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Fall 1994



*The Personal Leadership
of*
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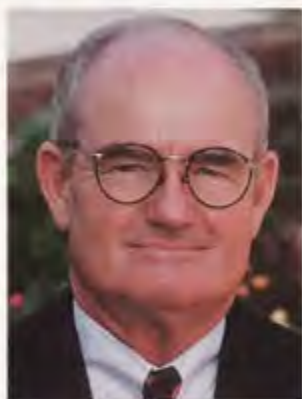
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The Personal Leadership of Charlie Jenkins

by Steve Glazner

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*On the Cover:
APPA's new president, Charlie Jenkins,
on the campus of St. Mary's University
in San Antonio, Texas.*

*Photo by J. Scott Schrader,
Saint Mary's University Learning Resources Center*

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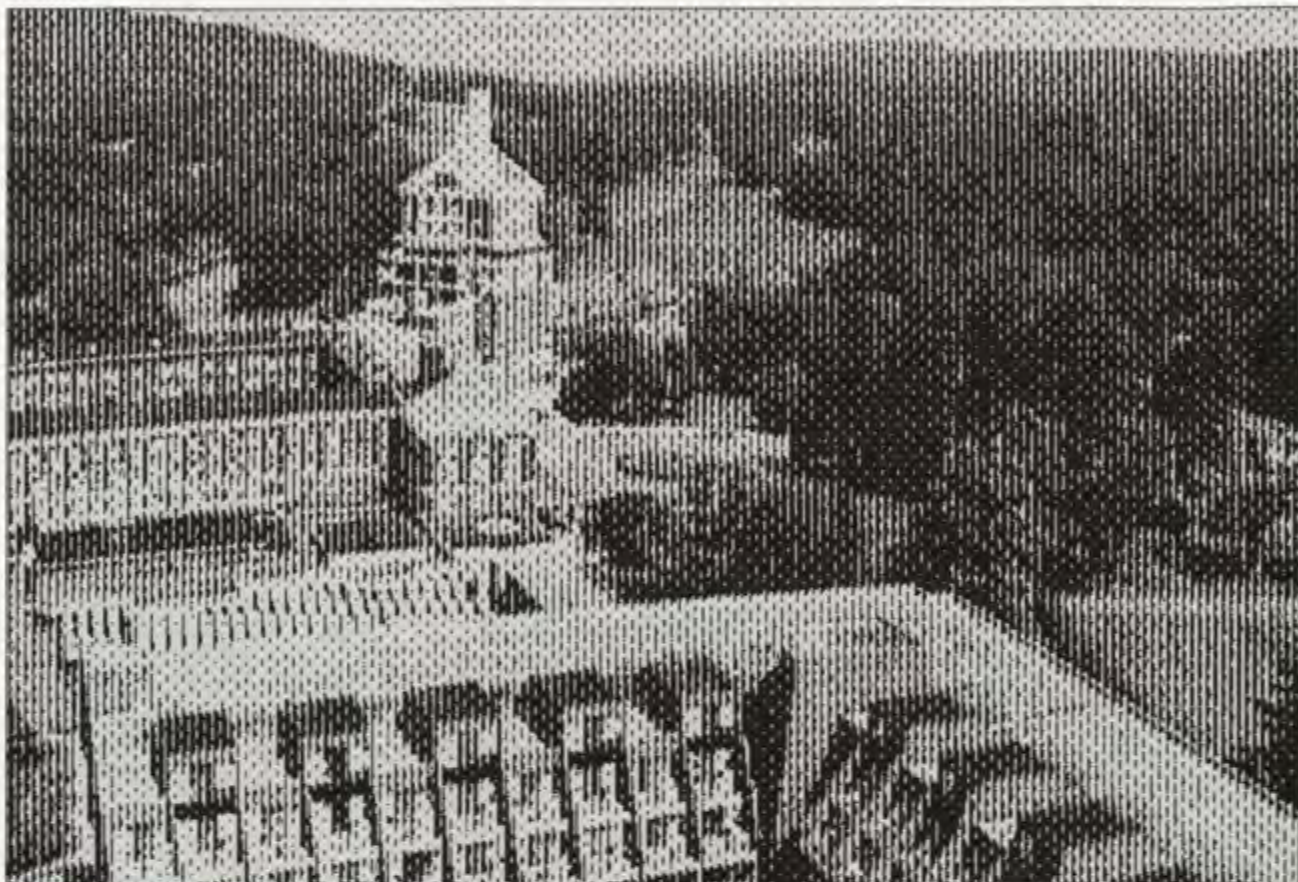
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From The Editor

Steve Glazner

This issue includes our annual profile of the current APPA President, designed to provide the members with a better understanding of the personal and professional goals of the individual elected to lead the Association this year. When he became APPA President-Elect last year, Charlie Jenkins asked me if I would write the profile of him, and I was honored and flattered to do so.

Promoting the leadership of the individual, Charlie has provided a consistent message to the membership over the past few years. His leadership presentations at several Institutes, regional meetings, and APPA conferences have been inspiring and thought-provoking to his audiences. Be watching for the Winter 1995 issue of *Facilities Manager*, whose theme will be on leadership in the facilities organization. In the meantime, I invite you to turn to page 18 and learn more about your current President, Charlie Jenkins.

The members of APPA's former Rightsizing Task Force, chaired by Fred Klee of Ursinus College in Pennsylvania, are preparing the final drafts of a new APPA monograph on rightsizing within the facilities organization. To introduce the topic from a broad, institutional perspective, we asked frequent author Harvey Kaiser to share with us his insights and directions for a comprehensive rightsizing-through-restructuring process.

Last year a unique activity occurred within higher education facilities management. Two APPA Institutional

members exchanged positions for five weeks to provide as well as to gain insight into each other's facilities operation. The article by Win Wassenar of Williams College and Jack Hug of the University of California/San Diego provides an innovative model for others contemplating such an exchange within the administrative side of campus operations.

The last feature article offers several alternative solutions to parking problems, especially on our urban campuses. The authors provide a recognizable context for discussion and present a number of valuable and cost-effective suggestions.

I would also like to direct your attention to page 4, which includes short summary reports of the roundtable discussions held at last July's annual meeting in San Antonio. We wanted the entire membership to benefit from these active and meaningful discussions.

Finally, don't forget to register for the January 1995 Institute for Facilities Management, scheduled for January 22-27 in Austin, Texas. In addition to the regular three-track program and a special program focusing on the topic of capital projects, the Institute will introduce a fourth track on leadership. The new track, titled Fundamentals of Leadership for Facilities Officers, is being developed in cooperation with the Covey Leadership Center. We are extremely excited about this addition to the already strong Institute program, and we urge you to register early. ■

APPA News

Roundtable Roundup

Approximately seventy-five annual meeting attendees participated in the eight special Roundtable Discussions held at the San Antonio meeting last July. Following are summaries of five of those discussions—written for the benefit of all APPA members by the

discussion moderator for each topic. The other roundtables discussed CFCs, telecom infrastructure, and a visit to Russia by members of the Australasian Region.

Rightsizing

by Frederick L. Klee
Ursinus College
Collegeville, Pennsylvania

Fourteen members attended the discussion on rightsizing. Custodial services continue to suffer in the downsizing/rightsizing process. In most cases reductions are being met through attrition rather than layoffs or terminations. A move to contract custodial services also continues to be a viable option as a way to shift away from the expensive benefit packages to lower-cost con-

tract employees. It is important to clearly define the services required to meet the expectations of the customers and yet keep the task hours to a minimum.

A suggestion made was to review the services defined in the contract and do some careful evaluations; if the total cost differential is greater than 10 percent, it is probably worth while to move to a contracted service. Most of us continue to emphasize the cleanliness of the front door of any building and then reduce service to more obscure spaces. A range of 20,000 to 70,000 square feet cleaned per person, and pay rates from \$6.50 to \$15 per hour, were suggested by representatives around the table.

At one institution processes were reviewed and led to some 500 tasks eliminated. At another university new software drove the process review, and reductions were made by staff attrition. In both cases task forces were formed to make suggestions for further reductions. Data handling for payroll information was streamlined and led to a revamp of the entry process and a reduction or reassignment of duties.

Other suggestions made around the table included:

- Provide some security for employees in the outsourcing process that is reduced incrementally over time.
- Define expectations of the customer—really find out what they want.
- Establish schedule of values in a spec book for the services purchased.
- Ask for deducts if services are reduced during the term of the contract.
- Examine the long-range risk of outsourcing or not doing the work; if there is little or no impact, do it.
- Consider short-term contracts of four weeks to complete a project that will not require further service.
- Look at task performance contracts—how many of something that have to be cleaned or serviced.
- Always look at the tasks that have to be done and determine if they can be modified or deleted.

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A form of business process reengineering is being used at more and more institutions where substantial reductions have to be made. Most universities have reduced by grinding away at the fringes of problems, and now the basic way we provide service must be reduced. Virtually every process from recruiting to postgraduate service must be redefined and restructured.

A monograph on rightsizing, prepared by the members of APPA's Rightsizing Task Force, will be published in the late fall. It will include suggestions, case studies, and assistance for any institution dealing with reduced budgets and staff.

Comparative Costs and Staffing Survey

by C. Gary Pringle
Converse College
Spartanburg, South Carolina

After brief introductions among the eight participants, Steve Glazner of the APPA staff gave a brief history of the survey and explained criticisms of the report. Following these opening remarks, a two-hour discussion ensued with the following highlights and concerns:

1. Standardize the unit of measurements used. Example: using square footage vs. acres when computing grounds information.
2. The NACUBO and APPA reports should solicit information using the same reporting terminology.
3. Pursue the possibility of collaboration between NACUBO and APPA to produce the same report.
4. Create data collection sheets that ask for explicit information.
5. Continue to add new line items, categories, and more as well as better job descriptions.
6. Continue to improve line descriptions in the Instruction Booklet, especially when the results present questionable data.
7. Pursue APPA's discussions with outside firms in evaluating the results and producing those results in improved chart and graphic formats.

After this discussion, all agreed that

in spite of problems with the survey, no one felt that it should be discontinued. On the contrary, it is a good benchmarking tool that should be used more often as a reference.

Small College Concerns

by Peter Sandberg
Saint Olaf College
Northfield, Minnesota

The small college roundtable session was extremely well attended, with seventeen participants, and the discussions were very helpful to me as the new chair of APPA's Small College Committee. Most committee members were able to attend including Bob Getz, Harper College; John Holmes, Messiah College; Jerome Meyer, Centre College; and Jeff Turner, Casper Community College. Ted Dews, James Cook University,

Australia, represented Australasian APPA in lieu of Greg Heap, who was unable to make the trip. Several small college members of APPA standing committees were also able to sit in. The committee had met prior to the roundtable discussion to work toward developing an agenda for the coming year, and it was good to be able to report on this session to the roundtable group.

One of the main focuses of both discussions involved looking at ways to increase the professional stature of the facility director on smaller campuses. It was felt that we need to work with NACUBO, ACE, and other associations to emphasize the vital role that the facility administrator plays on any, but especially, the small campus. We also felt that it is becoming increasingly important to do what we can to make it easier for the small college administrator to actively participate at the regional

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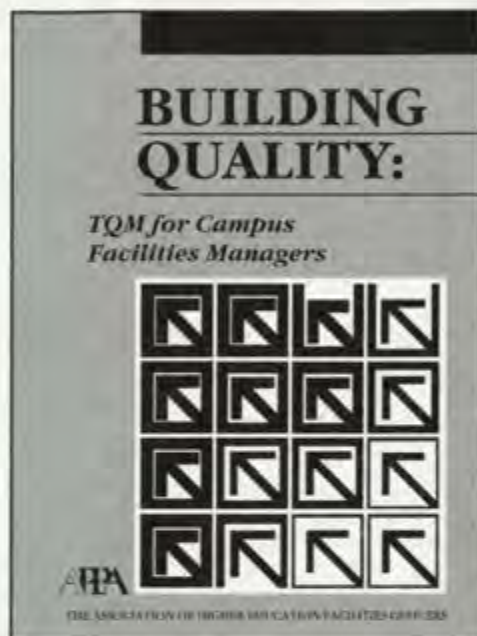
and international levels of APPA. We need to emphasize the importance of this involvement to the presidents and vice presidents, and demonstrate that their encouragement of this involve-

ment helps to show off the institution in ways similar to a faculty member's involvement in the associations of his or her academic discipline. We all see the press releases that come out of our

public relations offices touting the academic folks' participation at conferences and annual meetings. We need to get permission to participate in the same way, and blow our own horns.

An immediate result of this expression of concern is a change being worked on by APPA President Charlie Jenkins and Executive Vice President Wayne Leroy. They are hoping to bring the small college committee to Alexandria with the permanent and standing committees so that we can work on our issues and have plans formulated and ready to bring to the annual meeting rather than always being six months to a year behind. This is a great expression of APPA's commitment to the smaller colleges.

Much discussion was centered on APPA's services and their application to the small colleges. Small college committee people had already held preliminary discussions with members of the Government Relations and Information Services committees, and I believe that these groups will really



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The following are the document options and corresponding numbers:

- Educational calendar—10
- Institute for Facilities Management: 3 Track Program Schedule—14
- Institute Special Program: Information Technology—16
- Institute hotel & registration information—18
- Job Express subscription form—30
- Job Express advertising information—32
- Publication order form—40
- Upward Bound call for mentors—42
- Newsletter/magazine subscription form—44
- Editorial Calendar—46

Be sure to have your fax number handy! Let us know what you think; call 703-684-1446 and ask for Tina Myers.

help to represent our concerns in these areas.

The committees and roundtable participants both talked about the potential for developing a list server dedicated to small college facility concerns. There are several applicable projects on the Internet, but none specific to our needs at this time. Any of the small college committee members will appreciate your ideas regarding use of electronic distribution of information.

All of the APPA permanent, standing, and ad hoc committees have strong representation from the small college group. The small college committee intends to use these individuals to express our concerns and ideas to the committees, and you should use them also. In our discussions at San Antonio, virtually all of the large-school representatives to the committees were exceptionally supportive of the small colleges.

Finally, we were all encouraged that the committee meeting and roundtable discussion focused on identifying positive steps to advance our role at both our institutions and within the Association. We need to maintain and build momentum and not allow things to get bogged down. There are those who say, "Why?" and those who say, "Why not?"

Let's keep focusing on the "Why not?" ideas!

Trainers Network

by Wilma Mpelo
Howard University
Washington, D.C.

Developing skilled, competent employees as a means to effectively manage the rapid change occurring in most academic institutions is becoming a priority for many managers. This is complicated by the fact that few institutions have sufficient budgets or staff to adequately train and educate their employees. Consequently, this shaped the discussion at the Trainers Network roundtable, where a dozen members focused on the means of achieving the goal of strengthening the job skills of facilities

employees. The participants included managers from large and small institutions and all regions of APPA. The issues discussed included:

- Training partnerships,

- Reciprocal relationships,
- Developing a computerized library of resources,
- Identifying peers in other institutions,



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- Professional networking,
- Adding training responsibilities to key personnel,
- Reclassifying employees, and
- Utilizing the Internet to share information.

Reclassifying Positions or Adding "Other Duties as Assigned." Facilities directors with a great degree of control of assign-

ing job responsibility often have the option to identify one or more employees to assume responsibility of facilitating and/or coordinating the department's training efforts. The director can usually find funds to provide training for the person(s) assuming training responsibility or locate a mentor to work with the new trainer. This has the

greatest probability of working in small institutions where the annual training hours are lower than at a large institution. If you take this scenario one step further, reclassifying a current employee to be solely responsible for training is an option that some institutions have taken when hiring freezes are in place or when they are unable to create a new position. Hopefully, you will not have the misfortune to have your institution abscond with your trainer, budgeted position and all, to handle the institution's training needs, as has happened twice to one unfortunate facility director.

Stretching Training Dollars. Partnering with other institutions can help reduce the cost and time of developing and presenting training programs. For example, several institutions in the greater Washington, D.C. area joined forces to develop programs to comply with OSHA's Bloodborne Pathogens Standards. OSHA gladly provided a compliance manager to help the institutions in their efforts. As a result, the programs were developed and implemented before mandated.

Another example is the savings realized when a group of institutions negotiated with a vendor to reduce the per-person rate on training. Each institution only had a handful for technicians requiring certification to comply with the EPA's Clean Air Act. By joining forces they were able to increase the class size and reduce the rate. Savings were also realized when the session was hosted by one of the institutions.

Networking and Resource Sharing. Even if you are able to staff and fund a training office, the sheer diversity of training requirements can be difficult to manage for even the most competent trainer or training manager. It can be a job in and of itself simply to keep up with all the governmental regulations and college and university directives. On top of that let's add new technology (especially all the wonderful computerized machines), diversifying workforce, and changing job skill requirements. Identifying the most effective means to meet all your department's training needs is extremely challenging. Sharing information on what is available, pro-

(continued on page 10)



Mo Qayoumi and Dorsey Jacobs participate in the energy roundtable session.

Energy and Utilities

by Dorsey D. Jacobs
West Virginia University
Morgantown, West Virginia

Thirteen members attended the Energy and Utilities Roundtable Discussion. Included were members from Australia and Canada, who showed a high interest in this area as did members from the United States.

