

# Survey Results and Round 1 Comments on STARS v. 0.4

## Section: Planning & Development (to become "Facilities")

### PLANNING AND DEVELOPMENT

#### OP Credit 1: Campus Master Plan

Institution must demonstrate a commitment to sustainability or environmental stewardship in its campus master plan (and separate landscape master plan, if applicable). Sustainability or environmental stewardship must be incorporated as a high-level goal, principle, value, or equivalent; a minor reference to sustainability in the master plan is not sufficient to earn this credit.

#### OP Credit 2: Campus Design Specifications

Institution must include a LEED Silver (or equivalent) requirement in campus design specifications or a stand-alone green building policy for all new construction and major renovations. "Equivalent" means that LEED requirements are embedded in the campus building standards and/or included by reference in projects' construction specifications in appropriate CSI sections, and submittal compliance is enforced by the project owner prior to final payment to construction professionals. Submittals thus obtained are cataloged and confirmed by the project owner's project manager, compiled according to the LEED format, affirmed by the project manager as complete and adequate, and retained for public access for ten years.

#### OP Credit 3: LEED-EB Trend

Institution must demonstrate a 3-year upward trend in percentage of building square footage that meets or exceeds the LEED-EB "Certified" standards.

#### OP Credit 4: LEED-CI Trend

Institution must demonstrate a 3-year upward trend in percentage of building square footage that meets or exceeds the LEED-CI "Certified" standards.

### SURVEY RESULTS

1. [OP2-4: Are policies requiring LEED-equivalent standards sufficient, or should the policies require actual certification? Do any campuses have policies requiring actual certification for every new building?](#)

*Reviewer A*

Yes and yes.

*Reviewer B*

No, it shouldn't require actual certification. Again, we want the result of meeting the standards, the certification is less important.

*Reviewer C*

I'd give one point for LEED-equivalent and two for certified.

*Reviewer D*

Require certification and not sole source to LEED but also Green Globe Program and Energy Star ratings

*Reviewer E*

I am sure there are more campuses that have policies requiring certification but I know off the top of my head that University of Florida and University of California Merced require LEED Silver certification for all of their new construction. USGBC has new data that shows that buildings that are certified consistently deliver significant energy savings over buildings that are not certified. I am happy to share that study. The paper and summary will be ready in December. Anecdotally, building to LEED equivalent standards does not produce the same results as requiring certification. Unfortunately, not having a third party check on the work results in a building that is not equivalent in performance. The cost of certifying a building is minimal compared to the total cost of the project. However, consultant fees can often be significant. This means that as a campus develops expertise in building to LEED standards the costs will come down. We are working on ways to streamline the process and cut costs for all involved.

*Reviewer F*

I feel strongly that actual third-party certification should be required. This does not refer to LEED exclusively, since other programs that can provide 3<sup>rd</sup> party certification are out there, such as GreenGlobes (which in my opinion is not as strong as LEED). I do know there are campuses out there that require LEED certification – Clemson University is the one I've worked with. Designing around the LEED system but not actually obtaining certification very often results in a less stringent enforcement of sustainability goals. If project teams are not measuring a project's environmental footprint then goals are often not met; and if teams are measuring these things then the costs for 3<sup>rd</sup> party certification is minimal (much of the cost of LEED is the cost of asking designers to measure things like energy and water performance, % of materials that are "green", room daylighting factors, etc... Without measuring it, you simply do not know what you have.)

*Reviewer G*

Certification should not be required. LEED certification is prohibitively expensive in some cases (1% of the cost of the building!!!). This means that a \$300 million building will cost \$3M to certify. Adoption of LEED standards into the design standards by a campus should suffice, but documentary evidence should be provided to verify this. The LEED rating sheet can be submitted as evidence that the building is green built. Records to verify the design could also be supplied (photos/ correspondence, et c).

2. OP4: Would you support reformulating this credit to an upward trend in percentage of building square footage that has actually achieved LEED certification of any kind except LEED-EB (which is covered OP3 and is a reoccurring standard rather than a one-time certification like the others)?

*Reviewer E*

I think this is a good idea because many campuses are using LEED for Commercial Interiors to renovate either office or classroom space rather than renovating the entire building at once.

*Reviewer F*

I would be concerned that an upward trend is not aggressive enough, and certainly not as strong as a policy that requires LEED Silver for all future projects. I do not feel like a LEED requirement policy is too severe a requirement.

3. Can you suggest a credit that would recognize adaptive reuse of buildings?

*Reviewer C*

Great idea. I'm not the one to provide wording.

