

Cincinnati Union Terminal Cincinnati, OH

A Case Study on Space for Cultural Sites and Museums



Figure 1. Cincinnati Union Terminal, today (Courtesy of CMC)

An Art Deco Masterwork Uniting Seven Railroads

As a major center of railroad traffic in the late 19th and early 20th centuries and an interchange point between the Northeastern and Midwestern states, Cincinnati had no fewer than five passenger stations downtown. In the early 1890s, the railroads began negotiations to create a Union Station to consolidate and simplify passenger traffic and to raise that station above the flood plain of the Ohio River, as the other stations were prone to flooding. However it would take until 1928 for the seven railroads and the city to come to agreement, after intense lobbying led by Phillip Carey Company president George Dent Crabbs. The seven railroads involved in the agreements were the Baltimore and Ohio Railroad; the Chesapeake and Ohio Railroad; the Cleveland, Cincinnati, Chicago and St. Louis (“Big Four”) Railway; the Louisville and Nashville Railroad; the Norfolk and Western Railway; the Pennsylvania Railroad; and the Southern Railway.

Construction began in 1928 under the auspices of the newly-formed Union Terminal Company, with considerable site preparation and the grading of a portion of the Mill Creek flood plain on which the terminal was to stand. The terminal building itself was begun with the laying of the cornerstone on November 30, 1931, and the station opened on March 31, 1933. The total cost of

the project was \$41.5 million. A huge project, it involved over 2,000 workers constructing 22 buildings over 287 acres, including the Western Hills Viaduct, a cooling station, machine shop, roundhouse and rail car service building.

The principal architects of the [Cincinnati Union Terminal, one of America's great Art Deco rail stations](#), were Alfred T. Fellheimer and Steward Wagner, with architects Paul Phillippe Cret and Roland Wank brought in as design consultants. Cret was largely responsible for the building's signature Art Deco style, and is often credited as the building's architect. Its ten-story, half-domed limestone and glass main entrance hall was the only half dome in the Western Hemisphere and the largest in existence when it was constructed.

Standing one mile north of the center of Cincinnati, the entrance faces east over a quarter-mile plaza on what was once Lincoln Park. An illuminated fountain, cascade, and pool further landscape the entry. The dome is flanked on either side by curving wings, and on either side of the main entry doors Maxfield Keck's bas reliefs depicting transportation and commerce keep watch.

German artist Winold Reiss designed and created two 22-foot high by 110-foot long color mosaic murals depicting the history of Cincinnati for the entry rotunda interior, two murals for the baggage lobby, two murals for the departing and arriving train boards, 14 smaller murals for the train concourse representing local industries and a large world map mural located at the rear of the concourse. Reiss spent nearly two years completing these murals.

During its heyday as a station, Union Terminal could handle 17,000 passengers and 216 trains a day, with bus and taxi ramps that led to the 22,000 square-foot rotunda. While it had a brief revival in the 1940s because of World War II, it began to decline rapidly afterwards. The number of trains was down to 60 per day in the 1950s, to 24 in the 1960s, to 2 in the 1970s.

By the time Amtrak began operations in 1971, service had been reduced to just two round-trip trains a day, the *George Washington* and the *James Whitcomb Riley*. The terminal was abandoned for transportation purposes on October 28, 1972 in favor of a much smaller shed that Amtrak built—since demolished—on the city's riverfront.

Adaptive Reuse: Third Time's the Charm

It is not always clear what kind of reuse will work for a building. As early as June, 1963, the Cincinnati Planning Commission was considering future uses for this monument, which some swore was a white elephant. Built to last, it would have cost more to pull the building down than to repurpose: a hidden benefit of reinforced concrete. Various possible uses were suggested including railroad museum, multimodal transportation center, courts building, convention center, Air Force museum, museum of science and industry, space for private industry and shopping center. A science center, funded by federal grant and private and corporate gifts, opened there in 1968, but closed after only two years of operation because of financial difficulties.

Meanwhile, Southern Railway purchased the rail yard behind the Union Terminal in the 1970s, when rail travel was at its lowest ebb, and needed to tear down the 450-foot long passenger concourse to allow headroom for its new piggyback freight cars, many of them, ironically, loaded with truck trailers. Directly in the path of the wrecking ball were the 14 Winold Reiss mosaics depicting local industry. At the last moment, a group called Save the Terminal raised over \$400,000 to cover the cost of moving the murals to the Greater Cincinnati International Airport

terminal, where they remain today. The 14 industry murals were removed during demolition of most of the passenger concourse in 1974; the world map is the only mural not preserved.

