Facilities, business, planning, and other institutional officers considering what the college or university campus of the future should look like and how it should operate can find valuable guidance in the research their professional associations conduct.

Facilities, budgets, and personnel are the principal areas of responsibility for senior institutional officers and “the more we can do in solid research that they can use to make objective decisions about where they are headed, the better off they are and the better we serve our members,” says E. Lander Medlin, executive vice president of APPA, the association of choice for educational facilities professionals.

APPA, the National Association of College and University Business Officers (NACUBO) and the Society for College and University Planning (SCUP) are all conducting significant research that is making a difference in higher education administration. And all three associations will be highlighting their research projects and results at a jointly produced, first-of-its-kind conference, The Campus of the Future: A Meeting of the Minds, July 8-11 in Honolulu, Hawai’i.

APPA recently reevaluated its strategic plan and concluded from an overwhelming response from its members that “we need to expand our research efforts,” says Medlin. “It is one of the most valuable things we do for them.” In addition to the information they already receive through APPA publications and other resources, members want applied research “to provide benchmarks, best practices, and credible information. Research helps our members support the mission and goals of their institutions, and in return, helps APPA develop guidelines and standards for the educational facilities profession.”

Model for Investment Strategy

Two studies that APPA researchers will report on at the Hawai’i conference, both conducted through the association’s Center for Facilities Research (CFaR), demonstrate the type of research Medlin says is useful to facilities officers specifically and also to other institutional officers, including those at senior levels.

One study, Buildings...The Gifts That Keep on Taking: A Framework for Integrated Decision-Making, is expected to produce a widely accepted model for understanding the total cost of investing in and maintaining college and university facilities. CFaR says it is intended to assist higher education policy makers, including presidents and chancellors, boards of trustees and legislators, to “better understand the impact of major decisions” on such key issues as resource allocation, building design criteria, recruitment and retention of faculty and students, construction strategies, the nature of the learning and research environment, and accountability measures.

“This is going to really drill in on the fundamental financing issues of facilities, with a cradle-to-grave approach to assessing and analyzing the investment strategies that are related to making the decision to build a facility,” explains Michael Sofield, APPAs vice president for information and research and director of facilities planning and operations at the Smithsonian Institution’s National Museum of American History.
“There is a lot of information out there about what it costs to build, and lots of recommendations about how much you should spend every year to maintain your facilities and how much reinvestment you need to forecast to keep them in top condition. This project is pulling together all that material,” Sofield says.

The study's principal investigators are Douglas K. Christensen of Brigham Young University, Rod Rose of Stata-Herby, and Terry W. Ruprecht of the University of Illinois, Urbana-Champaign. The project included direct participation of and/or consultation with higher education institutions, major associations, federal or state agencies, corporations, and foundations.

The study's findings will be important not just for APPA members but also for senior financial officers, provosts and campus presidents “so they will be able to understand that there is a business approach to facilities,” states Sofield.

Attracting and Keeping Students

The second APPA study, The Effect of Educational Facilities on Recruitment and Retention of Students, updates a 1984 study by the Carnegie Foundation for the Advancement of Teaching that evaluated the decision-making process of parents and potential students in selecting a college or university. The latest CFaR study more fully explores the impact of the type and quality of educational facilities on the recruitment and retention of today's students and their parents.

“Since recruiting and retaining students is an essential part of the success of any institution, we think it will be a good guidance tool for people in admissions, residential life, development/advancement, the business office and potentially presidents,” says Gary L. Reynolds, one of the study's principal investigators with David A. Cain of Carter & Burgess, Inc. A past APPA President, Reynolds is also co-director of CFaR and director of facilities services at The Colorado College.

The two-part executive summary of this research project has been published in the March/April and May/June 2006 issues of Facilities Manager.

In other current CFaR projects, researchers are studying subjects including the structuring of in-house construction rates in colleges and universities and the effect of the Facilities Condition Index on National Science Foundation-funded research grants. Previous studies looked into workplace violence in higher education and the relationship between the “organizational culture” of institutions and their productivity.

APPA established CFaR about five years ago to coordinate what previously were ad hoc research activities by some members and provide a mechanism “to answer some big-issue questions,” says Reynolds.

In addition to CFaR's projects, APPA began last year an annual Facilities Core Data Survey, the only comprehensive collection of facilities-related costs and personnel information, strategic financial measures, and other relevant data for colleges, universities, and K-12 schools and districts.

Institutions participating in the survey receive customized reports comparing their data to that of other participants. The information helps facilities officers budget for current spending, plan for future capital needs, and present their needs effectively to campus decision-makers. The annual Web-based report and database tools are published as Facilities Performance Indicators.

