Building Florida's Future: Quality and Access or Business as Usual?



November 15, 2006

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Executive Summary

How many of Florida's four million children should expect to attend the State University System someday? And what should they find when they arrive? The bare minimum? Or world-class universities with facilities on a par with the best the nation has to offer?

A "business as usual" approach has corroded the link between the state's strategic priorities and its higher education facilities. It is time for a change of course.

A quarter of the system's current classroom, lab, office and study space was built in a single decade, from 1967 to 1976, as the state invested heavily in the educational infrastructure needed to serve its growing population. Since then, however, construction and renovation have fallen behind the pace of growth, even as the state made commitments, through the Prepaid Tuition Plan, Bright Futures scholarships, and other access initiatives to encourage students to attend college. Florida now has far less space per student in its university system than other states, and the squeeze is only going to get worse.

Florida must set the bar for quality high. Students and parents deserve the best, and the state cannot afford less if it is to achieve the goal of becoming a leader in the new global economy of ideas.

What does world-class competition look like? The University of Cambridge – a public institution which has produced more Nobel prizewinners than any other university – is not resting on its laurels, but is developing \$900 million in new facilities.ⁱ Closer to home, institutions and systems around the country are making big new strategic investments. The University of Michigan, for example, recently completed a 472,000 square foot, \$187 million facility to house its biomedical research programs.ⁱⁱ

While the state's needs and ambitions have grown, the structures in place to plan and fund higher education facilities have not kept up. The system has operated reactively – constructing buildings as funding becomes available – rather than planning strategically for its long-term future and proactively investing to ensure competitiveness.

Recognizing the urgency of the need for a change in course, a state university system task force convened in spring 2006 to recommend changes that would make it possible to move forward with major new statewide facilities initiatives. The task force included representatives from all eleven institutions, including provosts, vice presidents for finance, and senior administrators responsible for planning, budgeting, and facilities management. The task force focused on construction, maintenance and deferred maintenance, and made recommendations to Chancellor Rosenberg related to increasing efficiency, identifying and expanding revenue streams for investment, and improving processes in each category. The work of the task force is the foundation for the four key recommendations in this report:



University of Michigan's New Biomedical Research Buildingⁱⁱⁱ

I. Improve Efficiency: Best Practices in Utilization, Maintenance, Construction and Design

Key Recommendation: The Board of Governors should raise standards for classroom and instructional laboratory use to be among the highest of any public system in the nation. Funds for new classroom facilities should be directed first to institutions already making maximum *year-round* use of existing space.

With 30% fewer square feet per student than other public institutions in the United States^{iv}, Florida needs to make the most of its existing facilities. If the projected need for additional classroom and teaching laboratory space could be reduced by 10% to accommodate the same level of enrollment, nearly \$50 million could be saved in new construction costs. A 25% reduction would save \$120 million.

In addition to raising the utilization standard, the system should also adopt a series of other measures, outlined in this report, to improve efficiency in all phases of the building cycle from planning to construction to operations and maintenance.

II. Invest in the Next Generation: \$3.4 Billion in Capital Funding for Quality and Access

Key Recommendation: Consistent with the long-term priorities of the system and the state, the Board of Governors should work with other public and private-sector leaders to develop an aggressive, strategic construction plan for the State University System.

While it is essential for the health of the system that the projects currently anticipating funding move forward as planned, these represent only a fraction of the investment that will be needed to keep up with growing student enrollments and the

expansion of research as our institutions mature. Further they may not adequately address the need for expansion through branches or joint use facilities, nor the possibility of new institutions in communities clamoring for a public university presence.

"Business as usual" would mean virtually no state funds for new university construction in the next several years, even as the system expects an additional 50,000 students by 2012-13 and aspires to make major advances in globally-competitive research. With nearly 350,000 students by 2012-13, the state will need another 14 million gross square feet of facilities, at an estimated cost of \$3.4 billion. (See Appendix 1 for a more detailed calculation.)

III. Preserve Florida's Investment: Maintenance and Improvement of Current Facilities

Key Recommendation: The state should dedicate one or more funding sources specifically to maintenance and renovation of existing facilities.

The system has six million square feet of classroom, lab, office and study space, with an approximate replacement value of \$2 billion, in facilities that have not been remodeled in over 25 years. If the usable life of the space could be extended for an average of 50% of that cost, the state would save a billion dollars compared to new construction. Accelerating the deferred maintenance agenda would be one of the fastest and least expensive ways to improve the quality and efficiency of existing buildings and to reduce needs for new construction.