*Reviewer D*

Ability to do Federal Classified Historical Buildings

*Reviewer F*

A simpler metric might be a credit that discourages the demolition of buildings. Perhaps a trend-based credit where the ratio of the number of buildings that were renovated/reused over the number of buildings that were demolished, increases over a three-year period. Or perhaps a strategy-based credit that requires a feasibility study that examines the potential for the reuse of any building that is slated to be demolished.

4. We'd like to add a credit on Indoor Environmental Quality. What are the most important elements of a IEQ program? Can they be measured in a way that would allow for reasonable comparisons across campuses and wouldn't be unduly burdensome to carry out?

*Reviewer A*

IEQ is driven by Indoor Air Quality. Documentation of an established indoor air quality would be an important sign of a significant (i.e. greater than zero) commitment to this issue.

*Reviewer D*

Quality of working conditions –NOT the number of air changes which in fact can be climatic. Yes with proper sensing and data collection with the campus Building Management System.

*Reviewer F*

The big components of an IEQ program should touch on adequate ventilation rates, control of harmful indoor pollutants (like VOC's), and daylighting requirements. Of these, the indoor pollutant control is the easiest to carry out: simply by a strategy-based credit like "adopt the South Coast Air Quality Management District (SCAQMD) Rule #1168, the Green Seal Standard for Commercial Adhesives, and Green Seal Standards for all paints, sealants, and adhesives"

A “no-smoking except in designated areas” policy might be a good one to include.

Daylighting considerations are important but harder to create goals. For instance if one were to integrate a requirements into the University design guidelines that provides a minimum daylight factor for classroom and office spaces, that might be burdensome and impractical to achieve in some projects.

For ventilation rates (to ensure adequate ventilation is provided to occupied spaces), a start point would be to require all new projects be designed to meet ASHRAE 62. (this will ensure sound ventilation rates and design is followed. This is a pre-requisite to LEED so it may be implied if the University adopts LEED). This can be expanded by requiring that the ventilation rates prescribed by ASHRAE 62 are exceeded by at least 30%, or by requiring CO2 sensors to ensure adequate ventilation is being provided in all occupied spaces.

Another goal might be to commit to a policy where the facilities department conducts surveys of building users to determine their satisfaction with the indoor environment. This is the framework for LEED credit EQ 7.2, and should include the requirement to enact a plan to remedy comfort issues.

These last 3 suggestions really come from LEED. It is worth mentioning that by requiring projects to pursue a LEED rating, it does not ensure that any credit that is not a pre-requisite will actually be obtained, so there may be value in using LEED credits (or otherwise) as the basis of a policy, thus turning the most relevant ones into a pre-requisite.

*Reviewer G*

Air quality, absence of mold, smells, VOCs. Also light quality. Daylighting.

5. [Are there any other credits related to planning and development that should be considered for inclusion in STARS? Please be as specific as possible.](#)

*Reviewer F*

One that comes to mind is the requirement that the University monitor the energy and water use of all buildings within the campus. Metering of energy use should be specific enough to detect problems within specific systems. Metering of buildings provides information about building resource consumption which may help prioritize plans for system upgrades.

Perhaps it falls under Energy and Climate, but I would also require that all future design and construction projects incorporate building commissioning. Commissioning is a pre-requisite within the LEED program, so if LEED is required this may be redundant.

*Reviewer G*

Sustainable development; remediation of a site/ parking area to return it to native landscaping/ build agreen building in place of blight site.

## **COMMENTS ON V. 0.4**

### **PLANNING AND DEVELOPMENT - General**

*Reviewer 23*

Unfortunately, the building and operations section does not measure real LEED buildings (just LEED equivalent) which has little value in terms of measuring achievement since nothing is really “achieved”. It is not advisable to recommend LEED-equivalent compliance as this may be perceived as green washing.

*Reviewer A*

My comment is within the Operations section. You might consider on a later rendition including "Strategic Planning" as a to-do for college campuses. If they are doing Campus Master Planning prior to solidifying a strategic plan they could miss agreed upon goals and objectives from the board, students, administration and others. There are actually some architectural firms out there that are expert with campus master planning who won't do one unless the institution has gone through an aggressive strategic planning process and arrived at a mission statement with global goals and objectives to guide the whole process.

*Reviewer B*

These trends don't make sense in a small school that does little or no building. How about points for NOT building!?

*Reviewer C*

Should separate credits be given for new and renovated building compliance with LEED? Could we give points for various levels of recycling of demolition materials?

## **OP Credit 5: Campus Master Plan**

*Reviewer 17*

This is fine; however, I would delete the reference to landscape master plan since that is a separate issue.