The Union Terminal was added to the National Register of Historic Places in 1972 and declared a national historic landmark in 1977. In 1975, the city of Cincinnati purchased the terminal for \$2 million and the land under it for another million dollars and then sought to lease it however they might.

Three developers presented ideas for the building, and the city selected the plan which Columbus developer Steve Skilken, of Joseph Skilken Company, had proposed turning Union Terminal into a magical shopping land with everything from an indoor ice skating rink to a bowling alley. Within a few years, the Joseph Skilken Company reopened the terminal as an entertainment and shopping complex, "Land of Oz," investing more than \$20 million for renovations, restaurants, a bowling alley and a roller skating rink as well as shops. Although this venture began with 54 tenants at its 1978 opening—many specialty shop kiosks and a large Loehmann's dress store under the main rotunda—the recession saw them reduced to 21 by 1982. By 1984, a victim of the recession, the mall was all but dead, and only renovations necessary to the mall project had been done.

The Museum Project—the Second Renovation

The Cincinnati Historical Society, founded in 1831 in Columbus and moved to Cincinnati in 1849, had collected an impressive library and was outgrowing its existing quarters by 1980. At that time, they hired E. Verner Johnson, an experienced museum designer, to sketch out various options for the future. One of those options was collaboration with the Cincinnati Museum of Natural History, which was also bursting at the seams and in dire need of new housing. The proposal, originally rejected because of the estimated cost, was revisited in 1984, two years before the city's bicentennial. The Union Terminal was one of the 50 sites that Johnson looked at; he had fond memories of it from his childhood, and was intrigued by its possibilities.

The Union Terminal possessed a literally hidden treasure. To raise it above the Mill Valley Creek flood plain, the Union Terminal had been constructed on 5.5 million cubic yards of fill dirt, and to construct the building at the proper height, a vast area of 160,000 square feet with a 24-foot ceiling had been left largely unfinished underneath its front. In fact, in its heyday there had been an entrance underneath the building and lanes passing through so that cars, taxis, buses and trolleys could leave off passengers in that sheltered venue. The bottom of the building had even been opened for parking. Johnson showed this vast unfinished space to the two organizations, and explained that with nearly 500,000 square feet of usable space, a remodeled terminal would be far less expensive than a new construction. Thus, the administrators of the Cincinnati Museum of Natural History and the Cincinnati Historical Society developed plans for a joint museum project to enhance the neighborhood and provide a resource for the city. The spaciousness of Cincinnati Union Terminal, coupled with its Art Deco design and history, made it the clear favorite of all the proposals.

Former Cincinnati mayor Jerry Springer adopted the idea for the museum center in 1986 and he was one of the major proponents of saving the terminal. Mayor Springer even recorded "Save the Union Terminal,"¹ a plea to revitalize the train station, as part of a \$1 million dollar fundraiser.² As part of Mayor Springer's efforts, one of the city of Cincinnati's most successful capital campaigns on record was put into action. More than 3,000 individuals, corporations, and organizations contributed to the restoration of the new station.

Funding came from a variety of sources, including city, state and county governments. The city of Cincinnati negotiated the lease of the building and contributed a grant of \$3 million in addition to an \$8 million grant from the state of Ohio. In 1986, Hamilton County voters approved a \$33 million bond issue for the restoration of the terminal for the first phase of renovation and retrofitting the Terminal to house a multi-museum complex.³

It can be said that the Union Terminal saved the museums instead of the converse. So many of Cincinnati's citizens had memories of loved ones who had passed through that rotunda and concourse on the way to fight in World War II, and of joyous homecomings—and for those that did not return home, this edifice is their memorial, according to Steve Terheiden, Senior Director of Facilities and Operations at the Cincinnati Museum Center. Others, like Johnson, had fond memories of traveling through it in childhood. It is probably this memorial aspect, the monument to memory and their past, which has caused Cincinnatians to cling persistently to a place once viewed as a white elephant.

