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9:48 am:  
Housing is frenzied. They need a new dorm built ASAP to meet increased student enrollment.  
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10:17 am:  
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This issue of Facilities Manager is devoted to the discussion and application of APPA's Strategic Assessment Model, or SAM. Originally developed in 1995, the Strategic Assessment Model has evolved into a dynamic management tool for self-evaluation and continuous organizational improvement. The publication last June of The Strategic Assessment Model captured the work and concepts to date of the many individuals and institutions who supported this ground-breaking model. The book has proven to be one of APPA's most popular offerings from the Resource Catalog.

The current Strategic Assessment Model Task Force, chaired by APPA President Maggie Kinnaman, has convened several times within the past year to bring the model to new heights, including the integration and application of SAM at our educational institutions. The members of the SAM Task Force include:

- Maggie Kinnaman, Chair, University of Maryland/Baltimore
- Don Brisckien, Philips Exeter Academy
- David Cain, Illinois State University
- Doug Christensen, Brigham Young University
- Larry Givens, Gamma Group Consulting
- Steve Glazner, APPA
- Tom Harkenrider, Constructive Concepts, Inc.
- Laura Long, LTL Collaborative

- Dave Riddell, University of Western Ontario

In this issue, Maggie Kinnaman focuses on the qualities needed for an enlightened leader in today's fast-paced education and facilities environment. David Cain discusses the elements of a learning organization in practical terms. Larry Givens provides a lesson in the Strategic Assessment Model and how it can be utilized by the facilities organization. And Laura Long discusses the critically important, but oft overlooked, aspect of surveying employees to determine the quality of the work environment.

Also in this issue are updates on two other important APPA initiatives: technical trades staffing guidelines, reported by task force cochair Ted Weidner of Eastern Illinois University; and operational guidelines for grounds management, written by task force chair John Feliciani of Winterthur Museum and Gardens. These exciting projects will make a valuable contribution to the body of knowledge and organizational effectiveness of facilities operations everywhere, and we're looking forward to their completion and publication.

Finally, we urge you to register for this year's Leadership Academy, which will be held June 4-8 in Rancho Mirage, California. The three effectiveness skills programs that comprise the Leadership Academy individual, organizational, and professional have now been scheduled for the same week at one location. See the article on page 3 for more information, or visit the APPA website at www.appa.org.
Bon Voyage!

APPAn staff and members joined together in January to offer best wishes to Kathy Smith who recently left her role as APPA's director of education to join her new husband Rob in the United Kingdom. Kathy has been with APPA for 20 years, during which time she served as staff liaison to the Educational Programs Committee and the Midwest region. She was instrumental in the development of the successful new formats for both the Institute for Facilities Management and the Professional Leadership Center. Kathy also managed speakers and exhibits for APPA's educational conference and annual meeting.

Kathy's departure will be felt throughout the association. Fortunately, Andria Krug has been promoted to director of director of meetings, conventions, & education. She will be coordinating efforts for the upcoming annual meeting in Fort Worth, Texas. Andria can be reached by e-mail at andria@appa.org.

And Welcome!

APPAn Executive Director Lander Medlin is pleased to announce two new staff members: Randel Edwards (randel@appa.org) joins APPA as executive administrative assistant, and Betty Farley (betty@appa.org) is APPA's new receptionist and administrative assistant.

New Format for Professional Leadership Academy

Join us as APPA launches into another session of the Leadership Academy June 4-8 in Rancho Mirage, California, near Palm Springs. Designed for those individuals who are good at leading their department and want to get even better, the Academy is a three-track learning opportunity, with each track emphasizing a different perspective and type of leadership skills. The

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THINK GREEN:
The Next Step in Campus Environmental Stewardship
by Walter Simpson
Energy Officer
UB Green, SUNY Buffalo

Save energy. Recycle. Reduce waste. Those are the slogans of the Think Green campaign, recently initiated by the UB Green Office at the State University of New York at Buffalo. UB Green is part of SUNY Buffalo's Facilities department. The purpose of Think Green is to encourage campus environmental stewardship and create partnerships between groups on campus in an effort to make campus operations less consuming of natural resources and less polluting of natural ecosystems.

The program consists of a new green campus website, numerous environmental projects conducted by Think Green campus partner organizations, and a variety of Think Green resources. The resources include Think Green booklets, posters, bookmarks, buttons, stickers, reusable mugs, mouse pads (made of recycled tires), and table tents for food service areas—all with Think Green slogans and graphics.

The campaign booklet is entitled Think Green: A UB Guide to Campus Ecology, also known as “UB's Little Green Book.” It lists many ways members of the university community can reduce the environmental impact of their activities on campus and elsewhere. There are informative ("how-to") sections on waste reduction, recycling, buying 100 percent post-consumer content recycled paper, campus transportation alternatives, energy conservation, enjoying nature on campus, handling hazardous materials, and even “eating green.” Students are encouraged to take the “Graduation Pledge,” promising that they will consider the environmental implications of their future employment. The booklet also contains sections for getting more involved, a listing of campus environmental programs and groups, and who to contact on campus for green campus assistance.

Gracing the cover of the UB's Little Green Book is a cartoon donated to the Think Green campaign by Pulitzer Prize winning Buffalo News editorial cartoonist Tom Toles.
Building Conservation Contacts, or BCCs, who have volunteered to promote environmental stewardship in their offices and departments.

Among the Think Green partners are SUNY Buffalo’s Computing and Information Technology unit and its Libraries. Both units are using 100 percent postconsumer content recycled paper in all public printing sites—which annually amounts to five to seven trailer truck loads of paper manufactured without cutting additional trees. Other partners include the university’s student-led Environmental Network, its Environmental Task Force, Faculty Student Association, Office of the Vice President for Student Affairs, Go Green initiative, University Facilities, Eco-House student club, and University Residence Halls and Apartments.

In conjunction with Think Green, the SUNY Buffalo Facilities department is beginning to implement public area recycling by testing new recycling stations in lobbies, lounges, and corridors across its two campuses. These recycling stations, comprised of three bins each, will allow “one-stop” trash disposal and recycling of various materials. The public area recycling program will be substantially expanded in 2000 with the purchase of hundreds of new bins. SUNY Buffalo is now recycling about 35 percent of its trash stream, primarily through a comprehensive office paper recycling program. Hopefully, the new public area recycling stations will help us achieve our recycling policy goal of recycling at least 50 percent of our trash stream.

The UB Green Office of SUNY Buffalo would be glad to send APPA colleagues a packet of Think Green resource materials (a sample poster, booklet, and bookmark). To receive the free packet, send your request and return mailing address to: Walter Simpson, UB Green Office, University Facilities, SUNY Buffalo, 220 Winspear Avenue, Buffalo, New York 14215, or fax to 716-829-2704 or e-mail to ecal@facilities.buffalo.edu.

A lot of additional information about SUNY Buffalo’s green campus program is available on our new website at http://www.wings.buffalo.edu/ ubgreen. Think green! Act green! Be green!

MAPPA/PGMS Turf Seminar
Set for June

The 2000 MAPPA/PGMS Turf Seminar will be hosted by Butler University on June 20-22 in Indianapolis, Indiana. A block of rooms has been reserved at the Wyndham Gardens Hotel (317-574-4600) at the flat rate of $82 per night. For more information about the seminar, please contact Nickolas Hill at nhill@butler.edu.

In Memoriam

The following members of the APPA community have passed away in recent months. Please send information about deceased members within your chapter or region to Steve Glazner, Editor, Facilities Manager, at steve@appa.org.

- Kenneth V. Eyer, CAPPA member emeritus
- Charles Jankey, Cornell University
- Al Letourneau, Western New England College
- George Lyons, University of Missouri/Columbia
- William S. Rose, University of Alaska/Anchorage

Correction

In the article “Energy Submetering: The Key to Cost-Effective Conservation,” which appeared in the November/December 1999 issue of Facilities Manager, we left out the contact information for the authors. W.D. Turner, of Texas A&M’s Energy Systems Laboratory, can be reached at turner@esl.tamu.edu. John McBride, of New Horizon Technologies, can be reached at jmcbride@newhorizontech.com.
The Aurora Borealis, known as the Northern Lights, visually demonstrates the awesome power of earth’s magnetosphere. Created by the vaporization of energized particles being pulled into earth’s atmosphere, the Northern Lights are a spectacular reminder of the consistent, dependable, powerful holding force we usually take for granted.
Executive Summary

Competency, Collaboration, and Credibility
by E. Lander Medlin

This past fall I again enjoyed the opportunity to network with a vast number of members while attending the regional meetings. The quality of the educational programs—both general sessions and breakouts—was exceptional, focusing on both leadership and technical skills areas. The networking experience proved valuable in further developing long-term collaborative relationships with colleagues and business partners. There was more time spent this past year utilizing speakers external to the facilities profession. In other words, APPA members are actively focusing on increasing their understanding and awareness of other subject matter areas beyond facilities management (such as diversity, continuous quality improvement, human resource management, media relations, etc.).

Certainly, all are essential to the success of the facility professional.

I chose to highlight the content and experiential benefits of the regional meetings more fully to make the following point: These activities reinforce the need for our strategic plan to be on target. (For the full text of our present strategic plan, you can also visit APPA's website, www.appa.org/about/).

More specifically, our educational programs are helping to develop our professional competency. Our networking experience is fostering stronger, mutually beneficial collaborative relationships. Our focus on increasing our awareness about broader areas of responsibility help us improve our own credibility in the larger community. Therefore, the three desired outcomes of our educational programs are: 1) competency, 2) collaborative relationships, and 3) credibility. These are important because they make the strategic plan become a real, feasible, and achievable tool for change and future progress.

Now, from a member's vantage point, I reviewed the feedback from the Member Opinion Survey of last year to determine if the members' expectations were in alignment with the revitalized strategic plan's direction and focus. Let me reiterate what the members said by quoting from my June report to the APPA Board and membership:

You made it clear that your overarching expectation of APPA is to increase the awareness, visibility, and credibility of the facilities profession with senior institutional officers and across the industry as a whole. To do this, you stated we must:
1) deliver high-quality information and education concerning the present and future of the profession;
2) provide access to knowledge that stems from quality research grounded in comprehensive data collection and information derived from effective practices in the industry;
3) establish legislative ties with the federal government and its regulatory agencies;
4) stay abreast and informed of the newest, emerging technologies; and
5) continuously improve communication to and between members.

Therefore, from my perspective, we have a wonderful opportunity to positively connect what we plan to do as stated in the strategic plan with the members needs and expectations.

One additional point within the strategic plan concerns a “tag line.” (A tag line is a marketing tool organizations use to “brand” itself; that is, connect itself with its focus audience and define itself within the larger community.) It is interesting to point out that although we reaffirmed our original vision “to become a global partner in learning,” this concept can be strengthened further by adding a simple tag line.

APPA: Becoming a Global Partner in Learning—Building Your Children's Future

"Building Your Children's Future" reinforces APPA's importance and purpose to the general public and the higher education community we serve in simple, easily understood terms.

I hope the above background and context serves to reinforce and reconnect our efforts in the revitalization and reaffirmation of the strategic plan with past and present activities. It will be an important guidepost for all of us during the next few years.

All that being said, what are we actually engaged in at the present time or have accomplished during the past several months. I have attempted to capture these activities under the new strategic plan's framework of desired outcomes.

Competency:
- Two of the three components of the Professional Leadership Center (PLC)—the educational academy

Lander Medlin is APPA's executive vice president. She can be contacted at lander@appa.org.
and the research program—have been finalized with information on the web and printed brochures being distributed.

• On the utilities deregulation front, five new RR-USA (Resource Reallocation—Utilities Strategic Assessment) state-based Executive Briefings have been slated for delivery with endorsement from NACUBO and EPRI and funding by the DOE/RBA, EPA, and TREMCO.
• The Institute for Facilities Management redesign is still a monumental success as demonstrated by the burgeoning enrollments.
• The CCAS (Comparative Costs and Staffing report) will be ready for use and order fulfillment by March.
• The APPA website is being updated and refreshed on a regular, timely basis, thereby meeting our members' needs and expectations more than ever before. This has been demonstrated by heavy APPAinfo listserv traffic, a new Listnotes column in Facilities Manager magazine; and job descriptions added to the Job Express section online.

Collaborative Relationships:
• Both our Grounds and Trades Guidelines Task Forces are working tirelessly and expect to have their publications complete this coming fall 2000 and next winter 2001, respectively.
• Our relationships with CSI and correspondingly with the CMD Group (two of our strategic alliance partners) are flourishing. The test of their latest design/build construction software “Perspective” is at several higher education institutions. Plus, we are collaborating with CSI and the National System Contractors Association (and others such as McGraw-Hill, the National Glass Association, and possibly IFMA) on a conference addressing Emergent Building Technologies scheduled for delivery in February 2001.
• We will co-facilitate a day-long pre-conference workshop at the ACUHO-I Conference this July 2000 in Pittsburgh entitled Building an Effective Relationship between the Housing and Facility Professional.
• We have completed the migration to a new membership database and have printed the 2000 membership directory.
• We will offer Historically Black Colleges and Universities (HBCUs) complimentary, trial membership for both APPA and all the regions this spring during the dues billing cycle.

Credibility:
• The Strategic Assessment Model (SAM) Task Force is ready to deliver its survey and prepare a toolkit for publication this year.

We are continuing to work with NACUBO on a number of projects: co-location of our annual meetings in both 2003 (Opryland) and 2006 (Hawaii); a full, joint revision of the publication Managing the Facilities Portfolio; a seminar revisiting the old Institute for Facilities Finance; and, co-sponsorship of our Professional Leadership Center academies.

The RR-USA briefings and case studies book will be another way to improve our standing in the higher education community as we take a leadership role in managing the response to utilities deregulation.

We are continuing to work with the Council of Higher Education Management Associations (CHEMA) on a number of projects such as the Effective Practices/Benchmarking website and a companion executive level publication, and participation in a conference for corporate business partners called the “Campus/Corporate Partnership” to be held in conjunction with the CHEMA meeting in early June in Baltimore, Maryland.

