

10-5-2012

Revitalizing Cities: Adaptive Reuse of Historic Structures

Sara E. Sharpe
sara.sharpe@wayne.edu

Recommended Citation

Sharpe, Sara E., "Revitalizing Cities: Adaptive Reuse of Historic Structures" (2012). *Mid-America College Art Association Conference 2012 Digital Publications*. Paper 18.
<http://digitalcommons.wayne.edu/macaa2012scholarship/18>

This Article is brought to you for free and open access by the Mid-America College Art Association Conference at DigitalCommons@WayneState. It has been accepted for inclusion in Mid-America College Art Association Conference 2012 Digital Publications by an authorized administrator of DigitalCommons@WayneState.

REVITALIZING CITIES: ADAPTIVE REUSE OF HISTORIC STRUCTURES

Sara Sharpe
Wayne State University, sara.sharpe@wayne.edu

Fashionable words such as “green” are spreading throughout the interior design and architectural community at a rapid pace, referencing current and future designs as 'eco-friendly'. The truth is though that these adjectives should be used in a more vague sense of the term, applying to the methods of design rather than structures themselves. Sustainable design is not a new state of mind nor is it restricted to new construction. A very popular method in which sustainability is applied is the adaptive reuse of an existing, and sometimes historic, structure. This method reinforces the interaction and strong relation between the interior design and historic preservation fields.

An interior designer’s goal is to create environments with an appropriate aesthetic atmosphere that functions efficiently and insures the health and safety of the end users. The process involves interacting with clients to discover their needs versus their wants, researching the best ways to provide solutions, and applying their creativity to develop a cohesive space. The educational background of an interior designer discusses user needs and the building codes required to complete the project correctly, where as historic preservation programs do not typically stress codes and ADA requirements in detail.

A historic preservationist is trained to protect a sense of community and culture through seven levels of interaction – conservation, preservation, restoration, reconstitution, reconstruction, replication, and adaptive reuse. These seven levels can be applied in manners anywhere from an artifact, single room, house, community district, entire town, outdoor architectural museums, and landscapes. (Fitch, 1990) A major part of their process to preserve and protect involves educating others on local, state, national, and international levels of an item or site’s significance through documentation. Adaptive reuse brings these two professions together in the working environment as a preservationist works to protect the historic background and the designer converts the space for a new use.

Adaptive reuse is a long practiced method of adopting a pre-existing structure for new purposes that are often different from the original intent. This method is outlined to preserve the visual identity that the building contributes to a (historic) community (Fitch, 1990). Historic preservationists typically become involved when said structure was built fifty or more years prior to the reuse and/or has a cultural significance to its surrounding environment. This practice is viewed as sustainable for a number of reasons including restricting the amount of waste created and the recycling of various exterior/interior materials and possibly mechanical/electrical systems.

The case studies presented below reinforce the popularly used phrase of “the greenest building is one you don’t have to build”. They are also examples of how adaptive reuse provides cities and residents with their wants and needs while achieving the goals of historic preservationists and interior designers as well. While each discusses a main focus on a few specific structures, they are all a unique glimpse into adaptive reuse kick starting the revitalization of entire districts too.

CASE STUDIES

Pioneer Woolen Mills → Ghirardelli Square San Francisco, CA

The site that is now known as Ghirardelli Square originally began as a woolen mill owned by Heynemann, Pick and Company. The original structure from 1858 had a wooden frame and was powered by a coal-fired steam engine. In 1861 this building was lost in a fire and later replaced by the two-story brick building designed by William S. Mooser that sits at an angle to the grid streets of the city. Two additional floors were added to the structure in the 1860s and until 1889 the site was used as a wool mill (Delehanty, Lanier, & Platt, 1982).

Domingo Ghirardelli had been in San Francisco working as a merchant since 1852, expanding his chocolate, coffee, and spice company throughout three properties around a small three block radius within the neighborhood of Jackson Square. In 1892 Domingo retired as head of his company and left the business to three of his sons. One year later they purchased the city block (bound by North Point, Polk, Beach, and Larkin Streets) that the Pioneer Woolen Mill building existed on with a few other structures and moved manufacturing to overlook the San Francisco Bay. The site remained with the Ghirardelli Chocolate company for nearly seven decades before transitions for the company and property began to take place. During that time the company constructed new buildings on the site between 1900 and 1923 designed by William S. Mooser Jr., son of the Pioneer Woolen Mills architect. The construction included the cocoa, chocolate and mustard buildings, a power house for the complex, the clock tower, and the iconic Ghirardelli sign that overlooks the bay. At this point in time the original structures that were purchased with the block property had been adaptively reused for new purposes needed for the company (Delehanty et al., 1982).