Success as a Cultural and Educational Destination

The Hamilton County Board of Commissioners approved the plan put forward by E. Verner Johnson & Associates, Glaser Associates Inc. (now glaserworks), Wilson & Associates, Graham-Obermeyer & Partners, Fosdick & Hilmer, and Bentley Meisner Associates. Glaser, the planners, were not sure if the project would be a success or not, and still view it as an experiment in progress, according to Terheiden. In November of 1990, Cincinnati Union Terminal reopened as an educational and cultural complex featuring the Cincinnati Museum of Natural History, the Cincinnati Historical Society Museum and Library and the Robert D. Lindner Family OMNIMAX® Theater.

The success of the renovation made it possible for Amtrak to schedule a Cincinnati stop at the Union Terminal on its Chicago-bound route in 1991. In 2009, close to 15,000 Amtrak passengers traveled to and from the station, and in 2010, only slightly fewer passengers made their way through the terminal's doors.

As a measure of fiscal responsibility, in January of 1995, the major tenants and caretakers of the terminal, the four initial tenants, merged operations to become the Cincinnati Museum Center (CMC). In July of 1997, they merged again, this time with the Children's Museum of Cincinnati; the new Duke Energy Children's Museum opened in October 1998.

The reinvention of the Union Terminal as the Cincinnati Museum Center has been a success at creating a destination for visitors, as well as keeping a city's worth of valuable memories alive. Since 1990, the CMC has attracted more than 1.47 million visitors each year.⁴

The museums and attractions within the Center currently include:

- *The Cincinnati Historical Society Library*

Since its founding in 1831 as the library of the Historical and Philosophical Society of Ohio, the library has been collecting and preserving materials relating to the greater Cincinnati area, the state of Ohio and the Old Northwest Territory. Today, it houses one of the most significant regional history collections in the United States.

- *The Cincinnati History Museum*

The Cincinnati History Museum is regarded as one of the largest urban history museums in the country. It showcases materials and related aspects of the history of Cincinnati and the surrounding Miami Valley region.

- *Duke Energy Children's Museum*

Duke Energy Children's Museum consistently ranks in the top 10 children's museums in the U.S. Known for its interactive nature, the museum's exhibits allow children to climb, crawl, explore and learn about themselves and the world around them. Every year over 1,800 hours of children's programming is presented in arts, culture, reading, science and more.

- *Museum of Natural History and Science*

Experiencing natural history and science through an interactive world, the Museum of Natural History and Science allows visitors an opportunity to walk through a glacier and step back into the Ice Age, experience interactive exhibits on the human body, and participate in live demonstrations from gardening to collecting and cleaning fossils.

- *Robert D. Lindner Family OMNIMAX® Theater*

The OMNIMAX Theater features a five-story, 72-foot-diameter, tilted, and domed screen and one of the most sophisticated digital sound systems. It also features new accessibility options for visually and hearing impaired visitors.

- *Shops and restaurants*

A variety of shops and restaurants are available for guests to enjoy during their time at the Museum Center.

- *Rental spaces*

Virtually every area of the CMC is available for private events. The Newsreel Theater, Reakirt Auditorium and classrooms provide structured space for corporate clients. The Losantiville Café and Cincinnati Dining Room provide ready dining areas. The various museums make interesting entertainment areas amongst the exhibits, and the Rotunda provides a grand arena for large events.⁵

- *An Amtrak ticket office and waiting room*

The CMC features a traditional ticket office with ample waiting room for travelers.

The Vision Master Plan and Onward

The 1989 restoration had been a major undertaking for the purpose of retrofitting a multi-museum complex into the historic building, and the first real renovation in the terminal's history. However, it was not a *complete* restoration, with reason. All-new electrical and mechanical systems had to be strategically placed to minimize intrusion into the development of exhibit spaces while being sure not to compromise the historic aesthetics of the building. Almost 20 years later, many of the original 1933 systems are still in use. Additionally, many of the 1989 installations have since exceeded their lifespan. Several historic spaces, which were not addressed in 1989, were in serious disrepair. Neglect had been in many cases a matter of triage, only allowing attention to the most public and pressing issues of the day given limited funding.