And, all of this is being accomplished within the parameters of the budget. Indeed, our financial situation is more stable than ever before even against the backdrop of leveling revenues and rising costs across many categories of expense in an association budget (publication and advertising sales; membership renewal and recruitment; inordinate increases in airfare, lodging, and business meals; and, audiovisual and office technology enhancements).

Yet, we are still planning to achieve not only our targeted 3 percent of the total budget toward reserves, but a net surplus beyond that amount as well. As always, your support is appreciated and your active involvement and participation in the fabric of APPA is encouraged and welcomed.
The decade of the 1990s marked the 100th anniversary of the American automobile industry. Historians have credited the Duryea brothers of Springfield, Massachusetts for the start of this industry in America. In 1896, the brothers J. Frank and Charles Duryea produced 13 cars from the same design. The car was powered by a 4-horsepower, 1-cylinder engine. Although the very first American car was built back in 1805, this was the first time that more than one vehicle was produced from the same design. Prior efforts had been to produce one-of-a-kind and start-from-scratch type vehicles.

Ford Motor Company entered the business world without fanfare in 1903. This pioneering company, founded by Henry Ford was to become one of the world’s largest corporations. Few companies are as closely identified with the history and development of America throughout the 20th century as was Ford. And perhaps no other American firm is as well known around the world.

At the time of its founding, Ford Motor was a tiny operation doing business out of a converted Detroit wagon factory staffed with about ten people. In the first 15 months of operation, 1,700 Model A passenger cars chugged out of the old wagon factory. Records show that by 1908, 485 different companies were building the horseless carriages, but the most successful of all these vehicles was the Ford Model T. The first Model T was delivered October 1, 1908 and Ford Motor Company has been mass-producing cars ever since. Henry Ford is credited with putting America on wheels by producing a car within the means of the working class. Today, the company is the world’s second-largest producer of cars and trucks, with manufacturing, assembly, or sales operations in 30 countries on six continents.

A number of years back, in an attempt to offset criticism about the inferior quality of their vehicles as compared to those manufactured in other countries, Ford adopted the motto “quality is job one.” This theme was intended to inspire workers to perform quality work and to assure customers that the design and workmanship of Ford-produced products was guaranteed to be of the highest quality. One of Ford’s most successful car dealerships took this same concept a bit further by saying that within their particular dealership they also considered customer service to be “job one.” This highly focused attention on customer satisfaction led them to achieve phenomenal success in sales and service.

Though facilities management organizations do not peddle automobiles, the wisdom expressed by that one Ford dealership can benefit us as we serve our own customers. We might do well to consider how the five rules promoted by this automotive dealership could apply to facilities operations.

**Rule 1: Never tell a customer that a problem can’t be fixed.** When a customer has a problem, the last thing they want to hear is “that’s the way it is—live with it.” It is important to listen to the customer to identify the problem and then make an honest attempt to have it resolved. Some problems are easier to resolve than others and sometimes the resolution to the problem is not always obvious. Don’t drop the problem after making the first pass at fixing it. If repeated attempts are necessary, however, make sure you are working on the right problem. If the “fix” requires an extended period of time, keeping the customer informed is vitally important.

**Rule 2: Never promise too much, and always do a little more than you promise to do.** Taking responsibility to look into a customer’s request is expected, but caution must be used in promising something that can’t be delivered. Make sure you fully understand the issue before making any promises. No one wins when false expectations are created. Know the limits of what can be accomplished and the time frame within which it can be scheduled and completed. On the other hand, one builds credibility...
with the customers by doing more than they ask for. Sometimes that may be no more than completing a project ahead of schedule or doing it for less cost than was originally estimated.

**Rule 3: Treat your customer's needs first.** In the private sector, organizations that are most successful depend upon having customers come back again. Dissatisfied customers usually react first by using their mouth to complain and then secondly they use their feet to walk down the street to do business with a competitor. In our case, we need to make it a priority in meeting customer's needs so that our organization minimizes complaints and criticism, as well as minimizing the need to consider privatization options. Always remember that if it wasn't for the purpose of meeting your customers needs, your organization would not be necessary at all.

**Rule 4: Give all customers a fair deal.** Some customers are more demanding than others. But it is not good to give preferential treatment or better service to one customer and then try to make it up on another. All customers should be treated with consistency and fairness. Don't fall into the trap of dropping everything else to "grease the squeaking wheel." While attending to the problems of the "wheel," other less vocal customers may be doing a slow burn from neglect.

**Rule 5: Fix the problem right the first time you handle it.** It is highly frustrating to a customer to repeatedly request that a concern be addressed or a problem be fixed. In addition, it is highly inefficient for the "fixer" to make multiple attempts to resolve the same issue. The organization that makes repeated unsuccessful attempts to fix the same problem loses credibility and the customer is left with a lack of confidence in the organization's ability to resolve problems.

Just as Ford Motor Company has promoted "Quality is Job One" and one of its most successful dealers maintains that "Customer Satisfaction is Job One," facilities management organizations would do well to ensure that both quality and customer service are job one. Employees need to understand that quality and customer service must be a priority if the service organization is to be successful.

A wise man, whose name has not been recorded by history, once aptly summed up the concept of service with this advice: "Aim for service, not success, and success will follow."
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The new year has started off with a whimper and not a bang. This is good news in spite of the Y2K doomsayers who predicted the chaos of services such as electric grids, computer systems, banking, services, and other technology-based industries. Contingent, backup, and emergency plans were all in place but hardly any Y2K predictions came to fruition. While all the extra work and planning seems to have little justification now, a mock emergency could not have prepared us better for the unknown.

APPA too has much to be thankful for in the millennium. After a computer migration in December 1998 from DataEase to MemberTrak, APPA's services have expanded to meet growing concerns internally and by our regions and chapters. Membership and accounting reports are now more accessible and user friendly. Without input from members-at-large, the APPA Board of Directors, and regional officers, the scope of available reports, membership options, and billing capabilities demanded from the database would still be in its infancy stage. Further database customizations are planned for 2000 which will provide more tracking information and demographics.

Your ongoing help is needed to keep the database current. E-mail, fax, phone, or a postcard can be used to report changes to membership records. These changes include a new address, title, e-mail, fax, and phone numbers. This data will help us to provide you timely information on APPA services, including Facilities Manager and the annual Membership Directory and Resource Guide.

The Membership Directory and Resource Guide has been delivered to all members. Presenting the most up-to-date information in this publication is our pledge to you. This valuable networking tool will now be back on schedule after this edition. Look for the 2000-2001 guide in the fall of 2000. As APPA's President Maggie Kinnaman mentioned in the introduction to the Membership Directory and Resource Guide, the creation of this guide has a variety of uses. Whether it's used to network with former coworkers, learn about new product offerings by business partners, or discover APPA services such as e-mail discussion lists and educational programs, members rate this as an important membership benefit. Most importantly, this is a member-driven publication that can only become more useful through the years with your input on what you would like to see highlighted.

In that light, it is that time of year to mail membership renewal invoices. It is our hope that APPA will continue to be your organization of choice for higher education facilities professionals. A mailing schedule for invoices is listed below:

<table>
<thead>
<tr>
<th>Invoice Type</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial invoice</td>
<td>February 29, 2000</td>
</tr>
<tr>
<td>1st reminder</td>
<td>March 28, 2000</td>
</tr>
<tr>
<td>2nd reminder</td>
<td>April 28, 2000</td>
</tr>
<tr>
<td>3rd reminder</td>
<td>May 22-26, 2000</td>
</tr>
</tbody>
</table>

The third reminder will consist of APPA staff making phone calls to members in nonpayment status. For those institutions that last year let us know about a later fiscal calendar, you will receive an invoice asking if that information is still current. We certainly don't want any members to be left out when the 2000-2001 Membership Directory and Resource Guide is distributed in the fall. As always we strive to provide you with benefits and services that meet your specific needs, so if you have special concerns regarding the billing process, please let us know.

As of the printing of this article, I will have served as APPA's director of member services for one year. I have now completed a full rotation attending an educational conference, an Institute, a Board meeting, and a regional meeting. During this time I have met many members in person and hope to meet more this year as APPA continues to provide much needed services to the higher education facilities profession. Just as APPA has a mission statement, I too would like to state that my mission is not only to help recruit and retain members but also to be a sounding board for our members today and in the future. If I can assist you with your concerns or suggestions, I hope you will contact me by phone 703-684-1446 ext. 232, via e-mail dina@appa.org, or if you're in Alexandria, please stop by for an office visit.

Dina Murray is APPA's director of member services and staff liaison to the Eastern region. She can be reached at dina@appa.org.
Lots of magazines can give you facilities management information, but only Facilities Manager addresses your needs from the educational facilities perspective. Articles address the constraints of educational institutions when it comes to funding, budgeting, capital renewal, deferred maintenance, and more!

Facilities Manager is the official publication of APPA: The Association of Higher Education Facilities Officers. Founded in 1914, APPA promotes excellence in higher education facilities.

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*$120 rate is for nonmembers of APPA; member rate is $66, payable in U.S. funds by check or credit card. Please mail to: APPA, 1645 Prince St., Alexandria, VA 22314.
Sitting in my office on January 3, 2000, after a personally draining 1999 holiday and an uneventful Y2K transition, I was desperately seeking inspiration for this article on renewal and continuous improvement, when suddenly something caught my eye. On the corner of my desk sat a five-year-old paperweight. I read the inscription and couldn’t help but be inspired. It read, “Leadership is owned by those willing to make a difference. Thanks for making a difference.” Ironically, the paperweight was given to the APPA Board of Directors by then-APPA President Doug Christensen of Brigham Young University. It suddenly became crystal clear that making a difference is what APPA’s Strategic Assessment Model is all about. It is made for the leader in all of us. It fills our need for inspiration, renewal, continuous improvement, and excellence. Let’s explore this concept a bit more.

Organizational and Personal Renewal

A book that I recently read by Ed Oakley and Doug Krug, Enlightened Leadership, tells us that all organizations as well as all people go through a number of growth phases: entrepreneurial, growth, and decline or renewal. Characteristics presented in the entrepreneurial phase include adaptability, flexibility, risk taking, high motivation, and energy. As we enter the growth phase we want to capture forever the things that made us successful in the entrepreneurial phase and so we put in place systems, rules, and procedures that help to ensure continued efficiency and effectiveness. The problem is that the world does not stand still.

Larry Wilson from Changing the Game: The New Way to Sell puts it this way. “Our options are to learn this new game, the rules, the roles of the participants and how the rewards are distributed, or to continue practicing our present skills and become the best players in a game that is no longer being played.” This aptly describes the late growth phase, which is often marked by a breakdown in communication, habit orientation, rejection of innovation, bureaucratic style, low risk taking, and low energy. For those organizations that stick with the old ways, decline is inevitable. For people it is much the same. As we learn to survive in life, we establish habits or procedures that we rely upon and know work for us. But if we stay with the old ways of doing things, we will eventually experience crisis.

We can break this cycle by establishing new habits, new ways of doing things continuously that keep pace with our rapidly changing environment. We do this most effectively by exercising the alternative of renewal and continuous improvement. The renewal phase is marked by revitalization, closeness to customers and the market place, risk taking, developing a change-friendly attitude, quality orientation, openness, and flexibility. Renewal is a conscious choice, a state of mind. Wayne Gretzky, the great hockey player, knows all about renewal and describes it this way. “I skate to where the puck is going to be, not to where it is.” The need and

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importance for change is the mark of a healthy organization as well as a healthy person. In order to be flexible and adaptable, an attitude of openness and opportunity must be present, rather than a mindset marked by problems and fear. Ultimately, we must be willing to create our future rather than wait for it to arrive.

Oakley and Krug tell us that excellent organizations don't believe in excellence but continuous improvement and constant change. "Renewing organizations require Enlightened Leaders who can bring out the best in their people—their people's innovation, their ability to anticipate the future, their ability to make it work. In so doing, these leaders inspire a consciousness of continuous renewal in their people."

**So What About the Future?**

Rowan Gibson, a contributor to the book *Rethinking the Future*, tells us that the race to the future will be won by those who are able to stay ahead of the change curve and invent the world, rather than simply respond to it. The leaders in this brave new world will be explorers, always on the lookout for trends and opportunities. They will surround themselves with folks who are willing to embrace the future and exude a passion for that future that will be infectious and encourage others to join in.

Change requires personal skills and capabilities and a commitment to lifelong learning. Organizations in the future must find a way to work together as an integral whole. Most paradigm changes occur at funerals because no one willingly changes. It's too risky and uncertain. The organizations of the future must appeal to people's needs for a sense of purpose through a vision, something that people can really care deeply about. Nurture in people the ability to see the big picture and understand the interaction of all parts of the organization. We need to help people develop the ability to challenge their assumptions.

Peter Senge, the learning organization expert, tells us that to be a real learner is to be willing to admit you don't know it all. Most top executives may not be up to this. Leaders don't know what the future will hold. They don't know if they will be qualified and they're scared, causing immense stress. Until stress lessens at the top, there is no way stress can be reduced at lower levels. In order to give up the past, you need to understand what you'll get in its place. You need to help folks build a picture about what the future holds. The learning organization of the future will be highly productive and one in which the employees feel that their work environment is operating closer to that which they value.

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Futurist Gary Hamel tells us that the goal is not to predict the future, but instead to imagine the future that you can create. There is not just one future out there. The data about the future is out there for everyone, but how that data is interpreted and the ability to see new opportunities varies greatly. We need to be curious and contrary at the same time. We need to question and look at the possibilities. We will learn about the future outside of your own industry. As an example the future of utilities can be found by looking at what happened with the telecommunication industry.

One thing for sure, the future is filled with much change and the leader’s challenge is how to lead that change. John Kotter explains steps to the transformation process. Perhaps this can be added to your future’s toolkit.

