

RESEARCH YOU CAN USE

What Planners Need to Know About Evaluating LEED

At this point, there's no one—at least no one in planning—who doesn't know that the initials LEED stand for Leadership in Energy and Environmental Design. The green building certification system developed by the U.S. Green Building Council has become a global phenomenon. The council's mission is a sweeping one: "to transform the way buildings and communities are designed, built, and operated, enabling an environmentally and socially

say, have been dropped in recent years. We learned in those courses that input evaluation (a bus stop is on the property) is less useful than output evaluation (buses come with reasonable frequency), and that, in turn, is less useful than outcome evaluation (bus ridership is up and auto use down).

So I was interested to see two recent journal articles. In the September issue of the *Journal of Planning Education and Research*, Rebecca Retzlaff, AICP, of Auburn University writes about "The Use of LEED in Planning and Development Regulation." Retzlaff surveyed jurisdictions with LEED requirements to come up with a primer for local governments

new rating system. Among the strengths: LEED-ND gives heavy emphasis to development on infill sites and at other sustainable locations. Among the limitations: Projects may be certified even if there are no green buildings or affordable housing on-site.

These are the first evaluations of LEED in the planning literature, and they don't answer the big question posed above: What difference does LEED make on the ground (in terms of outcomes)? Maybe it is too soon to say. My first exposure to LEED-ND was as a consultant on a brownfield redevelopment project in Napa, California, called Napa Pipe, one of the first projects to be certified under the program. Our traffic impact assessment, which was conducted independently of LEED-ND, suggested that a small number of all trips generated by the mixed use development—about seven percent—would not congest the external street network or add to the region's vehicle miles traveled. That's because the trips would either remain within the development or would be transit or walking trips to outside destinations.

This is the kind of outcome information that should be central to the LEED

REGISTERED LEED PROJECTS FOR RATING SYSTEMS

Rating System	Approximate Number
New Construction (NC)	14,780
Core and Shell (CS)	2,835
Commercial Interiors (CI)	2,432
Retail (NC and CI)	100
Existing Buildings: Operations and Maintenance	3,484
Schools	907
Homes	17,081
Neighborhood Development	238

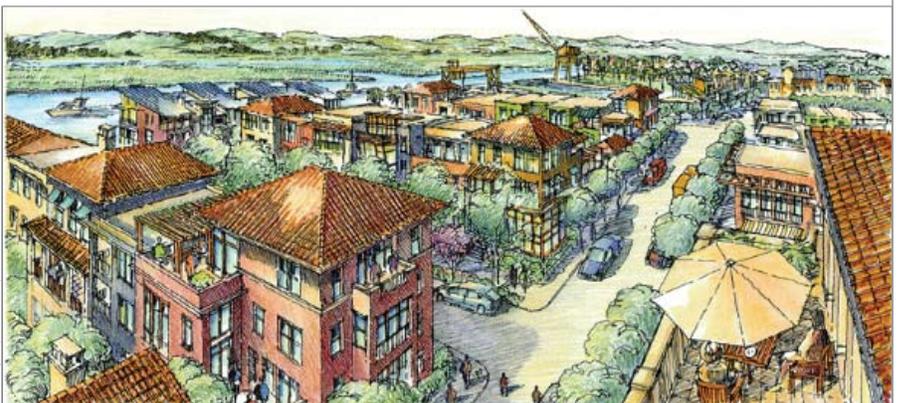
Napa Pipe, a brownfield redevelopment project in Northern California (below), is one of the first projects to be certified under LEED-ND. A traffic impact assessment showed that it would not add to regional congestion.

responsible, healthy, and prosperous environment that improves the quality of life."

Since LEED was launched in 1998 as a single rating system for new construction, it has expanded to encompass more than 35,000 projects in all 50 states and in 91 countries. There are now eight rating systems covering all types of development, from commercial interiors to homes and schools—with more systems to come. In the U.S., the ratings have been adopted by 126 cities, 36 counties, 28 towns, 36 state governments, 12 federal agencies, 16 public school districts, and 39 institutions of higher education.

There is no question that LEED has been a success in the number of registered projects. But is it leading to higher quality development?

In the 1970s, planning curricula included courses in evaluation research—most of which, I regret to



seeking to promote green building practices.

Ajay Garde of the University of California at Irvine is more critical. His article, in the autumn issue of the *Journal of the American Planning Association*, "Sustainable by Design? Insights From U.S. LEED-ND Pilot Projects," identifies the strengths and limitations of the

certification process. The program will be far stronger when it is built on verifiable good outcomes.

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