

Memorandum

To: Dan Ravenel, Chair, Higher Education Study Committee

From: John Montgomery (Chair), Scott Ludlow & Col. Claude Eichelberger (Vice Chairs), Buildings, Facilities, and Information Technology Advisory Group

Date: February 12, 2008

Re: Report of the Buildings, Facilities, and Information Technology Advisory Group of the Higher Education Study Committee

The Buildings, Facilities and Information Technology Advisory Groups' charge was to evaluate the adequacy of higher education's physical and technology infrastructure in light of the state's future higher education needs and goals. The Advisory Group met in Columbia on November 27, 2008, in a joint meeting with the Funding and Institutional Costs Advisory Group. Members of the Advisory Group invited were: Bill Berg, Furman University; Ginger Hudock, USC-Aiken; Walter Hardin, Winthrop; John Dixon, Francis Marion; Bill Hogue, USC-Columbia; Sandy Williams, Coastal Carolina; Harry Stille; Dr. Bob Cape, College of Charleston; John Malmrose, MUSC; Howie Roesch, Tri-County Technical College.

Informing this report and the recommendations of the Advisory Group were the questions raised by the final report of the Governor's Task Force Report. Following are discussion and recommendations regarding those questions.

Some preliminary observations are relevant. Viewed as a single entity, the public higher education system in South Carolina has both strengths and weaknesses in increasing the overall education level of the state, supporting research and developing a highly skilled work force. One clear strength is the number of public higher education institutions in the state, each with physical and information technology facilities supporting their missions. Most state residents live within 30-40 miles of a public higher education campus. This will facilitate increased educational opportunities for many without the expense of relocation. It also offers the opportunity for use of these same facilities to increase distance education and delivery of instructional content and educational services by technology, a second strength. Higher education generally has expertise and technological facilities to deliver educational content and services remotely. This most likely will increase as even better technology becomes more widely available. Increased use of technology will become a more significant factor in assessing future facilities needs.

There are also weaknesses. Deferred maintenance is both a major cost issue and facilities issue. The total accumulated cost of deferred maintenance in the system is of the order or magnitude of the entire annual amount of state appropriations for all of higher education. Aside from the cost, this affects the ability of each campus to meet the state's future higher education needs. Poorly maintained physical facilities limit use for instruction and also make using informational technology more difficult and costly.

A second weakness is the relative scarcity of higher education facilities along the I-95 corridor south of Florence, where public K-12 education needs strengthening. This area of the state where economic and educational opportunities are limited has relatively less access to higher educational opportunities. Increased use of information technology to better reach this and other underserved areas may be a way to address the future higher educational needs of these areas.

The Advisory Group's responses to the specific questions raised by the Governor's Task Force follow:

I. Does the State have facilities sufficient to support the Plan and is adequate and efficient use being made of these facilities?

In general the state does have sufficient facilities to support the Plan. With the possible exception of the I-95 corridor, the state's geographically distributed higher education facilities can support the amount of future growth contemplated by the Plan without the addition of additional campuses. South Carolina does not seem to be facing the rapid growth of states like Florida and California which require entire new campuses to meet projected growth. This is not to state that additional facilities on individual campuses will not be needed. They most surely will be, especially in the technical education system.

Facilities needs among institutions will also be affected by both academic and non-academic factors which affect growth at individual institutions. For example, some institutions are becoming more academically selective. Such factors may cause some greater than expected growth in other institutions as students look for other options.

Facilities needs will also be affected by the increasing impact of information technology. In general the state's public higher education institutions are increasingly using such technology to meet educational and service needs. As "virtual classrooms" and distance education increase, the need for academic and instructional space may level off as the need for space devoted to information technology increases.

The impact of deferred maintenance on future facilities needs cannot be underestimated. Without adequate maintenance, the capacity of existing facilities to serve instructional needs will decline over time. This is especially true with regard to employing sophisticated information technology, a difficult and costly undertaking in under-maintained, older facilities. This is a complex issue. Maintenance needs are part of the state funding formula and each institution does receive some funds for maintenance. Because of cost pressures in other areas, that money is often spent on other things. Deferred maintenance costs, accordingly, increase.

With all these sometimes conflicting considerations taken into account, most higher education institutions do have additional instructional and laboratory capacity in their existing facilities to meet near term growth needs of the Plan.