I distributed information on the work of APPA's Task Force on Energy and Utilities. To start the session, everyone was given the opportunity to report on what their schools have done or are doing. This in particular was of interest to the members of the task force in

attendance, as we were able to absorb new ideas. There was also a lot of interest in third-party financing and the sharing of successful energy-related projects with other schools.

We were one of the last groups to break up, and no one left early to go to another meeting. The session seemed to grow more and more interesting and useful. We learned by working with this group that energy and utilities conservation is a very high priority in higher education. The topic is in dire need of expansion and support to our membership as budgets continue to decline.

In closing, everyone commented that they are looking forward to the dissemination of the task force's information and assistance throughout the APPA membership.

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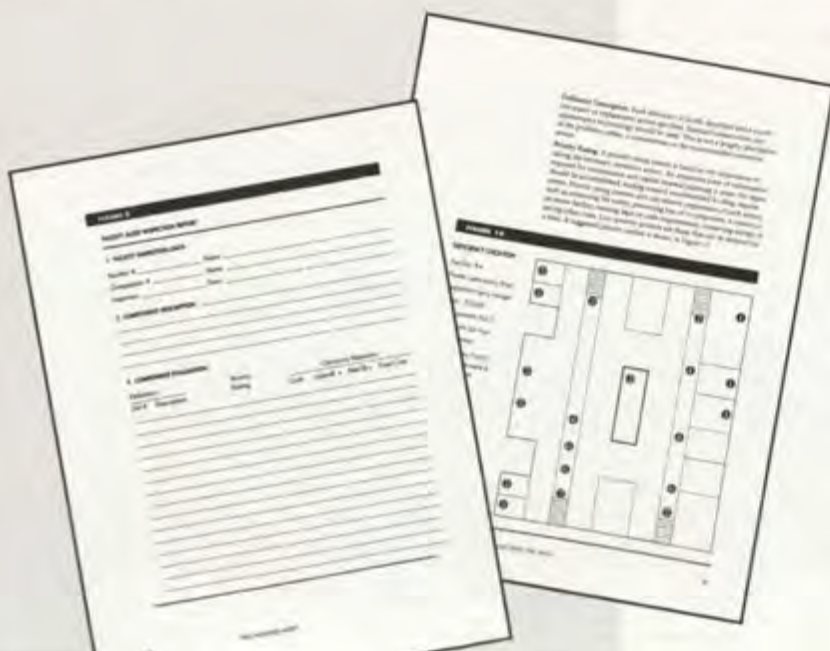
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(continued from page 8)

viding information to develop or facilitate programs, sharing resources, and just talking with someone who is experiencing the same issues that are often unique to higher education is often the difference between a great training program and a mediocre one. All of the participants agreed that networking can be the most productive and cost effective means to developing or strengthening training programs. ■



Submissions Due Nov. 4 for "Preserving Our Educational Heritage"

The deadline is fast approaching for the submissions of abstracts to be considered for inclusion in the program at APPA's 1995 Educational Conference and 82nd Annual Meeting. The meeting, whose theme is "Preserving Our Educational Heritage," will be held July 16-18, 1995 in Philadelphia, Pennsylvania.

Abstracts are due to the APPA office by **Friday, November 4, 1994** in order to be considered by the Educational Programs Committee. The major presentation tracks will focus on business management; facilities operations; facilities planning, design, and construction; human resource management; professional development; and small college issues. We are also seeking presentations on cutting-edge topics that might include: Workforce 2000, right-sizing/reengineering, professional ethics, partnering/outourcing, space inventory and utilization, and electronic technology.

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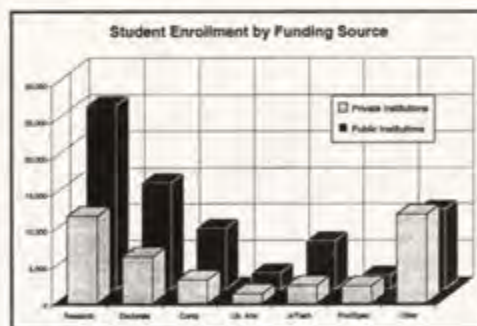
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Capital Notes

Barbara Hirsch

LEAD NEWS

Over the past year I have had many member questions regarding lead regulation. This edition of Capital Notes will give you an overview of existing lead rules, upcoming rulemakings, and legislation.

CURRENT LAW

Lead in Water/Pipes:

Safe Drinking Water Act—Regulates lead in drinking water. In 1986 and 1988 Congress took action to reduce lead in drinking water. The 1986 amendments banned pipes, solder, and flux with more than small amounts of lead in the installation or repair of public water systems. The ban also applies to plumbing in residences and other buildings connected to the systems. States must enforce the ban through state or local plumbing codes or other means.

Lead Contamination Control Act of 1988—Requires the recall of all refrigerated drinking fountains with lead-lined tanks and prohibits lead in new drinking fountains. The bill authorized \$90 million over three years for grants to public schools to reduce lead in drinking water. The measure also authorized \$66 million over three years in grants for state and local screening of children and infants for elevated levels of lead in the blood.

EPA Lead Standard—On June 7, 1991 the EPA set a new standard for lead in drinking water. This was mostly due to lack of compliance and enforcement of the Lead Contamination Control Act. The EPA regulation requires 79,000 pub-

lic water suppliers to monitor for lead at household taps likely to show high levels of contamination. In addition, all water systems must optimize corrosion control to reduce water acidity by 1997, regardless of current lead levels.

Small and medium-sized systems must install or improve corrosion controls if they find that more than 10 percent of monitored taps contain lead levels higher than 15 parts per billion. The deadline is 1999 for small systems and 1998 for medium systems. Water suppliers that fail to reach the 15 ppb action level will have to conduct public education programs on methods to reduce lead exposure. Water suppliers are also required to replace lead service lines that contribute more than 15 ppb to excessive tap-water lead levels. Full replacement must be made within fifteen years.

Lead in Paint:

Currently, there are no rules that require the abatement of lead paint in commercial structures. However, the Residential Lead-Based Paint Hazard Reduction Act affects residential structures on college and university campuses and the OSHA lead standard establishes maximum lead exposure levels to employees during construction work.

Residential Lead-Based Paint Hazard Reduction Act of 1992—Created a two-year, \$375 million grant program to reduce lead-paint hazards in private housing and required disclosure of hazards to prospective home buyers and renters. The measure also sets requirements for lead-based paint inspections or assessments in federally owned and

subsidized housing and requires EPA certification of lead inspection and removal contractors as well as EPA accreditation for industry training programs.

Construction Standard:

OSHA Lead Standard—Establishes the maximum exposure to lead during construction work. Construction work is defined as work for construction, alteration and/or repair, including painting and decorating. It includes but is not limited to the following:

- Demolition or salvage of structures where lead or materials containing lead are present;
- Removal or encapsulation of materials containing lead;
- New construction, alteration, repair, or renovation of structures, substrates, or portions thereof, that contain lead, or materials containing lead;
- Installation of products containing lead;
- Lead contamination/emergency cleanup;
- Transportation, disposal, storage, or containment of lead or materials containing lead on the site or location at which construction activities are performed; and
- Maintenance operations associated with the construction activities described in this paragraph.

PROPOSED LAW

Proposed Rules:

Lead-Based Paint Hazard Elimination—On May 12, 1994 the Department of Housing and Urban Development (HUD) issued a proposed rule to amend its regulations



Barbara Hirsch is APPA's director of government relations.

regarding the elimination of hazards due to lead-based paint. (See May 12, 1994, *Federal Register*, p. 24850.) The amendments would remedy inaccuracies and respond to advancements in the state of knowledge in the field of lead-based paint testing and hazard reduction. This proposed rule would amend both the department's basic regulation concerning lead-based paint poisoning prevention in residential structures and additional regulations pertaining to specific programs of the department.

The changes would include revising the definitions of an elevated blood-lead level, defective paint, and chewable paint; redefining the age of concern for children subject to lead hazards; providing definitions of hazard reduction methods; adding the option to test defective paint surfaces and permitting the use of laboratory analysis such as atomic absorption spectrometry (AA); modifying approved abatement practices to control lead-based paint dust; revising requirements pertaining to the number of dwelling units to be sampled under the random sampling provision.

EPA to require training and set standards for lead-based paint—The EPA has proposed a rule to require an accredited training program and for individuals who deal with lead-based paint. (See September 2, 1994 *Federal Register*, p. 45872.) In addition, the rule would also establish standards for the use of lead-based paint and require that all lead-based paint activities be performed by certified individuals. EPA has also developed a proposed Model State Program as a part of this rulemaking.

Legislation:

Several bills have been introduced in Congress including the following: to authorize research on lead products (HR 1419); to establish a permanent grant for the Residential Lead-Based Paint Hazard Reduction Act (HR 2479); to establish an excise tax on lead products (S 1347); and to amend the Solid Waste Disposal Act for lead-acid battery recycling (HR 1808). In addition, the Mercury-Containing and Rechargeable Battery Management Act (HR 4528/S 1949) was introduced into both Houses of Congress in May, which would require the EPA to set policies

regarding the handling and recycling of rechargeable batteries and limit the content of mercury in batteries.

In addition, the following bills have passed the Senate:

Lead Exposure Reduction Act (S 729)—Passed by the Senate on May 25, 1994, the bill would:

- Restrict the level of lead in a wide range of products including paint and coatings, pesticides, certain toys and games, curtain weights, ink, plumbing solder and fixtures, and packaging, with certain exemptions for artists supplies, toy models, and items for medical, mining, or national defense purposes;
- Prohibit the disposal of lead-acid batteries in landfills or incinerators;
- Require states to inspect elementary schools and day care facilities for lead hazards; and
- Authorize \$25 million in fiscal 1994, \$24 million for fiscal 1995 and 1996, and \$22 million in 1997 for the lead inspection program.

The House introduced a companion bill (HR 4882) on August 1, 1994, which was recently marked up by the House Energy and Commerce subcommittee on transportation and hazardous materials. The lead-acid battery recycling provision is contained in both provisions of the bill.

Safe Drinking Water Act (S 2019)—Includes an amendment offered by Senators Barbara Boxer (D-CA) and Bill Bradley (D-NJ) that requires the Environmental Protection Agency to establish a health-effects based performance standard and testing protocol for the maximum leaching of lead from water well pumps and components parts. The House bill (HR 4314), introduced April 28, contains no such provision.

FUTURE REGULATORY AGENDA

To date no rule has been proposed mandating lead-based paint abatement in commercial structures. However, a proposed rulemaking is scheduled to be introduced within the next two years that will regulate lead-paint in pre-1978 buildings.

Resources on Lead

The National Lead Information Center.

General information: 800-532-3394; technical information: 800-424-5323. ■

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Focus on Management

H. Val Peterson

The Customer is King

All of us have heard the saying, "the customer is king," but we usually think of the saying as applied to retail sales. No matter what project a company produces or service it provides, it goes without saying that it couldn't exist without customers. Every college and university has its customers, which are the students and to a lesser degree the students' parents. In the facilities management organization, not only are the students your customers, but the entire faculty and staff as well.

Sometimes employees within the facilities management organization take customers for granted. They assume their work can be accomplished in relative anonymity because they can "hide" within their work unit or department. They tend to rationalize that the significance of their work will never be noticed. What all employees need to realize, however, is that satisfying customers is the secret of success in business and it is the secret of success for a good facilities management organization.

This then also means that the secret of each employee's individual success within facilities management is how well they satisfy the customer—whether this be the campus community in general or only those individuals within a particular area or building where they are assigned to work. Only when employees strive to perform high quality work and provide good quality service do they give customers their "money's worth."

Employees need to understand that their work affects customers regardless of whether or not they are required to

deal with them directly. An incorrect delivery, a carelessly installed product, a mistake in billing, a room that is continually too hot or too cold—these things rarely go unnoticed by customers.

Worse than that, mistakes or shoddy work can sometimes result in much bigger problems. As a case in point, take this chain of events which happened at a pump company. A rush order for pumps and auxiliary equipment was shipped by truck from the company's plant en route to a construction site in a neighboring state. Before the equipment left the plant, a shipping clerk put the installation drawings in a heavy plastic envelope attached to the side of one of eight crates.

When the shipment arrived at its destination, the crates were stored outdoors. No one took the plans out of the envelope, and although a yardman was told to cover the crates with a plastic tarp, he didn't. It rained hard overnight, ruining the plans. The plastic zipper at the top had not been tightly sealed, allowing the envelope to fill with water.

Whose fault was it? The shipping clerk at the pump company denied he had forgotten to close the zipper; the receiving clerk said he didn't remove the plans from the envelope because "it wasn't my responsibility;" and the yardman couldn't even be found the next day.

This story exemplifies an unfortunate sequence of errors and oversights. Individually, they don't seem to amount to much. Collectively, they resulted in a costly delay in the installation of urgently needed equipment and a very dissatisfied customer. All of the problems could easily have been avoided if each person involved had just kept in mind that the customer was anxiously waiting for his equipment to be properly installed.

If employees are occasionally irritated when their supervisor insists upon more careful work, speedier deliveries, better service, and so on, they need to learn that it's really the customer who insists upon those things.

Within the facilities management organization it's part of everyone's job to satisfy the customer. Facilities management usually doesn't get much feedback from the customer unless they are unhappy. But when we don't hear from them, we hope it means they are satisfied. After all, if the customers are happy, it means we are doing our job. ■

Val Peterson is director of facilities management of Arizona State University in Tempe, Arizona.

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The Personal Leadership of **Charlie Jenkins**

by Steve Glazner

During his dynamic and thought-provoking speech to the membership at July's 81st Educational Conference and 1994 Annual Meeting in San Antonio, Charles W. Jenkins offered three attributes or characteristics of an excellent leader: a leader must have a vision for the future, a leader must be flexible, and a leader does not quit. All three attributes are well served by Jenkins himself as he begins his year as APPA President.

Steve Glazner is editor of Facilities Manager and APPA's director of communications.

Charlie Jenkins, facilities administrator at Saint Mary's University in San Antonio, Texas since 1982, sees himself as a facilities leader in a profession where management skills and techniques have traditionally garnered the greater attention. His evolution from facilities manager to facilities leader has been one marked with much hard work and self-evaluation, and both his institution and APPA have been the prime beneficiaries of his efforts.

While about 70 percent of the APPA membership is composed of small colleges—defined by APPA as institutions having 5,000 or fewer full-time equivalent enrollment—



**A leader must have a vision
for the future, a leader must be flexible,
and a leader does not quit.**

Jenkins is only the sixth president in APPA's history from a small college. He has previously served as president of the Texas chapter and the Central region, was a three-year member of APPA's Special Projects Committee, was elected for three terms as Vice President for Professional Affairs, and is a member of the APPA Board of Directors. He was an active participant in the APPA/Lilly Endowment study of theological seminaries, has been on the faculty of the Institute for Facilities Management, served two years on APPA's Publications Advisory Board, and is a graduate of the Executive Development Institute for Facilities Managers.

Jenkins received the CAPPD Distinguished Member Award, the APPA President's Award in 1991, and the APPA Meritorious Service Award in 1992. Under Jenkins' direction, Saint Mary's University received the APPA Award for Excellence in Facilities Management in 1993, and the regional Award for Excellence in 1988 and 1989.

Education and a Military Career

Jenkins was born in Fort Worth, Texas and was educated in Texas public schools. He graduated from Texas A&M University (then Texas A&M College) in 1957 with a bachelor's degree in mechanical engineering. Having participated in the ROTC program throughout college, he graduated as a reserve officer. During his mandatory three-year tour of duty in the Air Force, Jenkins decided to become a career officer and stayed for another twenty years.

In the first half of his Air Force career, Jenkins was involved primarily in aircraft maintenance. During this time, he received a master's degree in mechanical engineering from Arizona State University. On the "downhill side of the career," as Jenkins calls it, he got into facilities maintenance. He led and directed the in-house workforce and oversaw all capital improvements for the base. "It was exactly what Bill Middleton has described as what the comprehensive facilities officer does on a campus," says Jenkins. "And that was the most fun. I enjoyed that more than anything else I had done the whole time I was in the Air Force."

Jenkins was stationed in Korea, then at two different bases

in Germany, before being stationed in San Antonio for a year-long assignment on an Inspector General team. He was part of an umbrella facilities maintenance organization responsible for all the military installations in San Antonio, which consisted of four Air Force bases and Fort Sam Houston.

He retired from the service in November 1981 and worked for a year as a sales representative for a company that sold HVAC equipment and accessories to the mechanical contractors in San Antonio. Says Jenkins, "I got to know virtually every mechanical contractor in the city—the people, the managers, and the organizational culture of each of them. That was very beneficial to me when I noticed in the paper that Saint Mary's University was looking for a physical plant director. I knew that the physical plant director did what I liked to do, so I applied." Jenkins joined Saint Mary's University in November 1982 as director of physical plant.

The Transition to University Life

Jenkins' mentor during this period was George Mangrem, then director of physical plant at the University of Texas at San Antonio. "I knew George from the military, and he helped me make the transition from military to civilian life," Jenkins says. "He virtually built the UTSA campus from the ground up; they had never had a plant director before. George is the guy responsible for my being in APPA, and he told me that I should get involved in all three levels—state, regional, and national—so I did. George is long since retired now, but when we had the annual meeting in San Antonio this past July, he joined us for the emeritus luncheon and the awards banquet."