Endowments and Student Aid

NACUBO focuses its research on producing two major annual studies. One—the NACUBO Endowment Study (NES)—is the largest and longest running yearly, voluntary survey of higher education institutions and their foundations about their endowment holdings. It is the primary source of college and university endowment management and performance data in the United States.

According to 2005 survey results, released last January, an average one-year return rate of 9.3 percent for fiscal year 2005 provided college and university endowments with the investment income necessary to pay for annual educational spending and various management fees along with adjustments to preserve the endowment against inflation.

A matching ten-year compounded 9.3 percent return rate “validates the investment strategies employed by higher education endowment managers to maximize both current and long-term spending for the benefit of their institutional stakeholders,” NACUBO stated in releasing the 2005 results.

They were based on responses from 746 colleges and universities, the highest participation level since the study's inception in 1971. Participants reported $298.9 billion in total endowment assets, representing an overwhelming majority of colleges and universities with endowments greater than $1 million.

“Endowment income is an increasingly vital funding element of many college and university budgets and will undoubtedly remain so for the foreseeable future,” NACUBO President James E. Morley Jr. said when the survey results were released.

Detailed analysis of the 2005 NES data indicates that “institutions should look beyond their asset allocation mix to understand long-term investment success factors. We found that while asset allocation is critically important, manager and strategy selection, as well as resources, also matter,” adds Nancy Heller, asset management managing director of TIAA-CREF, a national financial services organization that worked with NACUBO on the endowment survey.

For 15 years, NACUBO also has conducted an annual Tuition Discounting Survey. It collects information from independent colleges on the level of institutional student aid, percent of students receiving institutional grants, net revenues and other related data. The 2004 survey, with 450 participants, marked the highest participation in the history of the study.

“It gets at a lot of different issues, including the net price—what it actually costs for a student to come to an institution,”
Trends and “Hot Topics”

At SCUP, Phyllis Grummon, Ph.D., director of planning and education, compiles a quarterly report for use by the organization’s board of directors and staff in their decision-making. The report covers six key areas affecting higher education and lists current “hot topics” within them:

- Demographics—trends in student recruitment, enrollment and retention and the impact on them of age, gender, ethnicity, income and geographic distribution. Hot topics, according to SCUP include Generations X and Y, European “massification,” and the impact of the Patriot Act on international-student enrollment in the United States.
- Economy—trends in institutional budgeting practices and financial resource development, national and state education budgeting, financial aid and tuition, as well as global economic issues. Hot topics include reauthorization of the Higher Education Act, tuition increases, and the loss of international students to countries like Australia, China and India.
- Environment—trends in environmental sustainability and green practices on campus. Hot topics include sustainability in the curriculum and the adoption of environmental practices, products and services by institutions.
- Learning—trends in adult learning, how people learn, and campus and classroom design to support learning. Hot topics include the use of active learning and connecting emotions to learning.
- Politics—trends in government and legislation as well as elections. Hot topics include cuts in financial aid and research funding.
- Technology—trends concerning the use of information technology on campus. Hot topics include wireless networks, the use of electronic devices by the campus community, course management systems, and privacy protection.

The Trends report released last February discussed such issues as “growing dissatisfaction with the usefulness and accuracy” of national statistics on the race/ethnicity of students. It cited a recent study by the American Association of Colleges and Universities that showed, among other things, that the increase in the number of students identifying as “other” or “unknown” likely leads to overstated enrollment figures for minorities.

This trend “affects every level of the institution,” SCUP wrote. “Campuses may need to improve the accuracy of their statistics by not only collecting data on student admission applications but through surveys conducted once students are already on campus.”

Other issues discussed in the February Trends report included how some institutions are “strengthening the old concept of ‘in loco parentis’ and accepting greater responsibility for more parts of students’ lives,” and how the Hurricane Katrina disaster plus increases in the costs of oil and natural gas have “created unexpected deficiencies” in institutions’ operating and capital budgets.

Copies of the Trends reports are free and available to the public at the SCUP website. Enhanced versions for SCUP members feature links to articles and other online resources for each area.

In addition to compiling and publishing Trends, SCUP conducts what Grummon calls “action research” with a specific focus. She cites a survey of community college planners to learn the “hot topics” for their institutions. SCUP also collects data for an annual campus facility inventory on the amount of space devoted to residence halls, athletic facilities, research laboratories, classrooms, offices and other uses. “People find that useful for following trends in the allotment of space on campus,” Grummon says.

Whatever the nature of each association’s research activities, they have value beyond the individual organizations that conduct them. “We not only have to educate our own members about the facilities issues important to us, we also have to educate the broader education community about them and the kinds of decisions that have to be made that are critical to the future success of individual institutions and of education in general,” concludes APPA’s Medlin.