IV. Lead the Nation in Sustainability: Cutting-Edge Research, Engineering, Architecture and Planning

Key Recommendation: The system should ensure that construction and renovation projects employ the most cost-effective, cutting-edge technologies to save energy and mitigate environmental impacts.

Universities spent \$172 million in 2004-05 on utilities^v. Small investments early in the planning and design phases of projects can pay off quickly in reduced operating and maintenance costs. With its fragile environment, Florida especially needs public institutions that model high standards of environmental and ecological responsibility for the future architects, planners, engineers, and construction managers they educate.

Introduction

"Today, Florida has one of the strongest economies in the world – topping three-quarters of a trillion dollars. Job growth is strong and virtually unmatched throughout the country. Personal income is on the rise. University research has joined with long-time mainstays of the economy such as the space industry and electronics to help ensure the state and its citizens keep apace with the global transformation now underway. Public universities have become one of the most productive investments of state government. Carefully tended and wisely enhanced, their assets will provide increasing benefits to future generations of Floridians."

--Board of Governors Facilities Task Force Recommendations to the Chancellor

Over the next twenty years, Florida's 18-34 population will grow by more than a million, with close to 500,000 in the next six years alone. The State University System will more add more than 50,000 students by 2012, as the generation that filled public schools in the 1990s and early 2000s works its way through college and graduate school. By 2027, the system should plan to accommodate at least another 100,000 students.



Figure 1: Projected Florida 18-34 Population Growth

To encourage more students and their families to aspire to higher education, Florida has built an education policy around the promise of access to the State University System. Three quarters of a million children are enrolled in the Florida Prepaid College plan.^{vi} More than 50,000 high school graduates each year now qualify for Bright Futures.^{vii} The top 20% of every high school's graduating class is guaranteed admission to a state university, as is every Associate in Arts graduate of the state's community college system.

These students expect that, when their day comes, the State University System will have a place for them and that they will have access to cutting edge instruction and facilities to enable them to meet the challenges of the global economy. But if it is to keep its promises, Florida can no longer afford a "business as usual" mentality.

In addition to expanding university facilities to accommodate projected growth, Florida needs to plan for the replacement or renovation of many of the buildings constructed for an earlier generation in the 1960s-70s. The world-class teachers and researchers Florida needs to attract will demand world-class facilities, and we must be able to compete with other states and countries that are making major investments in operating and capital funds for their university systems.

With so many competing priorities for public funds and private philanthropy, what is the case for spending on higher education facilities? Why do buildings matter? Any student, faculty member, or university president will have a different view, but will agree that physical infrastructure is critical to making higher education work. Universities exist not only to transmit bodies of knowledge but also to expand them. Facilities contribute to this mission in three critical ways:

- creating communities of teaching, learning and discovery;
- providing an environment that lends itself to interaction, collaboration, and inspiration;
- setting high standards and modeling innovation for all students and faculty, and especially those in fields such as art, architecture, engineering, materials science, urban planning, sociology, psychology and business, in which the physical environment can model or not the practical applications of the discipline.

Most people know from experience how workplace environment can affect job performance, either positively or negatively. The same is true for members of university communities. In a recent survey of 16,000 students from 46 different institutions, 67% of respondents indicated that the quality of facilities had been "essential" or "very important" in their selection of an institution, and half gave similar weight to the overall attractiveness of the campus. More than 29% of respondents indicated they had rejected another institution because it lacked a critical facility, 26% because of an inadequate facility, and 17% because of poor facilities maintenance.^{viii}

Size and Types of Space

How big – physically – is the State University System today? At the end of the 2005-06 academic year, the system had more than 3,000 buildings with 64 million gross and 41 million net "assignable" square feet of space (equivalent to eighteen Empire State Buildings or 20,000 average single-family homes) located on 14,000 acres (about the size of Manhattan). The scale is enormous, as is the size of the student population (nearly 300,000) and the workforce (nearly 60,000) that share those facilities. Sheer size makes the State University System an essential part of Florida's educational, economic development and job creation portfolio.

Of the total assignable area, 18.8 million square feet constitutes the core working area of the universities^{ix}: classrooms, teaching and research laboratories, library/study areas, and office space. Much of the rest consists of dormitories, parking garages, athletic facilities, student unions, and auditoriums that help make institutions accessible, convenient, attractive learning communities for students, faculty and staff. The "gross" square footage also includes elevators, wall space, restrooms and walkways.