The Ghirardelli name, products, formulas, and equipment were sold to the Golden Grain Macaroni Company in the early 1960s (Ghirardelli Chocolate, 2013). In 1962 it was made public that the Ghirardelli manufacturing process would be relocated to a modern facility outside of the San Francisco boundaries and rumors of the facility being replaced by an apartment complex began. At this time William M. Roth and his mother purchased the buildings and began working with an architectural firm to design a complex to contain retail shops, offices, restaurants, and a movie theater. Eventually more than 75 tenants would bring life to the square.

All of the buildings but one was reused for a new purpose and a construction of new units were limited to maintain the site's original atmosphere and characteristic architecture. The complex opened to the public in 1964 and was considered the first successful adaptive reuse project in the country by many, receiving its place on the National Historic Register in 1982. Since then numerous sites have tried to imitate their success, including but not limited to Larimer Square in Denver, Trolley Square in Salt Lake City, Canal Square in Georgetown, and Baltimore's Inner Harbor (Delehanty et al., 1982).

Commercial Freight Port → Charles Center & Inner Harbor Baltimore, MD

The harbor in Baltimore, Maryland had been an economically thriving center for decades, beginning in the early 1700s as an official Port of Entry for the Maryland tobacco trade. By the 1790s the harbor led the nation in ship construction. During the mid 1800s the area also became known as the

center of canning in the United States, beginning with oyster canning. Rail connections were created, the population grew, and the steel industry moved in. By the 1900s steel was the dominate industry in Baltimore, resulting in another population growth as new workers were required in the area (Healthy Harbor, 2012).

The area remained relatively productive during the depression of the 1930s and World War II allowed the area to thrive as a military seaport and supply center. The harbor remained an economic center for the city until the decline of the 1950s freight and passenger use of the harbor ended. As the larger industries abandoned the site, smaller businesses and residents followed. In 1954, not long after the decline began, the cities local government committees sprang into action by creating a master plan to revitalize the area. During the planning process it was decided that the project was too large to accomplish in one effort and broken into three phases, the first of which was introduced in 1957 (Millspaugh, 2003).

Phase one of the plan focused on a 22 acres site with 33 existing structures. After researching, the committees involved discovered a need for office environments to draw in new businesses and opened a competition for the design of the first new building, One Charles Center. This competition, along with a \$25 million municipal bond that was passed in 1958 to support the revitalization of the site, created a forward motion for the project (Global Harbors Documentary, Inc., 2008). Mies van der Rohe's design entry was selected and by 1962 construction was complete. In the following year three more structures were in progress and six projects were in planning and design phases (Millspaugh, 2003).

The success of Charles Center created and spread excitement through the community, causing the second phase of the plan to be picked up immediately. As the Inner Harbor Master Plan was announced a \$2 million municipal bond was passed to implement the plan (Global Harbors Documentary, Inc., 2008). Phase two would focus on revitalizing the inner harbor itself, which included developing office environments, housing, and community entertainment. This required demolition of approximately one third of the area. The city hall and financial district would be rehabilitated as the rest was rebuilt. The first major push from outside the community came from the USF&G Insurance Company to replace its headquarters. Their involvement encouraged other commercial commitments, including IBM, the Federal Reserve Bank, the Federal Courts, and others (Millspaugh, 2003).

By 1973 the area had been rebuilt with an open space to promote community activity. The city encouraged this use throughout the phase by introducing attractions to the harbor beginning with the USF Constellation in 1969. This year also hosted the announcement of a community college campus in the area to bring a daily population to the area. By 1975 the harbor was home to private marinas, tour boats, a shuttle to Fort McHenry, and a World War II submarine. The city created an Office of Promotion in city hall to plan festivals and events in the harbor area. In 1973 the city fair relocated from Charles Center to the harbor, drawing in an even larger crowd from suburbs outside of Baltimore (Millspaugh, 2003).