- Create a sense of urgency by looking at how your organization is functioning in comparison to others within your industry. Urgencies create opportunities for change.
- Form a group that can guide the change effort and put in place the policies and procedures necessary to support the desired change.
- Develop a vision and strategy for achieving it.
- Effectively communicate the vision to the entire organization.
- Empower people to change systems and structures that stand in the way of achieving the vision.
- Create some short-term successes so folks see that something is happening and that they are recognized and rewarded for their contribution to the successes.
- Capitalize on the short-term successes to create even more change.
- Institutionalize all of the change into a new culture.

Perhaps the biggest message here today is that the future will be a very different place than the past. And with the business we’re in as facilities professionals, higher education has the opportunity to be the focal point of our evolving knowledge-based society. Those who survive and thrive in this brave new world will be the ones who did not cower from the eminent change, but embraced it and began to build products and services that will best serve the needs of the customer of tomorrow. The opportunities are many and they are there for the taking by those who have the courage and imagination to venture into new territory.

Are we ready for the future? Does the following describe our APPA membership?

- We’re flexible and adaptable and try not to predict and control.
- We seek out opportunities for growth.
- We strive to let go of the past so that we can embrace the future.
- We’ve started the process of creating our future.
- We’re ready for anything the future has to offer.

**Association Renewal**

And how about associations? Is renewal important for them? Remember we spoke about the rapidly changing marketplace. Well, I know you would agree that the environment affecting higher education is highly volatile. We’ve previously identified forces that are making an impact on education as well as the facilities management profession; these include information technology, resource scarcity, societal needs/public accountability, governmental intervention, and environmental deterioration. In addition, in the information age where the individual is king, higher education becomes a growth industry in which individuals strive for enhanced competency. Sounds like a rapidly changing marketplace to me!

In response to all of this change, facilities professionals must consciously choose renewal and adapt to very different roles. These include the roles of information technologist, operations expert, asset manager, partner, strategist, executive and leader.

In response to all of this change, APPA is seeking renewal through revitalization, and in some cases a reaffirmation, of our Strategic Plan. Our existing Strategic Plan was developed over four years ago and includes the following.

**Vision**

To become a Global Partner in Learning.

**Mission**

To support educational excellence with quality leadership and professional management through education, research and recognition.

**Objectives**

To ensure meaningful participation and involvement of APPA stakeholders.

To provide equal access to educational opportunities.

**Strategic Initiatives**

To increase the effectiveness of education for APPA stakeholders.

To forge stronger links between the Regions and APPA.

To expand the use of APPANet’s electronic online services.

To increase the awareness of the facilities profession with senior institution officers.

To engage in continuous improvement based on stakeholder input.

At the last APPA annual meeting in Cincinnati, the Board of Directors agreed that reviewing and updating the strategic plan would be a worthy initiative. All decided that both the vision and mission were sound and would remain intact. We participated in an extensive brainstorming session and identified some new themes that are being considered by the Board. Let me share our draft with you.

**Principles and Values**

- Integrity
- Honesty
- Respect
- Fairness
- Patience
- Nurturance
- Encouragement
• Growth & Development
• Service
• Quality
• Collaboration

Desired Outcome #1
COMPETENCY—The organization will consist of competent, educated, ethical professionals.
Goal 1.1 To create, expand, refine, and transfer the body of knowledge of facilities management and leadership.
Goal 1.2 To provide broad access of educational and research opportunities for members.
Goal 1.3 To increase the participation in and value of APPA programs and services to APPA stakeholders.
Goal 1.4 To fully recognize the accomplishments and achievements of APPA stakeholders.

Desired Outcome #2
COLLABORATIVE RELATIONSHIPS—The organization will engage in symbiotic and collaborative relationships and partnerships. The organization is inclusive and accessible serving facilities professionals, their institutions, and related communities.
Goal 2.1 To increase meaningful participation and involvement by our diverse stakeholders (e.g., general membership, regional leadership, business partners, higher education community, other associations & governmental agencies).

Goal 2.2 To ensure member and staff, regions and state/local chapters' expectations are in alignment.

Desired Outcome #3
CREDIBILITY—The facilities professional will provide meaningful input and value in the decision making processes of the institution. APPA will be the authoritative and influential advocate of the facilities profession within the education community.
Goal 3.1 To increase the awareness of the facilities profession with senior institutional officers.
Goal 3.2 To anticipate and adapt to changing conditions.
Goal 3.3 To influence legislation and governmental regulations through relationship building and information.
Goal 3.4 To ensure responsiveness to the needs of the educational enterprise.
Goal 3.5 To ensure accountability for and stewardship of all human, capital, and financial resources.

Once the desired outcomes and goals are finalized they will drive all that we do within the association and should for the foreseeable future. Each year the incoming Board would identify their action plans for the upcoming year and these plans would help to ensure that we are continuously improving the organization, moving it one step closer to our vision of becoming a Global Partner in Learning; and ultimately achieving our desired outcomes of competency, collaborative relationships, and credibility.

So what do you think? Do you believe that your association is embracing the concepts of continuous improvement and renewal? Please contact us directly if you have any ideas, questions, or comments about our direction. You may send an e-mail to me at mkinnama@um.umd.edu, or to Lander Medlin, APPAs executive vice president, at lander@appa.org.

Leadership

"I find the real thing in this world is not so much where we stand as in what direction we are heading." Oliver Wendell Holmes

So what does this “leadership thing” have to do with continuous improvement and renewal? I’ll refer you back to the new roles that will have to be embraced by facilities professionals in the future. One of those roles was that of leader. That brings up the age-old discussion of the difference between a leader and a manager. Some
descriptions say that management is the act of efficiently managing things and leadership is the act of effectively leading people. Other descriptions say that managers do things right and leaders do the right thing. I contend that each of us must master all of these roles in order to thrive in today’s environment.

The Strategic Assessment Model

That brings us to renewal and continuous improvement. Remember that renewal is a conscious choice, a way of viewing the world. I hope that you can now appreciate the importance of making that conscious choice, that of renewal. As leaders who are willing to make a difference and have chosen the path to renewal, the Strategic Assessment Model (SAM) can provide you with a tool that can jumpstart your journey to organizational excellence based on a conscious set of continuous improvement and renewal tools and performance indicators. The essence of SAM follows:

The APPA Strategic Assessment Model, referred to as SAM, is an essential tool that can be used to achieve organizational excellence through continuous improvement. SAM enables the facilities professional to assess an organization’s financial performance, the effectiveness of its primary processes, the readiness of its employees to embrace the challenges of the future, and its ability to delight customers. The facilities professional can utilize the model for self-improvement, peer comparison, or benchmarking. Think of SAM as your vehicle that takes you on a journey from today’s realities to tomorrow’s excellence.

As Chair of the SAM Task Force, I am pleased to be able to provide the kickoff article for the magazine theme of continuous improvement and renewal as embodied by APPA’s Strategic Assessment Model. I encourage you to read through the articles that follow, think about the concepts and, most of all, be willing to make a difference and start your journey toward organizational excellence through continuous improvement. For some inspiration along the way, Peter Block in the Empowered Manager says, “Lasting improvement does not take place by pronouncements or official programs. Change takes place slowly inside each of us and by the choices we think through in quiet wakeful moments lying in bed just before dawn.”

References


Larry Wilson from Changing the Game: The New Way to Sell.
Creating a **Learning Organization Environment** for the **Facilities Professional**

by David A. Cain, Ph.D.

Facilities professionals today are challenged to meet the ever-changing needs of the 21st century. Never before have the stakes and expectations been so high. So why do we continue to work toward and develop political or authoritarian bureaucracies while visionary enterprises such as Internet businesses, e-commerce, and others involved in the computer technology revolution are unfolding globally at supersonic speeds right before our eyes? Furthermore, why do facilities professionals allow isolated bits of information, piecemeal analysis, reactivity, and fragmentation to be the rule rather than the exception, even as the rest of the world becomes more inter- and intra-connected with adaptive processes and transparent applications via technology?

These issues could be resolved by understanding and using the theories and methods presented in *The Fifth Discipline: The Art and Practice of Learning Organization* authored by Peter Senge, a faculty member at the Massachusetts Institute of Technology and director of the Sloan School of Management. APPA has already adopted some of these constructs and theories by embedding them into the Strategic Assessment Model (SAM) and the Leadership Academy. These theories represent the driving force behind a new vision of organizational change. According to *Fortune* magazine, “the most successful corporations of the new millennium will be something called a learning organization, a consummately adaptive enterprise.”

Developing a learning organization requires a quantum shift in how we interact and think. These fundamental shifts go well beyond the culture of facilities management, or even traditional western management culture. They challenge the steadfast assumptions of the industrial revolution about how individuals and organizations learn and work.

One guiding principle in moving forward is the discovery and exercise of personal commitment and building community. Without personal transformation, there is no real chance of moving towards an organization that learns to relearn. The best example of this is found in the reptile world where a loss of limb, by the miracle of DNA, is replaced by regrowth. Dr. W. Edwards Deming, leader in the quality movement, once stated that nothing ever happens without “personal transformation.” I would agree and conclude that an organization cannot learn and move forward unless the individual within makes the personal transformation and commitment to the organization.

Deming further explains that “our prevailing system of management has destroyed our people.” Unfortunately, many organizations and institutions of our society are predominately oriented toward cultivating control rather than learning. In learning organizations this postulate is reversed.

David Cain is currently the director of facilities and capital planning at Illinois State University, Normal, Illinois. He is a member of the Strategic Assessment Model Task Force, a MAPPA program committee member for FY 2000, and a past contributor of several articles for Facilities Manager. He can be reached at dacain@ilstu.edu.
Learning Organization Defined

A learning organization is one in which people at all levels in the organization, individually and collectively, are continually increasing their knowledge capacity to produce the best practices and possible results. A learning organization is one that deeply cares about its people first. A learning organization represents a new understanding of the process of organizational change. It is not a top down nor bottom up change but rather participation thinking at all levels. Any type of organization can become a learning organization, i.e., industries, businesses, educational institutions, nonprofits, community groups, and families. Learning organizations start with the assumption that learning is valuable, continuous, and most effective when shared and that every experience is an opportunity to learn.

Learning Organizations’ Characteristics

According to Calvert, et al. (1994) and Watkins and Marsick (1993), learning organizations have the following characteristics and share the same core values:

1. They provide continuous learning opportunities
2. They use learning to reach their goals
3. They link individual performance with organizational performance
4. They foster inquiry and dialogue, making it safe for people to share openly and take risks
5. They embrace creative tension as a source of energy and renewal
6. They are continuously aware of and interact with their environment

Those who work in a learning organization are “fully awakened” people. They are deeply engaged in their work, striving to reach their business and personal potential and they share common vision and mission in an effort to achieve a greater capacity. They use mental models to guide them in the pursuit of personal mastery, and their personal goals are in alignment with the needs and mission of the organization.

At its core, a learning organization understands itself as a complex organic system. It has a conscious vision and purpose. It is aware of its feedback system and alignment mechanisms and is deliberate about the method in which it constantly uses them to stay focused.

The total quality movement (TQM) represented the first real effort in building learning organizations. Its emphasis was on continuous improvement through analytical feedback. Today, leading organizations seek to understand and meet the “hidden need”
of the customer and create the new anticipated service, which meets or exceeds that need. These potential needs are what customers might truly value but would never think to ask for. To illustrate this concept, consider my two-year-old daughter's reply to questions outside her realm of understanding and imagination: "I don't know what I don't know." To further demonstrate my point, one only needs to consider the recent proliferation of .com businesses that have emerged (i.e., Amazon.com and eBay.com) to clearly understand this concept. You name it, they have dot com'd, dot gov'd and dot org'd it!

**Learning Organization's Core Concepts**

Peter Senge's *The Fifth Discipline* states that the concept of the learning organization (LO) has been promoted as a way to restructure organizations. Senge views teams as the core performance units in the organization. Much of the success of the Learning Organization movement is due in large part to Senge's emphasis on investing in the human capital rather than in the physical capital. While both are important, facilities professionals must give greater attention to human values in the work place and allow the natural forces to evolve and produce a genuine learning community.

The five disciplines are the **key characteristics** to achieving this type of organization:
1. personal mastery
2. mental models
3. shared vision
4. team learning
5. systems thinking

According to Senge, systems thinking is the most important and underlies the rest.

1) **Personal Mastery:** Indicates a high level of proficiency in a subject or skill area. Personal mastery is the discipline of continually clarifying and deepening one's own personal organizational commitment by learning to expand one's personal capacity to create the future and results one most desires. Personal mastery applies to individual learning, and organizations cannot learn until their members begin to learn. Personal Mastery has two components. First, one must define what one is trying to achieve (a goal). Second, one must have a true measure of how close one is to the goal. Creative tension is what motivates individuals to change and represents the difference in our personal vision of what an organization can be versus its reality.

2) **Mental Models:** Mental models are deeply ingrained assumptions, generalizations, or images that influence how we understand the world, the organization, and relationships and how we choose to respond to various situations. Mental models guide our actions and represent the framework for the mental (cognitive) processes of our mind. In other words, they determine how we think and act. Surfacing, clarifying, testing, and improving one's internal representations of the world and understanding how these representations, along with their accompanying implicit assumptions, shape one's decisions and actions are important components of mental models. Understanding our own internal "theories in practice" of how things work allow us to challenge, modify, refine, and change our mental models. Mental models also help us appreciate the perspective of others.

3) **Shared Vision:** A shared vision begins with the individual, and an individual vision is something that one person holds as a truth. Better understood as a group competency than an individual skill, this is the practice of developing a vision for an organizational team. The shared vision of an organization must be built of the individual visions of its members. What this means for the leader in the learning organization is that the organizational vision must not be created by the leader, rather, the vision must be created through interaction with the individuals in the organization. Only by compromising between the individual visions and the development of these visions in a common direction can the shared vision be created. The leaders' role in creating a shared vision is to share their own visions with other employees. This should not be done to force that
**Figure 1**

vision on others, but rather to encourage others to share their vision, too. Based on these visions, the organization’s vision should evolve. Shared vision fosters genuine commitment and recruitment rather than just compliance.