Facilities Growth since 1985-86

Since 1985-86, the size of universities' core facilities has grown by 84%, from 10.2 million net square feet to today's 18.8 million. At the same time, however, enrollment in the system has grown by 109%.

As a result, the square feet per student ratio – a key measure of the intensity of facilities usage – has declined from 85 square feet of classroom, lab, office and study space per full-time-equivalent^x student in 1986 to 76 per student in 2006 (see Figure 2).

By 2012-13, based on projects now funded or under construction, the system will add another 11% to its core square footage. At the same time, universities will add another 19% to their enrollments, further reducing the number to 69 square feet per student.





Florida and the Nation

The decline in space per student has made Florida's system one of the most crowded in the nation. On average, the 210 public four-year institutions that participated in the 2004-05 American Physical Plant Association (APPA) facilities survey had 108 square feet of classroom, lab, office and study space per full-timeequivalent student, compared to 76 in the State University System. The SUS had fewer square feet per student in every major category^{xi}.

Figure 3: State University System Facilities Square Feet per Full-Time Equivalent Student Compared to American Physical Plant Association Averages^{xii}



The APPA survey participants are anonymous, but on institutional and system facilities reports, other public universities typically report much more space than their Florida counterparts. The State University System average of 7.7 classroom square feet per student, for example, is less than North Carolina (10.8), Louisiana (14.5), and Indiana (11.0). The fastest-growing universities in Florida are rapidly becoming the most cramped for space. Florida International University only has 5.8 square feet per student followed closely by the University of South Florida and the University of Central Florida, each with 6.1.

Even the newest university, Florida Gulf Coast, has only 7.4 square feet of classroom space per student. All have less space than public universities in North Carolina, Indiana, Louisiana, and Ohio. The contrast is similar with research space. Ohio State University and the University of Florida are both public land grant universities with large medical schools. Ohio State, however, has 68 square feet of research labs per student, compared to 48 at the University of Florida.

Recommendations

The obvious collision of facilities shortfalls with increasing demands means we can no longer afford a "business as usual" mentality. The recommendations in this report include much of the spirit and many of the specific ideas proposed by the facilities task force, organized under four major headings.

I. Improve Efficiency: Best Practices in Utilization, Maintenance, Construction and Design

The university system must ensure that the state property it holds in trust for the public is well-maintained and used efficiently. This is all the more important given the dearth of space to accommodate planned growth. The university task force identified a number of areas in which efficiencies can maximize the return on investment in current and future facilities.

A. Use Space More Efficiently

A March 2006 report by the Florida Legislature's Office of Program Policy Analysis and Government Accountability (OPPAGA) identified several strategies universities and community colleges could use to increase classroom utilization rates, including quota systems, internal benchmarking and reporting, and tuition discounting. All of the strategies included in the report should be seriously considered and universities should be given flexibility to implement pilot programs to test different approaches. In particular, the system should implement the following recommendations:

1. Conduct a thorough utilization review

As part of the overall facilities review recommended in this report, a comprehensive study of space utilization should identify ways to maximize the use of current classroom, laboratory, and office space. The study should review the scheduling of instructional and non-instructional activities that take place on campus and what can be done to maximize savings on total operating and capital expenses by changing schedules, revising room use, creating incentives, or making better use of technology. The study should include development of a methodology for accurately capturing complete usage data, including space usage on branch campus and joint use facilities.

2. Establish high standards

Consistent with the recommendations of the OPPAGA report, the system should establish the highest possible standards for classroom utilization and incorporate them into calculations of need for new facilities. An annual, as opposed to weekly, standard for utilization should be considered in order to encourage creative use of space throughout the calendar year. Learning is life-long, research is continuous, and our universities should be more accessible each day every year.

3. Give universities policy flexibility, including differential tuition authority

In order to maximize utilization, universities should be given broad flexibility to experiment with different approaches to scheduling, including the authority to discount tuition for courses in underutilized time slots or locations. It is important to remember that, over the life span of a building, operating costs will far exceed the capital investment, and universities also need to consider the impact of space-saving measures on operating expenses and revenues. With the authority and flexibility to test new policies, institutions will be better able to determine the best potential for both operating and capital savings.



