

LEED for Neighborhood Developments Rating System

This paper briefly addresses several key questions regarding how the LEED-ND rating system will work in practice. This paper is organized according to these questions and is almost entirely based on the *LEED for Neighborhood Developments Rating System – Preliminary Draft* (September 6, 2005).

What are some of the major process issues for developers interested in pursuing LEED ND certification?

Of course, developers will prefer as much certainty of certification as possible prior to incurring the costs of building out the planned development. Thus, a key issue for developers will be whether the process provides sufficient assurance of certification prior to the start of development. To partly address this concern, the LEED_ND Core Committee intends “to make available some form of LEED-ND formal approval at the planning stage, such that it could be earned by developers at the stage of land use entitlements.” In general, as of the release the Preliminary Draft, the implementation details regarding this predevelopment certification process have not been determined.

Without doubt, the overarching concern of developers will be how much more money the certification process will add to the cost of development. In the case of the other LEED building certifications, the additional upfront costs to developers may be offset by reductions in the ongoing energy, water, or maintenance costs of that building. In the case of LEED-ND, however, it is less clear how the developer will recoup the additional costs of certification without either grants or subsidies; since a neighborhood developer does not typically retain an ownership interest in the neighborhood after it’s developed, there’s no way for the developer to amortize the additional costs of certification over the life expectancy of the neighborhood. Given that the future cost reductions and environmental and quality of life benefits will accrue to the residents of the neighborhood and the jurisdictions that provide services to these neighborhoods, it’s feasible theoretically for the developer to be able to pass these additional costs on to the benefiting residents and jurisdictions. In practice, however, it will probably prove

difficult for developers to pass these costs on without a significant public education and outreach effort that helps make the external social and environmental costs and opportunity costs associated with typical non LEED-ND or greenfield developments better understood and accounted for.

Overtime, different neighborhood development business models may evolve that will help developers better share in the benefits of “doing good and being right.” For example, developers may choose to retain at least partial or limited time ownership rights to residential and commercial property, or, if local power generation is part of the development, they may choose to charge market rates for the power until their desired return on investment is achieved.

How is a neighborhood defined?

The LEED-ND Core Committee makes a critical distinction between a neighborhood and a neighborhood development. That is the intent is *not* to certify neighborhoods, but rather certify neighborhood development projects. Thus, certification is defined in terms of “development projects that perform well in terms of smart growth, urbanism, and green building, and may constitute whole neighborhoods, fractions of neighborhoods, or multiple neighborhoods.” They also go as far as to say that “Smaller, infill projects that may be just a single use, but complement existing neighboring uses... should be able to earn certification as well as larger mixed use developments.” Thus, the answer to the question of how big or small a neighborhood project must be to earn certification is that there are no restrictions based on project size.

Even though the intent is not to certify neighborhoods, the very act of assigning credits and creating pre-requisites for certification requires at least a qualitative understanding of what makes for a *good* or *more sustainable* neighborhood. Along these lines, the qualities of an ideal neighborhood are derived from new urbanist principles and include characteristics such as that a neighborhood should have:

- a legible center and edge;

- be limited in size, typically five minutes average walk from center to edge;
- a mix of land uses, to allow for some basic daily needs to be satisfied in the neighborhood;
- a diversity of household types;
- an integrated network of walkable streets; and,
- special sites reserved for public spaces and civic buildings.

These ideal neighborhood qualities combined with sustainability principles at the neighborhood level result in the following neighborhood development project goals:

- revitalize existing urban areas;
- reduce land consumption;
- reduce automobile dependency;
- promote pedestrian activity;
- improve air quality;
- decrease polluted stormwater runoff; and,
- build more livable, sustainable, enduring communities for all income levels.

In turn, these goals inform the intentions behind the selection of the prerequisites and point credits required for certification.

What are some basic strategies and approaches for obtaining LEED ND Certification?

The four basic strategies that will help ensure certification are to build high residential densities near transit and other uses on a previously developed site.

In general, there are very few points awarded for Environmental Preservation (only 11% of the total), so the strategic focus should be on meeting the prerequisites and obtaining whatever other points are easily available. A sure fire approach to meeting the environmental prerequisites and obtaining many related credits is to propose a project on

a previously developed site. Developing on a previously developed site will just about ensure that four of the five Environmental Preservation category pre-requisites are met. The only pre-requisite not met by this approach is the Erosion and Sedimentation Control requirement, which can only be met by reducing water and air pollution from erosion, sediment, and dust created *during construction*.

Similarly, both of the Location Efficiency prerequisites, namely, Transportation and Water and Stormwater Infrastructure efficiency, are directly met by proposing a project on a previously developed site. Furthermore, many of the very high point credits in this category will most likely follow from developing on a previously developed site (such as a strip mall). These high point credit attributes include:

- Adjacent, Infill, or Previously Developed Site (3, 7, or 10 points respectively)
- Reduced Automobile Dependence (2 to 6 points)
- Contribution to Jobs-Housing Balance (4 points)

The Compact, Complete, & Connected Neighborhoods category has the highest percentage of points available (37% of the total or 3.5 times the number of environmental preservation points!). The core strategies here are straightforward. Build high residential densities near transit and other uses. This approach will help ensure that most of the points available in this category will be easily achieved.

The final category is Resource Efficiency (22% of the total or 25 points). Given that there are no prerequisites in this category and that only 46 of the total 114 points are required for certification, a strong argument can be made for focusing on the least cost credits, if any at all. These measures include achieving 15% energy conservation for non-residential and energy star requirements for residential and 20 to 30% water use reduction. The energy conservation technology and techniques to achieve these modest conservation objectives are readily available and inexpensive to implement. These techniques include proper site orientation of buildings, adequate insulation, low-E high performance windows, ventilation cooling, high SEER air conditioners, tankless gas water heaters, fluorescent lighting, and energy star appliances in all residential buildings.

In sum, the LEED-ND rating system is focused on neighborhood location and design over resource efficiency or environmental preservation. In addition, the core assumption built into the rating system is that the Ahwahnee Principles for Resource-Efficient Communities are the principles to operationalize into a rating system that will help both developers and decision-makers build and foster sustainability into our neighborhoods and daily life patterns.