**4) Team Learning:** The discipline of team learning focuses on the process of aligning and developing the capacity of team to create the learning and results members truly desire. Reflecting on action as a team and transforming collective thinking skills so that the team can develop intelligence and ability greater than the sum of the individual member’s talents are important to team learning. The key to this discipline is that members of a team suspend their assumptions and take up a “think together” mode that embraces the collective good and eschews individual self-interest. Characteristics of successful teams are principled leadership, a clear and elevating goal, a result-driven structure, competent members, possession of a unified commitment, working in a collaborative climate, using standards of excellence, and having both external support and recognition systems for feedback.

**5) Systems Thinking:** The fifth discipline is singled out because it underlies the other four. It is the framework for seeing interrelationships rather than linear cause-effect results. It is a learnable, habitual thinking process that allows one to look at events in an organization or life and see the patterns of complex interrelationships. Systems thinking takes the concept of interconnectedness of everything an organization does and understands the intra-connections and inter-relationships that shape the behavior of the system in...
which we exist. Systems thinking takes the doctrine of interconnectedness and brings it to bear on the organizational life. This discipline helps us act more in tune with the larger process of the natural and economic world. The best vision to describe systems thinking is the image of a spider web. People in the organization should be keenly focused on how small changes may be able to influence significant changes throughout the organization. For example, when an insect tries to fly through the spider web and gets entangled in a single silk thread, its delicate vibration and reaction signals that the next meal has arrived alerts the whole web!

**Leadership Role in Learning Organizations**

The role of facilities leaders in a learning organization centers on issues beyond just the operational management of the physical plant. The leadership shift is from that of the decision-maker to one of stewardship, mentorship, teaching, and community building. These new roles will require facilities professionals to acquire and utilize a different set of skills. They require the ability to create shared vision and mission, to challenge prevailing models, to foster creative patterns of thinking, and to build an organization that is able to continually expand the capability to shape its future. Figure 1 (Model of Leadership Competencies and Followership Expectations, by Chawla and Renesch, 1995) beautifully illustrates each of the five disciplines along with the desired leadership competency and counter followership expectation.

**Measures for Developing a Learning Organization**

While there is no one given approach to building a learning organization, the following measures will assist you to become effective at designing your own approach.

1. Make the commitment to becoming a learning organization.
2. Connect the facility operation and maintenance function with learning.
3. Evaluate and make an assessment on the organization’s capability to learn.
4. Clearly communicate the vision and mission in learning organization terms.
5. Recognize and reward the importance of each of the five disciplines and results of each.
7. Transform the organizational culture to one of continuous learning and improvement.
8. Cut bureaucracy and streamline the structure.
9. Empower and enable employees to take risks and think smarter.
10. Extend organizational learning throughout the entire organization.
11. Establish facility-wide strategies for learning
13. Acquire and apply the best of technology to the best of learning.
14. Encourage, expect, and enhance learning at individual, group, and organization levels.
15. Provide training to learn all about successful learning organizations.
16. Adapt and improve and learning continuously.

Conclusion
There has been a lot of interest for the past ten years centered around the concept of learning organizations applied to management. That interest is taking shape in all types of organizations developing into learning communities that continually regenerate themselves to maintain the competitive advantage. Knowledge of learning organizations provides a process by which facilities professionals can create and manage the transformations that are truly desired. It is a whole lot easier, however, to read, discuss and talk about building a learning organization than it is to create one. Developing a learning organization may not be an easy task for the facilities professional. It would be analogous to a lifestyle style change for the dieter. It may take a great effort of time, some money, and a lot of understanding and commitment, but the rewards are infinite. Anything that is truly worthwhile is never easy or cheap. Oscar Wilde represented this notion very well, by stating “For every complex question there is a simple answer, and it is wrong.”

Learning Organization is not the latest management/leadership fad of the decade but rather a process and set of life skills to guide individuals and organizations to become successful in their personal and professional pursuit. Much like Stephen Covey’s Seven Habits Of Effective People and APPAs new tool, the Strategic Assessment Model for organizational effectiveness, and APPAs Leadership Academy. These can all become a change agent for most and a way of life for all who prescribe. An organization that can thrive in today’s world of interdependence, uncertainty and constant change will be the organization that will survive to see Y2K. It will be an organization that we call today a Learning Organization.

Learning Organization Reference List

Websites
The Learning History http://www.sol-ne.org. A series of case studies housed on Society for Organizational Learning’s websites.

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APPAs Strategic Assessment Model, referred to as SAM, is an essential tool that can be used to achieve organizational excellence through continuous improvement. SAM enables the facilities professional to assess an organization's financial performance, the effectiveness of its primary processes, the readiness of employees to embrace the challenges of the future, and the ability to delight customers. Managers can utilize the model for self-improvement, peer-comparison, and benchmarking and realize the benefits of developing high performance organizations. SAM is the vehicle that starts the journey from today's reality to future excellence.

The purpose of this article is to simply explain what SAM is and how to use it. It will start by highlighting why facilities professionals are becoming increasingly aware of the need to improve their organizations and implement a continuous improvement program. There will be a brief overview of the features of the two most accepted models for continuous improvement in higher education. The first is the Malcolm Baldrige National Quality Program and the second is the Balanced Scorecard. A general understanding of these two models is essential in utilizing the power of SAM to transform your organization. SAM incorporates features from both improvement models and provides a consistent vocabulary for continuous improvement, regardless of which improvement model the campus may be using. It will conclude with simple instructions on how to implement SAM as a continuous improvement program for your organization.

Why Improve?

Facilities professionals are facing greater demands for accountability and improvements than ever before. They must be aware of the varied interests of their stakeholders and satisfy their requirements. Trustees are interested in ensuring that resources are efficiently and effectively utilized for the greatest needs of the institution. Customers have become more demanding for the delivery of cost-effective services that are high quality and sufficient to meet their own mission requirements. Employees have greater expectations of their leaders and have personal needs that must be accommodated within the workplace environment. Of course, facilities professionals have their own values that drive them to seek improvements. With a strong sense of personal responsibility and commitment to the institution, facilities professionals recognize their role as leaders to strategically plan and prepare their organization to meet the challenges of the future.

The first of the two models for continuous improvement is the Malcolm Baldrige National Quality Program. Baldrige is generally recognized as the premier continuous improvement program in the country. It was established over a decade ago as a program to stimulate businesses to focus on quality and continuous improvement. Its primary objective is to prepare businesses to meet the demanding challenges of an ever-
The Malcolm Baldrige Framework

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</table>

**TOTAL POINTS** 1000

Increasing competitive market environment. Each year, the criteria for performance excellence are updated and refined to ensure that it truly emphasizes the factors that will make the greatest difference in improving an organization and achieving performance excellence.

The Malcolm Baldrige Criteria for Performance Excellence is the basis for organizational self-assessment, for making the award, and for giving feedback to applicants. The core values and concepts of the program are embodied in seven main categories and nineteen subcategories. Baldrige takes a very comprehensive look at every aspect of an organization. It evaluates seven major categories:

- Leadership
- Strategic Planning
- Customer and Market
- Innovation and Analysis
- Human Resource Focus
- Process Management
- Business Results

Baldrige examiners use a set of scoring guidelines to evaluate the approach, deployment, and results of an organization submitting an application. You will see later that SAM has adopted the qualitative scoring guidelines of Baldrige to determine the level of performance of an organization.

The Department of Commerce is responsible for the Malcolm Baldrige National Quality Program and Award. The National Institute of Standards and Technology (NIST), Department of Commerce, manages the program. Additional information regarding the program can be obtained by going to http://www.nist.gov.

![Figure 1](image1)

**Figure 1**

Malcolm Baldrige Framework

<table>
<thead>
<tr>
<th>Category</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leadership</td>
<td>125</td>
</tr>
<tr>
<td>1.1 Organizational Leadership</td>
<td>85</td>
</tr>
<tr>
<td>1.2 Public Responsibility and Citizenship</td>
<td>40</td>
</tr>
<tr>
<td>Strategic Planning</td>
<td>85</td>
</tr>
<tr>
<td>2.1 Strategy Development</td>
<td>40</td>
</tr>
<tr>
<td>2.2 Strategy Deployment</td>
<td>45</td>
</tr>
<tr>
<td>Customer and Market Focus</td>
<td>85</td>
</tr>
<tr>
<td>3.1 Customer and Market Knowledge</td>
<td>40</td>
</tr>
<tr>
<td>3.2 Customer Satisfaction and Relationships</td>
<td>45</td>
</tr>
<tr>
<td>Information and Analysis</td>
<td>85</td>
</tr>
<tr>
<td>4.1 Measurement of Organizational Performance</td>
<td>40</td>
</tr>
<tr>
<td>4.2 Analysis of Organizational Performance</td>
<td>45</td>
</tr>
<tr>
<td>Human Resource Focus</td>
<td>85</td>
</tr>
<tr>
<td>5.1 Work Systems</td>
<td>35</td>
</tr>
<tr>
<td>5.2 Employee Education, Training, and Development</td>
<td>25</td>
</tr>
<tr>
<td>5.3 Employee Well-being and Satisfaction</td>
<td>25</td>
</tr>
<tr>
<td>Process Management</td>
<td>85</td>
</tr>
<tr>
<td>6.1 Product and Service Processes</td>
<td>55</td>
</tr>
<tr>
<td>6.2 Support Processes</td>
<td>15</td>
</tr>
<tr>
<td>6.3 Supplier and Partnering Processes</td>
<td>15</td>
</tr>
<tr>
<td>Business Results</td>
<td>450</td>
</tr>
<tr>
<td>7.1 Customer Focused Results</td>
<td>115</td>
</tr>
<tr>
<td>7.2 Financial and Market Results</td>
<td>115</td>
</tr>
<tr>
<td>7.3 Human Resource Results</td>
<td>80</td>
</tr>
<tr>
<td>7.4 Supplier and Partner Results</td>
<td>25</td>
</tr>
<tr>
<td>7.5 Organizational Effectiveness Results</td>
<td>115</td>
</tr>
</tbody>
</table>

**TOTAL POINTS** 1000

It is interesting to note that more than a million copies of the Baldrige criteria have been distributed, yet typically only 50 applications for the national award are submitted each year. The vast majority of businesses that are interested in the criteria are using it as a process for self-improvement, rather than a means to win an award.

The second model for improvement is the Balanced Scorecard. The Balanced Scorecard is a concept developed by Robert S. Kaplan, professor at the Harvard Business School, and David P. Norton, president of Renaissance Solutions, Inc. They developed it as a tool for managers to mobilize their people for achieving organizational goals.

The scorecard with its four perspectives—financial, internal business processes, learning and growth, and customer—provides a balanced picture of current operating performance, as well as drivers for future performance. While the concept primarily addressed the needs of businesses, its success and acceptance has also been growing very rapidly in the public sector. Since the public sector is more interested in developing organizations to meet the challenges of the future than it is with growth, the third perspective is usually referred to as innovation and learning.

The Balanced Scorecard integrates financial and non-financial measures, such as customer satisfaction and employee work environment, to show a clear linkage to organizational goals and strategies. Goals are developed to achieve an organization’s vision for the future. They become the roadmap to the desired outcomes. Goals established by departments and units become more specific further down the organization’s hierarchy. They show how the units will participate in the overall goals of the organization. Managers

Continued on page 30
JULY 16-18
FORT WORTH, TEXAS

It's time for the yearly roundup! Mosey on down this summer to Fort Worth, Texas and join your educational facilities peers as APPA 2000 spurs change and professional development with another Annual Meeting full of unparalleled opportunities. Learn the latest facilities management strategies featuring the newest and most innovative products and services. Network with colleagues, share tips, and explore new professional relationships with institutional and business partner members. This is an event you can't afford to miss!

COWTOWN IS WOWTOWN!

Headlines across the country are proclaiming "Cowtown is Wowtown!" and it's easy to see why. From a lively cowboy heritage in the Historic Stockyards to the top-ranked Fort Worth zoo, there's something for everyone! You'll find twenty blocks of dynamic entertainment, restaurants, shopping, and movies in downtown's Sundance Square. Discover year-round rodeo in the Stockyards National Historic District, along with daily round-trips aboard the Tarantula Steam Train. Fort Worth's collection of museums puts it on the map as the museum capital of the Southwest. It doesn't matter if you're a cowpoke or a city slicker, Fort Worth has critics raving. Come on down!

WELCOME PARTY

Don't take Whoa! for an answer! Saddle up and join APPA and Johnson Controls, Inc., for a welcome party celebration! This event is for the whole family, with fun, food, and fabulous festivities. Toe-tapping music will make this an evening to remember!

TEXAS LIL'S DANCE HALL HOEDOWN

Pull off your coat and stay awhile. City slickers will enjoy a good ole Wild West experience as Texas Lil's hunkers down for an evening of dining and dancing. And remember, $5 of your ticket price will go to support the Make-A-Wish Foundation, a charitable organization that fulfills the dreams of terminally ill children.

EXHIBIT HALL RODEO ROUNDUP

Hold on to your saddle! APPA's business partners are showcasing the latest in facilities management products and services. Stop by to see the newest and hottest trends at the official grand opening of the exhibit hall on Sunday. Strap on your feedbag and enjoy refreshments while you explore the expanded exhibit hall and APPA's Learning Resource Center.
SPECIAL OFFER FOR FIRST-TIME MEETING ATTENDEES

Now is the time to make up for all those broken New Year’s resolutions. Make this your first of many APPA events! As a first-time attendee, register for the 2000 Annual Meeting and you’ll receive a special discounted rate of only $295! You get three full days of educational sessions, activities, exhibit hall admission, and most meals, plus the unique opportunity to network with hundreds of fellow higher education facilities professionals from around the world. Nothing else comes close! Just mark off the “First Time Attendee” when you register.