FIU School of Musicxiii

B. Streamline Planning, Design and Construction Processes

1. Revise the educational plant survey process

A Plant Survey Work Group should convene to recommend process improvements and improve the accuracy of both the Space Needs Generation Formula and the calculation of space eligible for fixed capital outlay budgeting. The group should provide a report of its recommendations no later than June 15, 2007, with the goal of implementing as many possible improvements in the 2007-08 year.

2. Streamline the capital improvement plan budget request

Board of Governors staff should streamline elements required as part of the annual legislative budget request process, discontinue unneeded forms, update and improve the submission process; and clarify policy that allows inflation adjustments to the annual five-year capital improvement plan. These revisions will be reflected upon the next issuance of the capital improvement plan preparation instructions.

3. Accelerate fixed capital outlay funding releases

Board staff should work cooperatively with the governor's office to develop a process to permit more timely and equitable release of funds, so that the State University System does not incur avoidable process delays which add to the ultimate project cost.

Currently, all fixed capital outlay appropriations are given an automatic 20% release of spending authority on July 1st. The Department of Education budget office then authorizes encumbrances on a first-come, first-serve basis. As soon as possible, a budget amendment is submitted to the governor's office to obtain the remaining 80% of release. Until the budget amendment is authorized, however, the Department of Education may not issue encumbrance authorizations, and the university may not enter into any planning, design or construction contracts.

4. Increase the funding limit for minor projects

Regardless of the total amount of capital funds appropriated, the legislature should increase the limit for construction projects in this category from \$1 million to \$2 million in the upcoming 2007 session. Minor project authority allows the university to make incidental repairs and minor renovations without obtaining specific legislative approval. The university task force determined that raising the current threshold from \$1,000,000 to \$2,000,000 would allow the more timely correction of common safety problems and hazardous conditions that are detected throughout the year.

5. Streamline sales tax exemption process for building materials

The system should consider supporting a proposal that streamlines the process of obtaining an exemption from the state sales tax on building materials purchased for university construction. Many contractors do not use the current exemption process because it is too complicated.

C. Revise Plant Operations and Maintenance (PO&M) Processes

1. Request operation and maintenance funding for leased space

Board of Governors staff should consider appropriate parameters for the inclusion of leased space in our legislative budget request for plant operations and maintenance funding of education and general facilities.

2. Allow corrections to previous funding requests

Board of Governors staff should continue to allow for corrections in order to modify the amount of plant operations and maintenance funding depending on the timeframe involved. Consideration for making adjustments in the legislative budget request is given to requests to correct errors made within the last five years.

3. Allow changes in intensity of use due to renovations

Plant operations and maintenance funds should reflect buildings' current use. When a building is renovated for the purpose of changing its use or upgrading it for a special purpose (converting office space to a laboratory, for example), consideration will be given to requesting plant operations and maintenance funding based on the facility's current use, regardless of the age of the facility.

4. Request funds for space converted to education and general (E&G) use

Board of Governors staff should continue to allow plant operations and maintenance funding to be requested for a non-E&G facility (a dormitory, for example) that was originally ineligible for funds but that has been converted to space utilized for education and general purposes (such as a classroom building) provided that the facility has prior legislative approval.

5. Adjust operating costs for existing buildings for inflation

Inflation in operating costs for existing buildings should be taken into account in plant operations and maintenance funding requests. One method of doing this could be to take the total education and general gross square footage at each institution and apply the same incremental funding increase each year that is applied to the base cost factor for new space.

6. Change indexes used for increasing base cost factors

Alternative sources for cost adjustment should be evaluated. Currently, adjustments are made each year according to consumer price index information (for utilities and operations and maintenance) obtained from the U. S. Department of Labor, Bureau of Labor Statistics. Board of Governors staff will work with university personnel to evaluate alternative sources and incorporate appropriate changes.

II. Invest in the Next Generation: \$3.4 Billion in Capital Funding for Quality and Access

The state currently has no comprehensive plan and virtually no budget to finance new construction in the university system. If the current business model is maintained, only 7% of needed new space will be funded by 2013. A new generation of students will be short-changed with an infrastructure that is barely meeting minimum standards of quality and competitiveness.

At current construction costs it would take \$3.4 billion to fund the space needed for the 350,000 students the system plans to enroll by 2012-13. This figure is based on average needs of 119 gross square feet per student at \$250 per square foot. Appendix 1 includes more detail. The thorough assessment recommended in this report is an essential step to providing more precise parameters for the need, but this figure conveys the magnitude of the challenge the system confronts.

