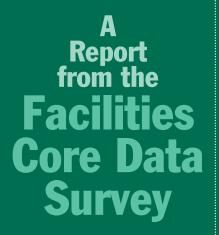




ach spring, parents and their offspring approaching college age pack their suitcases and set out to preview potential college campuses. It is important for them to drive onto each campus to see what it looks like, talk to some students and faculty, sit in on one or more classes, and stay overnight in a residence hall? what we call "getting a feel for the place."

While this rite of pending adulthood played out again this year, one could wonder if, when they drive onto a campus, they could sense a difference in how space and buildings are developed in a private versus a public institution. Does a private college "feel" and "look" different from a public campus, and if so, what are the factors in play?



by Laura Long

the Facilities Performance Indicators (FPI) reports demonstrate only the characteristics of the survey participants, and the statistics have not been tested to be representative of all private and public institutions. For one thing, the number of institutions completing space data surveys is growing each year but it is still low. (The change in the 2005-06 survey schedule and its shortened data collection period resulted in what is expected to be a one-time drop in survey participation. A higher percentage of 2005-06 survey participants completed space questions even though the counts did not increase.)

Some of the references in this article come from the General Data and Strategic Financial Measures portions of the annual Facilities Core Data Survey. There are robust counts in the FPI

#### Background

APPA started collecting statistics on ASF (assignable square feet) by building category and GSF (gross square feet) by building type in the 2003-04 Facilities Core Data survey. From the onset, the data showed different patterns of space development between private and public institutions. That being the case, it should be understood that the space data in Report for statistics on campus acres, number and average age of buildings, and building condition.

The following statistics are drawn from the 2005-06 FPI Report with some references to the 2004-05 FPI Report.

#### **Density on Private and Public Campuses**

The first set of comparisons concern the relative density of campus build-out. In the FPI Report, private campuses average 16,667 GSF build-out per acre maintained, and public campuses have 22,542 GSF of development per acre maintained.

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#### Number of Institutions with Space Entries

Funding	ASF by Space Category 2005-06	GSF by Building Type 2005-06
Private	20/18	16/13
Public	91/93	13/37
Total	111/111	19/50

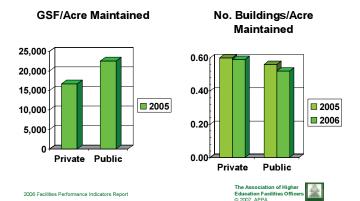
When we look at the number of buildings per acre maintained, it averages between 0.59 and 0.60 for private institutions and between 0.52 to 0.56 for public campuses. The public institution has about 10 percent fewer buildings per acre maintained.

In the third factor, the average number of GSF per building, private institutions have an average of 40,592 GSF per building. Public institutions average about 10 percent more GSF per building at 43,159.

To summarize the observations to date, the public institutions have a greater average number of GSF per acre maintained, about 10 percent fewer buildings per acre and about 10 percent more GSF per building. This can be summarized as a slightly more concentrated development pattern using either larger building footprints or higher buildings.

Then there is a question of the density of the campus in relation to its student population. The private institutions average between 35 to 39 students per acre maintained and the public institutions average between 76 and 89 students per acre maintained. This implies that the public campus will feel more occupied and their paths and plazas will be more crowded.

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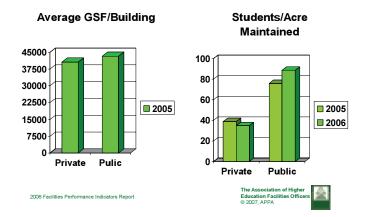
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# **Campus Density**

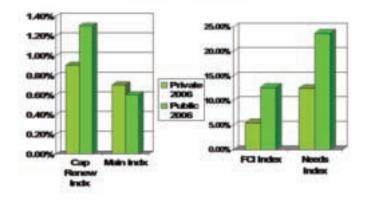


We don't know how these differences translate into impressions of vitality, relaxation, contemplation, energy, excitement, or comfort-to name a few intangibles. One has to think that the public campus, with larger building profiles and more compact use of outdoor spaces, would impart a different impression than the less populated private college.

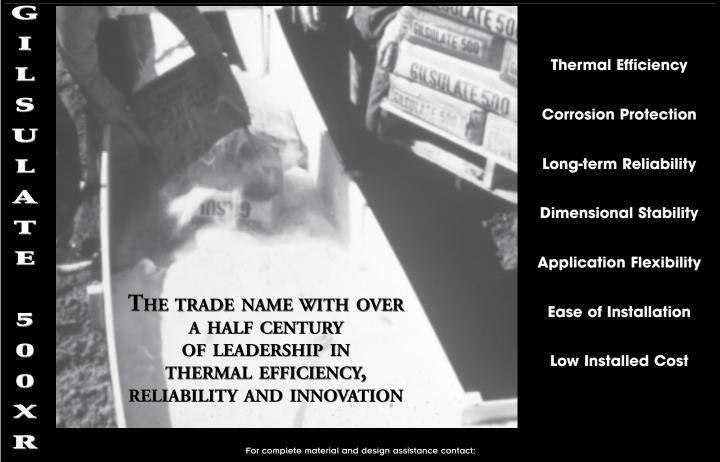
#### Condition of Campus Buildings and Grounds

The Needs Index (deferred maintenance plus cumulative need for renovation, modernization, and adaptation compared

# Condition Building Indexes by Funding (2006 Only)



to Current Replacement Value, or CRV) provides a snapshot of the condition of campus buildings. The private campuses in the study group are in better condition, with a Needs Index of 14 percent, than public campuses, whose Needs Index averages 20 percent. In both private and public groupings, half of the Needs Index comes from deferred maintenance and half from the cumulative need for renovation, modernization, and adaptation.