FEATURING!
THE CYBER CORRAL

Don’t think that you can escape your e-mail! You can access those little doggies in the Exhibit Hall as APPA offers the Cyber Corral. Check e-mail! Send e-mail! Show off your facilities department website to friends!

Go online to APPANet for speaker and registration information: www.appa.org. And visit www.fortworth.com for exciting things to do in Texas.

APPA: The Association of Higher Education Facilities Officers
1643 Prince Street
Alexandria, VA 22314-2818
Phone: 703-684-1446

Photos courtesy of Fort Worth Convention & Visitors Bureau
define and implement strategies or action plans for accomplishing each of the goals. They also establish performance measurements to indicate the progress obtained in accomplishing their strategies.

The Balanced Scorecard is a management tool for communicating goals and strategies throughout an organization, as well as for communicating progress and status of the strategies for accomplishing the goals. Each department and unit develops its own Balanced Scorecard for its own strategies. A well-constructed Balanced Scorecard for each unit would clearly show how the unit plans to contribute to the overall success of the organization through its goals and strategies for the four perspectives—financial, internal business process, innovation and learning, and customer.

The SAM Model

APPAs Strategic Assessment Model (SAM) combines features of both the Malcolm Baldrige program and the Balanced Scorecard. SAM has three components: the four perspectives of a Balanced Scorecard, the quantitative performance indicators, and the qualitative criteria for determining the levels of performance of an organization in each of the Scorecard perspectives.

The one-page SAM matrix illustrates the three components of SAM, which are combined to assist facilities professionals in assessing their organizations and carrying out a continuous improvement program. The Balanced Scorecard, in the upper portion of the matrix, represents the concept of pursuing continuous improvements in all perspectives in a balanced manner. Key performance indicators have been identified for each perspective. The lower portion of the matrix outlines the criteria for determining levels of performance. There are five levels of performance, which can be applied to each perspective. The levels of performance range from the lowest, Level 1—Copper, to the highest level of performance, Level 5—Platinum. The qualitative descriptions for determining the five levels are very similar to the scoring guidelines used by Baldrige examiners when evaluating award applications.

In defining the four perspectives of the Balanced Scorecard, the SAM Task Force decided to use the more comprehensive definitions of the Malcolm Baldrige program wherever possible, rather than the general definitions used by Kaplan and Norton. By including the Baldrige criteria in defining the perspectives, the continuous improvement program implemented with SAM would be more consistent with the national program for quality. The four perspectives are:

1. Financial Perspective reflects the organization’s financial performance in ensuring financial integrity and demonstrates stewardship responsibility for capital and financial resources associated with the operation and preservation of physical assets throughout the campus. Financial performance indicators are tracked to ensure that services are delivered in an efficient cost-effective manner. The Financial Perspective is linked to the other perspectives through the relationships between cost and the results in achieving the other scorecard objectives. An example would be to understand how improving internal processes or customer satisfaction correlates with increasing or decreasing costs. Another might be to determine how financial benefits are derived from improvements in employee safety, absenteeism, and turnover. Primary services include those for operations and maintenance, energy and utilities, and planning, design and construction. (Combines Baldrige categories 4.1, 4.2, and 7.2.)

2. Internal Process Perspective addresses the key aspects of the organization's process evaluation for the delivery of primary services. These services would include those for operations and maintenance, energy and utilities, and planning, design and construction. Examples of processes supporting these may include handling of work orders, procurement, billing, and relationships with suppliers. Evidence should show that processes for delivering services are efficient, systematic, and focused on customer needs.
### APPA's Strategic Assessment Model (SAM)

<table>
<thead>
<tr>
<th>PERFORMANCE INDICATORS</th>
<th>Financial Perspective</th>
<th>Internal Perspective</th>
<th>Innovation and Learning Perspective</th>
<th>Customer Perspective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facility Operating CRV Index</td>
<td>Facility Operating GSF Index</td>
<td>Cycle Time</td>
<td>Work Environment Survey</td>
<td>Customer Survey</td>
</tr>
<tr>
<td>Facility Operating GIE Index</td>
<td>Capital Renewal Index</td>
<td>Backlog</td>
<td>High Score Index</td>
<td>Customer Satisfaction Index</td>
</tr>
<tr>
<td>Facilities Condition Index</td>
<td>Needs Index</td>
<td>Energy Usage</td>
<td>Top Box - Bottom Box Index</td>
<td>High Score Index</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Energy Investment Index</td>
<td>Distribution Index</td>
<td>Top Box - Bottom Box Index</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Estimating Index</td>
<td>Organizational Change Assessment</td>
<td>Distribution Index</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Project Soft Cost Index</td>
<td></td>
<td>Weighting Index</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Gap Analysis</td>
</tr>
</tbody>
</table>

#### Levels

<table>
<thead>
<tr>
<th>Levels</th>
<th>General Qualifying Criteria for Each Perspective</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Platinum A sound systematic data collection, evaluation, and refinement has been fully established that accomplishes overall scorecard perspective objectives. A very strong fact-based improvement process is in place for all primary areas. Emphasis is placed on refinement of previous improvements to make them even better. Cycles of improvement demonstrate a mature program of continuous improvements in primary services and have been sustained over several years. Current performance is excellent for most primary services. No adverse trends are noted. Most trends and/or service levels are evaluated against relevant comparisons or benchmarks from other similar institutions. Some are benchmarked with outside industries. Results show areas of leadership with excellent relative performance levels.</td>
</tr>
<tr>
<td>4</td>
<td>Gold A sound, systematic data collection, evaluation, and refinement program has been established that documents results in satisfying scorecard perspective objectives. A fact-based improvement process is in place for all primary areas. Cycles of improvement demonstrate a mature program of incremental improvements and refinements in making previous improvements even better. Performance trends show cycles of improvement in many to most primary areas. Most improvement trends and/or performance levels are sustained over cycles of data collection. Current performance is good to excellent for most areas. No adverse trends are noted. Most trends and/or service levels are evaluated against relevant comparisons from similar institutions. Results show areas of leadership with very good relative performance levels.</td>
</tr>
<tr>
<td>3</td>
<td>Silver A sound, systematic program has been established to examine scorecard perspective objectives. A fact-based improvement process is in place for most primary areas. Emphasis is placed more on improvement than on reacting to problems. Improvements can be measured and substantiated. Performance trends show improvement in many to most primary areas. No adverse trends are noted. Some trends and/or performance levels are evaluated against relevant comparisons from similar institutions. Results show areas of strength with good to very good relative performance levels.</td>
</tr>
<tr>
<td>2</td>
<td>Bronze Beginnings of a systematic program to satisfy scorecard perspectives. Major gaps exist in deployment. Early stages of transitioning from reacting to problems to a general improvement orientation are evident with noted results. Trends show some improvements and/or good performance levels are noted in a few areas. Results not recorded for many to most areas of importance.</td>
</tr>
<tr>
<td>1</td>
<td>Copper No systematic program evident. Only anecdotal information is available on how scorecard perspectives are being satisfied.</td>
</tr>
</tbody>
</table>

The APPA's Strategic Assessment Model, referred to as SAM, is an essential tool that can be used to achieve organizational excellence through continuous improvement. SAM enables the facilities professional to assess an organization's financial performance, the effectiveness of its primary processes, the readiness of employees to embrace the challenges of the future, and the ability to delight customers. The facilities professional can utilize the model for self-improvement, peer comparison, and benchmarking. SAM is the vehicle that starts the journey from today's reality to future excellence.
There is an emphasis on identifying opportunities for improvements and measuring results. The SAM performance indicators are intended to be representative measurements that apply to these processes. (Combines Baldrige categories 6.1, 6.2, 6.3, 7.4 and 7.5.)

3. **Innovation and Learning Perspective** addresses key practices directed towards creating a high performance workplace and a learning organization. In a learning organization, people at all levels, individually and collectively, are continually increasing their knowledge and capacity to produce the best practices and possible results. The perspective considers how the organizational culture, work environment, employee support climate, and systems enable and encourage employees to contribute effectively. Work environment and systems include work and job design, compensation, employee performance management, and recognition programs. Training is analyzed in how well it meets the ongoing needs of employees and develops their leadership and knowledge sharing skills to improve efficiency and accommodate change. There is an emphasis on measuring results relating to employee well being, satisfaction, development, motivation, work system performance, and effectiveness. (Combines Baldrige categories 5.1, 5.2, 5.3, and 7.3.)

4. **Customer Perspective** addresses how the organization determines requirements, expectations, and preferences of customers to ensure relevance of current services and to develop new opportunities, builds relationships with customers, and measures results of customer satisfaction and performance of services. Primary customer groups include faculty, staff, students, customer representatives and decision-makers for customer departments, and other significant stakeholders. Primary services would include those for operations and maintenance, energy and utilities, and planning, design and construction. (Combines Baldrige categories 3.1, 3.2, and 7.1.)

The key performance indicators are provided in the SAM model as samples of measurements that can be used by facilities professionals to obtain a snapshot of their organizations at a point in time and to trend their results over an extended period. The performance indicators are by no means the only measurements that should be used. Quite frankly, we have a very difficult profession to measure. The complexity of the organizations and the vast variety of services provided add to the difficulty of identifying simple measurements that tell the whole story. While no single measurement will be adequate, using numerous indicators will help facilities professionals to triangulate onto a more accurate status of their organization. The facilities professionals who are challenged by this difficulty, rather than using it as an excuse, will identify numerous opportunities for continuous improvement.

A complete description of the performance indicators can be found at the APPA website (www.appa.org/sam). Just go to the SAM Matrix and click on each of the indicators for more information about its application.

APPA is also planning a survey for this spring to collect data on a selected number of the performance indicators, which will be published later this summer. The task force has selected performance indicators for the survey that can be used for comparison between institutions. Some of the other performance indicators are more appropriately used for internal comparisons and trending of specific processes. Periodic surveys will validate the use of the performance indicators and provide feedback and suggestions for refining them or developing more appropriate indicators. SAM will continue to evolve as a greater number of the profession deploys it as a continuous improvement tool for their operations. The performance indicators should become better over time as they are refined with actual experience.

There are five levels of performance: Level 1—Copper, Level 2—Bronze, Level 3—Silver, Level 4—Gold, and Level 5—Platinum. The medal classifications are carried over from the original SAM concept, where performance indicators were used to determine levels of performance. The current concept uses a qualitative approach, similar
to a Baldrige evaluation. The levels of performance apply to each of the four Scorecard perspectives. An organization may be at a different level for each perspective. The following briefly describes the differences in the five levels of performance.

**Level 1—Copper:** There is no systematic program evident. Only anecdotal information is available as to how scorecard perspective objectives are being satisfied.

**Level 2—Bronze:** The program is beginning to show a systematic approach to satisfy scorecard perspective objectives, even though it may be for only one or two areas. Major gaps exist in deployment. The organization is transitioning from reacting to problems to a general improvement orientation. Trends show some improvements in a few areas. The reference to trends implies that data has been collected for at least two different periods of time. Level 2 cannot be accomplished without showing improvement from some baseline period.

**Level 3—Silver:** At Level 3, the continuous improvement program is fully deployed. There is a sound, systematic program established for satisfying the scorecard perspective. A fact-based improvement process is in place for most primary areas. Emphasis is placed more on improvement than on reacting to problems. Improvements can be measured and substantiated. Performance trends show improvement in many to most primary areas with no adverse trends noted. Some trends and/or performance levels are evaluated against relevant comparisons from similar institutions. Results show areas of strength with good to very good relative performance levels. Those organizations performing at a Level 3 are quite exceptional. Even though there are two higher levels of performance possible, a Level 3 is really a well running organization.

**Level 4—Gold:** Very few organizations can reach this level. The operative words describing this level of performance are "refinements" and "cycles of improvement." In addition to a history of making improvements, there is clear evidence of refinements to previous improvements that made them even better. The improvement program is fully deployed for all primary areas. Performance trends show cycles of improvement in many to most primary areas. Most improvement trends and/or performance levels are sustained over cycles of data collection. Current performance is good to excellent for most areas with no adverse trends. Most trends and/or service levels are evaluated against relevant comparisons or benchmarks from similar institutions. Results show areas of leadership with very good relative performance levels.

**Level 5—Platinum:** Level 5 is a stretch goal, or possibly "only in your dreams" goal. The program for continuous improvement is so well established that work centers throughout the organization are collecting their own data for measurements and are carrying out very effective continuous improvement programs. A Level 5 organization has a very mature and sophisticated improvement program. Current performance is excellent for most primary areas with no adverse trends. Most trends and/or service levels are evaluated against relevant comparisons or benchmarks from other similar institutions. Some are benchmarked with outside industries. Results show areas of leadership with excellent relative performance levels.

**How to Apply SAM**

The easiest way to use SAM is to just start where you are. There is little need to pay too much attention to the higher performance levels in the beginning. The most important part about starting a continuous improvement program is to take the first step, however small it may be. Once making a small improvement, the next one is only a step away. So goes the pattern for continuous improvement.

An organization just starting to use SAM will likely be Level 1 or 2 for most of the scorecard perspectives. A few may already have mature continuous improvement programs, which could qualify for higher performance levels. It really does not matter where you start. Just get started doing something. For example, start collecting information for at least one service area. Pick one. Improve a process, find out what your customers need and expect, and determine what kind of work environment is necessary to prepare your workforce for the future. Then, expand your program by including another service area and giving attention to all four Scorecard perspectives in a balanced manner.

Those who want to fully capitalize on the advantages of the Balanced Scorecard as a management and communications tool are encouraged to link their continuous improvement program with their goals and strategies for achieving their vision. The institution’s goals can be realigned to a Balanced Scorecard. Some goals that contain more than one perspective may need to be rewritten or broken down into two separate goals to better fit the Balanced Scorecard format. Goals for facilities departments show how the organization would achieve the institution’s goals and vision. Strategies and performance measurements are established to track progress in accomplishing the desired results of the strategies.