In the past, the lion's share (86% in 2005-06) of state funding for instructional space came from the Public Education Capital Outlay (PECO) program, which allows bonding of taxes on utilities and communications services. PECO was constitutionally established in 1963 to provide for the acquisition, construction, maintenance and renovation of instructional space for community colleges and state universities. It was expanded in 1974 to include public schools.

Current revenue projections for the 2006-2007 academic year indicate that funds from Public Education Capital Outlay (PECO) will barely cover basic maintenance and the completion of the 46 projects that have already started. The Board of Governors' legislative budget request for 2007-2010, is just \$526 million, short of the estimated university need by over \$2 billion. The remaining 220 projects in the official planning pipeline will compete for whatever funds are available starting in 2010-2011. Most stand little chance of funding before 2013.

A. Conduct a Needs Assessment

The system should conduct an immediate, independent assessment of its essential facilities and infrastructure needs, similar to that conducted by states such as North Carolina, New York, Michigan, and Maryland.

No matter the direction the Board chooses pursuant to the recommendations of the Pappas Group, which is currently evaluating long-term options for the overall structure of the State University System, a capital needs assessment will be an essential first step in giving material form to the state's strategic priorities. In addition to the Board of Governors and State University System officials, the Governor, President of the Senate and Speaker of the House will be critical partners in the assessment process and the regular ongoing communications associated with this effort.

B. Implement New Funding Mechanisms for Critical Space Needs

Upon completion of the assessment, the Board should work with key stakeholders to identify the most appropriate mechanisms to fund projects deemed essential to the State University System. Options to consider include:

- **One-time appropriation** of non-recurring general revenue, lottery or other available existing state resources.
- Expansion of the existing facilities matching funds program, with incentives to encourage gifts that support the projects most critical to the state's strategic priorities. Currently, all donations are treated equally when requesting matching grants from the state.
- **Imposition of a tax on tobacco companies** that were not part of the original 1997 settlement that recovered smoking-related health care costs. A portion of this tax could be specifically directed toward construction of university health care and related research facilities. A 40 cent per pack tax with a 10% set-aside would provide over \$10,000,000 annually.



UCF Student Unionxiv

• **Bonding of existing revenue,** following the model of other states that have made strategic investments in higher education. One option proposed by the facilities task force would be to decrease the sales tax on communications services by one percentage point, and increase the Gross Receipts tax by one percentage point. While having no effect on the taxpayer, this proposal, if adopted, would create \$2 billion in bonding capacity for the State University System.

• Leveraging of indirect costs from sponsored research and other funds associated with revenue-generating operations, to secure financing for construction. With most types of external research funding, universities receive a percentage of the funds to subsidize the indirect costs of performing the activity, including facilities costs. Funds may also be available from revenue-generating activities (e.g., patient care, continuing education, or leasing of space to business partners) to support construction and maintenance costs.

C. Update the Funding Source for Student Auxiliary Facilities

Over a five year period, the Building and Capital Improvement Trust Fund fees that pay for student auxiliary facilities should be raised to \$8 per credit hour and thereafter indexed to the Building Cost Index published in the Engineering News Record.

Student unions and athletic facilities are not generally included in the Public Education Capital Outlay budget request, but are funded through mandatory student fees of \$4.76 per credit hour. These fees have not increased since 1988, although it would take more than \$8 today to provide the same purchasing power.

There is a growing consensus that recruitment and retention of both students and faculty is linked to the sense of community provided by both the co-curricular and extra-curricular opportunities. Students are demanding improved amenities such as student unions, gyms and stadiums, which the current fee does not adequately support.

III. Preserve Florida's Investment: Maintaining and Improving Current Facilities

The oldest buildings in the State University System (historic facilities owned by the University of West Florida and the University of South Florida) date to the midnineteenth century and the newest buildings are still under construction. The peak of building in the system followed the establishment in the 1960s of five new universities: Florida International, Florida Atlantic, the North Florida, West Florida, and Central Florida. More than 25% of the system's current core academic space was built in a single decade, from 1967-1976, and 5% of all classrooms, labs, offices and study space were completed in 1967 alone (see Table 1).

Much of this space is reaching an age when it will need to be extensively renovated or replaced. More than 40% of space built in the 1960s and 1970s has yet to undergo renovation, as does 30% of the space completed in the 1950s. Facilities can quickly become outmoded, especially in fields with rapidly advancing technology. In some of these fields, the amount of information available is doubling every two years. If the facilities support does not keep up, our students will not be adequately prepared when they graduate.

