SUMMARY
The Historic Ford Factory is an adaptive use project that involved the transformation of an auto assembly plant into a six-story, 120,000-square-foot (11,148-square-meter) modern office building. The rehabilitation and conversion of the formerly deteriorating 1915 landmark, once declared a "Blight of the Week" by a local newspaper, were conducted in compliance with National Park Service (NPS) guidelines. The project is in a prominent highway location just four miles (6.4 kilometers) from downtown Cincinnati, Ohio. The building is fully leased at market-rate or above-market-rate rents in a relatively soft market. The development includes 470 surface and structured parking spaces.

FEATURES
- Adaptive Use
- Historic Preservation
- Urban Regeneration
- Use of federal historic tax credits
- Former auto assembly plant
The Historic Ford Factory

Cincinnati, Ohio

Project Type: Commercial/Industrial

Subcategory: Office Buildings

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PROJECT TYPE

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LOCATION

Central City

SITE SIZE

3 acres/1.2 hectares

LAND USES

Office

KEYWORDS/SPECIAL FEATURES

- Adaptive Use
- Historic Preservation
- Urban Regeneration
- Use of federal historic tax credits
- Former auto assembly plant

OWNER/DEVELOPER

660 Lincoln, LLC
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ARCHITECT

Neyer Architects & Engineers
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Cincinnati, Ohio 45202
513-271-6400
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STRUCTURAL ENGINEER

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MECHANICAL ENGINEER
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ELECTRICAL ENGINEER

Biz Comm Electric Inc.
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GENERAL CONTRACTOR

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Fax: 513-271-1350
www.neyer.com
PROJECT DESCRIPTION

The six-story building at 660 Lincoln Avenue, featuring a total of 200,000 square feet (18,580 square meters) including structured parking on the lower levels, was originally constructed in 1915 by the Ford Motor Company to manufacture Model T automobiles. Located four miles (6.4 kilometers) from downtown Cincinnati in the neighborhood of Walnut Hills, the brick and concrete structure is believed to have been designed by Albert Kahn, the pioneering industrial architect.

Formerly a long-vacant eyesore overlooking Interstate 71, the Historic Ford Factory has been transformed into 120,000 square feet (11,148 square meters) of office space. The $10.5 million project has also contributed to the revitalization of the surrounding neighborhood.

The close cooperation of the development, design, construction, and marketing teams during the course of the project contributed greatly to its progress. In addition, efforts to build community awareness about the project yielded substantial publicity and support.

The quality of the restoration of the property has been recognized with the Design-Build Institute of America’s 2004 Rehabilitation/Renovation/Restoration Design-Build Excellence Award, and in 2003 with an award from the Cincinnati Preservation Association.

SITE DESCRIPTION AND BACKGROUND

By the early 1930s, Ford retired the factory from use as a manufacturing plant and Sears, Roebuck and Co. acquired the property, using it as a farm implement distribution center. But by the 1990s it was vacant, accumulating trash and characterized by broken windows. Due to its deteriorated condition and prominent location near Interstate 71, with 120,000 cars passing by it each day, the Ford Factory became known as “the Graffiti Building.”

The Walnut Hills neighborhood comprises an urban mix of industrial, commercial, and residential uses with high unemployment and low homeownership levels that has seen decline over the past several decades. However, new developments like the rehabilitation of the Historic Ford Factory and renewal efforts spearheaded by the Walnut Hills Redevelopment Foundation are revitalizing the area. The University of Cincinnati and the Cincinnati Children’s Hospital Medical Center are also within a one-mile (1.6-kilometer) radius.

The highly visible property had been listed on the National Register of Historic Places since 1989, but it sat vacant for years, prompting a local newspaper to award it the title of “Blight of the Week” in April 2002. Virtually all of the original windows were shattered. At one point, the city had proposed tearing it down, but the high cost of the demolition of such a solidly built concrete structure—estimated at $800,000 to $1.2 million—was a deterrent. By 1998, the last owner had gone bankrupt and abandoned the building. The disrepair of the structure was such that the exterior brick veneer was crumbling onto the highway below, compelling the city to spend $38,000 to remove the loose bricks and build a fence.

In 2001, a partnership of four real estate developers and investors formed 660 Lincoln, LLC, to undertake the development and rehabilitation of Cincinnati’s Historic Ford Factory. The partners included Steven Bloomfield, an architect and former head of the Cincinnati’s Department of Neighborhood Housing and Conservation; Richard Duval, a local developer specializing in rehabilitation; Ken Schon, vice president, urban design with Al. Neyer, Inc.; and Kent Rinker, an investor. The team hired Al. Neyer, Inc., a Cincinnati-area design-build firm, to convert the early 20th-century manufacturing plant into loft office space while preserving the significant historic features to meet federal historic tax credit requirements.

With the goal of bringing the building back to life, 660 Lincoln purchased it at a sheriff’s sale for back taxes. They sought to reclaim a community landmark from dereliction and prevent a part of Cincinnati’s history from being destroyed. The developers determined that they could hold the building indefinitely, since their initial investment was low. However, they felt that if they could closely manage the perception of security, then the project would perform well. They anticipated a return in the range of 10 percent.