This assumes more efficient (meaning more frequent) use of existing facilities than is often the case. Spreading actual use of instructional and laboratory space more fully over the traditional five day work week would increase the capacity of existing facilities significantly. There are tradeoffs in terms of scheduling flexibility for both faculty and students and supporting faculty research agendas, especially at research institutions. Even so, facilities can meet increased growth,

up to a point, by greater efficiency of use.

### Recommendations

1. An effective strategy for dealing with deferred maintenance can reduce the need of costly new facilities and increase the usefulness of existing facilities. Two possibilities are a one-time bond bill to address the most pressing needs or placing state funds normally passed through to individual institutions for maintenance into a “maintenance trust fund.” Institutions would receive proportionate shares but funds could only be spend on maintenance needs and not diverted to other purposes.
  2. All institutions should make more efficient use of existing facilities, with due consideration for the academic need of students and facility.
  3. Institutions should continue and expand the use of information technology to meet their educational and service mission and reduce the demand for additional physical facilities.
- II. Are the state’s higher education facilities (including coordination of duplicative administrative information systems) being shared adequately among the institutions to enhance affordability?

There appears to be little sharing of facilities as yet because of lack of need. Significant sharing of physical facilities may not materialize for some time.

One of the drivers for facilities sharing may be increased use of instructional technology and distance education. The practicality and efficiency of this type of instruction is increasing. Its use offers many opportunities for collaboration. For certain types of courses, facilities of any higher education institution could be used to house students in distance education courses. Research universities could provide distance education courses to students taking the course at a technical college facility. Several institutions desiring to offer one or more specialized courses could collaborate to hire one person to deliver such a course to each institution via information technology instead of each institution having to hire its own faculty. This would reduce facilities needs.

There are significant opportunities to combine facilities for administrative computing. Many functions such as payroll, human resources and some business operations could be centralized at one location for several institutions, reducing personnel and space needs for each individual institution. Florida has already taken this step, with regional centers established to handle routine administrative matters. Participating institutions pay fees for this “outsourcing,” allowing them to focus resources on their central missions. There may be significant cost savings and economics of scale here which should be fully explored.

### Recommendations

1. Higher education institutions should actively explore collaborative opportunities to share both facilities and instructional resources in delivering courses.
2. Higher education institutions should actively collaborate on ways to combine routine administrative needs especially involving administrative computing functions, to realize economics of scale and minimize facilities needs for these functions.

### III. Should space utilization standards be part of the Plan?

The practicality of developing effective space utilization standards is doubtful. Space utilization is a function of mission, with research universities having needs quite different from technical colleges. Even within a single institution, space needs vary dramatically between colleges. A law school which uses large lectures, no labs but a significant library has very different needs than a medical school or an undergraduate language program. Space utilization standards which are meaningful across disciplines and programs may not be workable.

An additional complication is varying accreditation standards. Some program accreditation standards have space requirements; others do not.

Finally, there are higher education national guidelines for many functions which have already been developed and which are being utilized.

A more productive approach may be establishing the expectation that the higher education system and each institution increase the efficiency of use of all facilities.

### Recommendation

1. The Advisory Group does not recommend space utilization standards for individual academic programs. The Advisory Group does recommend development of efficiency of use standards for facilities.

### IV. Should institutional requests for new or renovated buildings be compatible with the statewide Plan?

There is already adequate authority to assure compatibility. CHE must review all requests for new facilities or renovations in excess of \$500,000. Additionally, CHE, as part of the approval process for new academic programs, reviews the adequacy of space to support the academic programs. Accordingly, a mechanism is in place to assure compatibility with a statewide plan.

### Recommendation

1. No additional review process beyond those already in place is necessary.

- V. Should the Plan include recommendations for the improvement of the current capital resources (facilities) approval and delivery process to ensure greater efficiency and cost effectiveness focused upon the reduction of institutional costs?

The current process is cumbersome and time consuming. It involves review by CHE, the Budget and Control Board and the Joint Bond Review Committee of the General Assembly. Everything from design, land acquisition, construction, renovation and maintenance is subject to the process. Time delays in approval often can add significantly to project costs. A more streamlined process would be desirable and more cost effective.

Recommendation

1. The Plan should include specific recommendations for a more cost effective and timely review process, balancing the need for oversight with the need for maximum flexibility.