It would cost approximately \$30 billion to replace all the buildings on the system's campuses, which makes it critical to extend the useful life of buildings when possible. Remodeling projects can transform outdated space and preserve the architectural heritage of our campuses, but they cost a significant fraction of the replacement value and are less attractive for private donors than new buildings. The cost to bring universities' current core operations space up to satisfactory condition is estimated at \$650 million, with the total critical deferred maintenance needs of universities (including all buildings, roads, parking, etc.) estimated at more than \$1 billion, based upon a system-wide independent review in 1997.

Replacement is also an option that will have to be considered if high quality facilities are a priority. While there are many useful buildings from the 1960s and 70s – and some with important historic and aesthetic value – many believe those decades were not public architecture's finest hour and do not represent the face the system should be presenting to the world. In a commentary on the University of California at Berkeley's Barrows Hall, critic Todd Gitlin notes how such buildings embodied the idea of "American civilization as grid, as calculated order," but left their inhabitants uninspired and anxious to leave.^{xv} It is important to remember in designing and preserving buildings that they represent the current generation's physical legacy to the future.

Building Construction Decade	Core Square Feet (Thousands)	Percent of Core Square Feet
Pre-1900	5	0%
1900-1909	43	0%
1910-1919	237	1%
1920-1929	274	1%
1930-1939	332	2%
1940-1949	417	2%
1950-1959	1,426	8%
1960-1969	3,623	19%
1970-1979	3,482	19%
1980-1989	2,447	13%
1990-1999	3,941	21%
2000-2006	2,587	14%
Grand Total	18,813	100%

How will we pay to retrofit or replace these "baby boomer" facilities? We are approaching the moment when Public Education Capital Outlay revenues will be entirely devoted to minimal maintenance of the existing buildings and support infrastructure, and will be insufficient to protect the state's investment in the system's physical plant.

In addition to supporting new construction, PECO funds have also been the major source of financing for significant remodeling projects. Section 1013.64 of Florida Statutes requires that "funds for remodeling, renovation, maintenance, repairs, and site improvement for existing satisfactory facilities shall be given priority consideration by the Legislature." The funds appropriated pursuant to this statute, however, have not been sufficient to keep up with needed repairs and renovations and have fluctuated substantially over the course of the business cycle. While the statutory formula for "Maintenance, Repairs, Renovations, and Remodeling" indicates \$150 million was needed in 2006-07, only \$36 million was allocated to maintain the existing facilities and related infrastructure, based on non-bonded available PECO funds. Legitimate competing demands for instructional and research space have overshadowed this essential but often neglected component of the building cycle.

A two-part solution will greatly accelerate the system's critical agenda for maintenance and renovation:

A. Amend the 2007-2008 Budget Request

As a first step, the 2007-2008 budget request should be amended to include an additional \$140 million from non-recurring general revenue, thus funding the statutory formula for repairs and renovations. This would provide immediate support prior to establishment of a dedicated funding source as recommended below.

B. Allocate a Portion of Documentary Stamp Taxes to Capital Renewal

Legislation should recognize the State University System's growth and impact by directing 2.25% of the documentary stamp tax proceeds to university capital renewal.

Currently, Chapter 2005-290, Laws of Florida, provides \$750 million annually to fund specific transportation, school, and water projects. In this case, state policy recognizes the severe strain continuing population growth has created on the underlying support infrastructure and the state institutions charged with maintaining it.

The law directs \$575 million to the State Transportation Trust Fund, \$100 million to the Water Protection and Sustainability Program Trust Fund, and \$75 million to the Public Education Capital Outlay and Debt Service Trust Fund from documentary stamp tax collections. However, the PECO dollars thus provided are currently earmarked only for facilities within high growth public school districts. The policy rationale for these earmarks should also justify support for the state universities, which are subject both to population growth and to the expectations generated by the state's priority on access and economic development.

IV. Lead the Nation in Sustainability: Cutting-Edge Research, Engineering, Architecture and Planning

Most state universities have already incorporated some elements of a sustainability program in their facilities or academic operations. The most comprehensive new initiative in the SUS is at the University of Florida, which recently hosted a national conference on the issue, and which has constructed an award-winning facility to house its building construction program (see figure 4). Other national leaders in campus sustainability include both public and private institutions and systems such as the University of South Carolina, the University of California System, Yale, and MIT. In South Carolina, for example, a consortium of public institutions collaborates on sustainability initiatives and awards small grants to faculty and facilities managers for both research and practical initiatives related to campus environmental impacts.