As phase two came to a close in 1975 the only goal left was to create housing units for an urban living environment. The city's Department of Housing and Community Development took charge by offering residents rowhouses for \$1 in exchange for them rehabilitating the properties. The success of this decision provided the urban housing that the plan originally described and promoted future

residential projects in the area, including elderly housing in 1979 (Millspaugh, 2003 & Global Harbors Documentary, Inc., 2008).

Phase three's goal to attraction tourists began immediately in 1976 with a large centennial celebration with eight tall ships docked in the harbor. The event brought millions to the rehabilitated harbor and displayed the city's new pride. Over the next five years Baltimore's Inner Harbor would become home to a new convention center, aquarium, hotel, theater, and a performing arts tent. All of these attractions continued to draw tourists over the years. In 1982 it was estimated that the harbor was receiving 20 million visits a year (Millspaugh, 2003). A new subway station was opened in 1983 to accommodate transportation to the harbor (Global Harbors Documentary, Inc., 2008).

The third phase of Baltimore's plan marked the city's success nation-wide and began to inspire other cities to follow by example for years to come. National followers include Long Beach, CA; Norfolk, VA; and Honolulu, HI. International followers include Sydney, Australia; Osaka, Japan; Barcelona, Spain; and Belfast, Ireland (Global Harbors Documentary, Inc., 2008).

Pittsburgh & Lake Erie Railroad Complex → Station Square Pittsburgh, PA

The Pittsburgh & Lake Erie Railroad (P&LE) was chartered in 1873 and began construction on a rail line to connect Pittsburgh to Youngstown, OH four years later. The line officially opened in 1879 to transport coal and coke industry goods to the Lake Erie region (Western Pennsylvania Brownfields Center, 2007). The railroad selected a site approximately 40+ acres in size along the Monongahela River across from the main downtown community in Pittsburgh to develop a complex with a seven-story terminal, a freight house, and various other small structures.

As motor and air traffic became more popular the P&LE Railroad's business declined. By 1970 the railroad did not need the Pittsburgh facility any longer and abandoned the site, leaving its structures to decay over time. After six years the Pittsburgh History and Landmarks Foundation (PHLF) purchased the site and used a \$5 million grant from the Allegheny Foundation, a local Pittsburgh charity, to create a plan to adapt six of the structures for a mixed use facility. Richard Mellon Scaife, the chairman of the foundation, was quoted calling the project "an urban renewal project that doesn't feature the bulldozer – a project that preserves and builds rather than destroys" (Nichols, 1977). The buildings offered approximately 700,000 square feet of space that would be filled with dining, entertainment, retail, and office environments (Ziegler, 1980).

The plan began with the terminal building being reused as a fine dining facility driven by a Detroit resident, C.A. Muer. The Beaux-Arts structures were rehabilitated to preserve the iconic ornamentation and premiered the Grand Concourse restaurant and Gandy Dancer Saloon in April, 1978. The upper levels of the terminal were reused as office space for the PHLF and a few other companies (Ziegler, 1980). The next step of the plan was to convert the 85,000 square foot freight house interior into a retail space. The structure's original rail line was designed to become a focal point with historic rail cars converted into retail spaces and restaurants (Nichols, 1977). In 1979 the area became known as Station Square with its National Register of Historic Places nomination (National Register of Historic Places, 2012).

Before the end of 1980 three more projects were underway to expand the new complex. A six story industrial building would be adapted to offer office spaces with views of the river, PHLF created an

agreement resulting in a new Sheraton Hotel that would become accessible from the Freight House Shops, and boat docks to house the Gateway Clipper fleet were being designed. A study was also being conducted to determine the desire for apartment housing in the area (Ziegler, 1980).

PHLF invested \$35 million into this project, which totaled development cost at \$72 million. The Station Square project was successful by 1994 when the PHLF sold the properties to Forest City Enterprises. Until this sale, through an agreement with the IRS, the PHLF was able to use all of their net income from the project towards other preservation and adaptive use projects throughout the inner-city (Nichols, 1977 & Ziegler, 1980). Forest City Enterprises continued development, completing an addition to the Sheraton hotel in 2002 and developing the Bessemer Court to extend restaurant and retail environments across the waterfront (Station Square, 2012). The area is currently accessible via car, subway, shuttle boat, and public transit. The Monongahela Incline station has also allowed access to and from the Mount Washington community since 1870 (Station Square, 2012).