**Conclusion**

SAM incorporates features of the Malcolm Baldrige Quality Program and the Balanced Scorecard to achieve organizational excellence through continuous improvement. As a strategic tool, SAM answers the basic questions of strategic planning: where you are, where you are going, and what is needed to get there. With a minimum of understanding of the SAM model, almost anyone can make a quick assessment of the level of performance of an organization for each scorecard perspective. From there, one can easily see what is needed to move to the next level. This difference between the two levels will form the basis for developing action items or strategies to move an organization to the next level of performance, the next step.

What you do with SAM and how far you go is your choice. Have fun and enjoy the journey to organizational excellence.
For over 90 years, American Building Maintenance Company has been doing something right—high-quality contract maintenance services—without the high cost or liability you would have if workers were employed by the campus.

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It may be awesome to think about asking the employees how they feel about working in your facilities organization. The very thought opens a Pandora's box of emotions among staff approaching such a situation for the first time. You can be sure they will be nervous. Even the most battle-scarred professionals in your department can be worried about how their staff will evaluate the organization. Happily, these fears mostly disappear after the ghosts are banished by the results of the first survey.

We go through this self-inflicted anxiety because there is a huge "need to know." We operate on anecdotal information until we provide the employees with some tool for methodically informing us. Every one of us will admit that our picture of how the organization works would be greatly altered if we spent a few days in the shoes of the front-line employees. Things look quite different from their perspective. Unless you have bravely flattened your organization, information filters down to them slowly and in truncated forms. Secondly, it is primarily their supervisor who forms their work environment. You have only an inkling of what it would be like for this person to have power over your career.

Laura Long is president of LTL Collaborative, Friday Harbor, Washington. She is a member of APPA's Strategic Assessment Model Task Force and has assisted APPA on the Comparative Costs and Staffing Report. She can be reached at ltl@rockisland.com.

Thirdly, they have very few privileges in comparison to management and much less power. They don't park next to the front door. Their requests are not given top priority. They have less power on how to structure their workday. They probably have less privacy at their desk. And, let's face it, they earn less than you do—much less. Life may give all of us somewhat similar health and family challenges, but these staff members do not have as much in financial resources to address their problems.

The point is that we have incomplete pictures of how things operate below the level of our immediate reports. We have to find out whether the work environment enables these people to do a good job. We need to know, among other things, whether they feel like they are getting prepared to tackle emerging technologies, whether they understand where the facilities department is heading, and whether they are receiving the leadership they need for the type of work they perform.

Most of us would like to consider our facilities operation a learning organization—one that continually is adapting to a changing environment. Information is the principle ingredient for learning. A learning organization has to bravely open all of the information spigots and one of the largest of these spigots is the voice of staff.

After raising all of the obstacles and worries, let me say that the anticipation is much worse than the real experience of conducting a work environment survey. Employees are
basically fair people. They may be frankly honest about weaknesses but will give recognition to good qualities that they perceive. Rarely does any unit receive completely negative evaluations about its work environment. And you are basically a fair manager too, so your staff will find that you will give any of them a reasonable opportunity to demonstrate improvement and movement in the right direction.

Further, when the supervisors look at the work environment survey, they find out that a lot of questions are not aimed at them. Many of the questions are there to find out what is important to the employees and to find out how things work in the informal facilities organization. The dragon has fewer teeth than expected when examined first hand. Further, employees will drop their assumptions about why the survey is being used when you report the results back to them and they find out that you really are committed to improving their work environment.

There are fewer work environment surveys to choose from than customer satisfaction surveys. APPA has provided one developed by The IBM Consulting Group in conjunction with the University of California. This instrument has been adapted to the facilities organization. Similar variations of the survey have been in use for about five years in a variety of university administrative departments. Work environment surveys developed for industry often concentrate on sales objectives and are less easy to adapt to the field of education.

This survey can be modified to meet your unique needs. If you decide to use it, you will want to read through all of the questions to see if any of the phrases should be changed. For instance, should the phrase “salary increases” be better described as “annual increases” or “merit increases,” etc. If you decide to add questions, structure the statements so that they are interpreted in the same manner as the other questions.

For instance, in this survey when an employee “strongly disagrees,” that is considered a bad indication. You don't want to insert reverse statements for which “strongly disagrees” is a good response or you will need to reverse the numbers when processing the report.

You also have the opportunity to modify the demographic information on the second page of the survey. The demographic information provides important insights into differences and similarities among cultural groups within facilities. For instance, on the subject of benefits, do females have different priorities than males for programs like flextime and child care? Do persons below 40 years of age who have fewer health problems and are farther from retirement have different priorities for benefits than those over 40 years of age? Well, of course they do, but the important question is whether these groups are polarized in their different values or whether the differences are less in scale. It is important to base your decisions on facts rather than assumptions and sometimes on myths!

Employees can be very uneasy about answering demographic information. The more definitions they provide about themselves, the more they can be singled out from their coworkers. For instance, there may be only one Hispanic male person over 40 years of age who is a career employee in the Security area. For this reason, it is prudent to keep the organizational groupings identified in the survey fairly large so that there is less opportunity to single out persons by their profile. Secondly, you may only run one report for the whole of facilities using the ethnicity information again to make it less likely that persons in any one ethnic group can be singled out.

The sample survey has the following demographic categories:

A. What is your gender?
1. Male
2. Female

B. What is your age group?
1. Under 40 years of age
2. 40 years of age or older

C. Which best describes your position?
1. Supervisor/Manager
2. Professional/Technical/Analyst
3. Administrative/Office Support
4. Service/Maintenance

D. Which best describes your facilities area?
1. Central Administration
2. Construction/Renovation
3. Trades
4. Maintenance
5. Custodial
6. Grounds
7. Energy/Utilities
8. Security
9. Other

E. My ethnicity/race is:
1. African-American/Black
2. American-Indian/Alaskan
3. Asian American/Asian
4. White
5. Hispanic American/Hispanic
6. Other

F. My employment Status is
1. Career employee
2. Casual employee
3. Student employee
4. Employee of a contractor
The survey is intended to be processed by a third-party vendor to ensure that the employees feel confident that no one is identifying them to their answers. The survey is organized into 12 subjects and the questions are coded to these subjects; e.g., CO1 is the code for the first statement in the Communication subject area.

All of the statements in the work environment survey are responded to on a 1 to 5 Lickert scale. Most questions which have "low to high" or "bad to good" values associated with their answers are based on current management philosophies. Answers to these statements are used to develop statistics and scores for the basic report. The following questions are for information purposes and are reported separately. There are no "low to high" or "bad to good" implications in most of these questions. They tell you how your facilities organization works or indicates the priorities to which your employees place on various things.

CO2. How do you receive the information you need to perform your work? How good is the work information from each of the following sources?

CP1. What do you think determines your salary increases? How really important are each of the following things for determining your salary increases?

CP2. What are the most important types of compensation for you?

DE5. How are decisions made in your work unit? How often does the following occur?
DE6. When you work in a team, how does your team make decisions? How often does the following occur?

MO1. What makes you feel really good about yourself and your job? How do the following things affect your morale?

PE6. Which is important in your individual performance evaluation? How do the following things affect your performance evaluation?

TW6. Participation on teams is what percent of your total work effort?

One of the best ways to analyze work environment information accumulated from this sample survey is to have a combination of charts and tables on the reporting end. The tables are used to drill down into demographic information.

The charts provide quick visual summary of results. Let’s use an example of a chart on the survey subject of Morale. There are six questions that map to the subject of Morale (five in the Morale section of the survey and one in the Performance Management section). The average of the scores indicated for these six questions form the score for Morale. The summary Morale score might be the first bar on a chart that is then followed by bars showing average scores for each of the six questions. You first look at the summary Morale score and then you look at the components that make up the summary score determining whether the summary score is being driven by extremes in one or more questions. If you see that “managing pressures of the job” has a lower score in comparison to the other questions in this category, then you drill down into the demographic information. You might find that this pressure is felt most by staff in the Profession/Technical/Analyst group in Central Administration and the employees in the under 40 years of age group who are Career Service/Maintenance staff in the Trades. You now are in a position to develop targeted action plans to correct these two situations.

There is a variety of statistics that assist in the analysis of work environment results. You are invited to visit the Strategic Assessment Model on the APPA website (www.appa.org/sam) and view the description of work environment indices recommended. Each give a different view of results and you may decide to program a number of these into your reports.

You might wonder how much of the information should be shared. It is healthy to have a open disclosure policy about survey results as long as the confidentiality of any single person’s answers is protected. Out of courtesy, you give supervisors and managers first opportunity to view the results but the distribution of information to employees at all levels should not be delayed very long. The most important part of the work environment assessment process is your demonstrated commitment to take positive action to address problems. When the employees see positive results coming from their input, they start to look forward to participating in future surveys and feel valued because the organization is investing its time and efforts in improving their work environment.
While you're busy trying to control your transfers, maybe you should consider this fact: When asked, students said a university's physical environment was the main factor in deciding which college to attend. When you also consider that facility budgets are being squeezed more every day, it should come as no surprise that you need innovative ways to make the most of your capital and operating budgets. Enter Johnson Controls. We can help you lasso your dollars to fund facility upgrades, renovation and even new construction—just what you need to attract and retain students. One method is performance contracting, which allows for facility improvements to be paid for by the savings they create. Another is called Results Oriented Service, a program in which we tailor a comprehensive service plan based on your priorities and needs that allows you to maximize your assets while reducing long-term costs. For more information, call Johnson Controls at 1-888-214-0916 or visit us at www.johnsoncontrols.com.
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In February 1999 representatives from APPA and the Professional Grounds Management Society (PGMS) first met to discuss the development of a grounds management and staffing guidelines publication. The task force quickly realized that to create a truly inclusive publication, the National Recreation and Park Association (NRPA) and the American Public Works Association (APWA) should be members of the task force.

The Task Force members are:

- John Feliciani (Chair), Winterthur Museum & Gardens, PGMS
- Stephanie DeStefano, Leisure World of Maryland, PGMS
- Marc Fournier, University of Massachusetts/Amherst, APPA
- Robert Getz, William Rainey Harper College, APPA
- Fred Gratto, University of Florida, APPA
- Dr. Len Morrow, J. Sargeant Reynolds Community College, PGMS
- Kevin O'Donnell, Villanova University, PGMS
- Scott Payne, North Carolina State University, NRPA
- Dennis Swartzell, University of Nevada/Las Vegas, APPA

The four associations are represented also by staff members:

- Steve Glazner of APPA
- John Gillan of PGMS
- Karen Miller and Kathy Spangler of NRPA, and
- Dale Crandell of APWA

The mission of the task force is to develop a tool to assist professionals in managing grounds operations. Each task force member has been given a specific area to work on. Draft chapters were reviewed at our meeting January 14-15, 2000, and we organized the material in the following tentative outline:

**Section I**
- Introduction/How To Use This Book (with flow chart)
- Environmental Stewardship
- Site Inventory
- Levels of Maintenance
- Maintenance Tasks, Times, and Frequencies
- Staffing Estimator (worksheet with examples)
- Cost Estimator (worksheet with examples)

**Section II**
- Methods of Organization
- Contract Services, In-House Services, Union Shop
- Position Descriptions
- Benchmarking Your Operation (with examples)
- Environmental Issues and Contacts
- Periodicals and Publications
- Professional Organizations
- Glossary
- Index

We are also pursuing the development of a software component that will accompany the publication, which is scheduled to be released later in 2000.
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Last year APPA President Joe Spoonemore established a committee of eight members with the task of developing maintenance staffing guidelines for buildings technical trades. The success of the Custodial Staffing Guidelines (CSG) and the concurrent development of Grounds Staffing Guidelines (GSG) was the source of the inspiration. The committee is co-chaired by Ted Weidner of Eastern Illinois University and Matt Adams of Adams Consulting Group. The other committee members include Ron Calloway, (University of California/Los Angeles); Joe Fisher, (West Virginia University); John Holman, (Boise State University); Jay Klingel, (University of Virginia); Eric Ness, (University of Massachusetts/Amherst); and Phil Waier, (R.S. Means, Inc.).

Realizing the complexity and difficulty of the project, the committee initially evaluated the feasibility of creating guidelines. Considerations included:

a. Is there sufficient interest for guidelines?
b. Are there sufficient foundation materials from which to build guidelines?
c. Will any guideline be reasonably accurate to be useful?
d. Will the guideline become a tool for facility officers or a stick for presidents?
e. What other positive and negative points would face the committee and the end product?

The group determined that development of the guideline, similar to the CSG would be possible; and in addition, alternate approaches to trades staffing could likely be developed.

After the first meeting, the committee divided into four pairs to study various approaches to the problem. The multi-team approach was intended to quickly study different methods and determine whether any could be used. The four approaches chosen were:

- **Heuristic**: based on data gathered from APPA membership
- **Numeric**: based on physical data of the campus such as area and building types
- **Intuitive**: based on collective experience.
- **Financial**: identifying how to best divide a given amount of resources

In subsequent meetings, members reviewed the progress on each approach determining what additional steps or information was necessary, and developed a five level maintenance service matrix similar to that in the CSG. Besides providing descriptive terms, the service matrix levels attempt to provide linkage to the Strategic Assessment Model (SAM) service levels, average facility condition index (FCI), and operating budget as a percentage of plant's current replacement value (CRV). The levels developed are named: Showplace Facility, Comprehensive Stewardship, Managed Care, Reactive Maintenance, and Crisis Response.