Charlie Jenkins and his wife Ann enjoy themselves at the banquet.

Saint Mary's University, a private, Roman Catholic liberal arts institution, was established in 1852 in San Antonio. A faculty and staff totaling 500 (80 within the facilities department) serve a student population of about 4,100. The biggest challenges facing Jenkins when he joined Saint Mary's physical plant department were disorganization and lack of direction. "The managers were heavily into being cops rather than colleagues," he says. "If they didn't think that the requestor really needed to have done what he had asked to be done, they simply wouldn't do it. It took a couple of years to overcome that."

Working for his third president since 1982, Jenkins has witnessed a 64 percent growth in student population (from 2,500 to the current 4,100), and he has overseen the addition of 60,000 square feet of residence space, a new university center, and a new law library. He is proud to have developed a strong staff instilled with a customer-oriented organizational ethic. "We look for ways to serve, rather than wait to be asked," he says, "and we have done this even while experiencing a steady decrease in our percentage of E&G expenditures over the years."

Jenkins credits much of his personal and professional growth over the past five years to his wife Ann. "She's really smart," says Jenkins, "and a loving, nurturing person who has encouraged, subtly guided, and even prodded me a little as I've expanded my outlook to include things I'd never have dreamed of a few years ago."

In the following interview, Jenkins shares his views on leadership versus management, the importance of personal values to those in leadership positions, the value of APPA and its regional associations, the concept of "small college," the future of the college campus, and other topics.



Steve Glazner: Let's talk first about your regional experience and your view of the value of the regional organizations.

Charlie Jenkins: When I first came to Saint Mary's, the university was already a member of TAPPA, the Texas state chapter. The dues were only \$10 a year. With George Mangrem's encouragement, we joined APPA, and my very first meeting was in Louisville, Kentucky in 1983. I then got around to joining CAPP. People like Joe Lonigro and Joe Estill got me involved in committees and other leadership roles in the chapter as well as the region.

I think that the regional associations are an absolutely critical part of APPA. There are any number of people who belong to the regional associations but don't belong to APPA, or maybe belong to both but don't participate in anything beyond the regional level. I've heard it said by CAPP members many times—although not in recent years—that they got more out of the annual regional meeting than they did the APPA meeting. But I don't hear that so much anymore.

I do think the regional meetings are an extremely valuable complement to the programs that APPA puts on. Through them we can reach further down into the ranks of the APPA members and get our message down to the grassroots level, and also get feedback up to the Board of Directors.

Do you feel that there could be some improvements made to the relationship between APPA and the regions, or a more formal arrangement between the two?

I think there could be. But I would probably argue against it because I enjoy the regions' autonomy. And I really do believe that serving in leadership positions at the regional



I would hate to see us get too structured and regimented with policies and procedures that dictate how APPA relates to the regions and vice versa. Each one of the regions has its own personality, and I think that's valuable.

level is a very good finishing school or training ground for moving on up to leadership positions in the international Association. I would hate to see us get too structured and regimented with policies and procedures that dictate how APPA relates to the regions and vice versa. Each one of the regions has its own personality, and I think that's valuable.

Your emphasis has been on the individual facilities officer as a leader. You have given several talks on the dichotomy between leadership and management and how they relate to higher education facilities management. What does it mean to be a leader versus a manager?

This notion of leadership and management being different activities came to me as somewhat of a revelation. I'd never thought about it until I read Warren Bennis' book, *Why Leaders Can't Lead*. That was when I was first exposed to the idea of a difference between leadership and management, and I was fascinated. Leadership and management are different. Ever since the 1950s we've all been trained to be excellent managers. Higher education is overpopulated with managers and dreadfully short of leaders.

Too many of us have fallen into the trap of being mostly concerned about buildings, systems, infrastructure—inanimate things—and forgotten that it's people who are our customers and the ultimate stakeholders in our success. I think we are all excellent managers, but I don't think we spend enough time doing leadership kinds of activities. Our nature is to focus on the bottom line, on results, on efficiency, on timeliness. We instead should focus on what Stephen Covey calls the top line, which are human relations—relations with the staff, the customers, and others. These activities are more leadership oriented. We don't need to take a lot of our time away from management to do leadership, but we need to do more than we are. And not only us, but also the business officers and the presidents as well.

My message to the membership is to recognize that there is a difference and what the difference is and start spending a little more of our time doing leadership things—finding those things that are the right things to do. Do it by visioning, do it by focus groups in the organization, or whatever, but exam-

ine where you are now and see if that's where you really want to be. Don't accept the status quo. Admit that we can always improve and, in fact, must improve, for if we don't improve the rest of the world is going to pass us by.

In terms of implementing quality programs, some facilities officers wonder how feasible it is to effect change from the middle out. The facilities operation traditionally serves in a support capacity to the institution. What advice would you give to those who want to move to the next step in their departments and on their campuses?

Covey talks about the difference between the circle of concern and the circle of influence. The circle of influence is where you should spend your time, because that's where you can have an effect on what's going on. A larger circle, concentric to the circle of influence, is the circle of concern. Outside the circle of influence are all those things that might bother and concern you, but which you can't do anything about. Covey's message is that if you'll concentrate on working within your circle of influence and make changes as you can, it will grow until eventually your circle of influence has expanded to include everything that was originally in the circle of concern. Conversely, if you spend your time worrying about the things that are outside your circle of influence and that you can't do anything about, then you're going to waste all your time stewing over things beyond your control, and your circle of influence will decrease in size.

That's a metaphor that I really find useful. I've found it useful in my own life because by concentrating on making things happen within the physical plant department at Saint Mary's University and other areas associated with facilities that are within my circle of influence, that circle of influence has grown, somewhat surprisingly to me.

For instance, I find myself being asked to do things that I would have never been asked to do when I first came here. And it's simply because of the things that have happened within the facilities area that are my circle of influence. Example: Recently we had a three-day, by invitation, workshop on our campus that included representatives from the three universities operated by the Society of Mary. We call them Marianist schools, and they are Saint Mary's, the University of Dayton, Ohio, and Chaminade University in Honolulu. We discussed how to spread the Marianist spirit of ethics, community, and service throughout the university. A second topic was how to instill in students, faculty, and staff a sense of servant leadership. Of the thirty or so participants, I was the only facilities person. In fact, I was the only representative of the support staff. The rest were faculty members, presidents and vice presidents, and student development and university relations staffers.

Also, during the past year we completed a university-wide self-study pursuant to reaccreditation. I was asked to serve on the institutional effectiveness study group and, in fact, chaired a subcommittee. Institutional effectiveness measures how well the university agencies plan their activities, execute the plans, and assess whether the outcome was what the initial plan had envisioned.

Now, I submit that both of those activities are outside my

normal sphere of activity as facilities administrator. I was included, however, because people had noted our successes in the physical plant department.

That would not have happened three to five years ago?

Absolutely not. But it's because we didn't wait for leadership to break out somewhere else, neither higher in the chain of command nor below. It's because we relied on the old saw



Photo by J. Scott Schroeder

Charlie "sharpens the saw" with a daily run around campus.

that says it's infinitely easier to obtain forgiveness than it is permission. We simply ventured out on our own and started doing things within the physical plant department that no one else in the university was doing, and we've gotten excellent results from having done that. Now, you see, we're being invited to expand our circle of influence.

How would you demonstrate or publicize that to your community?

Probably very judiciously. I don't know that it's something we want to go around blowing our horn about. But, in a small place like Saint Mary's, it will be picked up on.

And people obviously have.

And they have. My advice would be to know the territory and then be bold, be imaginative, and don't be satisfied with



Photo by J. Scott Schroeder

Jenkins with members of his facilities team: (from left to right) William M. Tam, supervisor of the year; Raymond Pollok, craftsman of the year; and Irma Valerio, housekeeper of the year.

the status quo. Do what you can to make things better and different within your own circle of influence.

I remember years ago, maybe the second or third APPA Institute I attended, there was a seminar one evening led by a former APPA President. He told us to be careful not to let our departments outstrip the rest of the university. And he told a story about someone he knew who had gone into the university as a chief of police, who over a period of a few years had built that police department up to a beautiful model. Eventually the guy got fired because his area was so much better, so much nicer, so much more equipped than the rest of the university. I took that counsel for a number of years, but now I don't believe that the physical plant department can ever get "too good" for the rest of the university.

So we started improving things at Saint Mary's. We started doing training and now have the only organized staff training program at the university. We have the only safety program in the whole university. Our department has some of the best facilities at the university. I think you ought to get as good as you can get and then keep on getting better.

I admit to having some blind spots. For example, I have never worked at a public institution where my budget allocation was determined by a formula so that regardless of what happened, how good we were, how bad we were, the budget allocation was going to be the same. A lot of what I say may fall on deaf ears, especially to my colleagues at public institutions, but I hope not. At this little private university, we seldom are denied funds that we think we need and can make a cogent argument for, and it's because we're respected. The administration simply says, "Those guys know what they're doing down there, and if they're championing this cause, let's try to find them the money to do it." As long as we keep championing winners, it's going to continue that way.

Is APPA meeting the needs of its members at small colleges, which comprise the majority of member institutions?

APPA has certainly served Saint Mary's University and me extremely well, and that's of course the only real direct value

judgment I can make. I think APPA does a great job.

But I want to admit to one minor intolerance, which you've heard me admit to before. I don't have very much patience with those who say they can't do something because they're "just a small college." I've said a number of times that you're only as small as you think you are. I don't accept that as an excuse for not trying new ideas, not getting better, and not doing good work.

We haven't heard much from the Small College Committee for a year or two, but the new chair, Pete Sandberg of Saint Olaf College, is rejuvenating that committee and will serve as a catalyst for moving it in positive directions.

What is APPA currently doing right in terms of leadership? What are we doing right, and where do we need to improve?

What APPA has always done the best are the educational programs. Pushing hard right behind are our informational services—publications, periodicals, and manuals. My only criticism of all that effort is that it has been predominantly oriented to management as opposed to leadership.

Some of the publications we have planned—the next issue of *Facilities Manager* and an anthology of critical readings, for instance—are going to bring in some more of the leadership side.

One exciting new program is the development of a fourth track—a leadership track—at the Institute. The Institute does a tremendous job of teaching our people the concepts, the process, and the techniques of facilities management, and I'm very happy to see the fourth track coming along to introduce the other part of it.

In addition, I'm extremely happy that the Covey Leadership Center is involved with the fourth track. It is truly a step up to a new level. I am really anxious and interested to see how the people who attend the first session of that fourth track feel about it.

What Covey teaches, and what will be an important part of the Institute's fourth track on leadership, is a bit different from the total quality management focus that APPA has



Too many of us have fallen into the trap of being mostly concerned about buildings, systems, infrastructure—inanimate things—and forgotten that it's people who are our customers and the ultimate stakeholders in our success.

offered recently, and I'd like to comment on that. My judgment is that TQM and Deming's 14 Points and all the other related material are not as suited to a university environment as are some of the other softer, more human relations-oriented stuff. Our quality improvement program at Saint Mary's is going to come almost exclusively out of Covey's book, *The Seven Habits of Highly Effective People*. Our student development function at the university is already into it. The culture and dynamics of a small institution like ours tend more to the

Photo by Robin Mayo, The Borke Tree Company



St. Louis Hall. This is the original building for St. Mary's University.

interpersonal improvement approach rather than the process of improvement. Maybe it would be entirely different for a mega-campus where you've got a staff of 800 people; that's probably a totally different dynamic that I'm not familiar with. From my own standpoint, however, I like the softer people-oriented improvement approach rather than process improvement.

Earlier this year APPA went through a somewhat rigorous evaluation by the American Society of Association Executives. They reviewed the Board structure, volunteer-staff relations, and other topics. What is your summary of that evaluation in terms of where we are and what we need to be doing in the future?

The purpose of the ASAE evaluation was simply to hone in on the management of the Association itself, as opposed to what the Association is doing for its members. And it introduced a whole new agenda, as far as I was concerned. The timing of it was such that it was too late for me to pick up many of ASAE's recommendations in the agenda for my year as APPA President. Happily, however, President-Elect Doug Christensen has jumped right into that with both feet to lead us into what, I hope, is a new era for APPA. I am confident that Doug is laying the groundwork now that will result in great strides during his presidency. He's a remarkable man, and APPA is fortunate to have his ability and energy at our disposal.

The ASAE recommendations point out some areas of concern that I had personally noted. I thought for a number of years that the Board of Directors was heavily into micro-man-

agement of daily activities, and the ASAE report alludes to that same thing. I hope during my presidency to turn the focus of the Board from reviewing things past to looking ahead into the future and establishing direction for the Association.

What do you think is the future of technology and expanded information services to APPA in the years to come? And what do you hope will happen this next year during your year as President?

I'm not going to push for any great changes, simply because the budget is already set in place and the money is allocated. I hope during my year as President, however, that Pete van der Have, APPA's Vice President for Information Services, and the group of members and staff who are studying these new technologies will come up with some objectives to be implemented in subsequent years that would set in place the technological advances that I think are available and should be used. The fax-on-demand service is a great idea. I would like to see us have a computer bulletin board or Internet hookup at the office where a member can call in from the screen sitting right on his or her desk and access files and databases—call them up, read them, search them, download them, print them, whatever he or she wants, and share information with other APPA members electronically rather than on hard copy paper. I think that's a place we can go to, and I hope that we will.

You have pointed out that you have served five consecutive years, in one capacity or another, on the APPA Board of Directors prior to



Photo by J. Scott Schroeder

Surveying the campus
from the University
Center Bridge.

becoming President. Do you have any observations to share from that experience?

I had five role models for President to study closely. While I, of course, want to leave my own legacy with the Association, I most want to emulate Jack Hug. He is definitely visionary, always thinking ahead, and very energetic. I admire him a great deal.

I've always considered Hug and Bill Middleton as shining examples of presidents who wanted to make an impact on the Association and on the profession. For instance, Jack was the father of APPA's long-range plan several years ago, while Bill got it passed and started implementing it.

I also want to state that Wayne Leroy is and will continue to be a superlative executive vice president for the Association. I championed his appointment from the outset. I was surprised and moved by the spontaneous outpouring of support given him at the San Antonio annual meeting. The Board of Directors has already given him a solid endorsement. I look forward to a warm association with him for years to come.

You have made leadership presentations—sermons, you've called them—to APPA members at the Institute, regional meetings, and, most recently, at the San Antonio annual meeting. In your presentation you commented on the importance of personal values, integrity, and discipline. Could you talk about those personal issues a bit?

All of us who have grown up in what is commonly referred to as the free world have basic principles that we were taught by our parents or that we have learned over the years. Sometimes we may, in the rush and the clamor, get away from them, forget about what they are. They're the very things that you mentioned: ethics, integrity, courage, inventiveness. We start letting expediency govern us. My feeling is

that if we're really going to make a difference and improve ourselves, then we have to go back to those universal principles that enable us to relate with other people in a manner that earns their respect, confidence, and willingness to let us establish direction and to set examples.

In many cases we let ourselves be overtaken by the pressing issues of the day and the forest fires that have to be put



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out and the swamps that have to be drained. We let them guide and direct us, rather than stepping back and taking control of our own lives and our own careers using the basic principles that we know to be true and worthwhile. After those speeches, by the way, many members have come up to me and said, "You know, I've never heard an elected APPA officer talk to the members the way you did. It was good. Thanks." That was great to hear.

Do you see any potential conflict with what you view as basic and universal principles and the growing issue of diversity and cultural differences on campus, in the workforce, and in society at large?

Yes, I do. I have to admit that my values and ethics come from a white, male background, and the books I read and study are essentially written by other white males. People like Stephen Covey, Warren Bennis—all these guys—are coming out of the same culture that I did. So, yes, absolutely right—we have to be sensitive to the fact that those values may not necessarily be regarded in exactly the same way by everyone. But I still think the basic values are intrinsic, and they are concepts that are rooted in ancient teachings, be they Christian, Jewish, Islamic, Buddhist, whatever.

Since we're talking about diversity, could you comment on APPA's new Upward Bound Mentoring Program for women in facilities management?

It is a great idea. I would like to see it expanded to all young APPA members who are just starting out in the business and want to make their way up the ladder. Everybody should have a mentor; everyone can benefit from having or being a mentor. I think Upward Bound is great, but I would like to see it expanded to include every APPA member who wants it.

With regard to my own involvement in the Upward Bound program, I'm having quite a delightful experience with my mentee. Part of the exercise of working with the woman who is in the mentoring relationship with me included an exchange of letters and talking by phone occasionally. She recently described to me a program that she's trying to get going; I immediately recognized it as what other universities are pursuing as the job order contracting concept. I gave her the name of a guy to call to talk to about it and mailed to her the names and addresses of a couple of different firms who contract to do that very sort of activity. The interesting thing that happens in APPA is that regardless of what you start out to do, thinking that maybe you're inventing a wheel or creating something new, you really aren't. Somebody's already been down that road, and all you have to do is find out who it is and tap into their prior knowledge.