However sturdily it was constructed, in 2008 the Union Terminal was showing its age as its 75th birthday arrived. CMC had already realized that the Union Terminal was gradually destroying itself from the inside-out. A master building assessment begun in 2005 revealed a number of problems:⁶

- Structural steel in certain areas had corroded significantly with visible stone and brick displacement and cracks.
- Flat roof systems had far exceeded their useful lives and failed, resulting in significant deterioration of the building envelope as well as murals, rare interior historic finishes and historic materials.
- The original exterior design (typical of period construction) was deficient in flashing details and lacked protection for structural steel against water infiltration and corrosion.
- Base building systems did not have the capacity to support a fully renovated Union Terminal as a contemporary museum facility and have far exceeded their useful lives. Additionally, systems—some installed in the era of the shopping mall—are terribly inefficient, resulting in high energy bills and operating costs.
- Windows replaced in 1990 were failing, and many of the 1931 windows were still in place, with resultant energy inefficiency and associated costs.
- Other water infiltration had resulted in significant deterioration of interior finishes and historic materials originally used in the construction of the Terminal.

Using the study, the CMC completed plans in 2007 to help direct the museum through a major building preservation project, exhibit revitalization and larger community development initiatives. In its 2007 Annual Report, CMC outlined a three-part Vision Master Plan, which included these aspects:

- **Restoration and Renovation Plan:** Includes extensive historic research, assessment of the structure by a team of experts—architects, preservationists, conservators and structural engineers—and recommendations for the restorations as well as strategies for implementation.
- **Exhibition Plan:** Introducing new learning experiences in a contemporary framework. Sets out vision, strategy, approach and individual components of the visitor's experience.
- **Strategic Action Plan:** Direction and strategies to clarify CMC's identity and to develop and sustain operational effectiveness and critical relationships; includes a plan to achieve financial stability.⁷

Funding for the Vision Master Plan Restorations

As with other restoration projects large and small, funding has been pieced together in an often fluid and creative process. In 1989 the voters of Hamilton County passed a bond to help fund the partial restoration and retrofit of the Union Terminal complex creating the Museum Center. Because of the increased occupancy costs of the building and the anticipated repairs to the facility, in 2004 voters approved a five-year operating levy to help fund the maintenance,

operations and minor repairs of Union Terminal, providing approximately \$3.8 million towards expenses. Both the 1989 and 2004 levies were due to expire in 2009.

On June 25, 2008, CMC announced that the state of Ohio had awarded them \$2.5 million in capital funds for the restoration and repair of Union Terminal. However welcome, this would only satisfy a part of their requirements for restoration funds.

On August 26, 2009, the Hamilton County Commissioners passed a unanimous resolution committing their long-term support for the CMC. Proposed by Commissioner Todd Portune, the resolution also requested a review of services that the county might cost-effectively provide for the upkeep of Union Terminal and its grounds. County administrator Patrick Thompson was asked to work in partnership with the Museum Center to assure the preservation of Union Terminal and the success of the vision of Cincinnati Museum Center.

So, in August of 2009, the CMC mobilized its staff and volunteers to encourage Cincinnatians to vote for a new tax levy which would reduce millage by 0.02 to 0.18 mills and provide basic support of about \$3.3 million per year over next five years. Steve Terheiden noted in a recent interview⁸ that the \$16.2 million measure passed by greater than 65 percent, a measure of overwhelming support by voters. However, this measure only covers building maintenance, utilities and insurance for five years.

Fundraising is still underway to maintain the look and historical feel of Cincinnati's Union Terminal for years to come.⁹ The CMC's operations also continue to be successfully supported by hundreds of donors, from individuals and corporations to foundations and endowments as well as business operations inside the terminal and museum entrance fees. In fact, in a 2009 presentation by CMC President and CEO Douglas McDonald showed that the Museum Center's budgets balanced with surpluses from 2005 through 2009, involving a staff of approximately 340 Museum Center regular employees and 60 contractors.¹⁰

The \$10 million restoration, from 2009 to 2010, Project One, began with funding from the Ohio Cultural Facilities Commission, the City of Cincinnati, the National Park Service Save America's Treasures program, and Hamilton County tax levy dollars.