A. Adopt Policies that Promote Sustainability

In consultation with academic and facilities experts around the state, the Board should incorporate sustainability in the guidelines for the capital budget request, including minimum standards for all projects to be recommended in the Board's legislative budget request and additional priority status for projects that exceed the minimum.

B. Recognize Institutional Achievements

Every year, the Board should recognize the top two university achievements in sustainability in each of three domains: 1) new construction, 2) renovation, and 3) campus operations. Such an award would raise the statewide profile of these important efforts.

C. Continue the Concurrency Trust Fund

The State University System should make a concerted, coordinated effort to ensure the continuation of this trust fund. Board staff should draft language for the Board to recommend in the upcoming legislative session to reinstate the previous dedicated revenue stream for this fund effective July 1, 2007.

The principle of "concurrency" is that development should not negatively impact existing communities. Universities should be setting the highest standards for good local citizenship in this regard. The state has formally recognized (in section 1013.30, Florida Statutes) that while university campuses provide research and educational benefits of statewide and national importance, they may have an adverse impact on the public services and natural resources of the host community. Special growth management provisions have therefore been adopted that supersede the regulations for land development. Historically, the costs associated with this concurrency requirement have been provided via the University System Concurrency Trust Fund. This provides a funding mechanism for the university to be a "good neighbor" and meet its "fair share" of the costs of its impact on public facilities and services, including roads, sanitary sewer, solid waste, drainage/stormwater management, potable water, parks and recreation and public transportation.

This cornerstone of sustainability is now in jeopardy. The revenue previously directed to the fund was eliminated as of July 1, 2006 and the fund itself is scheduled for termination on July 1, 2007.



Figure 4: Cross-section showing energy features of University of Florida's Rinker Hall

Section through Atrium

Relatively small investments in sustainable facilities such as the University of Florida's award-winning Rinker Hall, which houses its School of Building Construction, lead the field in conserving operating costs and reducing negative impacts on the environment.

Conclusion: Moving Forward

Changing course will take a collective effort. If we are to exchange "business as usual" for a shared vision of quality and access, we will need the involvement and commitment of students, parents, faculty, and the academic and political leadership of the state.

This report is a call to immediate action. Parts of the plan outlined in this report can begin now, as universities and the Board of Governors office implement policies to make the system work more efficiently. Other elements will require action in the 2007-2008 legislative session to reinvigorate the system's maintenance and renovation programs. Finally, the comprehensive review of system facility needs – which will take no more than 12-18 months to complete – should serve both to provide critical information and to stimulate the state's interest in making long-term investments in higher education. We can no longer afford to wait.

Appendix 1: Calculation of 2012-13 Projected Need

Planned 2012-13 Enrollment (Fall Headcount Estimate	240 122			
Based on FTE Plans)	349,122			
	Net	Projected Need		
	Assignable	(Square Feet	Current Space	
	Square	Per Student x	Inventory and	Difference:
	Feet Per	Planned	Funded Space	Space Deficit by
	Student*	Enrollment)	in Pipeline	2012-13
Classroom	7.6	2,656,635	2,039,490	617,145
Teaching Lab	9.6	3,351,257	2,600,358	750,899
Study	12.8	4,469,463	2,105,603	2,363,860
Research	13.4	4,687,516	3,501,029	1,186,487
Office	31.3	10,910,799	7,306,820	3,603,979
Auditorium/Exhibition	2.1	723,265	549,953	173,312
Instructional Media	0.7	248,249	114,202	134,047
Academic Support	0.4	135,299	84,832	50,467
Gym	3.4	1,170,237	759,170	411,067
Support Services	4.1	1,417,638	883,219	534,419
Total Net Square Feet	85.3	29,770,358	19,944,677	9,825,681
Gross Square Feet				
(Net Square Feet x 1.4)	119.4	41,678,501	27,922,548	13,755,953
Estimated Project Cost P	\$250			
Cost to Meet Projected 2 Need	\$3,438,988,350			

*Note: These are systemwide averages per student enrolled in fall. The space needs formula uses more detailed factors for each institution's planned full-time-equivalent enrollment.