There has been a lot of discussion lately about the virtual campus and the future of campus facilities management. The increased use of the Internet and the rise in available electronic information may lead us, as Jane Ryland of CAUSE has suggested, to an environment in which access, not acquisition, of information becomes dominant. What does this mean to the campus and to the facilities manager in ten years or more?

I cannot imagine in my lifetime ever seeing a widespread proliferation of the university without walls. Such a university would require a paradigm shift in the culture that, at best, will take place over a long period of time. There are still too many people who value the experience of being on a campus—living on a campus, going to a classroom, being part of a university community, learning to relate with other people, and those sorts of things—that there will always be a place for a resident campus simply to serve that need or that desire among the attending public. I do think that distance learning is going to proliferate, and that's probably good. We should take advantage of all the technological breakthroughs that are taking place. But I do not believe that, in my lifetime or yours, we will ever see the resident campus totally displaced by a university without walls.

There are other factors that impact on that as well; take Saint Mary's, for instance. We've got a major water problem

Charlie's Leadership Resources

The following books are highly recommended by Charlie Jenkins to anyone who wants to learn more about leadership. All are available at bookstores everywhere.

By Warren Bennis:

- *Leaders: The Strategies for Taking Charge*, with Burt Nanus, 1985
- *On Becoming a Leader*, 1989
- *Why Leaders Can't Lead: The Unconscious Conspiracy Continues*, 1990

By Stephen R. Covey:

- *The Seven Habits of Highly Effective People*, 1989
- *Principle Centered Leadership*, 1990
- *First Things First*, 1994

By Michael LeBoeuf:

- *How to Win Customers and Keep Them for Life*, 1988

By Burt Nanus:

- *Visionary Leadership*, 1994

here in San Antonio. I did an analysis a couple years ago during which I envisioned a scenario in which we were told by the city that we had to reduce our pumpage from the aquifer by 40 percent. It became readily obvious that in the event we, along with everybody else in the community, were told that we had to quit pumping so much water from the aquifer, we'd have to shut down our residence halls. That's the only way we could continue to survive—to become a completely commuter campus and either board up the dorms or sell them off as apartment houses or whatever, because we simply would not be allowed to pump enough water for the kids to bathe in and drink. And, of course, before we did that we had already let the place turn brown and had shut down the cooling towers. So, other variables, such as environmental impacts, could drive us to become a university without walls.

Where do you see APPA, then, in ten years? What will we be doing differently in terms of service to the members and to higher education?

I'm expecting that we'll have a better sense of that from the visioning exercise that Doug Christensen is taking us through. Nonetheless, we ought to continue to do the things we do well, which are educational programs and information services, and enhance those. We just have to be attuned to what the membership is calling for and what the industry says it needs from us, and try to adapt what we do to meet those needs.

What do you hope folks will remember from your year as President?

I hope they'll remember the speeches on leadership, of course. I hope that when people look back, they will say, "Charlie was a special kind of president." And I guess the third thing would be that "Charlie helped get us started in the direction of thinking a little bit more about leadership and a little bit less about management than we had up to his year as President." I'd be happy with that. ■

Rightsizing Through Restructuring:

A HIGHER EDUCATION CHALLENGE

by Harvey H. Kaiser

Illustration by Sarah Sloane



Finding the right size for a college or university is a management challenge for the 1990s. Weakening financial performance, due to structural changes in the national economy, changes in legislative priorities, and social attitudes toward higher education have brought the concept of rightsizing through restructuring to the top of the strategic planning agenda. This article explores the background of rightsizing for higher education by defining terminology and fundamental issues. In addition, I have outlined alternative strategies, with a detailed description of a process and phases for implementing a rightsizing-through-restructuring program.

Rightsizing Defined

Rightsizing? Downsizing? Restructuring? Cost containment? Budget reductions? Retrenchment? The terms may vary and causes may differ. The results are the same. The

challenge is not only to become smaller, but to also create a stronger institution.

National headlines, the higher education press, and association publications tell the story: Harvard, Yale, M.I.T., and Stanford plan budget deficits, staff layoffs, and program closings; state systems face increasing demands to lower costs with reduced legislative allocations. Impacted by a recession and a sluggish economy, changing social attitudes for costs and value, resistance to increasing costs and demands for increased faculty productivity, and a crumbling infrastructure, institutions are faced with taking drastic steps for their very survival. At best, they must change their traditional patterns of conducting affairs by rightsizing through restructuring.

Weakening financial performance signals the complex problems of rightsizing. However, there is an inherent difficulty in rethinking traditional patterns of institutional growth and contraction because the prosperous decades of the 1970s and 1980s have built in a natural resistance to change. The common response to economic stress is raising revenues and imposing budget discipline, accompanied by a questioning of the capabilities of campus leadership. Now, administrators must contend with the dichotomies of growth in some areas

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and reductions in others, following a process that emerges with a balanced "steady-state" institution. Cautious first steps toward rightsizing couple cost containment and quality improvements. When these measures fail to provide long-term financial stability, the institution must opt for more substantial and far-reaching measures by reshaping itself and reallocating resources.

Sizing is the act of balancing mission and operating activities with resources. On one side of the equation are programs and activities, i.e., the purpose of the institution and its costs for delivery of programs and activities; on the other side are the resources available to perform the institution's mission. The terms "rightsizing" and "downsizing" present subtle choices in describing initiatives and reactions to changes in the external environment. American society applauds growth and considers smaller size a pejorative condition. "Right" suggests balancing and implies positive actions; "down" suggests decreasing resources and has negative connotations. In our society, winners get it "right," while losers go "down" and out.

Rightsizing requires restructuring an institution, a planned process that encompasses a phasing mechanism while achieving a balance between mission and resources. The results of

rightsizing are cost savings and cost avoidance, as well as improved delivery of programs and activities and quality of services.

Rightsizing is a planned process with a phasing mechanism for restructuring an institution achieving a balance between mission and resources. It is a cautious match of resources to revenues. Downsizing is signaled by a downturn of key financial indicators and is the reaction to decreases in revenues and unbalanced budgets. Such a reaction may be in anticipation of, during, or after a shortfall in revenues. Ultimately, the institution must become smaller for a sustained period (five to ten years or longer). Downsizing may comprise freezing of hiring or pay increases, across-the-board budget cuts, reductions of services, or deferred maintenance. The short-term adjustments do not alleviate the fundamental problem of an imbalance between mission, operating costs, delivery of services, and resources. Downsizing is a reactive process to external conditions, shrinking the size of the institution.

While rightsizing is the more preferred term because of its positive connotations, downsizing is acceptable when it is used accurately to describe short-term conditions. The response to both actions is to curtail expenditures and assess

functions that can be cast in a new light or terminated. Institutions must decide what they do best, what they can do without, and how to improve the quality of what they are doing.

Fundamental Issues

Lewis Carroll's conversation between Alice and the Cheshire cat offers one way to look at the sizing question:

Asked Alice: Would you please tell me which way I should go from here?

Answered the Cheshire cat: That depends on where you want to get to.

The fundamental issues facing an institution in rightsizing are as follows:

- What is it we do? (mission)
- What values do we operate with? (values)
- What external factors affect our mission and values? (external environment)
- How are we organized to conduct our mission? (institutional structure)
- What are the resources required to perform our mission? (resources)
- What are the results of our activities? (services/impacts)

Five of the six issues—mission, values, institutional structure, resources, and services/impacts—are set in the context of the external environment. There is an interrelationship between these five components that form the basis of understanding the institution and charting a rightsizing plan.

Initially, a plan requires separate investigation for each component. However, to complete the plan, recommendations for change must consider how each component affects the other before finally being established and implemented.

You may be familiar with the strategic concept of "scanning" the external environment. This requires continually surveying and evaluating those factors creating an environment with aspects that are uncontrollable but have an impact on the operations, structure, and composition of the institution. Whether it is changing social attitudes toward higher education, shifting legislative priorities, government regulations, or demographic changes, the institution must continually scan changes in the external environment as it adopts assumptions for strategic planning purposes.

The first of the interacting issues is a mission statement defining the purpose of the institution. Coupled with a vision statement, defining "What is the institution today and what will it become in the future?" the mission statement provides a rallying point for members of the institution to understand its purpose and direction.

A *New York Times* headline last February addressed higher education, but was appropriate for many other types of institutions. It read: "Bad Times Force Universities to Rethink What They Are." The opening sentence was a prescription for developing new mission statements: "Tough economic times are forcing so many colleges and universities across the country to cut costs and adjust their ambitions that the shape of higher education may be significantly changed as the 21st century dawns." Developing a mission statement may seem like an academic exercise, delegated to lower levels because senior administrators know the institution's purpose. The process of developing a mission statement is as important as

the final product. It may only occasionally be referred to, but it forms a strong bond among the senior management team debating its content, choice of language, and emphases. It is the start of the team-building necessary to form a unified approach to rightsizing through restructuring.

With a mission and vision in place, the institution can move forward simultaneously on:

- How are we organized?
- What are the resources required?
- What are the results?

Rightsizing Alternatives

Efforts applied throughout the institution include: 1) prioritizing activities; 2) closing or downsizing lower priorities; 3) strengthening successful activities; 4) establishing quality and productivity goals; 5) tying quality and productivity gains to budget process; and 6) developing responsibility-centered budgeting.

The choices available to the manager in rightsizing are:

- Restructuring
- Consolidation
- Elimination of nonessential functions
- Outsourcing services
- Sale or release of assets

Variations are possible on these themes, but they will serve to guide the rightsizing process.

1. Restructuring. Restructuring is a comprehensive approach to rightsizing. It is a careful examination of programs, activities, and services performed by an institution. Restructuring should not be confused with tinkering with the organizational chart. Although restructuring can alter the institution's structure, each element of the institution should undergo evaluation against similar criteria. Driven by budget reduction goals, all elements should be cycled through the same questions and repeated over and over during the rightsizing process:

- What do we do?
- Why do we do it?
- How do we do it?
- Should we continue doing it?
- Can we do it better?
- Do we need more or less resources to do it better?
- If we don't do it anymore, what are the costs and savings?

Budget reduction targets are followed by an evaluation of functional activities among possible alternative choices for action. After rigorously testing the functional activities with the list of questions, we move on to the difficult choices of position, unit, and asset elimination. In restructuring, every position must be closely scrutinized for its contribution to the unit's performance. A particular target area is middle management and administrative support positions. These are the positions that tend to grow in response to perceived needs that are not necessarily real, or simply to make life easier for the managers to whom they report. A typical form of inefficiency, particular to management structure, is to have managers who function full-time in management mode, but do not have a large enough span of responsibility to justify their existence. In reducing the number of managers, one also reduces the layers of management. One of the indexes of

whether a unit is "fat" or "lean" is the number of layers of management between the productive workers and the CEO.

2. Consolidating. Consolidating eliminates duplication of programs and activities. Opportunities for consolidating exist at several levels, depending on the size of the institution. For example, staff functions that have no line responsibilities can be consolidated with management positions responsible for functional activities.

"Old wine in new bottles" describes pretenses at consolidation without achieving any budget reductions. Renaming a unit, or joining two or more together without eliminating positions is merely shuffling the boxes on the organizational chart without reducing the budget base. Indeed, there may be greater efficiencies and quality improvements in reorganizations, but the goal of budget reductions for an activity will require permanent budget base reductions, regardless of organizational chart revisions.

3. Eliminating Nonessential Functions. Functions that are nonessential to the mission or central purpose of the institution should be identified and eliminated. How do you decide what is and what isn't essential? The test of essentiality is comparison to the mission, vision, and guiding principles for quality, centrality to mission, and demand.

Oversight and close monitoring may be a solution to rescue or convert a marginal activity to an essential one. Establishing a task force from different parts of the institution or with a panel of outside advisors can identify critical issues,

inefficiencies, or opportunities for change. Collection of data, analyses, and thorough evaluation can determine whether an activity has passed the test of essentiality.

4. Outsourcing Activities. Outsourcing to provide administrative services can be cost-effective for several reasons. First, vendors may have lower fringe benefits than in-house employees. Even if the vendors are no more efficient and workers are paid the same as in-house staff, full-cost accounting of all fringe benefits and other overhead costs can show savings.

Second, vendor services can be more efficient and cost less than in-house workers. Vendors are in the business of providing services on a competitive basis. They know that they have to be competitive to survive and can be replaced if providing unsatisfactory services. The discipline of the competitive market place is difficult to achieve for internal services, and vending solves that problem immediately. A temptation to avoid is to have too many employees supervising the vendors. A guideline is to have no more than one supervisor per service.

Candidates for outsourcing throughout the institution should not be too readily dismissed. Bargaining unit or employee contracts must be regarded. So must the opportunities for competitiveness for any function under consideration for outsourcing. As a final test, the in-house unit should be given the opportunity on a full-cost accounting basis to compete with vendors. Don't reject any functional activities at first glance, either because of tradition or possessiveness of a manager. Do include all costs of operations, including fringe

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benefits, utilities, debt service or lease for facilities, and administrative overhead in making comparisons.

5. Capital Assets. Reducing the size of the physical plant and making what remains more productive can offer cost avoidance and possibilities of generating income through sale or leasing.

The sale, leasing, or mothballing of capital assets can eliminate operating costs from underutilized, marginally profitable, or nonproductive capital investments. Hidden costs for retaining some assets in active use are often overlooked and represent a source of savings through cost avoidance.

Sale or leasing can generate revenues from nonproductive space. The two components to be considered in divesting an asset is recovery of capital and reduction

of carrying costs: management expenses, maintenance, insurance, security, etc.

Mothballing is the temporary closing of a facility at minimized operating costs. Considerations for retaining ownership include the role of a facility in the institution's patterns of land holdings and master plan. Alternative uses should include the cost for conversions compared to cost avoidance.

Thorough evaluation of conditions of gifts, restrictive purchase agreements, or legislation that accompanied an asset's acquisition are necessary before sale, leasing, or conversion of use. However, the potential realized from "cleaning the attic" of noncontributory assets can be substantial and should be a key element in rightsizing.

The Rightsizing Process

Rightsizing is a process and not a prescriptive set of rules or guidelines that produces a restructuring plan. The following ten points are essential to a successful process.

1. Leadership. The highly visible leadership of the chief executive officer is responsible for the conduct and ultimate success (or any failure) of the process. Although many tasks can be delegated to other senior-level administrators and outside advisors, the leadership and support of this activity cannot be parceled out. The CEO must be committed and unwavering in support of the process, conveying the necessity to rightsize by personal style with integrity and credibility from beginning to end of the process. The CEO must focus on the results, ask for substantiation of all open items, and personally render a decision on the analyses and the accompanying plans for implementation. The ultimate success of any institutional rightsizing activity rests with the CEO.

2. Openness. A major decision has to be made at this juncture, and it is a critical one: How open a restructuring

process? An open airing of the alarming facts is imperative to alert all members of the community to the unpleasant realities, to enlist their help in restoring financial stability, and to begin corrective action. Even though a full, honest revelation of the problem may be embarrassing to those present, damaging if it is broadcast in the media, and potentially destructive to morale and financial factors, it must be done openly and with full disclosure.

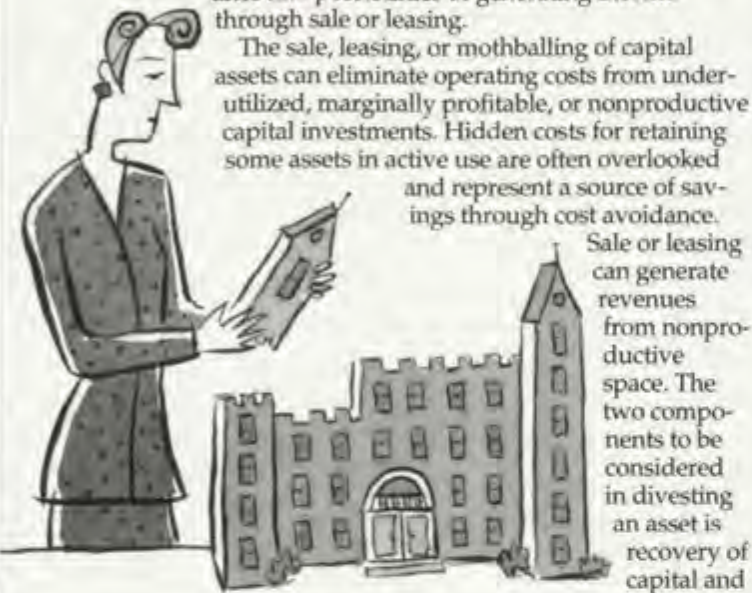
The institution's leadership must anticipate denial and recognize resistance to the need for change; personal and family security at risk creates powerful emotions. The style needed requires an explanation of the need for change, articulating issues, and calling for an understanding of planned outcomes. Assurances must be made that plans will be developed on a consultative basis, with a full disclosure of existing conditions, alternative plans, and opportunities for discussion. Presenting a final plan at the announcement of a call for change will be disastrous. Confidence will be shaken and resistance will rapidly develop. Leadership must control the situation, developing plans through tiers of management and guiding the rightsizing process through all phases.

Strong, fully committed leadership and candor in delivering the initial restructuring statement is vital to the process. The process must be a collaborative one, with contributions from all senior management. Doubts caused by inconsistencies in the need for reducing budgets, variations in the presentation, or a lack of trust in the leadership can be fatal to the plan and, possibly, to the leadership.