*Reviewer 32*

Under Master plans: since some institutions may have plans that were completed before the sustainability push, and they are quite expensive to commission, could STARS accept a "sustainability addendum to the master plan"?

*Reviewer 26*

I would relocate the requirement that the plan formally endorse LEED NC for all New Construction the likelihood that the validity and fairness tests will hold up on principle, values and equivalents is not clear this is.

*Reviewer 30*

would a strategic plan apply if it has specific goals/objectives on long-term campus planning?

## **OP Credit 6: Campus Design Specifications**

*Reviewer 33*

Why not explicitly require certification by a third-party? Otherwise, how do we know all items that would be verified through commissioning, etc., were delivered in the project?

*Reviewer 9*

Is the intent for the campus to choose either LEED Silver certification or equivalent? The way this paragraph reads right now it is not clear whether or not the campus must have the buildings certified by USGBC if they choose LEED Silver or if they are just required to write the LEED Silver requirements or equivalent requirements into their design specifications. We have shown that the results from buildings that go through LEED certification are significantly better than those that are only built to LEED specifications but not certified. It is my opinion that whether a campus chooses LEED or another rating system they should go through the entire process.

*Reviewer 17*

My institution has recently adopted a policy that we aspire to LEED building requirements, but we will not normally arrange for LEED certification. The campus believes that the money spent on verifying LEED certification could be better put into the building. I am guessing that this would not be a sufficient policy to get the point for this category. Perhaps this building design category could be split into 2 points, one of which is to have adopted green building standards and the 2nd to have LEED (or equivalent) certification for at least one building.

OP Credits 3 and 4: I am not familiar with these, but suggest that they be dropped in favor of my suggestion for giving 2 points for OP Credit 2.

*Reviewer 26*

OP2 is excessive and burdensome. It will drive more people away from LEED.

*Reviewer 30*

does LEED have a policy on use of the phrase "LEED equivalent" as it seems to be an end run effort to use their criteria without paying the fees, and I am not sure as how it may not violate their copyright/trademark holdings. also, if we can use LEED then this indicator should be tiered to award more points for different levels of LEED certification.

*Reviewer D*

I have said this before but I can't seem to get any one's attention on this. LEED Silver is entirely inadequate. LEED Silver buildings can be quite average. The bar should be LEED Gold and Platinum – with maximum energy points -- and the STARS rating system should establish that threshold. I can't say this strongly enough.

## **OP Credit 7: LEED-EB Trend**

*Reviewer 3*

A 3-year trend won't differentiate between institutions with little or no building and institutions that are building, but not to LEED standards. This might be one area where strategy and policy should count more than performance indicators, especially over a 3 year period.

*Reviewer 26*

OP3 LEED EB is available to LEED NC buildings after a 5 year term. Some will Make it. LEED EB is the toughest LEED criteria there is there are very few buildings in the US who can make it today. If this category stays it is worth more than one point. There should be a minimum percentage to enter the game otherwise If I have 10 million square feet and I do

25,000 square feet a year for three years and do not build a building I get a point. Meanwhile I still have 9,925,000 square feet of non LEED buildings.

*Reviewer 30*

OP Credit 3-4 these should be merged together. otherwise, I would encourage merging them and doing the tier system mentioned above.

*Reviewer 31*

OP Credit 3/4 – I think I'm ok with this, but I would rather see a campus build a green science building (energy hog) than a big LEED certified athletic facility with lots of square footage of air.

*Reviewer E*

From an operations standpoint a Commissioning plan brings results and is a system that OP understands and knows how to implement. LEED-EB is intended as a tool to maintain a building that was built to LEED NC standards. Most campuses have older buildings that would not qualify for LEED EB. A retro commissioning plan will help these buildings operate to their efficient potential. Add:

"Or, Institution must set up a retro commissioning plan for all buildings conducted on a regular basis and not longer than 5 year intervals. Institution must develop an ongoing plan to respond to the retro commission reports."

**OP Credit 8: LEED-CI Trend**

*Reviewer 3*

A 3-year trend won't differentiate between institutions with little or no building and institutions that are building, but not to LEED standards. This might be one area where strategy and policy should count more than performance indicators, especially over a 3 year period.

*Reviewer 26*

This LEED category exists for clients who are located in space which is not owned or controlled by them. This does happen in higher education but it is by far and away an anomaly. And de facto if it is the case that it is not owned it is not operated by the university or college I would suggest if there are any of these that as a percentage of square feet they have to meet a minimum 5% of the campus and that they be submitted as innovation point suggestions.