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#### **Overall Average CRV**

Funding	2004-05 with Auxiliary Services	2005-06 without Auxiliary Services
Private	\$239	\$250
Public	\$216	\$251

We examine the Capital Renewal and Maintenance Indices to see if they provide insight on the condition of campus facilities. The Capital Renewal and Maintenance Indices are based on expenditures divided by CRV. Private campuses spent equal amounts (0.9 percent of CRV) on capital renewal and operating maintenance in 2004-05. In 2005-06 their Capital Renewal stayed at 0.9 percent, but the Maintenance Index dropped to 0.7 percent of CRV.

Over the same two surveys, public campuses put between 1.7 and 1.4 percent into capital renewal and 0.6 percent of CRV into operating maintenance. In these two survey periods, the public institutions invested more into capital renewal and less into routine and scheduled maintenance than private campuses when the expenditures are normalized by the CRV.

The maintenance expenditures measured by GSF in the FPI Operating Costs Report also showed a slightly higher cost per GSF for private versus public institutions.

Another touchstone for the condition of campus facilities is customer satisfaction. Over the last two years, private campuses have had a high satisfaction average of 3.9 to 4.1 percent. Public campuses have a satisfaction average of 3.6 percent.

All the statistics tend to indicate that private campuses in this study are maintained at a better level than the public institutions and the cause might be that public institutions, on average, invest less in routine operating maintenance when measured against either CRV or GSF.

#### **Quality of Private and Public** Buildings

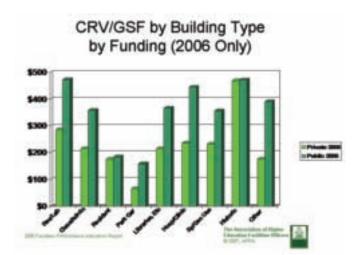
One indication of the quality of facilities is the cost per GSF of new construction. The FPI Report has two sources of CRV statistics from the Facilities Core Data Survey.

1. Single entry overall CRV value:

Some single entry CRV estimates a. stem from detailed CRV studies and can be very accurate.

- b. The less accurate single entry estimates are calculated as total GSF times an overall average construction cost. This estimating method usually does not weight the differences in construction costs by building types very well.
- 2. CRV Calculation Worksheet, which computes CRV by building type.
  - The Worksheet is second in accuracy only a. to a detailed campus CRV study.

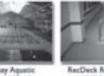
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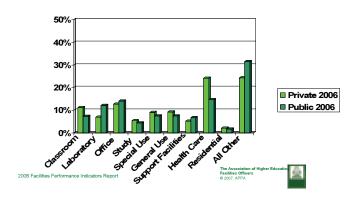
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### Space Category ASF @ % of Total ASF by Funding (2006 Only)

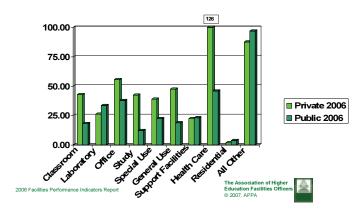


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In terms of overall average CRV/GSF (Total CRV value divided by campus GSF), the difference between private and public campuses is not noticeable.

However, there are differences in construction costs by building type that are derived from the CRV Calculation Worksheet. About half of the institutions providing CRV statistics used the Worksheet in 2005-06.

# ASF per Student by Funding (2006 Only)



The differences between private and public institutions are substantial. Construction on public campuses costs about twice the amount per GSF than private campuses with two exceptions; about the same amounts per GSF are invested into residence halls and historic buildings. However, our counts are not large enough to claim this is representative of the two groups. So, we look to the 2006-07 FPI Report for additional input and encourage those who participate in the Facilities Core Data Survey to use the power of the CRV Calculation Worksheet.



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#### A View of Private and Public ASF

As previously stated, counts for private institutions' ASF statistics are too low to be representative. Therefore, these observations are far from conclusive. However, there are statistical similarities between the last two FPI Reports, which is a good indication that the statistics have some validity.

The first impression of this chart is that private and public institutions, in general, balance their ASF by type of space in the same manner. Closer examination by space category shows a few of the subtle differences that might be expected. Private institutions have a larger percentage of their total space in classrooms, while public institutions have larger percentages in laboratories. The healthcare category results were different in 2004-05, so the 2005-06 disparity is discounted for now.

Another view of space is from the student's perspective. These statistics have not been consistent between 2004-05 and 2005-06, and we cannot rely on the statistics until we see consistency from one report to another.

However, let's note some patterns and see if they reappear in the 2006-07 FPI Report. It appears that private institutions may provide twice the ASF of classroom space per student than public institutions, with more study, special use, and general use space per student. On the other hand, public institutions provide more laboratory ASF per student. Both

## "... the number of institutions completing space data surveys is growing each year but it is still low."

public and private institutions provide almost identical amounts of support facilities ASF per student.

#### Summary

It is interesting to explore the patterns of space and building statistics between private and public institutions. We have not drawn any conclusions but have made a number of observations.

The average private higher education campus might compare to public institutions in the following ways:

- · more open landscaped or natural grounds
- · slightly smaller and better maintained buildings
- · possibly a less expensive type of construction
- less crowded walkways and plazas
- more student-centered ASF per student

The public institution might be different than the average private campus in these ways:

- denser build-out of maintained acreage
- larger building profiles
- campus facilities that are more in need of maintenance and renewal
  - more laboratory space, indicating a higher concentration of science programming
  - higher student occupancy patterns in buildings and on grounds

Whether the 2006-07 FPI Report confirms or changes these observations remains to be seen. The 2006-07 Facilities Core Data Survey will open in late-August, and the resulting FPI reports and dashboards will be available in February 2008. We invite your participation. ▲

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