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Featured Story

The Greenest Neighborhood in America

By: Sean Rhiney, 9/15/2009

Its time to rethink green construction.

The perception: innovative green building techniques require new housing construction and a significant financial investment over and above traditional housing costs. The reality: 100 year old buildings might be better suited as green investments, and the costs to do so are minimal.

That's the conclusion a team of local experts arrived at after completing a study begun in 2008. The Over-the-Rhine Green Historic Study, managed by the Over the Rhine Foundation and historical preservation consultants, Gray and Pape, was developed to test a common assumption: that centuries-old historic buildings are inherently energy inefficient. Funded in part by grants from the Ohio Historic Preservation Office and Duke Energy, the study assembled a cross-disciplinary dream team of local historic, engineering, architects, and green

professionals. Their hope was that some green building techniques might be able to be implemented in conjunction with historic renovation of structures. The outcome, however, surprised even the experts.

With an estimated 500 vacant historical buildings in Over-the-Rhine, the opportunity to create the largest LEED certified neighborhood in America exists right here. Chalk it up to being largely built before the invention of cars and long before the existence of suburbs, but Over-the-Rhine's density and historic building patterns already embody most of what is now considered "green planning" or "new urbanism." Add in a little 19th century ingenuity melded with 21st century innovation and we have the opportunity to make our oldest neighborhood the greenest neighborhood in America.

And why not? Cincinnati's largest historic district is also one of the largest urban historic districts in the United States. Over-the-Rhine's scale and mixed-use building stock are unique and can easily accommodate housing, retail, offices, entertainment, and light industrial uses. Add in the fact that mixed use, historic neighborhoods with proximity to all the amenities offered in a central business district are what is attracting new urban residents and making cities appeal to young professionals, and you have a golden, nay, green opportunity. And with home ownership rates in Over the Rhine hovering just below 10%, attracting more individual homeowners into the neighborhood is an idea everyone can get behind.

The green historic study identified four prototypical buildings in Over-the-Rhine, and asked whether historic properties could be redeveloped affordably, in a historically appropriate manner, while still utilizing green guidelines. Using the federal standards for Historic Rehabilitation as the benchmark for "historically appropriate" and the Leadership in Energy and Environmental Design (LEED) point system created by the US Green Building Council as the test for being "green," the four buildings were put through architectural design work, historic and LEED analysis, and energy modeling. Ultimately, the study concluded that all four properties were capable of obtaining LEED certification; including reaching Energy Star levels of energy efficiency, while still complying with federal standards for historic rehabilitation. And it could all be done without significant added expense for the buildings' developers.

Of the four buildings participating in the study, two are deteriorating 'shells' owned by individuals who plan to turn them into primary residences. The other buildings include the Belmain Building at 1202-1204 Main, currently being renovated by Urban Sites into condominiums and retail space, and 1420 Pleasant, a multi-family currently being developed by Over the Rhine Community Housing.

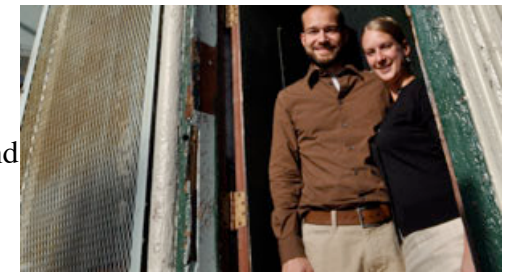
But is every historic building a candidate for LEED certification? Sanyog Rathod, a LEED accredited architect who worked on the study team notes that homes remodeled in the past two decades can be a bit more challenging because testing involved in the certification process requires access to crawl spaces and inside walls. The perfect building might just be one of the many vacant, unoccupied 'shells' plentiful in the neighborhood.

"If it's a gut rehab, it has a better chance of obtaining certification," he says.

And their guts are exactly what Reid and Patty Hartmann trusted when they invested in their own 'shell' on Vine Street.

The Hartmanns are both medical professionals - he's a physician with Christ Hospital; she's a pharmacist with Children's. The couple have lived on Main Street in Over-the-Rhine for a little over

five years.



While only a few blocks away from 3CDC's multi-million dollar residential and commercial reimagining of the Gateway Quarter, the Hartmann's building is on a block of Vine Street that is still largely undeveloped and underutilized. But if location is a benchmark of successful real estate purchases, the Hartmanns have struck urban gold, with their front door steps away from Findlay Market, Tuckers' diner, new Gateway retail, and a short bike or bus ride to the University and Hospital corridor where both work.

"We both love OTR, and felt that it was important to bring improvement to a block that needed help," Reid Hartmann says. "Main Street was continuing to improve so nicely, and we were getting the itch to work on a new property. It also helped that the price was affordable."

The Hartmanns purchased the house and an adjacent lot for a little less than $18,000, and estimate they'll spend $350,000-$400,000 over the next five years to completely rehabilitate their primary residence and a separate detached building in accordance with the environmental design and green historic study recommendations.