Project One Restorations

The first phase of Union Terminal restoration and renovation plan was intended to address the following:

- Exterior building system envelope (windows and flat roof)
- Building systems and infrastructure (HVAC, chillers, security)
- Interior architecture
- Dalton street underpass and fountain
- Green design initiatives

CMC President Douglass McDonald, Operations Director Steve Terheiden and architect Art Hupp of glaserworks introduced the scope of the restoration to the public with a media tour of the restoration areas on February 11, 2009. The tour made an impression on its attendees according

to the *Building Cincinnati* blog recording the event. Later that spring, on June 4, CMC announced the beginning of Project One of the estimated total \$50 million in repairs, which would be complete by early summer of 2010.

This initial top-to-bottom overhaul took in the 10,000-square-foot southwest corner, a portion of the building surrounding the Cincinnati Dining Room and the Historical Dining Room—the latter unused since the 1950s. The project was chosen not only to make these historic rooms available for community programs and events, but because all the elements of repairs could be addressed in a way that would inform the repair process for the rest of the building. It was, in essence, to be a test case.

A team of contractors, conservation technicians and craftspeople, led by general contractor HGC Construction installed more than 60 new energy-efficient steel-frame windows; replaced corroded structural steel beams and reconstructed brick and masonry around them; replaced mechanical systems and wiring; and restored historic finishes including wood veneer walls, mirrors, doors, railings and light fixtures. While the space was restored to its original condition, certain minor adjustments were made to make it more functional for the 21st century, according to the glaserworks architect, Adam Luginbill. Workers referred to original photos taken after the 1933 opening to ensure they remained faithful to the building's original appearance. For example, while light fixtures still have the Art Deco look, they are energy-efficient compact fluorescent dimmable bulbs.



Figure 2. Cincinnati Dining Room – before (Courtesy of CMC)

Through the support of a grant from the National Endowment for the Arts, workers also cleaned and restored ceiling murals in both dining rooms. These murals, which had been painted by French artist Pierre Bourdelle, were found overlain with decades of grime and soot from the trains

outside. The stunning ceiling mural in the first-floor Cincinnati Dining Room now shows the Cincinnati street grid, local landmarks, and different modes of transportation in rich, glowing colors and gold leaf.



Figure 3. Cincinnati Dining Room - after restoration (Courtesy of CMC)

The second floor Historic Dining Room, which had been unused for fifty years and suffered water damage, received the most extensive restorations. The room, which can be divided into three sections, boasts new cork floors just as it once had, and new wood veneer walls that are nearly indistinguishable from the originals, thanks to a donation from the Fairfield-based M. Bohlke Veneer Corporation in honor of executive vice president and managing director, Marc Bohlke. (Bohlke, who had wanted to be involved in the CMC restorations, had died unexpectedly in an accident in January 2009.)

The hallways outside the Historic Dining Room have been returned to their original bright yellow with freshly painted horizontal stripes of blue, silver, brown, gray, and white—but not before workers had painstakingly removed multiple layers of paint to uncover the original colors. A phone booth in the corner of one hallway has also been restored, minus the phone.

Above both dining rooms is the very modern “green” roof—which is literally green. At 7,600 square feet, it is one of the largest green roofs in Hamilton County and is covered with 10 varieties of sedum plants—grass. If it receives additional funding, the center hopes to expand the roof and cover all 100,000 square feet of the flat-roofed parts of the terminal. Curiously, a green roof is not a new concept for the Terminal, as the fountain and plaza in front of the building cover a significant portion of the terminal’s lower levels, now utilized by the museums. When fully built, the living roof could cut the CMC’s annual energy bill of nearly \$1 million by 20 to 30 percent.¹¹



Figure 4. Historic Dining Room – before (Courtesy of CMC)



Figure 5. Historic Dining Room - after restoration (Courtesy of CMC)

Impact on the Community

Even though the Union Terminal is not directly downtown, its presence is felt nonetheless. The course of railroad construction in the 19th century led to the creation of an immense rail yard in the Mill Creek area west of downtown in Cincinnati as well as a scattering of stations along the low-lying areas next to the Ohio River—which were frequently flooded when the river rose. When consolidation took place with the building of the Union Terminal, the logical place for it was on man-made fill in the valley of Mill Creek, bringing the site above flood level. Thus, the terminal has always been a somewhat inconvenient distance from the city center. Its self-contained coach yard, mail facility, engine terminal and control tower, all located in a logical flow of trackage as part of the double-ended terminal project, were a model of modern passenger transportation planning in their day.¹² Today, it is surrounded by a primarily industrial neighborhood, with little in the way of residential structures nearby. Thus, its greatest impact upon the community originally was not so much in terms of bringing passenger traffic directly downtown, as in some other cities, but in greatly facilitating both freight *and* passenger rail traffic.