3. Definite Timetable. A timetable for development and completion of a restructuring plan should be announced when the need for the process is publicly disclosed. Announcing a timetable specifying each step will assure that the process is deliberate and will reach a definite set of recommendations for implementation. There should be no doubt that the process is necessary. It should be well-supported by data capable of relieving any questions of the need for urgency in reaching conclusions and taking action.

A period of no more than six months should be allocated from the first announcement of the need to retrench to the recommendation of a plan. Extending the process any longer invites lobbying from units that suspect termination or consolidation or that face major personnel reductions. The timetable should leave room for presentations by the CEO and senior management team and meeting with various constituencies to explain the process and solicit comments.

4. Human Resources Plan. Budget reductions of up to 5 percent are usually achievable through cuts in operating budgets and personnel attrition, retirements, and leaving vacant positions unfilled. Above the 5 percent level, the focus shifts to position eliminations, accompanied by reductions in personnel benefits. A human resources plan is essential for voluntary and involuntary separation of personnel, including early retirement and layoffs. Choices must evaluate short- and long-term benefits in achieving budget reduction targets. Because the elimination of positions to gain the full measure of salary and benefit savings can become necessary, the plan should also include components for easing the impact of layoffs on individuals through employee assistance programs. Terminating and eliminating positions requires certainty on the part of the decision-maker and compassion by the human resources division. Criterion for selection of position elimina-



tions is its contributory value, separate from the personality in the position. In other words, does the position contribute to the overall strategic restructuring plan for the unit. This is a difficult task because of mitigating circumstances, such as the age of an individual and length of service.

Employee contracts and organized bargaining units are often challenges to obtain the expected full benefits of restructuring. Early retirements have real and hidden costs: estimates of the applicants for a program should be as realistic as possible, calculating expenses and savings. The intangibles of losing key members of the institution cannot be discounted and a program should be tailored to eliminate poor performers. Criteria of performance evaluation and seniority are the primary factors that guide layoff decisions.

5. Budget Reduction Targets. The prospects of unbalanced budgets require the chief financial officer to prepare a budget reduction plan. It may be advisable to enlist outside advisors to monitor budget reduction planning, sharing in the disclosure of previously confidential financial information. An advisory group can also lend an air of credibility to numbers that will be suspect as defense mechanisms for survival are erected.

A massive amount of data needs to be collected in a short period of time to support cost containment planning. Included is enough historic background to establish trends and alleviate any suspicions about the gravity of the situation. All costs and revenues are summarized, liabilities and assets evaluated, and reserves carefully examined and carried out to

at least five years. Variations will occur from assumptions over the duration of the planning period, creating uncertainty in projections. Alternative ranges of target reductions should be developed to maintain credibility and offer planning flexibility for differentiated treatments of operating activities. A basic target should be established and designated as a middle range, with higher and lower budget target ranges set to cover contingencies in planning assumptions. The ranges allow flexibility in choices between how each operating unit "contributes" to overall budget reductions.

An open policy regarding budget reductions while detailed cost-containment plans unfold is necessary to eliminate concern that exceptions or differentiated treatment will occur. If exceptions or differentiated treatment do occur, they should be perceived as the result of reasonable and well-planned decisions.

6. Assignments. Senior managers with budget responsibility should provide proposals for cost containment after target reductions are prepared and distributed. Their starting point is the assigned target ranges for their divisions. Division managers should be available during the entire process to discuss options. Each manager should operate on the premise that his or her area will be examined for its necessity and appropriateness in a restructured environment.

An area's value to the future of the institution should be examined with questions such as: What happens if we terminate a unit or activity? Can we consolidate several functions into one? Can we outsource any of our activities? What hap-



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pens if we shift work hours or develop shared-work programs?, and so on, so that no function is assumed as invulnerable to examination for scaling back, consolidation, or elimination. Proposals of a cost-cutting nature shifting expense on to another unit or attempting to generate revenues that adversely affect other units should be rejected. On the other hand, possible investments in new revenue generating proposals should be thoroughly examined and brought forward to senior management for consideration of funding from reserves or other sources.

7. Consultation. A team of outside advisors might be engaged to review each division's plans. Experienced consultants can act as guides in the difficult decisions that must occur and to advise on how to deliver the announcement of the final rightsizing plan. For example, the CEO can invite a select panel from other institutions or consultant teams to review a specific functional activity. The advisors/consultants will require an overview of the unit under study as background to their evaluation. Interviews should be held with senior managers to draw comments and observations. Finally, open forums of employees and "customers" of the unit should be held to obtain frank opinions of the functions and services offered by the unit. The advisors/consultants report should be prepared for the CEO and shared with the reviewed units' senior managers.

8. Plan Adoption and 9. Announcement. An important action of the CEO is the formal announcement of the final rightsizing plan's adoption. This is carried out with the formality and openness of the initial presentation for sharing the process. In a style of firmness and candor, the CEO steps up to the full burden of leadership in presenting the content, implementation, and monitoring for the plan. A timetable is outlined, with goals and enough details announced to leave unanswered any questions about the impact on activities and individuals. The plan should be explained at a public presentation accessible to all employees and reproduced for distribution.

10. Implementation and Monitoring. Staff should have the vision explained to them for the future at the very beginning of implementing a restructuring plan. Explain what it will mean for them and the positive outcomes. It is important to have a process for measuring and reporting the progress of rightsizing/downsizing. Staff must be focused on their goals and on reporting progress. Deadlines should be established for reports to be submitted to the CEO for review. Throughout the monitoring of the process, provide incentives for people who are successfully achieving their goals and disincentives for poor performance. Once the process is over, build in mechanisms that maintain the austerity mentality so that the positive effects of the austerity are not lost.

Management Innovations

Managers must be strong leaders and work closely with staff to meet the institution's rightsizing goals—to make the institution smaller while continuing to deliver high quality services. Such a style incorporates management innovations that achieve significant gains in productivity and service and institutionalize quality and productivity improvement principles.

Total quality management (TQM) is an example of these

principles. TQM is based on the creation of a structural system for institution-wide participation in planning and a continuous improvement process that exceeds the expectations of the customer/client. While TQM has as its goal quality improvement in the customer/client relationship, rightsizing adds the dimension of reallocating resources. Quality improvement is characterized by the following key concepts:

- A commitment to quality that is ongoing
- A focus on the customer
- A means for obtaining systematic feedback from the customers who utilize the product or the service
- An emphasis on teamwork to accomplish work objectives
- A strong emphasis on staff development

Because administrative systems accrete as new needs are identified by the institution, it is necessary to periodically review

work processes. Analyses discover whether these layered structures are the most efficient and effective way for work to be accomplished. One approach advocates reengineering work to achieve efficiency and quality improvements. Employees sharing responsibility challenge how tasks are currently performed in the institution, and to radically reconceptualize how desired outcomes are to be achieved.

Reengineering principles include:

- Organizing work around outcomes, not tasks
- Providing opportunities made available by technologies for those who utilize a process to perform that process themselves
- Buildings control into the work so that employees can be more self-managing
- Capturing information once for a variety of purposes

Another example of management innovation is benchmarking; the process of comparisons to key indicators establishes goals for improving productivity levels leading to problem-identification followed by problem-solving.

TQM, or other quality improvement programs, should not be confused as the rightsizing process. Management innovations applied during the rightsizing process must operate within a fixed set of resources and achieve goals within applicable constraints. Innovations may accompany the process, but do not replace or act as a substitute for a planned process of finding the "right" size for the institution.

Rightsizing Phases

Rightsizing can be organized into five phases. Each phase concludes with public presentation and discussion, a sharing of the findings with the institution, media, and decision makers in the surrounding community.



Phase 1—Organizing the Rightsizing Process. The overall structure of the rightsizing process is defined, a management team designated, concepts for determining budget reduction targets delineated, and critical dates scheduled.

Rightsizing Team. The CEO designates a core team of senior managers capable of assembling data on budgets, financial, human, and physical resources. The chief financial officer develops assumptions and defines the budget base and elements that can be included or excluded as part of the base. The human resources officer provides data on staffing and existing labor agreements in anticipation of staff reductions. A representative of the campus relations department may be included in the team to prepare and disseminate information. The team will decide whether to use external advisors/consultants and will report findings directly to the CEO and individual departments.

Budget Reduction Targets. The rightsizing team develops concepts for reaching budget reduction targets for the entire institution and for each division. A basic reduction goal may be established, with specific targets distinguishing separate units' goals. The team prepares a preliminary list of categories to be excluded from a reducible budget base, such as self-supporting units.

Schedule. The team develops a schedule of start and completion dates, which should be disseminated to the entire institution, for each phase of the rightsizing process. Adequate time should be allocated to provide opportunities for comment.

Phase 2—Information Gathering and Creating the Data Base.

Data Collection. The team collects a wide array of data to confirm budgeting assumptions. Comprehensive data allows a complete picture of all services provided, including financial, human, and physical resources. Five-year projections should be developed for the budgets, proposed budget base reductions, institution structures and staffing, space utilization, and facilities conditions.

Proposed Budget Base Reductions. The chief financial officer prepares a schedule of current operating budgets, proposed budget base reductions, nonreducible items excluded from budget reductions, and cash flow projections.

Unit Description. Descriptions of each major unit are assembled, including mission statements, functional activities, staffing and salaries. The description should include a "SWOT" report describing the unit's Strengths, Weaknesses, Opportunities, and Threats.

Functional Area Analysis. Once all the data are gathered, functional area analyses are prepared for all departments describing how the department is organized, its budget, services offered, procedures and policies, and impact of budget reductions on levels and quality of services.

Phase 3—Developing the Preliminary Rightsizing Plan.

Plan Assumptions. The rightsizing team prepares a preliminary plan that summarizes the assumptions based on the information and budget target reductions prepared for major divisions. The plan includes interim annual projections for rightsizing and the overall time schedule. Proposed budget and reducible base reductions should have target high and low ranges for flexibility in assigning final budget cuts to

major divisions. Management innovations to offset staff reductions and to maintain acceptable levels of services should be examined.

Human Resources Plan. Human resources plans are drawn up for voluntary and involuntary separation and employee assistance for salaried and hourly employees. The impacts of proposed restructuring on activities, budgets, and financing programs should be detailed.

Institutional Restructuring. A plan is developed to cover proposed institution structures and staffing after rightsizing has been implemented. The preliminary plan may be reviewed by outside consultants and comments may be incorporated into the final plan.

Division Plans. Each division prepares its own reduction plan responding to the preliminary plan. These proposals should include a description of the rationale for the proposed budget cuts and impacts on services. The proposals should achieve alternative reduction ranges and include rationales for restructuring, consolidation, eliminating, or outsourcing functions. Present the details to all employees and publish for widespread access, hold open meetings for feedback, and solicit comments.

Phase 4—Developing the Final Rightsizing Plan. The final rightsizing plan is a refinement of the preliminary plan, incorporating comments obtained through discussions with employees. The rightsizing team should present the final plan to the institution's CEO for review and public presentation.

Phase 5—Implementation and Monitoring. The final plan is implemented and a monitoring program follows its progress. Adjustment are made as assumptions change.

Summary

Higher education institutions—private and public alike—must evaluate declining financial performance and determine whether the condition is long- or short-term. With enough information in hand, you can begin to draw conclusions as to whether a restructuring plan is necessary to recover a balanced financial condition. A decision to restructure requires exploring the appropriate future "size" of the institution. When the planning process is reactive, i.e., permanent budget reducing activities that are usually across-the-board in nature, the institution is downsizing. It becomes smaller, reducing expenditures to match incomes.

Through the campuses leadership in an open process, the institution that creates a planning process incorporating a phased mechanism for restructuring is rightsizing. The process balancing mission and resources may produce a smaller institution, one with changed programs and services, some units expanding and others contracting in size, using less capital assets, and stronger than the original institution. A realistic view of what the institution does now, what resources are available, how well it delivers programs and services to its customers, and the impact of proposed budget reductions is required to take full advantage of this opportunity. ■

Editor's Note: For more information on rightsizing with a focus on campus facilities organizations, be watching this fall for APPA's new monograph prepared by the Rightsizing Task Force.

A CROSS-COUNTRY EXCHANGE:

Two Facilities Officers Change

by Winthrop M. Wassenar & Jack Hug

A DESCRIPTION OF THE EXCHANGE

Win Wassenar

For five weeks during the fall of 1993, Win Wassenar and Jack Hug—respectively, the chief facilities officers of Williams College in Williamstown, Massachusetts and the University of California, San Diego—participated in a no-cost exchange that provided consultant services to each school as well as a professionally broadening experience for the participants.

The exchange proved to be extremely successful and beneficial to everyone involved. It provided the opportunity to interview and interact with a wide array and number of individuals, which resulted in consulting reports that contained a more in-depth understanding of the two facilities organizations and an awareness of the larger community. In addition, this exchange demonstrated the commonality of issues and problems that exist in large and small schools alike.

A Look at the Two Sponsoring Institutions

From October 15 to November 21, 1993, Jack Hug and I exchanged places to act as on-campus consultants to our host institutions. Jack is assistant vice chancellor for auxiliary and plant services at the University of California/San Diego, and I am director of physical plant at Williams College in Massachusetts.

There are many differences in our institutions. Williams College is a well-endowed, selective, four-year undergraduate liberal arts college with 2,000 students located in the rural northeast. We have a physical plant of roughly 2 million gross square feet on 450 acres of central campus and 2,000 acres overall. UCSD, one of the nine campuses in the University of California System, has a total enrollment of 18,000 students in its undergraduate, graduate, and medical school programs. It is located in La Jolla, California, by the Pacific Ocean on 1,400 acres of mostly developed land, and has the fourth largest research program in United States universities. UCSD has

Win Wassenar is director of physical plant at Williams College, Williamstown, Massachusetts. Jack Hug is assistant vice chancellor for auxiliary and plant services at the University of California/San Diego, La Jolla, California. He is a past APPA President and a current member of APPA's Publications Advisory Board.

Jobs



Winthrop M. Wassenar (left) and Jack Hug.

approximately 4.5 million gross square feet of state-supported plant, and a total of 9 million gross square feet including auxiliary, student-supported space such as athletic facilities, and housing.

The buildings and grounds department at Williams reports to the vice president for administration and treasurer and has responsibility for all facilities-related tasks, i.e., programming, planning, design, and construction of all new and renovated facilities, as well as the maintenance and operation of all facilities. Additionally, the department is also responsible for the management of several auxiliary services, including telecommunications, college vehicles, central office services, hazardous waste handling, recycling, student and faculty housing, and commercial rental properties. These activities are supported by an annual operating budget of roughly \$12 million, an annual capital budget of \$8.5 million, and a total staff of 150.

The Department of Auxiliary and Plant Services at UCSD reports to the vice chancellor for business affairs and is responsible for the maintenance and operation of the state-supported portions of the plant, although it is contracted to supply some specific services for housing, sports facilities, and others. Additionally, this department manages the fol-

lowing auxiliary services: graphics and reproduction, early childhood education center, transportation and parking, and the research machine shop. These services are provided with an annual budget of \$100 million. Of this total, \$29 million is spent for maintenance, \$14 million of which is for utilities. The maintenance functions employ approximately 350 FTE, and the auxiliary units employ approximately 300 FTE. The planning, design, and construction functions report to the vice chancellor for resource management.

How the Exchange Worked

The exchange program was conceived, formulated, and approved over the course of approximately one year. Each school had in place an existing policy that provided for administrative staff sabbatical leaves. Key individuals in the approval process were the chief financial officer of each school.

The program was designed to provide a no-cost consulting service to each institution and a professionally broadening experience to the participants. Additional benefits resulting from the exchange would include administrative develop-

ment and evaluation of other facilities department staff. Hindsight has shown that this was achieved.

For Williams College, the principal objective was to obtain a facilities management evaluation for the Buildings and Grounds Department. This report evaluated eight management criteria for the administration of the facilities department according to the APPA Facilities Management Evaluation Program. In addition, this report will serve as a base for future regular department review by outside agencies. Presently, there is no provision or requirement for a regular review of this department, and there had never been a formal, professional review of this critical function of the college. Although there is no formal agreement, it is expected that a review will occur every five years in the future.

UCSD requested an evaluation of several specific facilities functions: energy conservation policies and practice; the capital renewal and deferred maintenance program; the UCSD organizational structure for all facilities functions; and an evaluation of the TQM program in the Department of Auxiliary and Plant Services.

In order to develop a meaningful, professional report representing the total range of opinions of the entire service community, and the capabilities, personalities, and professional abilities of the facilities staff, Jack and I determined that an extended review period of five weeks was necessary for the exchange.

We arranged the details regarding housing, cars, office space, and secretarial assistance on a straight swap basis at no cost to either institution. Each institution continued salary payments to the participants as usual.

The proposal was endorsed and supported by the respective chief financial officers, who in turn sought and received approval of our chief executive officers, namely President Francis Oakley of Williams College and Chancellor Richard Atkinson of the University of California, San Diego.

With approval secured, Jack and I agreed on the October 15 to November 21, 1993 exchange period. Administrators at each campus agreed that the guest consultant would sit in on any regularly held administrative staff meetings and would meet regularly with the chief financial officer. In order to maximize integration into the new community, each school publicized the upcoming exchange in regular publications and special announcements to the institutional community.

