler, 404-727-7487 or rt Tyler@fmd.emory.edu.

Other Events

Jul 11-12—Physical Plant Crafts Association Conference. Los Angeles, CA. Contact Paul Herrera, 505-646-15998 or

pherrera@nmsu.edu or www.pcca.net.

July 13-17—SCUP 37: Mision y Cambi/Mission and Change. San Diego, CA. Contact SCUP, 734-998-7932 or www.scup.org or www.scup.org/37.

July 20-23—NACUBO 2002: Business Officers Without Borders. Vancouver, British Columbia, Canada. Contact National Association of College & University Business Officers, 202-681-2500 or www.nacubo.org.

Jul 20-23—IEHA's 38th Association Convention. Saint Paul, MN. Contact International Executive Housekeepers Association, 800-200-6342 or 614-895-7166 or excel@ieha.org or www.ieha.org.

Jul 29-Aug 1—2002 State Energy Program/Rebuild America National Conference. New Orleans, LA. Contact Rebuild America Program, 202-466-7868 or www.pcgpr.com/sep-rba/home.html.

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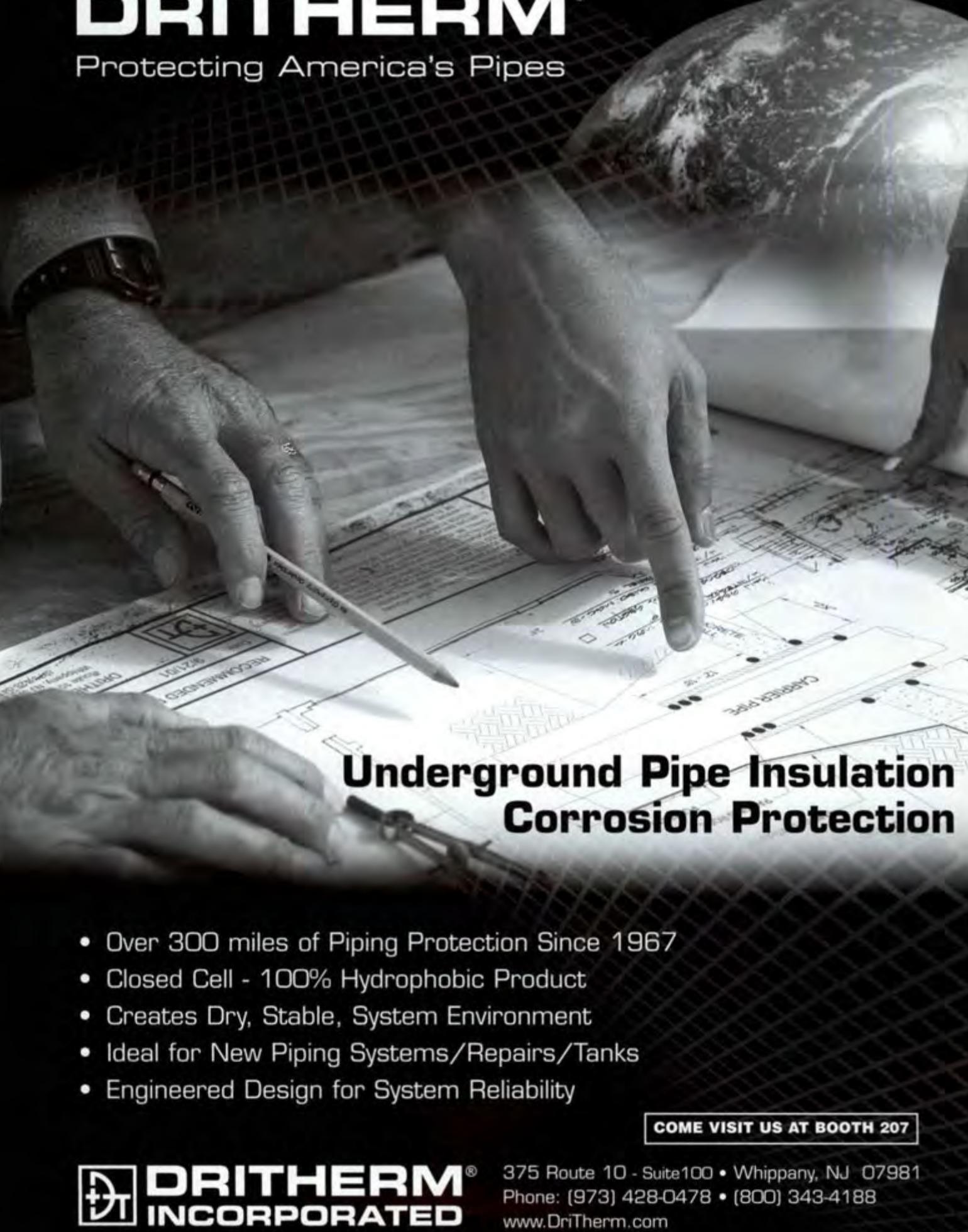
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