Many cities play host to the abandoned buildings that have great potential for adaptive reuse and an important part of revitalizing such a structure (district or city) is understanding its original purpose, passing-of-hands, and how it came to be in its current state. Often times when researching a single structure, the information applies to the entire city’s history as well. In areas dubbed decaying cities we find that a pattern emerges, affecting numerous structures, complexes, entire districts, or even the entire city.

This pattern (Figure 1) begins with a boom of commerce and the need for workspaces, warehouses, factories, etc. Along with the commercial necessities, new employees flock to the area and with them begins residential construction. Over time market demands change causing production to evolve in any number of ways including growth, reduction, relocation, or even elimination. In the circumstances of reduction, relocation, and elimination adaptive reuse opportunities are born. Some structures are lucky enough to be sold, though others are abandoned and left to degrade on site. While this is a problem in itself, the point-of-view that these structures are useless is what needs to change.

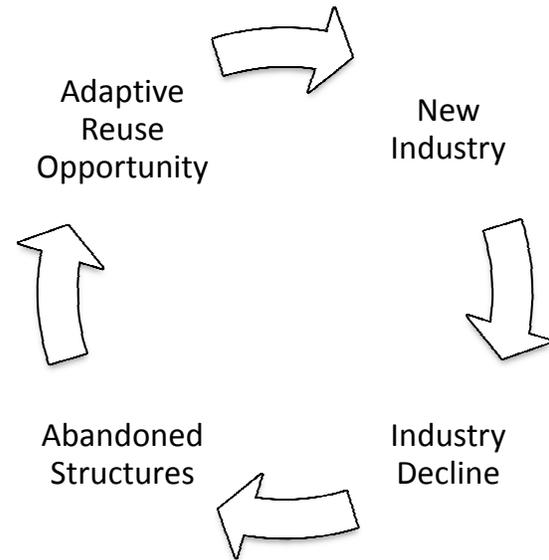


Figure 1: Circular Theory of Adaptive Reuse

The case studies previously discussed are successful examples of structures and/or sites that were left to sit up to six years before a plan was put into place. The circular theory of adaptive reuse is clearly observed in each theory (Figure 2-4), San Francisco displaying two levels of adaptive reuse. Each figure lists the original industry and structures matched with their evolution over time. The key to their success is based on three key players: a city government or private organization, commercial industries or companies, and the local residents.