I want to point out that Jack and I did *not* perform each other's responsibilities while at our host institutions. Instead, we acted as advisors when requested. Our prime responsibility was to perform the agreed-upon consulting tasks.

Each consultant conducted extensive interviews across the institutional organization, which led to in-depth reports and a breadth and accuracy of reporting not normally achievable.

The reports were well received by both institutions. Several initiatives for change have begun at both schools as a result of the reports, such as renewed energy conservation programs,



The University of California, San Diego.

reorganized work order management procedures, developing a program for deferred maintenance and capital renewal, a proactive facility audit program, and a commitment to active involvement of all levels of staff in decision making, as exemplified by the TQM program that Jack has in place now at UCSD.

Jack and I found the experience rewarding both personally and professionally. This exchange made clear the commonality of facilities management issues on large and small campuses, public and private schools, and comprehensive universities and liberal arts colleges. All facilities management organizations have as their primary goal the responsibility to provide the services necessary to accomplish the academic program and to provide for the safety, comfort, and recreational needs of all campus constituents.

The principles of an effective energy conservation program are universal, applying equally to all institutions. Care of the facilities—including deferred maintenance, capital renewal, and adaption—employ the same principles regardless of size or type of school. The program and concepts used to develop a capital renewal program at Williams are equally effective in developing a capital renewal program for UCSD.

Management principles also apply equally to everyone. The major difference between large and small schools is, of course, the numbers of people and buildings on the campus. Taken individually or in groups, however, the principles remain equally applicable. Hence, the trend on many large campuses to break the campus into zones for better control and management.

Both Jack and I were equally comfortable on the other's campus, although they were totally different in size (18,000 students vs. 2,000 students), in location (Pacific Coast and Atlantic Coast), in governance (public and private), and in academic goal (a comprehensive research university granting doctorate and medical degrees and an undergraduate liberal



Williams College campus.

arts college). It would be difficult to find two schools that were more different in so many ways. Yet, the facilities management issues are remarkably similar.

Our interviews with staff provided them with an opportunity to discuss professional issues with a respected facilities manager without concern for political repercussion. Staff informally praised the exchange as an opportunity to discuss issues with a professional with "fresh ideas" and an opportunity to learn "how others do things."

The result was a rewarding, collegial, and value-added experience for the institutions, the two participants, the facilities staffs at each institution, and the profession in general.

Five weeks went by very quickly. We made many friends and had a lot of experiences that we will remember and value in the future. Both institutions were very satisfied with the exchange and have expressed interest in developing additional exchanges for other administrative officers.

Recipe for a Good Exchange

This experience has demonstrated the desirability, feasibility, and practicality of an administrative officer exchange between institutions of all kinds. Due to the no-cost feature, institutions of all types can participate in such an exchange. A successful exchange requires that there are two individuals who can and wish to provide needed services at each other's institution, and that each have the mutual professional ease and confidence in examining and critiquing the other's organization. It is also necessary to have sufficient expectation of one's support personnel to be able to assign those people to acting facilities administration responsibilities during the exchange period. This in turn provides those people an excellent administrative development opportunity.

I thoroughly enjoyed my six weeks in San Diego—great weather, wonderful school, a beautiful and interesting cam-

pus, and a rewarding professional experience. I know that my staff enjoyed having Jack around for five weeks, and they have called him several times since to get his input on ideas that they had discussed while he was here at Williams.

On a very personal note, I was also a major winner in luring the former director of sports facilities at UCSD, Vanessa Cunningham, to move to Williamstown this past spring. We will be married on October 15—a year to the day I flew out to San Diego—and Jack will be at the wedding. It was a great exchange indeed! ■

PEOPLE SERVING PEOPLE

Jack Hug

The opportunity to exchange places with a respected facilities professional for the purposes of learning and growing in the profession was for me one of life's rare experiences. From October 15 to November 21, 1993, I was most fortunate to have had such an opportunity.

The feeling that I was doing something very special began to happen on that autumn morning last year when Win Wassenar and I passed each other in the sky somewhere over mid-America—I on my way to Williams College in Massachusetts, and Win on his way to the University of California, San Diego.

What began as a foggy idea a couple of years before had finally come together in the form of a "shared consultancy" for the two institutions. Win and I each agreed to complete specific assignments at each other's institution during the five-week exchange period. Win wrote in his article about the mutual benefits and value received from the exchange by our respective institutions. The key thesis of my article focuses on learning through new relationships and making stronger connections with people.

The facilities management profession is not what it used to be. It does not take a genius to predict that the next few years will bring increasing fiscal pressures, rising customer expectations, increased inquiry of accountability, and so-called "bottom line" management. With these changing forces we will see an increase in the standards by which our performance is measured, a "new performance architecture."

It did not take long to recognize that Win and I were transforming something common (the exchange program) into something unique. We are often so immersed in the actions of our own institution (too close to the trees to see the forest), that sometimes it is helpful to take a few steps back for a good look at ourselves. Sometimes the view from an objective third party is best. In this case, an objective view of a very respected and trusted colleague proved to be just the right thing. The result of Win's review of the University of California, San Diego continues to pay dividends, and my own personal and professional growth was substantially enhanced through this special experience.

The current APPA leadership—President Charlie Jenkins and President-Elect Doug Christensen—are absolutely right on target in calling for a fundamental "rethinking" of what

we do and how our key stakeholders can work together to do "it" even better. Part of the answer is in building relationships and increasing continuous learning activities. We need to really concentrate on connecting in new and in different ways to other professional colleagues and coworkers. This is a leadership issue, and the leadership step required to build constructive and effective new relationships to learn new ways of doing things crystallized for me during the exchange at Williams College.

One lesson that I have learned after more than thirty years in the facilities profession is that no single institution, regardless of size, can go it alone. Especially now, in this new era of rapid fire and fast-forward change, my experience at Williams College has reinforced this lesson and convinced me, more than ever, that selected partnerships, strategic relationships, and carefully planned alliances can help us succeed. APPA members already know that is a recipe for success, but we don't always practice it. We need to consistently and carefully plan these relationships to gain the maximum benefits. Success requires increasing connection to other professionals, to the people we serve, and to the people with whom we serve.

Another lesson I've learned is that a small college is not just a little "big" university; there are important qualitative differences. Part of the learning process for me, provided by

the exchange opportunity, was the chance to see some of these differences firsthand and to identify certain qualities of service and performance that can work at any size institution.

I firmly believe that there are many practices performed by small colleges and universities that the larger institutions ought to be doing. Specifically, I'm referring to getting the job done with fewer and less complex processes, operating closer to the customer, high levels of trust within the organization and the institution, a shared institutional vision, teamwork, and caring stewardship.

Williams College provided the perfect environment for me to experience these qualitative differences. The outstanding people at work in the Williams College Buildings and Grounds Department strengthened my resolve, more than ever, to prove that the quality of work they practice so well can also be achieved at the University of California, San Diego.

It has been a year now since Win and I took this mutual step. It required moving away from the pack, being an adventurer, and committing to our beliefs by taking that first step. One question often asked of me is, "What is it like to work at Williams College?" It's great!! I wish all of us who care and serve at large universities could be as much a part of our own institutions as Win Wassenar is to his. He is a vital part of Williams College. ■

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AN CAMPUS

Urban colleges and universities are major traffic and parking generators and have a tremendous influence on their environs. Indeed, the development of a college or university affects the city in which it is located and vice versa. With

growing campus populations and increasing commuter activity, the existing parking supply at many urban colleges and universities is frequently not sufficient to meet demand. Parking capacity shortfalls often result in increased on-street congestion as vehicles circulate through local streets in an attempt to find available parking. This condition, in turn, can lead to time lost from classes for both students and faculty and time lost from work for university staff.

Parking is an essential element of a university's infrastruc-

ture, serving the diverse needs of students, faculty, staff, visitors, and residents. Parking must be responsive to overall campus planning and be managed in such a way that it enhances the campus. A well designed and managed parking system can enhance the utility of a university, maintain the overall community's traffic flow and pedestrian circulation, and address environmental concerns. Campus planning and management concerns for parking are often eclipsed by more pressing considerations such as budgetary constraints and local issues. Planning for parking is quite different from other university infrastructure planning, because the results of parking decisions are much more visible and perceptible to the university population and the local community.

When planning for parking, it is important to recognize that each segment of the university's population exhibits different parking needs and affects the existing parking supply in different ways. For example, many universities have large residential populations while others, such as two-year institutions, have little or no residential populations. Other universities host numerous sporting events and other activities that significantly affect parking needs. Each segment of a campus population exhibits different arrival and departure patterns, as well as different origin and destination patterns. It would be inappropriate to superimpose the peak hour needs of each separate subgroup as a total aggregate; this could lead to a costly over-design of the parking facilities. Rather, it is necessary to look at each subcomponent of the parking demand individually and then develop a plan that meets the underlying common need.

Faculty, staff, and students, like the urban population in general, often prefer to drive alone to their destination. For example, in the nine-county San Francisco Bay Area, the number of commuters driving alone on their journey to work actually increased from 62.8 percent in 1980 to 68.2 percent in 1990¹. The increase in the number of automobiles on the road is the result of three major factors: 1) increased number of households; 2) increased number of automobiles per households; and 3) the decline of other means of transportation. A majority of households now have two or more cars and nationally the number of vehicles available has surpassed the number of licensed drivers. More critically for transportation, the number of vehicles per worker has increased from 0.85 in 1960 to 1.34 in 1990². These factors are extremely important in explaining the dominance of the auto in travel mode choice.

Alan Freeman is director of space management and facilities planning at San Jose State University, San Jose, California, and Thomas Topolski is project urban/infrastructure planner for Bechtel Corporation's Jubail Project, Madinat Al-Jubail Al-Sinaiyah, Saudi Arabia.



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Zip

Carpooling, public transportation, and alternative modes of transportation are currently not popular choices. However, based on a recent university survey³, a university population indicated that carpooling, public transportation, and alternative modes of transportation would be considered if the conditions supporting them were more positive.

Institutions of higher education are in a unique position to educate their population about the benefits of alternative travel modes. What can a college or university implement to increase accessibility to the campus and create a more positive condition in support of alternative modes of transportation? There are two avenues to explore: first, traditional alternatives that manifest themselves in increased student housing and additional parking facilities, neither of which provides conditions that support alternative modes of transportation; and second, the nontraditional approach, or alternative modes of transportation and transportation demand management.

TRADITIONAL ALTERNATIVES

Additional Parking Facilities

The most obvious solution to alleviate a campus' parking problem is to provide additional parking either on surface lots or in parking structures. This alternative typically finds immediate support among university faculty, staff, and students. The convenience of providing additional parking spaces would allow the campus population to continue driving to campus and reduce its time searching for available space. However, the average ridership per vehicle could remain the same or even be reduced due to the availability of parking.

Additional parking structures could further enhance the relationship between the adjacent neighborhood and the university in that fewer faculty, staff, and students would be searching within the surrounding neighborhood to locate free or low cost on-street parking. Additional parking structures could also reduce on-street traffic congestion as a result of vehicular traffic having a destination determined prior to arrival on campus. This would, in effect, reduce congestion around the campus, a benefit to most residents living within the university's environs.

Building additional facilities would result in several negative impacts, one of which is cost. The current minimal cost estimate for construction of a multistory parking facility is approximately \$6,500 per space⁴. As with most university structures of this type the parking facility must be self-supporting. This, of course, includes paying off the debt incurred for construction. Unless the structure is fully utilized, it can result in a negative cash flow for the university.

Universities typically do not charge for parking in the conventional manner of issuing a ticket and collecting a daily fee. Most universities employ some form of a decal or identification program. Decals or stickers are typically offered to faculty and staff on an annual basis and to students on a semester basis. Most university parking systems are subsidized through tuition fees and school endowments⁵. Unless the university subsidizes campus parking, it is faced with creating a condition whereby students, faculty, and staff will seek other,

lower-cost parking arrangements, usually at the expense of the adjacent community.

As important as the cost of parking is in dollars, insufficient or poorly managed parking is also costly to the environment. Although many states have enacted legislation, such as the California Environmental Quality Act (CEQA), to identify and mitigate negative impacts to the environment, some are unavoidable. Providing additional parking for a university will likely encourage vehicular use. Instead, public and private institutions should be encouraging public transportation and other alternative modes of transportation. While this solution is not new, the increasing demand on land use and the environment should discourage the desire to provide a parking space for every person that wants one.

A third negative aspect resulting from the construction of additional parking structures is the use of land. Many universities, especially those located in high-density urban areas, can ill afford to use land, a scarce commodity, for parking. Land values often are prohibitive for construction if land acquisition is required. If a university has to choose between providing land for additional parking structures or land for needed academic space, there is no question as to the outcome of this decision. The university's obligation is to provide needed classroom and laboratory space.

The cost to the user also has to be considered as a negative impact. If the user perceives only cost in terms of time, parking fees, and fuel, he or she can be misled. Additional costs of auto depreciation, insurance, and maintenance also have to be included. The maintenance of the structure, the cost of staffing, and use of land should also be taken into consideration. Finally, the cost to the user with regard to potential environmental impacts resulting from increased vehicular traffic must be included in the equation. Although many of these aspects are difficult to measure and assign a dollar value, they nevertheless must be included into the user's cost.

Safety to the user should be included as a potential negative impact of building additional structures. Today, greater numbers of urban crime are being reported in conjunction with parking structures. Parking structures are difficult to monitor and police. The crimes range from theft and damage to vehicles to personal assaults.

Additional Housing

An option that a campus may consider is the construction of additional student housing. There are many advantages in having students live on campus. The most important advantage is that it adds to the student's college experience. The student is more involved in the traditional college social life. This involvement can add to the learning experience when one views college as a form of social, as well as intellectual, growth and development.

A second advantage is that a student living on or within walking distance of the campus has little need for private or public transportation for their campus commute. This reduces congestion and cost. Thus, the cost in time and money are greatly reduced with the on-campus lifestyle.

Of course, the initial cost of construction can be quite high. In fact, the cost comparison between a structured parking facility and a large residence hall is an advantage to the park-

ing structure. The cost of a 2,500-space parking structure is approximately one-half of that for a 1,100-bed residence hall⁶. However, as with parking structures, valuable university land is allocated to nonacademic use. With a landlocked campus, this is not always the best use of land.

With changing lifestyles, living in a residence hall may be popular during one time period but then wane as student preferences change. Also, not all colleges have an appropriate student profile conducive to campus housing. An urban institution often is composed of students whose average age is in the mid- to upper-twenties and who work part- or full-time. It is not unusual for an urban campus to generate an average student load of ten to eleven hours per semester.

Many students live in their own homes and commute to work and to school. The younger, more traditional student at an urban institution is likely to be living at home with his or her parents and working part-time.

A second housing option for a campus is to provide faculty and staff housing located on site. The University of California System has been quite successful in providing such housing. The intent of the faculty/staff housing for the University of California was to provide affordable housing in areas where the housing market is extremely expensive, and thus, to be able to attract faculty and staff from outside the geographic area. However, the secondary effect of providing affordable housing is that the faculty and staff no longer require parking for the conclusion of the journey to work, thus reducing the need for campus parking. While providing faculty housing can be considered as a direct response to a campus parking problem, it cannot be viewed as a viable alternative due to the cost. But it is an interesting thought.

NONTRADITIONAL ALTERNATIVES

All levels of government have recognized the need to better manage our existing transportation systems and encourage the use of alternative transportation modes. The federal Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991, hailed by many as landmark legislation, is designed to turn the initiative back to the states and cities. More than \$31.5 billion have been allocated for mass transit projects over the next six years. This legislation, coupled with the federal Clean Air Act Amendments of 1990, will require and result in dramatically different travel patterns in the coming years.

The commitment of California residents to reducing traffic congestion is evidenced by Propositions 108 and 111, approved by California voters in June 1990, which put into place a nine-cent-per-gallon fuel tax. These taxes are expected to generate approximately \$18.5 billion in fuel tax subventions to fund transportation investment statewide over the next several years. The fuel tax subventions are available to local governments and are linked to state mandated requirements aimed at curbing congestion on the state's transportation facilities. These requirements are collectively referred to as Congestion Management Programs (CMP's).

The intent of this legislation is that federal, state, and local agencies join with transit districts and private and environmental interests to develop and implement comprehensive congestion management strategies. Among the key elements

of the CMP legislation is that a transportation demand and trip reduction element be developed by each county that includes alternatives to single-occupant auto use and promotes strategies to manage travel demand. This is usually accomplished through employee-based trip reduction ordinances. Nevertheless, it will take time for these measures to produce tangible results. Decades of disinvestment in mass transportation, massive highway construction, and the resulting urban sprawl cannot be undone overnight.

Schedule Modification

One alternative to building additional parking structures and residence halls in order to reduce the need for additional parking on a campus is to employ transportation demand management strategies such as the modification of class schedules for a campus. Traditionally, faculty have enjoyed teaching Monday through Thursday from approximately 9:00 a.m. to 3:00 p.m. When one reviews classroom utilization data for a university, it becomes readily apparent that these are the prime hours for instruction, and many classrooms are vacant outside these prime hours⁷. As to who benefits from scheduling during these hours is questionable. In all likelihood, it is the faculty.

