

Redefining Neighborhoods

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Monday, 08 October 2007

LEED-ND offers a new slant on creating communities.

Launched in late June of 2007, the LEED-ND (Leadership in Energy and Environmental Design for Neighborhood Development) pilot program is challenging the traditional American concept of "neighborhood." The LEED-ND program strays from the inclination to define neighborhoods by physical and spatial means. Rather, it offers a framework of predominantly performance-based criteria by which to create and recognize the quality of new communities. LEED-ND strongly emphasizes project location as well as planning, design and construction approaches that do not infringe on environmentally-critical areas, are pedestrian-oriented and are comprised of high performance buildings. The program further examines the impacts on, while concurrently leveraging, the existing infrastructure and larger surroundings. This expands neighborhoods to a vertical plane to include urban residential towers as well as redevelopments that are acres wide. The first national standard for neighborhood design, LEED-ND is a partnership between the U.S. Green Building Council (USGBC), the Congress for New Urbanism and the Natural Resources Defense Council. LEED-ND has four categories: smart location and linkage; neighborhood pattern and design; green construction and technology; and innovation and design process. The framework helps spur comprehensive thinking about smart development and offers a clear standard to help guide project owners and recognize their efforts. Incorporating the principles of smart growth, new urbanism and green building, the program treads new ground by aiming to take green building performance beyond, but not past, the building scale. Neighborhood-scale developments generally have longer design and construction schedules, so LEED-ND allows projects to participate at three different phases: optional pre-review, which happens before land entitlement; approved plan; and completed neighborhood development. Nine pre-requisites serve as the baseline requirements for projects to attain LEED-ND certification that cover proximity to existing water and wastewater infrastructure; public transportation access; community services within walking distance; avoidance of floodplains, prime agricultural soils, wetlands and habitat; open (as opposed to gated) communities; higher density; and construction activity pollution prevention. Currently, there are 238 projects participating in the LEED-ND pilot that span the globe and range from .1 acre to more than 12,000 acres. Green Building Services Inc. (GBS) is working on four pilot program projects that address a variety of neighborhood classifications including two urban towers, a multi-block infill redevelopment, and a multi-acre revitalization of a previously developed site. One example is the Eliot Tower, an urban condominium tower that adds density and vibrancy to downtown Portland, Oregon. Located on the streetcar line in Portland's cultural district, the "vertical neighborhood" project offers residents a diverse and less auto-dependant lifestyle. Developer John Carroll believes that the USGBC's recognition of the value and importance of high density developments through LEED-ND is an excellent step forward. "I think every developer should participate in the program," says Carroll. "We know we have to accommodate the needs of building occupants, so it makes sense to include density, public transportation and access to services as part of our planning process." The USGBC selected Eliot Tower as one of 60 projects to participate in a focus group. Gathering feedback from the team's direct experience with the new program, the USGBC will use this information to help shape the final version. The focus group will offer teams the opportunity to learn from others and discover which issues all participants face, as well as which ones are particular to certain project types. The Washougal Blocks in Washougal, Washington, is another LEED-ND pilot project that GBS is assisting through the process. The four-block catalyst redevelopment includes mixed-use, office and retail space and a community plaza in the heart of downtown Washougal. All of the buildings will also be designed and constructed to LEED for New Construction (LEED-NC) standards, which benefits the project's LEED-ND performance as well. Wes Hickey of Lone Wolf Development says the pursuit of LEED-ND certification fit in with his vision for the project. "This type of development helps build community, and we want to set an example of how to do this right," says Hickey. "As a result, we'll have a stronger, happier and healthier community." A green community can be defined as comprising four different parts: nature, people, buildings and infrastructure. Each part supports itself as well as the other parts in a way that produces no harm or waste, essentially creating a system that performs as nature would if left to itself. These mutually affirming relationships are the nexus of opportunity to create truly green communities. Planning and designing communities to function like nature is an extremely challenging and complex proposition. The impact of the four parts needs to be evaluated at various scales in space and time. LEED-ND represents a starting point to make this concept tangible in a set of required performance conditions. Because development teams don't often have the time to delve into this level of evaluation in the context of a project, LEED-ND becomes particularly useful by providing stepping stones to help a project begin to perform like nature. The significance of the relationships between nature, people, buildings and infrastructure underscores the important role that government has to play in laying the foundation for green community development. Through comprehensive planning, codes, zoning, incentives and assistance programs, local governments can institute mechanisms that help direct and support desirable neighborhood form and performance. LEED-ND can aid governments in developing standards to create new, or augment existing, public tools to meet this end. The pilot phase allows the USGBC to gather feedback from participating projects to revise and improve the effectiveness of the rating system, but the organization is in a difficult position of balancing rigor with program participation. Given that the inclusion of transportation can account for nearly three times the energy-related impacts of the building compared to building operations alone, the LEED-ND pilot includes a pre-requisite that precludes participation by projects not located near existing public transportation, on an infill site, within walking distance of

community services or located in an area where studies show less than average driving rates. By creating a barrier for developers with projects not located near transit but who might be interested in achieving other aspects of LEED-ND, this pre-requisite raises an interesting question. Working through the LEED-ND requirements provokes thoughtful decision-making and offers guidance in a variety of sustainable techniques that could benefit all developers. Yet the USGBC has a responsibility to encourage better land-use policies. While developments concentrated in urban areas can become socially vibrant areas, provide environmental stewardship and meet the intent of sustainability, it's possible that certain outlying projects might catalyze future transit. A two-pronged approach of working with local governments on zoning and development issues while concurrently inspiring developers outside urban areas to make changes might offer a balanced solution. Preliminary and feasibility assessments can help developers decide whether it makes sense to pursue LEED-ND or not. Although the pilot program is not accepting additional projects, an early assessment can ensure that LEED-ND compliant conditions are designed into a project, preparing it for submission when the final version is released in 2009. Obtaining direction on site selection, planning and design strategy and product feasibility will save owners and designers both time and money and maximize project performance in pursuit of LEED-ND. Green community assessments can also look beyond LEED-ND requirements to help create more holistic developments.