The committee's goal is to produce a draft document within the next year which combines facilities maintenance data incorporated in the R.S. Means databases, with data from the APPA Comparative Cost and Staffing Survey (CCAS), and SAM. This document will be an overall staffing evaluation tool intended to reflect the traits and idiosyncrasies of higher education facilities. Reducing the staffing requirement data to a facility type and square footage, as was done in the CSG, is the preferred format. These data sources can also provide needed material either for the development of conversion factors between an ideal model and a campus, or create explanatory narratives on the use of the guidelines. However, a major shortcoming in our process is the lack of facilities data from the APPA membership. To correct that, we are looking for additional data to supplement the CCAS. In addition, we are looking for campuses interested in assisting us with testing of models being developed. We have gotten a number of volunteers but we need more as well as a greater variety of campuses, small to large, liberal arts to research. The committee encourages campuses that have not submitted data to the most recent CCAS to contact APPA and provide their information to the survey. We also encourage your input.

Suggestions and ideas are welcome and may be sent directly to me at Eastern Illinois University, Facilities Planning and Management, 600 Lincoln Avenue, Charleston, IL 61920-3099 or feel free to contact any of the members on the committee.

Ted Weidner is director of physical plant at Eastern Illinois University, Charleston, Illinois. He co-chairs APPA's Trades Task Force and can be reached at cstfw@eiu.edu.
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According to statistics, there has been a steady growth in the renovation of laboratories and research development facilities throughout the United States and Canada. As higher education facilities grow in enrollment and the pressure to keep up with the ever-changing technical needs mounts, it is the facilities next step to expand and adapt their existing structures. In a few cases, these large-scale renovations may involve an entire laboratory or a number of buildings. As we are all well aware of unpleasant encounters, these types of projects seem to carry a number of hidden costs such as transporting chemicals, asbestos abatement, lead abatement, decontaminating equipment, storage areas for chemicals, and chemical disposal.

This article was in response to a number of facilities that are currently experiencing the “over the budget whammy” on their laboratory renovation and expansion. In this article, I will provide an overview of the variety of problems that may be incurred, as well as present a series of procedures that can be used to manage the activities associated with a move or renovation of a laboratory. These procedures may vary depending on the type of laboratories that are involved and whether it is during an active semester. Over the years with laboratory renovation, I found it very useful to look at these activities in stages such as:

1. The planning stage
2. The decontamination and moving
3. The construction and renovation
4. The move in

The Planning Stage
Moving a lab requires careful planning to account for the safety and health of those involved in the project such as laboratory occupants, moving personnel, contractors, and the adjoining occupants of surrounding areas. If your facility has a Health and Safety personnel or relevant personnel it will also be important to incorporate these individuals in the program.

Appointing a project or move coordinator to obtain all the required facts related to the move or renovation and coordinate various activities would be beneficial. For large projects, a committee that includes representatives of all involved parties and chaired by the move coordinator can assist in some of the hassles. In many cases, it is still important to have this committee established for any size project.

As you get started, the laboratory personnel seem to have invaluable information that can identify current and past practices that may reveal most of your potential problems. For example, the location of hazardous chemical spills that were not properly remediated may result in toxic fumes from floor drilling. Broken thermometers that contained mercury and which remain in plumbing systems or under floors or cabinets can pose a major concern. Hidden containers of radioactive materials in the storage cabinets may result in exposure to radioactive contamination.

Try to put the pressure on these laboratory occupants to also identify what equipment and chemicals are to be moved and advise them of appropriate handling procedures. Make them responsible for decontaminating equipment and surfaces prior to renovation activities. Your Health and Safety professionals should ensure that all the right questions are asked, and they are required to maintain all appropriate state and federal regulated paper work for disposal and compliance. They should also provide advice and assistance in assessing potentially hazardous conditions and specifying...
appropriate decontamination procedures.

If you are planning group meetings, invite the contractor to describe their work and the estimated schedule of demolition and renovation. The contractors should explain the type of equipment being used such as a water-cooled floor drill, dust control fans, and flame torches. Meetings like these will open a line of communication allowing the laboratory personnel to voice their opinions for chemical management in these areas.

One last thing in the planning stage is to anticipate finding unknown and unlabeled materials. Any move or relocation should be viewed as an opportunity to review equipment and material needs and discard items that are not needed. Try not to store old chemicals that are improperly stored or are showing deteriorated containers, this will just pose a catastrophic accident to happen. This is the time for major house cleaning of equipment and chemicals.

**The Decontamination**

In a number of cases, contracted moving personnel will require all equipment, apparatus, and fixed structures to be decontaminated prior to the move. Most of the preparation can be done two weeks before the move, thus minimizing disruption of the laboratory work. Many laboratory materials are regulated and will fall onto some form of regulated requirement. All biological materials must be packaged before the move. Proper packaging consists of a primary sealed container placed within a secondary, sealed, unbreakable container, with enough absorbent material in between to contain and absorb any spill. Once decontamination is done, the project coordinator will require that no work that can re-contaminate the equipment be performed. A labeling system should be incorporated so that no confusion between clean and un-clean equipment can happen.

It will be important to set aside additional storage equipment such as drums, absorbents, spill kits, labels, and personnel protection clothing. Decontamination or moving should take place only when appropriate safety personnel are readily available, thus coordination between the movers and safety personnel is essential. If the support of laboratory personnel is available, it is advisable to let them move or direct the individuals. Moving personnel should not handle equipment that is not decontaminated. Place some form of marking on the equipment so that the movers know which equipment has gone through decontamination.

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through the decontamination process and the proper location.

**Decontamination Tips**

- On moving day, laboratory personnel should be available to oversee the move and train the movers. Coordination and minimum-awareness training of everyone involved in or "near" the moving activities should be performed so that they have a general idea of what will happen and their specific roles in the process.

- A review of packaging material can minimize spills and injuries. Overloaded or overweight boxes can contribute to spills as well as back injuries. A spill kit consisting of disinfectant, absorbent materials, paper towels, plastic bags, tongs or dust pan and brush, lab coat, respiratory protection, gloves, and safety glasses must be readily available during the move.

- After a facility has been cleared by the movers, it may have to be washed down and properly decontaminated. Have an outside contractor that is certified to handle these types of operating procedures.

- When the job is done, the safety officer should perform a final survey qualifying the facilities has performed all proper procedures according to local and national regulations. A record of the survey must be kept in a permanent file.

**Construction and Renovation**

This is probably the most disruptive and "dirty" portion of the process besides the asbestos abatement project. The potential hazards are primarily to the demolition or construction workers, but in some cases, the personnel in surrounding areas can be affected if a catastrophic event occurs or regulations are violated. During this phase, it is important to provide general awareness training to construction personnel, particularly if they have not done other lab work. As many facility managers know, it is up to the contractor to maintain a safe working environment for their workers and building occupants. If the planning stage and decontamination stage was a success, there should be little impact to the contractors or occupants. As the project moves on in this stage there will be some additional preparation which may involve removing asbestos from pipes or lead paint from unknown areas. These activities are common and should be taken as a on call needed basis. It is recommended that an asbestos contractor be informed or on call in case of a quick removal.

It is important to have several meetings with laboratory personnel and safety officers concerning new emergency or safety equipment installed. In some cases, the wrong location, equipment selection, and equipment operation can create a problem after the project is completed. These individuals could offer insight on the proper regulations that are applicable for these devices and streamline the ordering process. I found out that architects and designers have limited understanding of safety procedures and equipment.

**Moving In**

For this final phase, the move preparation phase is done in reverse. Try to incorporate a construction closure meeting with all appropriate personnel and vendors. It is important to understand that the same issues of packing must be considered in unpacking. Plans for handling "broken" or "spilled" materials must be made in advance. The moving company should be working with laboratory personnel on handling and transportation. It is likely that some construction-related activities will continue after the move, and potential problems must be anticipated. Make sure that all of the safety systems are operable, particularly fire detectors, alarms, emergency eye wash and showers, emergency exits and lighting. Be sure that staff have received appropriate training and orientation that covers any changes in the new space or equipment before operation.

The renovation or decommission of any type of laboratory can pose hazardous conditions to a facility. It is important to properly plan and anticipate all types of scenarios that could effect the project. I have found out through experience, that communication of all involved parties and groups can solved a large majority of unknown concerns. The laboratory personnel are packed with hidden information that serves as a great resource for all. Try to sit down with these faculty members or even some janitorial staff to fully understand these hidden surprises. As far as asbestos concerns, just remember that a properly performed inspection will reveal the large scale abatement concerns and probably not identify the hidden ones. So always keep some extra for the glovebag abatement projects during the renovation.

If proper planning is done, the rest of the steps will proceed smoothly with a minimum loss of work time. If the stages that I have outlined are carried out correctly, the actual move should be relatively trouble free. 
If there's one thing I've learned from the APPAinfo list discussions, it's that service matters. And above all else, customer service. A key element of providing outstanding customer service is maintaining the image of professionalism within the campus facilities department. Not only do you want your customers to appreciate the high level of quality work done by your staff, but you want them also to recognize that these same employees are a significant part of a team effort on campus. A facilities team which significantly and positively effect faculty and students alike, from the moment they turn on a faucet for a hot shower in the morning, to the moment they sit in a comfortable and clean lecture hall, to the safe and well-lit walk home to the dorms at the end of the day.

There's an incredible amount of work going on behind the scenes on campuses, and some are now reconsidering the role uniforms play in the custodial and maintenance environments. Uniforms are undoubtedly a touchy topic. Which employees get uniforms? What should the department pay for and what should be purchased by the employee? What differences should be considered when providing clothes for women versus men? Some employees prefer not to be restricted in their wardrobes, but safety, comfort, and appearance of workers is a concern for managers. As the saying goes, “image is everything,” but perhaps with some collaboration and planning, uniforms can be a positive influence not only within the facilities department but across campus as well.

**Do the Clothes Make the Custodian?**

Does anyone have any words of wisdom on uniforms for custodians and maintenance? I am trying to decide on purchasing, renting, shirts only or complete uniforms. Also what about summer and winter? Do the uniforms need to be different?

- We provide uniforms for our custodians, shop, and transportation employees. We initially purchased the uniforms but found that in our area, it is cheaper to rent them and have the renting company clean and replace them. We only provide shirts for those who mostly work indoors. Those who are required to work outside are given cold weather clothing, coveralls, and rain coats. Our uniforms all have distinctive university and department logos. One note of caution, some women employees do not want their names on the uniforms. There has been situations where someone saw the name on a female employee's uniform and used it to make an attempt at a quick “pick-up.” Most of our custodians work at night and we felt this may cause a safety problem, so our custodial uniforms do not have names on them, only university and department logos.
- Most of our employees like uniforms. However, a very few employees do not want them and are not required to have them. We have not made uniforms mandatory, but we do require our employees to be neat and clean. With some employees, this would be hard to enforce if we did not provide uniforms.
- We issue work shirts to trades, custodial, and grounds, and offer them to other sections such as office staff, engineering, project managers, etc. We offer a dark forest green or a white as color options (or school colors, green and gold). We offer long and short sleeve t-shirts and twills. We also offer polo shirts, smocks, and sweatshirts. All clothing has our logo. New employees are given five shirts to start with and three additional shirts each year. The dark and the light colors make an attempt to address concerns for those who get clothes dirty and for those who work outdoors in the sun. We had some problems with a few folks when we first implemented the plan. Some have an aversion to “uniforms” so we call it “work wear,” but it’s just semantics. I think this concern is offset by those who appreciate not having to ruin their own clothing. Don't forget to consider women's cuts as well as...
men's—we made this oversight to start with. There is a major increase in warehouse stock item numbers when you consider white and green for five different styles for five different sizes (small, medium, large, x-large, xx-large) and for men and women. We are trying to work with local vendors for stocking but that has not been a total success so far. We are also coordinating with Housing, Telecommunications, and Central Receiving to develop common guidelines and for volume discounts. The biggest benefit was the comments from our customers who appreciate being able to identify us from the crowds that go through their space. This in itself has justified the expense. It also differentiates us from contractors. As with most new programs, we had to develop guidelines for when they should be worn, replacement due to damage, etc.

- We mandate that custodial, trades, engineers, utility, and mechanic all wear uniforms. We have worked together to come up with acceptable standards. We use to buy the uniforms every year but three years ago went to a rental company. This has worked out well since the uniforms are kept cleaned and in good repair. We give the choice of long or short sleeved shirts and each area is a different color. In the summer we purchase heavy duty t-shirts for all staff with our name and logo embroidered on them. Each person is issued two shirts for the summer quarter. This has helped with staff who are working outside in the heat to not strip down to a ratty undershirt while working. All in all I think our policy works fine. We issue one pair of coveralls to each employee and buy jackets for them if they want them. Every piece of clothing with the exception of pants has a name and department on them for easy identification. We do not buy rain gear or cold weather gear. I have bought boots for some staff who ruin their pair on the job but most staff prefer to provide their own within what the laws allow.

- My experience has been that having a uniform is not a big deal as long as the employees wearing them have some say in what it looks like, what it is made of, and who takes care of it.

- Our school purchases three uniforms per year for our custodial and maintenance employees. A uniform consists of a shirt and a pair of pants or one pair of overalls, one pair of overalls, one cold weather jacket, etc. Employees choose from a wide variety of shirt and pant styles. Some prefer durable traditional uniforms and some like more comfortable clothing like golf or t-shirts and denim pants. The choice of clothing colors is limited only by what is available from the supplier. All shirts, jackets, hats, coveralls and sweatshirts are embroidered with a very attractive and easily recognizable school district logo. Most employees are responsible for laundering their own clothing.

Plumbing and paint department employees also have rented coveralls available which are cleaned and exchanged weekly by a laundry service. With such a wide variety of clothing to choose from most employees enjoy wearing "uniforms" and they are no less recognizable than when we provided only one color and one style of institutional appearing uniforms.

- We have uniforms in both custodial and maintenance. We have moved to shirts only since pants are hard to fit and not well liked by most employees; jeans are preferred. We use both short and long sleeves and allow them five of each.