The existing traditional teaching pattern allows the faculty member time for committee work, often required and considered part of the normal teaching contract, and to conduct research and/or consult. Surveys indicate that students are willing to take classes any time during the week as well as on weekends as long as they are able enroll in the courses they need and are able to plan ahead in order to modify their work schedule if necessary.

If a university were to radically modify its class schedule pattern and distribute classes evenly throughout the weekday and on Saturdays, this would decrease the demand for parking facilities and allow the institution to provide fewer parking spaces and yet meet the evenly distributed demand. The benefits to such a modification are many. First, the university would immediately experience a more efficient utilization rate for its facilities—a goal of many governing boards. In fact, it may even reduce the need for additional facilities. Rather than attempt to provide more facilities to satisfy prime time demand, the university would use the existing facilities more efficiently.

Class schedule modification can also reduce the environmental impact by drastically decreasing congestion around the immediate area of the campus. This would please those neighbors of a university who often raise legitimate complaints about traffic congestion resulting from students searching for available free street parking.

Ridesharing

Universities can, and in some cases are required to, increase ridesharing. Currently in southern California, local air management boards are placing greater restrictions on business and industry with respect to pollution and congestion resulting from their workforce. Public institutions of education fall within these guidelines. In the Los Angeles Basin, local authorities are requiring higher average ridership in vehicles; campuses that do not comply with the more

stringent standards are subject to substantial fines.

A university can provide computer-assisted ridesharing programs to match university travelers from a common origin for potential carpools. As an incentive to ridesharing, carpools can be allowed unlimited access to parking facilities, even when they are closed to other commuters.

In addition to the ridesharing program, a university can operate a small fleet of vans for use by faculty and staff. The vans maintained by the university can operate as large ridesharing vehicles. One faculty or staff member is the designated driver and proceeds to collect a full van on the journey to work and discharges the riders on the journey to home. One van in use at San Jose State University travels as far as 100 miles one way each day. The only limitation to this program is the university's ability to purchase additional vans. The rider demand is present and only the supply is limited. By increasing the ridership per vehicle, the university can decrease the demand for parking. The benefits of such a program are not only to the environment, but also to the university budget and use of land. Many urban universities are developing ridesharing programs that include vans.

Public Transportation

There is little question that public transportation, if properly utilized, will greatly reduce congestion. The benefits of reduc-

ing traffic congestion are immense. Indeed, reduced traffic congestion results in fewer travel time delays, fewer auto accidents, reduced pollution, and less need to clutter the landscape with freeways and other roadway facilities. The more effective and efficient use of resources cannot be overestimated when public transportation becomes a viable option for an urban area. Users find more free time to read, prepare, and just relax as a direct result of taking public transportation. Once the user becomes accustomed to taking public transportation, he or she finds it much more convenient than single occupant auto transportation. It can be a time that the user does not become combative, irritated, and frustrated with other drivers. The journey to work and home can become a pleasurable part of the day. Usually the real cost to the user of public transportation is less than the real cost incurred by the single occupant auto user. Thus, the public transportation user finds an economic benefit from using the available facilities.

As with any alternative there are negative aspects to public transportation. The most commonly cited is the perceived inconvenience. Individuals who are accustomed to driving directly to their destination perceive public transportation as less convenient. There is little question that the level of connectivity in public transportation is lower than that of a private auto. However, as stated above, the benefits of using public transportation can have a number of positive implica-

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tions and, in fact, can outweigh the negative aspects.

A second negative aspect of public transportation is the cost to the taxpayer. Most, if not all, urban public transportation systems are subsidized by taxpayers, including both users and nonusers of public transportation services. The cost of construction is also limiting. Although buses require no additional surface area than that of autos, often at bus stops special pads have to be constructed to withstand the destructive vibration of the bus, which breaks up normal street surfaces. When one investigates fixed rail, both surface and subsurface, the cost per mile for construction is extremely high. Again, someone has to pay for the project, and it results in both the users and nonusers supporting the construction and operation.

A university can promote public transportation fiscally. Funds generated from fines and forfeitures can be used to subsidize monthly travel passes on the local public transportation network. This type of program has been very successful on many urban campuses. Depending on the availability of funds, a university may subsidize anywhere from 25 to 75 percent of the monthly public transportation pass fee. As public transportation improves, more and more faculty, staff, and students will be willing to participate in such a program.

San Jose State University has been subsidizing county transit passes at a cost of more than \$100,000 per year for the past few years. In fact, the request for subsidies continues to grow each year while, at the same time, the purchase of campus parking permits is on the decline. While the university is excited and impressed by the success of the public transit subsidy program, the downside is that the sale of parking permits, which indirectly funds the subsidy program, is creating a loss of revenue. The university will have to evaluate carefully both programs and determine where the point of equilibrium exists. It does demonstrate, however, that when conditions are enhanced, alternative modes of transportation can be and are successful.

Bicycles

Perhaps the best alternative travel mode option for colleges and universities to encourage is the use of bicycles. Bicycle commuting is a relatively inexpensive and extremely effective travel mode and is particularly well suited for commuting short distances in relatively temperate environments. Through the promotion of bicycles as an alternative travel mode, colleges and universities can not only minimize the impact of commuter traffic and attendant parking problems, but also demonstrate their interest in and commitment to the health and well being of the student, faculty, and staff population. Indeed, cycling improves physical fitness as well as reduces energy consumption and improves air quality.

Each college or university must consider several points before aggressively promoting a bicycling program: 1) the terrain should be relatively level near the campus; 2) the climate must be conducive for cycling; 3) a substantial number of the students, faculty, and staff should live within five to ten miles of the campus; 4) the city in which the campus is located should have bike lanes or the ability to install them; and 5) there should be no significant barriers to bike use.

The university or college can encourage bicycle use by: 1) providing ample on-campus bicycle parking by installing secure bike racks near major buildings on the campus; 2) offering bicycle and repair discounts to students, faculty, and staff who commute by bicycle; 3) sponsoring and/or promoting cycling events; 4) providing faculty and staff bicycle commuters with incentives such as better medical plans or pay bonuses; 5) supplying maps of existing routes, information on safe riding techniques, and on-campus rules and regulations; and 6) designating a mobility coordinator (could be a volunteer student position) to inform students, faculty, and staff of the primary benefits and considerations involved in cycling.

It is interesting to note that the San Jose State University survey results indicated that the majority of the respon-

NOTES

1. Metropolitan Transportation Commission, *Transaction*, Transportation News for the Nine-County San Francisco Bay Area, June 1992.
2. Institute of Transportation Engineers, *A Toolbox for Alleviating Traffic Congestion*, Washington, D.C., 1989.
3. *San Jose State University South Campus Parking Structures Feasibility Study*, Appendix B, Environmental Science Associates, San Francisco, September 1991.
4. Dollar figures based on current California State University building cost guidelines.
5. Whitlock, Edward M., *Parking for Institutions and Special Events*, Eno Foundation for Transportation, Inc., Westport, Connecticut, 1982.
6. Based on California State University building cost guidelines, it would cost approximately \$31,775,000 to construct a 1,100-bed residence hall, whereas it would cost approximately \$16,565,000 to construct a 2,500-space parking structure.
7. California Postsecondary Education Commission, *A Capacity for Learning*, Commission Report 90-3, January 1990, page 49.

dents would prefer to ride bikes as a first option to driving alone. This finding is, in all probability, not unique to San Jose State University. It is the responsibility of the college or university, in cooperation with the local political organization, to provide the paths and storage necessary to encourage this mode of transportation.

Education

An important role and responsibility of a university is to educate its faculty, staff, and students about public transportation. For many, public transportation has been viewed negatively. Public transportation was used by those individuals who could not afford their own private transportation. Driving an auto became, and still is, a status symbol in the United States. Colleges and universities need to take an active role in the education process that is required to alter people's perception.

Not only should the university attempt to change its own population's perception regarding public transportation, but it should work with local entities to educate the population in general about public transportation. By working cooperatively with local authorities, great strides may be achieved. Society can only benefit from increased usage of public transportation and alternative modes of transportation.

SUMMARY AND CONCLUSION

The impact that vehicular traffic has on the environment is everyone's concern. Institutions of higher education cannot preach the need to improve the situation without participating in the changes that are required to reduce vehicular traffic. Two points emerge from this article. First, there are numerous options that are available to reduce the need for additional parking facilities on a campus. Although at first view some of the options do not appear to be viable, it may be our own perception and mindset that influences this view. Most of us have lived in a society that promoted the use of the automobile to the exclusion of all other forms of transportation. To us, it is a way of life.

Surveys have indicated that a campus population is willing to try alternative modes of transportation. All that is required is that the opportunity be made available. As stated earlier, the San Jose State University survey indicated that

carpooling, public transportation, and most importantly, alternative modes of transportation would be considered if the conditions supporting them were more positive. It is incumbent upon us to make the conditions more positive. On the basis of society's commuting and

travel preferences, and impact that their preferences have on the environment, it is time to create more positive conditions and give greater attention and more serious consideration to the alternative modes of transportation. It is an idea whose time has come. ■

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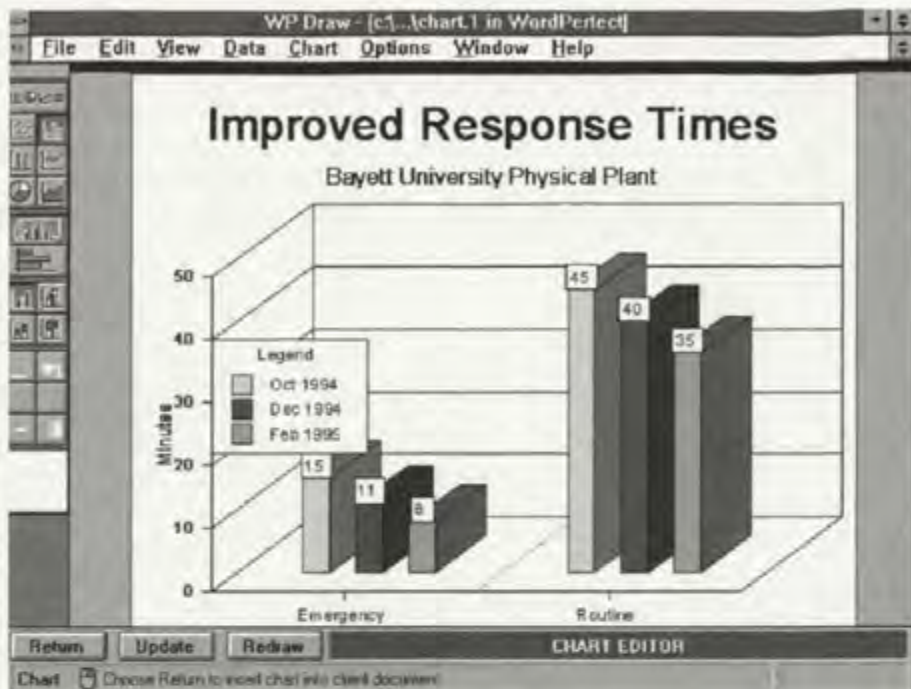
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Database Update

Howard Millman

Punch Up Your Printouts With Charts

At the next meeting I chair, I intend to provide Prozac with the printouts. Like you, I hand out papers at meetings. And yes, some of them require the reader to wade through a sea of text and numbers. Sensitive as I am to the pain of others, I noticed that the facial expressions the readers wear range from mild curiosity to quasi-interest to temporary depression.



To overcome that situation I adopted a technique used by professional speakers. To increase information retention

by my audience, I started using charts, graphs, and graphics instead of plain text.

First, I experimented with dedicated presentation software like Harvard Graphics and Freelance. These powerhouse packages, however, contained features primarily targeted to creating slides and overhead transparencies. Spreadsheet packages were closer to what I wanted but this approach required two software packages—a word processor for writing the main document and the spreadsheet to create the graphs.

How well did it work? Following a consultation at a university in Massachusetts on facility automation, they invited me to return for a day just to show them how to create the kinds of charts I used in my reports.

Here's how you can do it using a Windows 3.1 compatible word processor. The keystrokes I describe relate to WordPerfect 6.0 for Windows; however, most newer Windows word processors, including Microsoft's Word for Windows, have a built-in charting function.

One quick note of encouragement. Creating your first chart is like assem-

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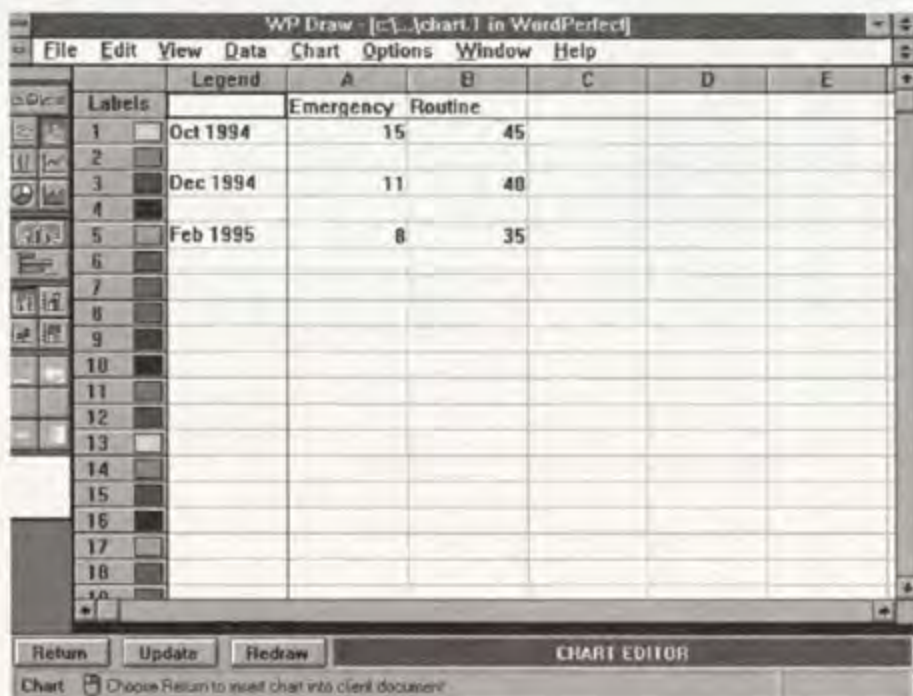
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bling kid's bicycles at Christmas—the first bike takes two hours, while the second one is together in ten minutes. Look at the chart in Figure 1. When you gain experience with the software, you'll create a graph like that in under two minutes.

Create the Chart

To create a chart start by opening a new document (File, New) in WordPerfect 6.0 for Windows. In the menu bar across the top of the screen, click on Graphics, then select Chart. By default, WPWin displays a sample bar chart. Let's look at other styles of charts. On the left side of the screen you see a toolbar. Notice the six square boxes in the upper third of the toolbar? The icons in those boxes represent the six types of available charts. Click on each one in turn. WPWin immediately displays the related chart onscreen. Also, notice that as you point to each chart, a hint line (at the top of the screen) offers suggestions on the recommended use for that kind of chart.

Right under these boxes is an icon that changes the chart from flat (2-D) to three dimensional. Click on it and transform the chart's appearance from Ho-Hum to Zonk!

Okay, let's create the Bayett University bar chart shown in Figure 1. First, we clear out the sample chart—do that by clicking on File, Clear, Yes.

Point to the bar chart icon (upper right selection in toolbar). Click on it once to select a bar chart.

Enter the Data

First, maximize the data entry screen so it's easier to work in (see Figure 2). In the menu bar, click on View, click on Data Only. Key in the same data shown in Figure 2. You can move between cells with the mouse or the arrow (cursor) keys. To enter the information, simply type it in. When you click on a different cell the information you entered is accepted. If you make a mistake or want to change the data, click on the cell and just type over the cell's contents.

Some precautions: the LABELS row will only accept numbers or letters. The (data) rows, the rows with the colored boxes, want numbers only. In addition, you may want to leave a blank line between rows. That makes the chart easier to read when printed.

To see both the data field and the chart, click again on View. This time select Chart and Data.

- On the bottom of the screen, click on Redraw.
- Next, click on Options, Titles.
- In the title box type in: Improving Response Times.
- Point to and click in the subtitle box, type in: Bayett University Physical Plant.

- In the X1 Axis field, type in: Minutes. Click on OK.
- While still in Options, click on Legend, make sure that the Display Legend box has an X in it (that means it's active). If the box is blank, click on it once.
- Click on Redraw. To see your chart full screen, click on View, Chart Only.

That's it, you're done. Now experiment by clicking on other chart types and switching between a 2-D and 3-D look. Some chart types also offer a vertical or a horizontal alignment. Click away, because these actions change the chart's appearance only temporarily.

As you explore, you'll discover that by clicking on Font you can change the size and look of the text you use in titles, legends or labels. Also, return to the Legend menu (located under Options). Notice how you can toggle the legend box on and off plus determine its position in the chart.

When you're through experimenting, click on Return (in the lower left hand corner). If WPWin asks if you want to update the document, select Yes. WPWin will return you to the document you opened earlier—and there's the chart you just created.