Their first course of action was to secure the building and begin cleaning it out. Over 50 large “roll off” Dumpsters of accumulated materials were hauled away. Ultimately, they wanted to clean up the mess, make a positive impact on the community, and “do well by doing good.”

The office market was soft, but the developers determined that this type of space would have a unique appeal. They believed that the building’s highly visible location, historic architecture, and solid construction offered a sound opportunity for distinctive corporate offices.

FINANCING
The development team took out a personal loan to clean up the building, remove the broken windows, eradicate the graffiti, repair roof leaks, and haul away 200 tons (181.4 metric tons) of debris. The acquisition of the Historic Ford Factory also required the resolution of outstanding issues, such as paying transfer fees and back taxes of $100,000 owed to Hamilton County. As the building is in an enterprise zone, the city of Cincinnati granted a ten-year tax abatement on any improvements.

Despite the attractive combination of the tax abatement, the acquisition of the historic tax credits, and an empty building ready for construction, developers had found that most local banks would not consider making a construction loan unless at least 60 percent of the space was preleased—a formidable challenge for a property with significant rehabilitation needs. However, LaSalle Bank, an urban-oriented lender with roots in Chicago, was willing to make the construction and a “mini-perm” loan with preleasing of 40 percent of the office space and the 20 percent equity provided by the tax credits. Fisher Design, Inc., a Cincinnati-based design firm, fulfilled the preleasing requirement when it signed a long-term lease agreement for 33,000 square feet (3,065.7 square meters) of space on the top floor and was also added as a partner in the building.

Because a six-year compliance period is required when historic tax credits are used, the developers also secured the option of extending LaSalle’s loan beyond the actual 12-month construction period to satisfy potential tax credit partners. Wachovia Securities, active in tax credit programs, became the tax credit partner. After the building was substantially leased, National Life Capital Management provided permanent financing.

MARKETING

Marketing of the property started early, before rehabilitation commenced, because the project’s viability was dependent on leasing. Michele Laumer of Carey Laumer Commercial Realty began with a cold-calling campaign to find the right tenants for the building and continued with a sustained public relations effort. The marketing strategies included outreach to the local community, the city, and the neighborhood redevelopment association. These efforts yielded widespread community awareness and support for the rehabilitation of the building.

Although the large floor plate allowed for a suburban-scale floor plan, the developers believed the structure could provide “creative space” for a technology or design firm with a stake in the city, rather than the suburbs. To appeal to prospective tenants, marketing strategies also emphasized the security of the building, since many questioned the safety of the neighborhood. Marketing efforts were strengthened by the structure’s visibility from the highway, which was a liability when the building was in disrepair. Also, because the property is located in one of Cincinnati’s Enterprise and Empowerment zones, businesses located there qualify for tax benefits.

As part of the marketing efforts, Laumer arranged for a morning TV news segment on the developers’ plans for the property to be broadcast from the top floor. This caught the attention of Bill Fisher, president of Fisher Design. Looking for new space with room to grow and having considered moving to suburban locations, Fisher Design preferred to remain in the city’s core if possible. The office space at the Historic Ford Factory offered the opportunity not only to consolidate the firm’s two locations under one roof, but also to do so in a distinctive space that could become a significant part of the firm’s image.

PLANNING, DESIGN, AND CONSTRUCTION

The rehabilitation of the historic concrete building required significant repair and reconstruction of the windows and its brick and terra-cotta exterior, as well as the adaptation of the interior to accommodate modern office needs. As a former Ford manufacturing plant, the building contained some unique architectural features, some of which required innovative thinking for adaptive use. These distinctive features included a high bay area that had been open from the lowest level to the top floor, designed to allow a crane system to deliver parts shipped by train from Detroit to be distributed to assembly stations on the floors above. The finished cars were stored on the roof to await delivery to dealers. The building’s foot-thick concrete floors are capable of bearing triple the weight required by modern building codes. The water tower on the roof, likely originally used for a sprinkler system, is now an iconic landmark adorned with logos of the building and the Fisher Design firm.

The developers hired Al. Neyer, a Cincinnati-based design-build firm whose integrated approach to the project guided the design and planning decisions. To accurately document the size and architectural features of the structure, Al. Neyer commissioned a full set of CAD-based architectural drawings. This careful documentation provided essential information to assist with the reuse of the landmark. A survey documented property lines and the topography. The drawings also helped with the detailed restoration of the exterior, much of which had deteriorated and needed to be repaired or replaced.

Once Fisher Design signed on as an anchor tenant in January 2003, renovation efforts began in earnest. There was the additional pressure of the timing for occupancy, since Fisher Design had to move in by fall 2003. However, the timeline for the restoration of the building was less than predictable, and issues with repair and replacement of the windows and masonry caused delays. Despite these challenges, the project team worked steadily and efficiently, completing the construction in just seven months.
The use of federal historic tax credits, a key component of the project financing, necessitated paying close attention to specific ways in which the building could be restored, particularly to maintain its original industrial character. National Park Service (NPS) approval was required for all plans and restoration procedures. To earn the 20 percent equity in historic tax credits, the developers were required to strictly comply with historic guidelines and to closely coordinate their efforts with the state historic preservation officer. Rehabilitation efforts paid particular attention to the windows, material for terra-cotta replacement, and interior architectural elements.