Appendix 2: Facilities Task Force Participants

Mr. William Merck II, Facilities Task Force Chair

Vice President for Administration & Finance University of Central Florida

Committee on Revenue

Dr. Robert Bradley, Committee Chair Interim Vice President for Academic Quality and External Programs Florida State University

Dr. David Denslow Director, Economic Analysis Program University of Florida

Ms. Debi Gallay Associate Vice President for Education Policy and Budget Florida International University

Dr. Curtis Bullock Executive Director of FGCU Financing Corporation (Direct Support Organization) Florida Gulf Coast University

W. Scott Cole, Esq. Vice President and General Counsel University of Central Florida

Mr. Frank Brogan President Florida Atlantic University

Committee on Process and Procedures

Mr. Victor Citarella, Committee Chair Associate Vice President, Division of Administration Facilities Management Department Florida International University Janet Owen, Esq. Vice President for Governmental Affairs and Associate General Counsel University of North Florida

Dr. Renu Khator Provost and Vice President for Academic Affairs University of South Florida

Dr. Debra Austin Provost and Vice President for Academic Affairs Florida A & M University

Mr. Bert Hartley Interim Vice President University of West Florida

Dr. John Cavanaugh President University of West Florida

Mr. John Martin Vice President for Finance and Administration New College of Florida

Dr. Hui-Min Wen Director, Institutional Research New College of Florida

Dr. Larry Abele Provost and Executive Vice President, Academic Affairs Florida State University

Mr. Tom Donaudy Associate Vice President and University Architect Florida Atlantic University

Committee on Best Practices

Dr. Joe Shepard, Committee Chair

Vice President for Administrative Services Florida Gulf Coast University

Ms. Carol Walker Director, Facilities, Planning & Construction University of Florida

Mr. Clarence (Tony) Stallworth Associate Vice President Construction and Facilities Management Florida A & M University

Mr. Zak Ovadia University Facilities Planning University of North Florida

Dr. Ralph Wilcox Vice Provost for Policy Analysis, Planning and Performance University of South Florida

Focus Group

The task force held a focus group meeting with the Association of Building Contractors (ABC), Associated General Contractors (AGC), and the Florida president of the American Institute of Architects (AIA). In attendance were:

Vivian Salaga President of Florida AIA

<u>American Building Contractors (ABC)</u> of Florida, Inc., represented by:

Rick Watson Legislative Counsel

Rex Kirby Suffolk Construction, West Palm Beach

Kyle Kovacs Elkins Constructors, Jacksonville

David Lewis Wharton Smith Construction, Orlando

Associated General Contractors represented by:

Tom Murphy Wharton Smith Construction Group

Ed Parker, Jr. Biltmore Construction

Notes

ⁱ£500 million. See http://www.cam.ac.uk/building/

ⁱⁱ *Chronicle of Higher Education.* Special coverage of campus architecture. See http://chronicle.com/indepth/architecture/

ⁱⁱⁱ Photo copyright Samuel Asarnow. Used with permission.

^{iv} BOG Staff analysis of facilities data in American Physical Plant Association survey, 2004-2005. SUS data from Facilities Master File (2005-06).

v State University System Fact Book, 2004-05. Table 41

vi Florida Prepaid College Board 2004/05 Annual Report. Page 4.

^{vii} Office of Student Financial Assistance Report to the Commissioner, 2004-05. Page 24. https://www.floridastudentfinancialaid.org/SSFAD/pdf/annualreport04-05.pdf

viii Cain, David, and Gary Reynolds. "The Impact of Facilities on the Recruitment and Retention of Students." *Facility Manager*. March/April 2006. Page 54.

^{ix} Data on the core areas of the system are much more consistent over time and with other institutions around the country than with some of the peripheral and support facilities. The core areas are also the most critical to a university's mission and, unlike parking garages and dormitories, are not generally self-supporting.

* The national standard FTE definition of 30 credits/undergraduate and 24/graduate has been used to facilitate comparisons with other states. The trend data here relate to space eligible for capital outlay funding, consistent with historical SUS records. For national comparison purposes, however, all space, eligible and ineligible, was included, resulting in slightly higher numbers of square feet per student. If only eligible space were included, Florida would be farther below the national norms.

^{xi} The survey combines teaching and research labs.

^{xii} Source: American Physical Plant Association Survey (2004-05), average of all public baccalaureate and higher institutions. SUS data from Facilities Master File (2005-06)

xiii Photo: Alfonso Surroca. Creative Commons Attribution Noncommercial Share-Alike License

2.0.

xiv Photo: Kevin Morris. Creative Commons Noncommercial Attribution License 2.0.

xv "Berkeley's Right Angles," The American Scholar, Autumn 2000.