Now, how about creating a chart that illustrates the critically needed increase in understanding and retention that graphs encourage? ■

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The Bookshelf

Management

Strategic Corporate Facilities Management, by Stephen Binder. New York: McGraw Hill, Inc., 1992. 274 pp. \$42.50, hardcover.

Stephen Binder is a highly successful practitioner of facilities management (or asset management—his proposed term for the next century), and we can learn a great deal by listening to what he has to say. However, I formed a strong impression while reading the book that I could learn more easily by actually listening to him. The book is intended for use as an instructional text and appears to be geared for young facilities professionals. It is Binder's second book in the field, a companion to *Corporate Facility Planning*. The author's somewhat breezy style, coupled with the highly segmented organization of material, make the book sound and look like a course syllabus with lecture notes.

After getting into the mood of the presentation, a reader will find a huge stockpile of information, experience, checklists, formats, and real-life paradoxical quagmires. Many of the examples and case studies really have no textbook solutions, but rather are presented as platforms for analytical thought, group discussion, and navel contemplation. Personal and institutional values are sorely tested and twisted by these open-ended situations. My own similar experiences have produced many sleepless nights. By reading about and contemplating such problems now, a young facilities professional might be able to sleep better later, when the real thing pops up. Again, this text's real value would be in a group study experience, and its greatest value would come from use as a text in a course taught by the author.

The material is organized into four chapters that roughly take a chronological approach: planning, decision-making, implementation, and post-occupancy activities. Binder's answer to "Why only four chapters?" is "Because I couldn't fit the contents into three chapters." That's a great answer and provides a model I wish other authors would follow. Throughout the book, the reader or student is drawn into the facilities world and is made to feel a part of the process under discussion.

In the planning chapter, Binder makes it clear that business plans drive facilities planning and he gives multiple forms that

planning may take. Alternative approaches to organizing and staffing are explored and the discussion hones in on the roles and responsibilities of the asset (facilities) manager. Useful tools for comparing in-house versus consultant staffing are presented in detail. The decision processes involved with corporate facilities are displayed and dissected in a second chapter. Although no checklist is ever complete, Binder provides some comprehensive accumulations of considerations involved with various decisions. Leasing arrangements and realty financing are detailed quite nicely. Questions relating to "Whose decision is this?" and "How much authority can I grab, at what personal career risk?" are woven into the process.

Implementation is the messy part of any endeavor, and facilities programs are not exceptions to that rule. Here again, the book provides extensive checklists, alternatives, considerations, and dilemmas for discussion. The facilities manager has the privilege of being totally to blame for all mean and evil things that befall people when they are moved from one facility to another. This book offers a means of ordering the chaos. The final chapter delves into ongoing occupancy considerations, but also brings the focus down to you, the ambitious, young, asset manager. Topics such as performance appraisals, actual performance, career management, and personal strategic plans come to the fore.

This text is not directly applicable to most college or university facilities situations. Rather, it is oriented toward a corporate-level business environment. However, many of the processes that are discussed here have parallels in higher education arenas. The book would be most useful to facilities managers who consider themselves as practitioners of the profession, not limited as to the arenas in which they may compete.

This book is available from McGraw-Hill Publishing Company, 11 West 19th Street, New York, NY 10011.

—Joe Cannon

Associate Vice Chancellor for Facilities
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 University of North Carolina
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Working With Older Personnel

The Aging Work Force: A Guide for Higher Education, edited by Nancy B. Julius, Ph.D., & Herbert H. Krauss, Ph.D. Washington, D.C.: College and University Personnel Association, 1993. 266 pp., softcover.

The editors tell us that this book is addressed to human resource administrators in higher education. They developed the manuscript with the assistance of nineteen other scholars and higher education administrators who contributed chapters. Major divisions are: Growing Older, The Graying of America, Adapting to Changing Times, Retirement and Retirement Planning, and The Corporate Example. The technique

of preparing a book by assembling contributed chapters from many authors offers the prospect of benefiting from a broad range of expertise. Unfortunately, this technique also results in redundancy, unevenness in the quality of writing, and unequal levels of detail in the several chapters.

It may be a bit unfair for me to review this book. I have been retired since 1988 and never served in the capacity of a human resource administrator in higher education. However, my career often brought me into close working contact with higher education administrators, and along my path, I qualified for a TIAA-CREF pension. The parts of this book that are interesting to me may not receive the same response from other readers.

There is quite a bit of redundancy in many chapters that might have been relieved by some hardnosed editing. Or even better, a critical review of certain often repeated topics would have been constructive (e.g., myths about retirement, and general demographic trends). Several chapters seemed to me to be almost perfunctory, but a number of chapters are rich in information and guidance.

The chapter dealing with the legal aspects of the aging workforce is full of detailed guidance on the handling of problems and issues that occur on higher education campuses. Many higher education facilities officers will find that this one chapter is reason enough to get a copy of the book. I found the two historical chapters specially interesting for the perspective they provide about how things have turned out the way they are now. The first of these historical pieces is about retirement in general, going back well into the last century. The second history is of mandatory retirement. Reading these two historical chapters made me wish for more of the same—for instance, a history of volunteer activities by persons who have retired from higher education positions, or a history of the retirement lifestyles and consumer behaviors of former higher education careerists.

One of the most interesting chapters is about the faculty perspective toward institutional policies concerning aging staff members and retirement. This is the only place in the book that acknowledges and deals frankly with the relationships between the professional roles in a higher education institution. Unfortunately, a similar chapter on facilities officers' perspectives is not included in the book.

As a retiree, I was disappointed by the chapters on maintaining well-being after retirement, and on financial planning for retirement. In the light of my six years of retirement experience, they try to touch all of the bases, but are just too general and broadbrushed. The result is helpful definition of terms and concepts, but little guidance in those areas where seeing into the future with wisdom and sound personal planning are so important. Nonetheless, they may serve a good purpose for the per-

son who is just beginning to think about these matters.

All in all, this book has many good parts and may serve well as a first reader on an important subject. *The Aging Work Force* is available from CUPA, 1233 20th Street, NW, Suite 503, Washington, DC 20036.

—Harold Horowitz, AIA
Architect and Cultural Research Consultant
APPA Honorary Member

Planning a DSM Program

Demand-Side Management Planning, by Clark W. Gellings & John H. Chamberlin. Lilburn, Georgia: Fairmont Press, Inc. 452 pp., hardcover.

Demand-side management (DSM) is an area of increasing interest to higher education facilities officers and to other facility managers, as well as to anyone involved in the generation, supply, or use of energy or of energy management hardware or systems. Although it provides a scholarly and fairly thorough overview of the status of DSM in the early 1990s and is a useful reference for utility planners and managers and for public utility regulators or others involved in the regulatory process, *Demand-Side Management Planning* by Clark Gellings and John Chamberlin has little to offer facility managers.

The authors define DSM as "activities which involve actions on the demand or customer side of the electric meter, either directly caused or indirectly stimulated by the utility" including load management, strategic conservation, electrification, and strategic growth. The book includes detailed discussions of the activities associated with utility resource planning, program design, program implementation, monitoring and evaluation of DSM. More significantly, the authors' major goal appears to be the identification and discussion of currently controversial issues affecting the promotion and treatment of DSM by both utilities and utility regulators. Great emphasis is placed on the interaction between regulators and utility planners while the relationship of utility DSM programs to end-users is clearly not within the scope of this book. Any discussion, or even a cursory overview, of the range of available DSM technologies and their application is absent from the book.

More than an updated edition of their earlier book (*Demand-Side Management: Concepts and Methods*, 1988), the authors have provided an assessment of some of the major issues affecting DSM in the nineties. If there is a major shortcoming, it is the fully understandable fact that the authors (and the rest of us) are not sufficiently clairvoyant to anticipate the rapidly changing issues affecting DSM (and all other utility related activities) as the reality of increasing deregulation hits home in the utility industry. Rapidly increasing competitive pressures are beginning to result in both evolutionary and revolutionary changes in the ways that

energy is generated, distributed, sold and used. The result is tremendous uncertainty regarding the future role of DSM, how it will be implemented, and the extent to which it will be applied. One may not necessarily disagree with the authors' implications that DSM will continue to grow rapidly as an increasingly preferred method for meeting future demand for energy; however, little discussion is presented to refute, or even identify the existence of, alternative points of view.

The text is extremely readable considering the relatively specialized technical nature of the subject. Two minor criticisms include: first, that certain acronyms appear in the text well in advance of their full names or descriptions, thus creating confusion for anyone being introduced to the subject, and second, although an index is provided at the end, a more extensive index would further aid the reader in quickly locating specific subjects of interest.

The text clearly conveys the authors' experience with and understanding of the subject matter. In several cases, the authors credit other experts who assisted in the preparation of a chapter on a specific subject. References are provided at the conclusion of each chapter; however, it is disappointing in many cases to find an overly heavy reliance on references from a single source, namely EPRI (Electric Power Research Institute). As a case in point, the chapter on Electric Thermal Storage relies entirely on EPRI citations, many somewhat dated, while overlooking potentially pertinent references from other sources.

The book is organized into chapters with the following headings:

1. Introduction
2. DSM: The Winds of Change
3. The DSM Planning Process
4. Moving Toward Integrated Resource Planning
5. Efficient Energy Use
6. Beneficial Electrification
7. DSM and the Environment
8. International DSM Activity
9. Electric Thermal Storage
10. Cost-Effectiveness Analysis
11. Rate Design and DSM
12. Forecasting DSM
13. DSM Program Design
14. Evaluation
15. Removing the Financial Barriers Against DSM

Individual chapters are employed to address relatively specific, or even narrow subjects. In general, enough specific facts and data are presented to infer trends or to make generalizations. However, the authors at times exhibit a tendency to present broad generalizations, sometimes in the form of rules-of-thumb with which the uninitiated reader could be misled. The organization of the book provides a clear beginning and middle, but no clear end. After introducing DSM, reviewing its development to date, and describing the current issues and open questions shaping DSM, the remainder of

the chapters explore specific subjects in relatively self-contained formats. Many chapters (e.g., those on International DSM Activity and Electric Thermal Storage) are illuminating on their own, but somewhat lacking in correlation to the whole. An additional, final chapter to draw conclusions and to review the possible and likely future directions of DSM would add context and value to the individual chapters and to the book as a whole.

Although of little interest or direct value to facility managers, *Demand-Side Management Planning* has much to contribute to the understanding of today's issues affecting the regulation and implementation of utility DSM activities. This book is available from The Fairmont Press, 700 Indian Trail, Lilburn, GA 30247.

—John S. Andrepont
Product Manager, Thermal Systems
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Oak Brook, Illinois

TQM for Custodial

Total Quality Management for Custodial Operations, by Stephen D. Gaudreau, Jacquelyn C. Bridge, & Eleanor R. Fisher. Salem, Massachusetts: POWER, Inc., 1994. 141 pp. \$99.95, spiral bound.

During the past fifty years, management has evolved from such management theories as Scientific Management (Taylor), Hierarchy of Needs (Maslow), Theory X and Y (MacGregor), Situational Leadership (Hersey and Blanchard), and a veritable plethora of methods on how to accomplish good management, moving from theory to practice. Measurement programs were established to "manage" objectives, such as the famous Management By Objective programs of the late 1970s and early 1980s.

What is exciting about total quality management (TQM) is that it takes many of the elements of past theories and practices and tries to mesh the elements together, while considering the personnel involved in doing the work and the customer that is actually receiving the end product. Such words as "empowerment," "teamwork," and "total employee involvement" add elements that heretofore were more lip service than practice. TQM brings all these elements together in an integrated way so that managers, employees, and customers are very much on the same team. And, meaningful measures are still maintained.

Thus, it was with excitement that I sat down to review *Total Quality Management for Custodial Operations*. The book is informally spiral bound with a softcover, and I felt, from the outset, that this could be one of the sources that I would like our management team to utilize in implementing TQM. The authors give a brief overview of TQM, followed by such chapters as Why Become Involved in TQM?, The Results of TQM, The Four Stages of TQM, and Three Key Ideas to TQM Philosophy. This sets a

stage for what the reader would hope would be a meaningful and applicable book. The writing style is clear and the book has a good index that also serves as an outline of the book.

However, after the overview, this book starts to develop voluminous lists of items, on such subjects as meetings, steering committees, listening skills, consensus building, facilitation skills, problem solving models, conflict management, etc. The most meaningful list and example is the "Perfect Team" scenario that in six short pages integrates all the verbose rhetoric of the first seventy-one. However, after this breath of fresh air, the book lapses back into more lists. There are lists of all sorts of charts and concluding with an "Integrated Systems Management" chapter that discusses planning, implementing, and replicating. Sounds reminiscent of the five steps of management taught many years ago!

This reader had the distinct impression that the book was formulated based upon a series of lists on "How to," with minimal meaningful information on the implementation of the lists. It is fine to give long lists, but meaningful examples and scenarios that are relevant to the workplace would have a greater impact and make the book more useful to managers.

In the advertising for *Total Quality Management for Custodial Operations*, and indeed in the subtitle of the book, there is a statement: "A guide to understanding and applying the key elements of Total Quality Management." The statement is misleading, because the book is long on lists, short on reality, and it seems that the authors simply extracted lists from other texts on management skills and slapped it into a shell outline on TQM.

Disturbing also was the fact that there are no footnotes, no bibliography, and minimal recognition of the sources that developed many of the lists cited. After reading one of the lists on problem solving, I wondered where it had developed from. The book does not indicate its sources, however, the steps in the model were practically identical to steps on problem solving theory!

If you purchase this book with the idea that you will be able to utilize it to set up a meaningful TQM program in custodial operations, beware! There is no doubt the book will give you a trite overview of TQM; however, a much more meaningful text is the book published by APPA titled *Building Quality: TQM for Campus Facilities Managers*, edited by Gary L. Reynolds. If you wish to purchase one TQM source that has meaningful applicability for custodial operations, the APPA book has greater viability and is more pertinent to facilities.

Total Quality Management for Custodial Operations is available from POWER, Inc., 9 Pickering Way, Salem, MA 01970.

—Alan S. Bigger
Director, Building Services
University of Notre Dame
Notre Dame, Indiana

Coming Events

APPA Events

Contact the APPA Educational Programs Department at 703-684-1446.
Nov. 6-8—**Institute for Facilities Finance**, Arlington, VA.

Jan. 22-27—**Institute for Facilities Management**, Austin, TX.

Other Events

Nov. 2-3—**Fundamentals of Energy Management**, Washington, DC.

Contact: Association of Energy Engineers, P.O. Box 1026, Lilburn, GA 30226; 404-925-9633.

Nov. 6-9—**National Institute on Park and Grounds Management**, Orlando, FL. Contact National Institute, P.O. Box 1936, Appleton, WI 54913; 414-733-2301.

Nov. 6-9—**International Conference on Sustainable Construction**, Tampa, FL. Contact: Ron Nutter, University of Florida Division of Continuing Education, 2207 NW 13th Street, Gainesville, FL 32609; 904-392-1701x240.

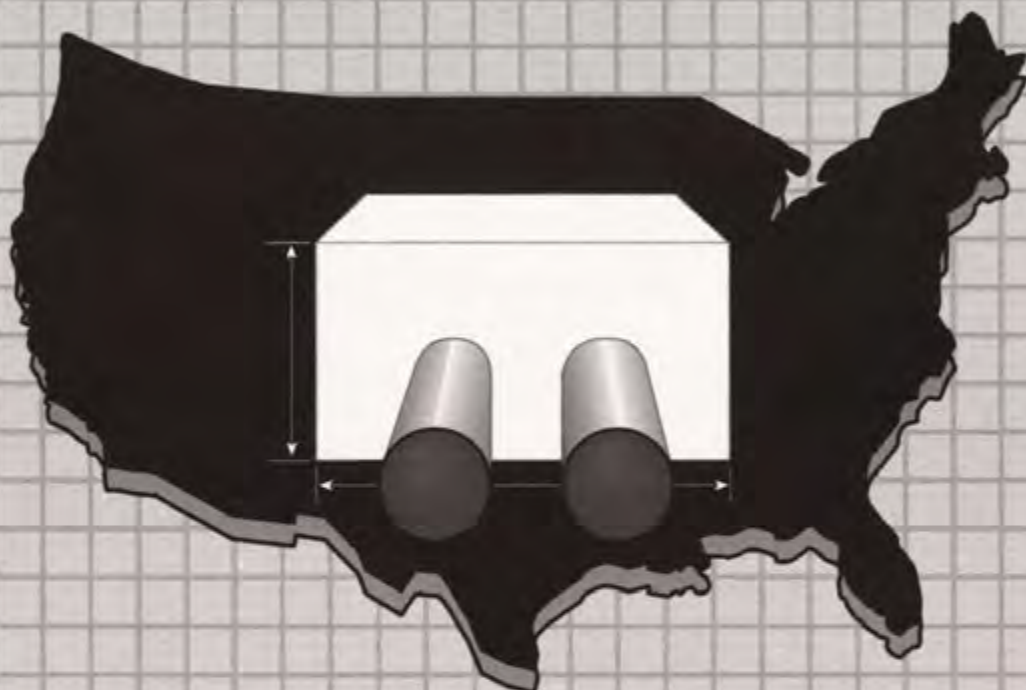
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