And, as a masterwork of the integration of art and functionality—the essence of the Art Deco aesthetic—the well-planned terminal certainly made for a memorable and easy passage for rail travelers. As Steve Terheiden says, “So many come in today have and some memory of this place. When a parent or loved one came through the terminal, coming back from war, they retained vivid memories of the rotunda and the artwork. This isn’t your normal building; this is also a memorial for those who didn’t come back.” And that encapsulates the essentials of the Queen City’s love affair with Union Terminal: it is a monument to the memories and history of Cincinnati, as vividly recounted in many recordings upon the Museum Center’s website.¹³ And, the CMC considers the terminal to be its most important artifact in its collection, embracing its role as a steward of the building.

The impact of creating the Cincinnati Museum Center at Union Terminal, as well as the Terminal’s restoration, has been economic, educational and cultural. The economic impact of normal Museum Center operations and maintenance was estimated in 2009 to be \$87 million, with 1,100 jobs supported and \$37 million of “new money” brought into the region by center visitors. In February 2009, CMC published a report summarizing the expected economic impacts of the \$120 million restoration project alone:

- Total economic impact of construction activities in the region amounted to creation of 2,524 jobs and \$158 million in economic activity
- Expenditures on construction also would generate household earnings in the region of nearly \$88.6 million
- Construction activities are expected to bring \$2.15 million to local jurisdictions in tax revenue.

The Museum Center is open 363 days a year, for more than 3,400 hours, and since Union Terminal’s reopening in 1990, the Terminal has welcomed in the neighborhood of 1.3 to 1.4 million visitors each year. Out of the 1,326,084 visitors in 2008, for instance, 400,000 of them were children attending or participating in programs at the Museum Center. So, while the Union Terminal may not have impact upon the people in its immediate neighborhood, it has become a vital community asset for all of Cincinnati and its surrounding counties.

The results of the Union Terminal's renaissance have been justly lauded. The Cincinnati Museum Center announced in October 2009 that it was one of 10 recipients of the 2009 National Medal for Museum and Library Service. The award, presented by the Institute of Museum and Library Services, recognizes museums' outstanding social, educational, environmental or economic contributions to their communities. The Center was recognized for being, "a national model of excellence as an educational and cultural complex that has successfully merged cultural institutions." It is also recognized as the largest cultural institution in the city and the most visited museum in Ohio.¹⁴

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All photos courtesy of Cincinnati Museum Center, Cincinnati, Ohio.

Citations

¹ *Save the union terminal - Jerry Springer*. (1970). Retrieved from

<http://www.youtube.com/watch?v=xCbtOAaP34k>

² CBS Interactive. (n.d.). *Jerry Springer*. Retrieved from <http://www.movietome.com/people/3644/jerry-springer/trivia.html>

³ Panioto, J. (2009, August 26). *Resolution establishing county and cincinnati museum center framework toward addressing long-term capital needs at historic union terminal*. Retrieved from <http://www.cincymuseum.org/pdf/HamiltonCountyCommissionResolution.pdf>

⁴ http://www.cincymuseum.org/information_center/press_room/fact_sheets/ut_history.asp

⁵ http://www.cincymuseum.org/information_center/facilities_rental/

⁶ "Union Terminal begins first phase of repair and restoration project," Press Release, Cincinnati Museum Center, June 4, 2009

⁷ CMC 2007 Annual Report, June 30, 2007

⁸ Phone interview, November 19, 2010

⁹ Lauren Bishop, "Union Terminal Rooms Return," *Cincinnati Enquirer*, Cincinnati, Ohio. September 17, 2010.

¹⁰ Presentation by Douglass McDonald, 2009.

¹¹ Ibid.

¹² "A Tale of Three Cities: The Union Stations of Cleveland, Columbus, and Cincinnati," Jeffrey T. Darbee, Indiana Historical Society, 2003

¹³ http://www.cincymuseum.org/explore_our_sites/union_terminal/presentation.asp

¹⁴ Ibid.