Even before the opportunity arose to work with the LEED study team, Hartmann knew they wanted to go green.

"We saw a great opportunity to create a home that had many sustainable features that are often not incorporated in current developments."

Their 1870s home was actually already 'green' before the study. Built in the common 'L' shape of many early 19th century houses, its design permits air and sunlight to penetrate the densely built environment and provides sufficient outdoor space as well.

The Hartmanns plan to implement many of the ideas resulting from the study, including installing geothermal heat and cooling, utilizing an operable window well skylight for air circulation, and other green finishes. They're also big fans of reusing historic products and scour local reuse resource centers for doors,

windows, fireplace mantels and other items.

"Some of our green upgrades may be in a later phase, such as solar panels, to keep costs down," he says.

Hartmann admits that there have been "moments of pure harmony and pure frustration" in balancing green rehab and preservation principles for their home.

"Owning a condemned property in a historic neighborhood in Cincinnati is not easy," he says. "Sometimes we forget that simply being able to reuse a building is the best form of preservation, as we have seen what happens to vacant buildings."

Rathod suggests that one of the benefits of working with LEED certification is the cradle to grave assistance with your project. He notes that certification guides you through the process by utilizing an integrated professionals approach and rewards you for engaging all of the necessary experts up front. And Cincinnati has a wealth of good advice out there to make it a reality.

"So many [green projects] are currently being built that there is a good amount of expertise that exists in our community," Rathod says.

While he might have more experience working on old historic buildings than the Hartmann's, urban developer Greg Badger says his building on Clay Street that's also part of the study will be his first green project as well.

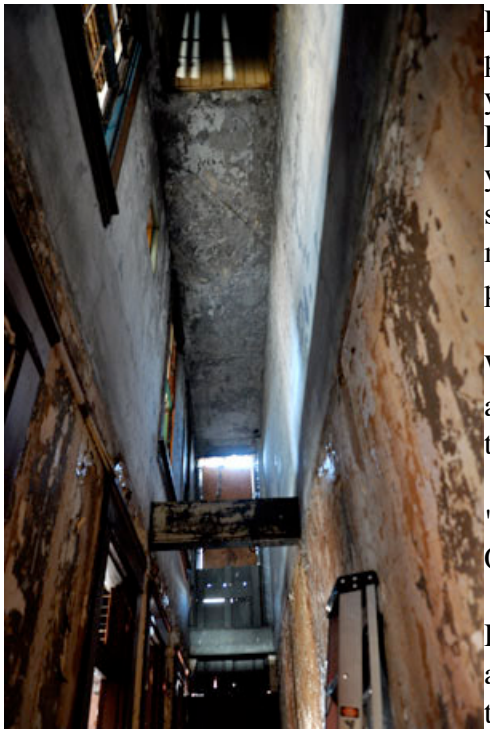
Originally a stable for the French Bauer Dairy constructed in the late 19th century, the industrial building will be a primary residence for Badger with rental units and storage. Currently, the building still has the original horse ramp used by the dairy, and Badger says that's part of the allure.

"I loved everything about the building; the history, the past use, design, location, size. I decided this could be the perfect next home for me and I could design a really nice loft. "

Badger hopes to start work on the building in the next three to four years and

complete the project within five. After purchasing his building for $140,000, he estimates a total build out cost of $300,000. He is still evaluating his design options for the space, and recognizes that in pursuing the LEED path costs will be higher up front, but the savings down the road more than make up for it.

"Some of the technologies involved in a LEED project are still new to the market so some of their costs are somewhat higher. You have to weigh that against the longer term benefits as well as cost savings in heating and cooling as well as lighting. With proper planning upfront, the cost shouldn't be any higher than traditional methods."



Rathod agrees. He estimates that if you're planning on investing $300,000 on a home, you would need about $8,000 more for the LEED certification process. But, he notes, you can expect up to 30-40% in energy savings over the life of the building which more than recoups your additional out of pocket costs.

While he admits to some initial skepticism about the project, Badger is now fully on the green bandwagon.

"With proper planning, most buildings in OTR can be green," he says.

Hartmann agrees, and believes Cincinnati, and Over-the-Rhine, is greener than we think.

"We have a solid residential recycling program. We are using energy saving technologies in our government buildings. We have an enormous number of LEED certified schools. Bike ridership is up and Metro buses accommodate bikes. We have Park and Vine. We have many great restaurants which feature local foods. We have great city and county parks. And we have solar panels on Findlay Market!"

And one day, the Hartmanns will be able to walk right down the street to the Market. It doesn't get any greener than that.

Want to learn more? The findings of the Over-the-Rhine Green Historic Study will be discussed Friday, September 18 in a public presentation at the University of Cincinnati's DAAP building located at 2624 Clifton Ave. The presentation is open to the public and admission is free. The presentation begins at 5:30p.m.,

followed by a question and answer session.

Photography by Scott Beseler