- Our college provides uniforms (shirt, pants) for the physical...
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planted staff. We initially purchased seven shirts and five pair of pants for each. Each fall we replace up to three shirts and three pair of pants. The shirts we purchase locally from a company that also embroiders our logo and the first name of the employee. Our staff reviewed several rental companies uniforms and decided that they would rather do their own laundry. They also had the input in deciding the design and material type of the uniforms. They have three different colors of shirts and decided they would rather wear dark blue jeans (not faded or worn). This uniform has greatly improved the image on campus for the staff. We also purchased winter jackets with the college logo on the back and their first name and logo on the front. Our jackets have become so popular that the college president, vice president of finance, and a board of trustee member have also ordered the same jackets. We try not to promote the jackets for everyone to purchase because it would dilute the purpose of the identification of our staff, but obviously those folks can purchase if they please. After the first year, baseball caps became an issue so we purchased summer and winter ball caps with the college logo embroidered and required our staff to wear them at all times while working. The shirts cost about $30 each and the jeans between $30-40 each. I think overall this cost evens out compared to rentals when you figure in that the employees were able to select their type of uniform and are pleased with the outcome. Our experiences with rental uniforms was never satisfactory because of repairs, lost garments, and overall appearances.

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One very special APPA book and two solid reference publications are the subjects of this Bookshelf column.

APPA first published *The Decaying American Campus* ten years ago; this confirmed to the rest of the higher education community that our organization had important information to convey regarding fiscal responsibility with academia. More recently, APPA published *The Strategic Assessment Model*; this time, APPA stresses that there are important things to teach its members concerning the assessment movement in higher education. In my review, I decided to extol the virtues of this book even before I had read it, because I am convinced that this method of self-evaluation, despite its shortcomings, represents the best survival tool currently available to APPA members.

Two other reference books are reviewed, and both deserve attention. Both books are published by R. S. Means Company, which assures all readers that the information presented is accurate and current. I reviewed the *Facilities Operations and Engineering Reference* which is the official Certified Plant Engineer (CPE) reference book, sponsored by the Association for Facilities Engineering (AFE), the new name of the old American Institute of Plant Engineers. Leslie DeSimone, ASID, the interior designer for the University of Georgia Physical Plant Division, reviews the second edition of *Planning and Managing Interior Projects*, an important work covering design of office space.

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The phrase “adversity breeds evolution,” attributed to Dr. Jonas Salk by one of the contributing authors to *The Strategic Assessment Model*, is an appropriate reminder for Higher Education today. For we are, in fact, beyond the requirement for a simple necessity-mothered invention; we need to evolve quickly. Institutions must recognize that the adversity-named, accountability-mandated “assessment” accompanied by its co-conspirators “increased demands” and “reduced funding” will not go away. Higher education institutions should confront and conquer this problem, or suffer the consequences.

Facilities managers have a special need to address accountability, since what we do, or fail to do, is almost always visible to anyone who cares to look. As a result, our stewardship is very likely to be challenged first. This information and reminder should be old stuff for readers of *Facilities Manager* since most of the final issue of the twentieth century addressed accountability and assessment. Clearly, we need to develop brand new or exponentially better operating procedures to conduct our affairs more professionally and efficiently. In addition, we must then communicate what we do more effectively to institutional decision-makers. We may even be required to make heroic changes in what we do, since this adversity may propel us into a paradigmatic crisis; such a situation, described by historian Thomas Kuhn as the way that scientific thought develops, poses a crisis which can only be remedied by extraordinary changes which restructure the framework, or paradigm, of an activity.

APPA is to be commended for promoting the concept of a strategic assessment model, dubbed “SAM,” which should become a major tool to help our profession evolve successfully. While there may be some facilities managers who do not want their operation compared to others, most would agree that such a model, if successful in measuring the right things, would be very helpful in promoting effective and efficient use of our scarce resources. Such a successful model would also allow facilities managers to be proactive in their approach to implementing the appropriate changes necessary to weather this and all other future...
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SAM is explained in The Strategic Assessment Model through a series of clearly presented chapters. Years of work preceded the refinement and subsequent publication of this assessment method. Many APPA members and institutions participated in the planning and data collection sessions that preceded the book’s publication. The APPA members of the original Strategic Assessment Model Consortium (1995), the Task Force (1999), and the contributing authors Doug Christensen, Jack Hug, Maggie Kinnaman, Gary Reynolds, and Mo Qayoumi, along with the editor, Steve Glazner, deserve special kudos for their extraordinary efforts. In addition, business partners from American Management Systems, Constructive Concepts, LTL Collaborative, and Nalco Chemical Company provided technical and financial assistance.

The methodology for the model is loosely based on the highly respected Malcolm Baldrige National Quality Award, which is the most widely used business assessment instrument in the United States. As a result, SAM is predicated on both a successful model and the expertise of knowledgeable practitioners in all aspects of the facilities management profession. As presently configured, the model measures an institution’s operation in four categories: financial, internal process, innovation/learning, and customer satisfaction; and contains eighteen performance indicators. These items are benchmarked, and relative success levels are proposed, from lowest (1) to highest (5). In general, Level 1 operation defines activities measured at or below the 80 percent level; that is, 80 percent of the institutions operate at or below this level for a specific performance item. Level 4 operation defines activities considered to be current best practices, while Level 5 operation represents the highest possible plateau of operation in a performance category.

For example, SAM survey results indicate that for one performance category in the financial benchmark perspective, facility operating expenditures are expressed as a percentage of the current replacement value of Education and General (excluding Auxiliary Enterprise) facilities. This percentage is considered by the developers of the model to be an example of the commitment the institution has for operating and maintaining its plant. Eighty percent...
of the institutions reported receiving less than four percent of the current replacement value for operating expenditures, so Level 1 for this category is less than four percent. Level 4 was set between five percent and five percent, while any greater percentage was considered Level 5. (Several of the remaining seventeen categories utilize current replacement values, indicating the importance of this term; facilities managers should ensure that these values are kept current and are not understated). When data for all eighteen categories are computed by an institution, comparisons to the survey values will indicate its strengths and weaknesses. Note that SAM is intended to be a dynamic document, and new categories, or modifications to existing categories, are expected and encouraged.

The Strategic Assessment Model represents APPAs finest hour. It is a book that must be used by each member institution to prove to the world that we understand what we are doing, are performing at the highest levels of efficiency possible, and are planning continuously to improve our services. Each institution should participate in the process by responding to the survey. Combining the results of SAM with information from APPAs Comparative Cost and Staffing Report will allow facilities managers to produce useful information, not only for internal planning and fine tuning, but also for presentation to both public and private governing boards. Previously, a relatively small percentage of APPA members have battled to promote this model; the time for coat holders to become combatants is now at hand. APPA needs and deserves cooperation to make SAM, and therefore all of us, successful.

Dr. John M. Casey P.E.
Manager, Engineering Division
University of Georgia
Athens, Georgia


R. S. Means has done it again. Here is a solid reference manual for facilities managers, published by Means and the Association for Facilities Engineering, in collaboration with the Westinghouse Electric Company. This book is divided into ten chapters, covering management, engineering economics, civil engineering and construction projects, maintenance, energy efficiencies, HVAC, mechanical engineering, instrumentation and controls, electrical engineering, and environmental health/safety. The information contained in each chapter is very complete and relatively easy to follow; an extensive index and appendix make it easy for the reader to find answers to specific problems.

Since the book is intended as the primary reference source for Certified Plant Engineers who usually work in the industrial sector, information concerning higher education specific management areas are not included. The book does, however, cover most of the important duties for which APPA members are responsible.

I feel comfortable with his book for at least three reasons. First, the book refers to APPA as a resource for information and expertise in management of facilities. Second, one of the contributing authors is David Millay of the University of Delaware; David is an excellent facilities manager, a former president of the Association for Facilities Engineering, an active member of APPA, and a book reviewer for this column. Finally, the first sentence of the first chapter of the book states “we live in a time of great change,” putting the concept of change at the head of the parade.
indicates clear thinking on the part of the authors.

As a nuts and bolts reference source for facilities operators, this book is as good as any on the market today, and would complement APPAs four-set volume of Facilities Management: A Manual for Plant Administration very well.

Dr. John M. Casey PE.
Manager, Engineering Department
University of Georgia
Athens, Georgia


This book provides a general overview of everything you need to consider in planning a move to new office accommodations, or the expansion or consolidation of existing offices. It is a great resource for anyone in facilities management, but especially for a novice member of a planning committee, one who is not familiar with the work that is required, the questions to ask, or the technical expertise necessary to complete such a task. The information is given in convenient “bite-size” pieces that are easy to locate. While many topics are addressed, none are developed in-depth; the book does, however, give the reader an idea of the many things to be considered or remembered, from the “Strategic Planning” phase to “Post-Move Administrative Duties” portion of an office project.

The book contains sample bid documents, budget sheets, letters, etc. that are most helpful. One chapter has a list of responsibilities of the various parties concerned in a project involving interior design, including project manager, designer and client.

Following this list would help insure a successful completion to a complicated project. Other sections range from ADA compliance to water gardens, waterfalls, fountains and everything in between. The only missing section in this manual appears to be a time-line showing when all these pieces of the puzzle would be accomplished, relative to each other and to the overall project.

Planning and Managing Interior Projects is a very helpful resource, especially for the office manager or department head who has been told by the boss to “make it happen.” APPA members should consider purchasing this book if they are involved in the design and construction of office spaces in their institutions.

Leslie M. DeSimone, ASID
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New Products

New Product listings are provided by the manufacturers and suppliers and are selected by the editors for variety and innovation. For more information or to submit a New Products listing, contact Gerry Van Treeck, Achieve Communications, 3221 Prestwick Lane, Northbrook, IL 60062; phone 847-562-8633; e-mail gerryv@concentric.net.

Locknetics Security Engineering unveils a highly innovative new series of electromagnetic locks, the MagForce Plus family. This electromagnetic lock product line represents a significant evolution and improvement on Locknetics’ 390 Series. MagForce Plus locks employ a number of universal features including an easy to wire, modular circuit board common to all models. For detailed information call Locknetics Security Engineering, 860-584-9158.

Spartan Chemical Company announces the newest addition to its line of floor finishes waxes/seals with the launch of SunSwept. By cleaning and shining all at once SunSwept is a time and money saving solution. Literally walk through the cleaning and shining process and ease Custodial scheduling and work load. Obtain more information by calling the Spartan Chemical Company, 800-537-8990.

Regency Ceiling Fans reminds us that ceiling fans aren’t only for summer cooling. Industrial ceiling fans for manufacturing plants, warehouses and other high-ceiling applications are a great way to save energy in any season by reclaiming heat trapped at the ceiling and circulating it to the floor where it’s needed. For information on VISTA industrial ceiling fans call Regency Ceiling Fans, 636-3493-000.

HAWS Corporation introduces the Model 3502 Triple Pedestal Drinking Fountain. Model 3502 a triple receptor unit, utilizes unique features for ease of maintenance and long life. Constructed of welded stainless steel, with a lockable door and heavy duty stainless steel hinges the Model 3502 is from the StreetSmart line of products designed for use in low security, high traffic areas. Additional information can be found at the HAWS Corporation 888-909-4297.

Dynamix debuts five new clean-room wipers for use in controlled environments. Dynamix contamination control solutions, is an alliance between Berkshire Corporation and the DuPont Company. Dynamix offers several innovative features that provide controlled environment customers with increased wiper efficacy and value, including superior wipe/dry characteristics, superior strength and absorbency. For more information call Dynamix at 877-4Dynamix.

World Dryer Corporation introduces the concept of warm-air hand drying with their cast iron Model A Series. Today, the Model A and its automatic counterpart, the XA hand dryer, continue to deliver valuable benefits. Public washrooms equipped with warm-air hand dryers save up to 90% over washrooms with paper towels. Preserve the environment, conserve trees, eliminate unnecessary waste. Call World Dryer Corporation 800-323-0701.
Coming Events

APPA Events

For more information on APPA seminars and programs, visit our website’s interactive calendar of events at www.appa.org/news/.

June 4-8—The Leadership Academy. Rancho Mirage, CA.

July 16-18—Educational Conference & 87th Annual Meeting. Fort Worth, TX.

September 17-21—Institute for Facilities Management. Pittsburgh, PA.


APPA Regional Meetings

September 22-26—CAPPA Regional Meeting. Overland Park, KS.

September 23-26—RMA Regional Meeting. St. George, UT.

September 26-29—AAPPA Regional Meeting. Wellington, New Zealand.

October 1-3—PCAPPA Regional Meeting. Long Beach, CA.

October 7-10—SRAPPA Regional Meeting. Nashville, TN.

October 8-11—MAPPA Regional Meeting. Ann Arbor, MI.

October 8-11—ERAPPA Regional Meeting. Burlington, VT.

APPA Chapter Meetings

April 13-15—Virginia APPA (VAPPA) Meeting. Roanoke, VA.


May 25-26—Kentucky APPA (KAPPA) Meeting. Richmond, KY.

May 28-31—Georgia APPA (GAPPA) Meeting. Jekyll Island, GA.


Other Events

April 9-12—2000 North American Snow Conference. Traverse City, MI. Contact American Public Works Association, 816-472-6100 or snow@apwa.net.

June 4-9—KAUBO Conference. Jasper Park Lodge, Jasper AB. Contact Michelle Hoyle, 780-492-4281, michelle.hoyle@ualberta.ca.

June 6-10—ACUHO-I National Housing Training Institute. Pittsburgh, PA. Contact Norb Dunkel, 352-392-2171 ext. x139.

June 8-9—Assessment of Facilities Rehabilitation Needs. Sydney, Australia. Contact Roger Parks, r.parks@unsw.edu.au.

June 18-22—EDUCAUSE Institute. Boulder, CO. Contact the Institute Registrar, inst@educause.edu.

June 14-16—Big Ten & Friends Trainers Conference. Indianapolis, IN. Contact Patty Turner, p.turner2@butler.edu.

June 20-22—2000 MAPPA/PGMS Turf Seminar. Indianapolis, IN. Contact Nickolas Hill, Butler University, at nhill@butler.edu.

July 9-11—ACUHO-I 52nd Annual Conference. Pittsburgh, PA. Contact the Association of College and University Housing Officers, 614-292-0099.


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