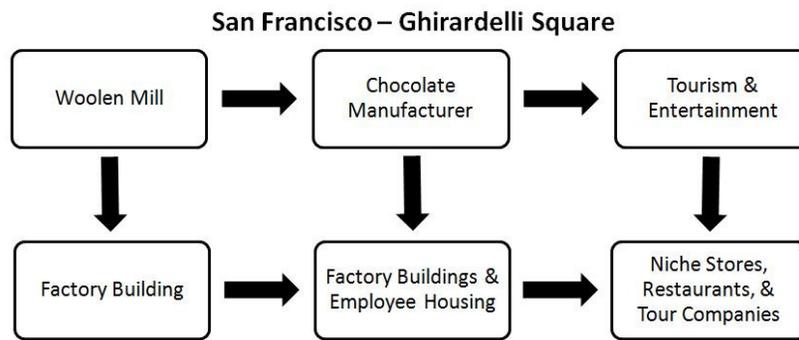


Figure 2: Levels of Adaptive Reuse in San Francisco

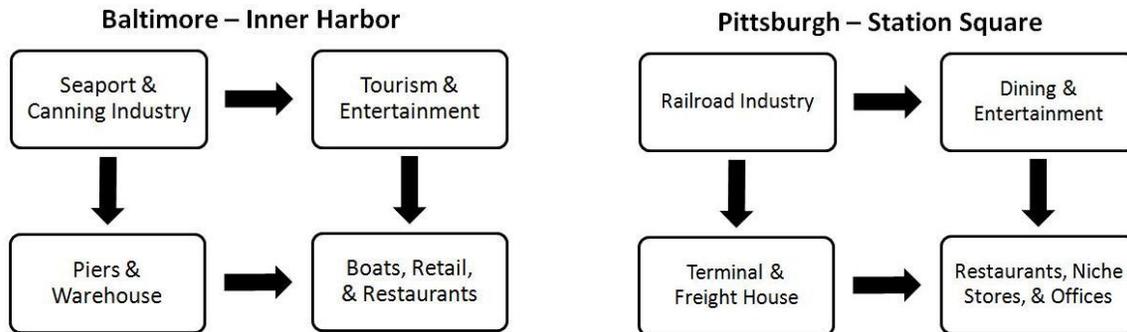


Figure 3: Levels of Adaptive Reuse in Baltimore

Figure 4: Levels of Adaptive Reuse in Pittsburgh

In many instances the city government is the first to make an effort towards revitalization by the definition of their responsibilities alone. Baltimore is a great example of a city government wasting little time before recognizing the problem and developing a master plan to resolve it. Each city is tasked with ensuring a thriving economy. When local industries begin to decline the city needs to respond in order to maintain its stability. The longer a city waits to respond to industry decline, the harder it becomes to revitalize. When businesses do not replace previous ones immediately and structures are allowed to degrade for a longer period the need for a master plan to be developed is more severe. These plans are typically used to define (building) renovations and/or (site) re-design in order to attract new businesses to the area after completing a study to discover what the city and residents need and desire.

After a plan is developed, proposed, and adopted, funding is sought out to put it in motion. Many cities have had success raising taxes, passing a millage or municipal bond, and always accept donations. Private organizations and non-profit groups have also initiated revitalization efforts for single structures, a complex, and even districts. Funding in these circumstances is very similar, but does not include options to raise taxes or pass a millage or municipal bond. These groups can however take advantage of state tax incentives, which are available in numerous states for single structure or small district projects. Once supportive funding is established, design and construction phases begin, accompanied by advertising to attract new businesses to the area.

Interior designers and historic preservationists need to be involved throughout the next steps of the project in order to preserve local history as structures are renovated for new uses. Important aspects to any structure, complex, district, or city should be preserved so that the community does not lose connection with its past. In many situations awareness is heightened by displaying historic photographs to be compared to the current experience. Station Square in Pittsburgh celebrated its history by preserving the terminals architectural elements and interior design of the first floor within the new restaurant and bar atmosphere. The Freight House Shops also reflect on its original use by marking

the rail lines previous locations with tile mosaics and a unique conversion of boxcars into niche retail shops. The Ghirardelli son’s specifically hired William S. Mooser Jr., son of the Pioneer Woolen Mills architect, to design their new structures to be cohesive with the original wool mill during the first phase of adaptive reuse. Ghirardelli Square also re-enforced design regulations during the second phase of adaptive reuse so that the new restaurants, retail shops, and entertainment venues did not alter the historic architectural image that the chocolate company created. All three of the case studies include historic markers throughout the areas to commemorate their past as new businesses moved in.

Commercial industries and companies are crucial to every revitalization plan. Without a new business to use the revitalized space an economical boost to the area is not possible. In order to optimize the opportunity to attract new companies the master plan must begin with an analysis of the type of businesses the area desires and what necessities they require verses what already exists. For instance, in Baltimore they desired to attract a large company to bring jobs to the area. A study discovered that there was a need for new office environments in order to attract such business. Once the city had supplied this type of environment, an insurance company opened a new headquarters. The analysis of the site is very important because commercial industries and companies are not required to participate and often have numerous options, including new construction rather than adaptive reuse.

Local residents are important to the revitalization process for two main reasons. Any revitalization plan needs to address their wants and needs. The development of the master plan should always include local residents’ opinions when considering what type of businesses to attract to the area. Surveying gives a community-wide response reflecting their needs and desires. Their responses may be the determining factor between planning for a large company or various small businesses. The second applies to situations where the city government is coordinating the project, as funding becomes an important matter that affects every citizen of the city. Raising taxes is never a popular decision, so it is important that residents are interested in the revitalization plans, making it easier to pass a millage or municipal bond for funding. The mistake of not considering local opinion may cause the project to fail as residents are not required to participate either.

