

REAL VALUE OF RENOVATION

By Kathleen Jircik, Megan Irvin, Kapil Upadhyaya

One of the first decisions a client is faced with when contemplating a project in the built environment—all the brick and mortar structures where we live and work—is whether to build a new structure or to renovate an existing one. There are challenges associated with both options. The end goal for both client and architect is a product that is high-performance, healthy, and creates value. In Houston, renovations are achieving all of these goals. Renovation projects are increasing in number, and examples of projects like the ones featured in this article prove that renovation can add value in many forms.

1. Enhance Local Character

Houston, unlike many cities, has few structures that preserve its history. One

example in neighboring La Porte, Texas, is Sylvan Beach Pavilion. Built in 1956, Sylvan Beach Pavilion has served local residents as an entertainment venue and as a place for community events. Thousands of people have celebrated family traditions, anniversaries, senior proms, and even rock concerts—in days gone by—at this local landmark. The Pavilion has weathered many severe hurricanes to date. The most recent was Hurricane Ike in 2008, requiring renovation or replacement of the Pavilion. The renovation of this historic building focused on bringing life back into this aging structure, while preserving the architectural details of the original design, but the real value created by renovating Sylvan Beach Pavilion lies in the preservation of its cultural and

historical character as well as the revenue it once again generates for Harris County and the city of La Porte.

2. Maximize Green Solutions

While renovating a structure is inherently “green,” another key component of a successful renovation is ensuring that its impact on the environment is as minimal as possible. This is most commonly achieved with energy and water efficiency retrofits. Another project example, 5900 Canal in Houston, consists of an industrial warehouse that is being renovated into offices and record storage for Harris County. Estimated energy savings for this project as a renovated, code-compliant building over 40 years should amount to \$265,000. Water savings on this project over the course



Sylvan Beach Pavilion, LaPorte, Texas, before (above) and after (below) Hurricane Ike.



5900 Canal Warehouse, Houston, Texas before (above) and after (below) renovations.



of 40 years should amount to 1.6 million gallons, which is equivalent to saving water for 53,000 baths.

While the pictures don't show it, the real value in renovating this warehouse lies in benefits that come from employee productivity: reduction in air pollution, reduction in carbon emissions, and health benefits from recycling. Based on multiple research studies, Autocase, an energy-savings software program, predicts savings from these measures in the range of \$645,450 over 40 years.

3. Increase Area Property Value

As buildings age over time, they may become rundown or completely abandoned altogether. Several districts around Houston have recognized that value can be added to an area by renovating these older, aging structures. As one building renovation is completed in a neighborhood, it sparks interest in further developments and attracts new businesses and residents from all walks of life. This spread of development illustrates how the value of renovation is not contained on one single property but also in the proportional increase of adjacent property values. The updates that accompany the restoration will also lower utility bills and allow owners to charge more rent for a net add to total income.

4. Keep Existing Footprint Advantage

Existing buildings are sited according to the plat and setbacks required at the time of their construction. In some cases, the same square footage could not be constructed if the building were demolished and re-built in the same location today. In the project example of Park Towers, the renovation improved energy performance, updated the appearance and exterior skin, and maximized the buildable area of the project site. If the two towers had been demolished, the new building footprint would have decreased in order to comply with current code regulations. The building owner gained a "like new" renovation for this project while maximizing return on the rentable area.

5. Reduce Cost

Saving costs in renovations also comes from avoiding construction and from reuse of the existing structural frame while upgrading the exterior



Park Towers, Houston, Texas, before (left) and after (right) renovations.

enclosure to current standards. An example of this is the renovation of a student center for Lamar University that preserved existing walls, saving \$1.5 million in exterior wall construction. Even after accounting for the cost of restoration of existing exterior walls, there was a net savings for exterior wall construction. In the example of the renovation of 5900 Canal from warehouse to office, all of the windows were replaced and the existing exterior wall had extensive repair and restoration. The cost to rehabilitate the wall and replace the windows was \$2.5 million, while the cost to build new walls and windows would have been approximately \$2.9 million, equaling an estimated net savings of almost half a million dollars.

6: Gain Historic Tax Credits

When a substantial rehabilitation is pursued on a historic building, several tax credit opportunities become available for the project that are not available to new constructions. In the state of Texas, there are two main programs that provide such credits: the Federal Historic Preservation Tax Incentives Program and the Texas Historic Preservation Tax Credit. There are several requirements historic buildings must meet in order to become eligible for these programs, but the effort is well worth the savings in the end. It is worthwhile to have a



5900 Canal warehouse, Houston, Texas before (above) and after (below) renovations.



consultant that can help you through the process required to document and claim the tax credits.

7: Preserve Unique Structures

Whether a unique building is important to people because of personal attachments or because it is recognized as a local landmark, it is critical to those involved in the building's future that these structures be preserved. Some of these projects are so unique in their design that renovation and restoration are the only path forward to achieve this goal. In the project example of the

NRG Astrodome, the first fully enclosed, open-span athletic facility often referred to as the 8th wonder of the world, this unique design paved the way for other structures of its kind. Renovation of this national icon ensures that the groundbreaking structure will live on for generations to come. This type of project sets a great example for how to preserve a unique piece of the built environment while simultaneously renewing its economic viability. **N**

With more than 30 years of experience as a licensed architect, Kathleen Jircik, AIA, LEED AP has managed a diverse range of project types from design to completion. A vice president at Kirksey Architecture, Kathleen is a member of Kirksey's Renovation Team and has worked as a project manager for over \$400 million of renovation and new construction projects. Kathleen can be reached via email at kathleej@kirksey.com.

Megan Irvin joined Kirksey as a Renovation Team member in 2014, executing and coordinating complex renovation projects. She has enjoyed contributing to the renovation of multiple projects for Harris County, including the 5900 Canal warehouse.

Kapil Upadhyaya, BEMP, LEED AP has more than 12 years of experience in the building industry and is one of a handful of ASHRAE-accredited Building Energy Modeling Professionals (BEMP) in Texas.