As the situation stands today, the city of Detroit can learn a lot from previous examples and is in the perfect position to become an adaptive reuse project. This city has waterfront, urban, and suburban areas with potential revitalization based on the city and residents’ needs and desires. Unfortunately Detroit did not respond quickly when the auto industry began to decline, but this does not mean that the city cannot turn around still. However, the local government does need to respond sooner rather than later as time is not on its side as the city’s stereotypical image grows and current (and potential) residents do often opt to leave the area. The belief that Detroit’s revitalization on a larger scale due to population loss is skewed, as two of the case study cities have experienced similar losses. (Table 1)

Population Gain/Loss from 1960 to 2008			
City	1960 Pop.	Est. 2008 Pop.	Percent Gain/Loss
Baltimore	939,024	636,919	-32
Detroit	1,670,144	912,062	-45
Pittsburgh	604,332	310,037	-49
San Francisco	740,316	808,976	9

Table 1: Population Gain/Loss from 1960 to 2008
(Gallagher, 2010)

Baltimore's population loss of 32% and Pittsburgh's loss of 49% are discouraging numbers, yet their revitalizations have proven successful due to the support of residents during the funding and construction phases. Detroit's population loss is discouraging, but not a deal breaker. The success of a revitalization project in Detroit will be dependent upon its local residents' involvement of the process. If a plan is developed with the residents' and city's needs and desires in mind a successful revitalization is possible. Due to the city's struggles in the past, it may be in the best interest of the plan to take a similar approach to Baltimore, focusing on the overall goal but applying it in smaller phases for a more manageable success. In any instance of a plan being pursued, historic preservationists are an important part of the team to ensure that our local history and community is not lost as interior designers convert existing structures and incorporate new ones. The two professions will be at the front of the line as revitalization takes place.

WORKS CITED

- Important dates during the history of Harborplace. (2010, July 1). *The Baltimore Sun*. Retrieved from http://articles.baltimoresun.com/2010-07-01/business/bs-bz-harborplace-timeline-20100701-11_1_light-street-pavilion-tall-ships-rouse
- Delehanty, R., Lanier, A., & Platt, Bland. (1982). *Pioneer Woolen Mills and D. Ghirardelli Company*. Unpublished national register of historic places inventory – nomination form. Retrieved on September 14, 2012 from pdfhost.focus.nps.gov/docs/NRHP/Text/82002249.pdf
- Fitch, J. M. (1990). *Historic preservation: Curatorial management of the built world*. Charlottesville, VA: University of Virginia Press. pp 41-44, 46-47
- Gallagher, J. (2010). *Reimagining Detroit: Opportunities for redefining an American city*. Detroit, MI: Wayne State University Press. pp 7
- Ghirardelli Chocolate. (2012). Ghirardelli's heritage – 160 years. Retrieved on September 13, 2012 from www.ghirardelli.com/about-ghirardelli/ghirardellis-heritage-160-years
- Global Harbors Documentary, Inc. (2008). Baltimore's Charles Center-Inner Harbor timeline, 1950 - 2000. Retrieved on September 25, 2012 from http://www.globalharbors.org/baltimore_inner_harbor_timeline.html
- Global Harbors Documentary, Inc. (2008). Model for the world: Examples of port cities influenced by Baltimore's waterfront renaissance. Retrieved on September 25, 2012 from http://www.globalharbors.org/model_for_the_world.html
- Healthy Harbor. (2012). History of the harbor. Retrieved on September 15, 2012 from <http://www.healthyharborbaltimore.org/state-of-the-harbor/history-of-the-harbor>
- Millspaugh, M. L. (2003, April). The Inner Harbor story. *Urban Land*, 36-41.
- National Register of Historic Places. (2012). National register information system. Retrieved on September 27, 2012 from http://nrhp.focus.nps.gov/natreg/docs/All_Data.html
- Nichols, A. (1977, February). Pittsburgh to revitalize river area. *Preservation News*, 17 (2), 1, 13.
- Station Square. (2012). History. Retrieved on September 26, 2012 from <http://www.stationsquare.com/info/history>
- Station Square. (2012). Inclines. Retrieved on September 26, 2012 from <http://www.stationsquare.com/info/inclines>

Western Pennsylvania Brownfields Center. (2007). *Station Square (P&LE Railroad)*. Retrieved from <http://www.cmu.edu/steinbrenner/brownfields/Case%20Studies/pdf/station%20square1.pdf>

Ziegler, A. Jr. (1980). Large-scale commercial adaptive use: Preservation revitalizes old buildings – and new ones too! *North Carolina Central Law Review*, 11(2), 234-242.