The National Park Service/U.S. Department of the Interior rehabilitation guidelines restricted the installation of ceiling or wall elements within four feet (1.2 meters) of the windows to preserve the open, industrial environment. The developers also needed to obtain permission from the National Park Service to remove the windows, which were acknowledged as being unsalvageable. Several other architectural features, such as the column capitals and the passenger elevator, were also retained in accordance with the historic rehabilitation standards.

Ultimately, the adaptation plans for the building called for locating the office space on the second, third, and fourth floors, and using the first floor and two below-ground floors for secured parking.

The spacious lobby on the first floor embodies the creative vision for the building. Designed with new materials, the walls are covered in a maple veneer and the original concrete floor has been stained and polished. The art display in the lobby features photos of the graffiti that had once covered the building, as well as a pristine showpiece Model T Ford that was actually produced at the Cincinnati plant. The generous size of the space also makes it suitable for hosting community events.

The original automobile showroom on the first floor was preserved as conference room space. This showroom has floor-to-ceiling windows on the building’s south side, and had originally been the prime display space for Ford automobiles fresh off the assembly line before they were driven to a downtown sales center. The preservation of the space included retaining the original ceramic tile floor and ornamented columns. To accommodate its new use as a conference room, a small kitchen and restrooms were added.

The anchor tenant is Fisher Design, whose retail environment group played a major role in designing its new office space. As a 110-employee firm that specializes in brand identity and various design disciplines, Fisher seized the opportunity to use its headquarters as a marketing tool, investing $500,000 to design its sophisticated metal and glass industrial-chic interior.

Having sufficient tenant parking was the key to making the project viable, but the project team rejected structured parking as cost prohibitive. The building plan incorporated 260 secured parking spaces in the first floor of the building and the two below-grade floors. In addition, the developers were able to purchase or lease land from several owners for surface parking beyond the property line on the project’s north side. Land for parking included a lot purchased from the Ohio Department of Transportation, carved out of the Interstate 71 right-of-way; land owned by the city; privately owned land; and spaces leased from a nearby commercial business, to add an additional 140 surface spaces. With all the spaces, the parking ratio is 4.5 spaces per 1,000 square feet.

The significant elements of the exterior restoration were the windows and the building’s brick and terra-cotta veneer. Since most of the original windows were beyond repair, any replacement windows on the primary facade of the factory—the south side, facing Lincoln Avenue—had to conform with historic guidelines and maintain the appearance of the originals. The replacement windows had to appear to have true divided lights with smoky glass panes and operable parts, as they had in the original structure. After an extended search, the developers found the only manufacturer in the country—a Denver firm—that was capable of producing windows that could exactly match these specifications.

In addition to the windows, restoration of the terra-cotta decoration and masonry exterior was of particular importance for the building’s front elevation. Completed according to historic rehabilitation guidelines, the repointing of the brick exterior successfully blends new mortar with the old, and replacement bricks closely match the original masonry. Historic terra-cotta was patched and reglazed, while portions that had deteriorated significantly were replicated with fiberglass.

**TENANTS AND PERFORMANCE**

In 2003, a total of 46,000 square feet (4,273.4 square meters) of space was tailored for Fisher Design’s collaboration and design needs. Fisher found that the property’s location offered many advantages, such as proximity to downtown, ample parking, and access to resources at the nearby University of Cincinnati. In addition to the office design space on the top floor, the firm was able to install a prototype workshop on the lower level. The renovated structure bears the building logo and the Fisher Design logo on the water tower, visible from both directions by thousands of cars driving on Interstate 71 each day.

The Cincinnati Children’s Hospital Medical Center has leased much of the remaining space—about 60,000 square feet (5,574 square meters)—for its billing department and a call center. Other tenants include Advantage Group, a structural engineering firm that occupies 4,500 square feet (418 square meters), and the principals of 660 Lincoln, LLC.
The loft office space was leased at rents at or above expectations and the building was full within a year of opening. To attract tenants in a soft office market, the developers provided increased tenant improvement allowances.

**EXPERIENCE GAINED**

**Assemble a team you can trust.** The project team needed to have confidence in each other’s abilities to take on the challenges of the property’s redevelopment.

**Bring vision and enthusiasm to the project.** The sales team especially was able to convey enthusiasm and vision for the final product. This was crucial in marketing to prospective tenants during the early stages, when the building was only starting to emerge from years of neglect.

**Working collaboratively is essential to reaching the project goals.** The development, design, construction, and marketing teams coordinated closely, meeting weekly for two years to orchestrate the successful rehabilitation of the building on time and within budget. The timing for the rehabilitation of the property was especially crucial to meet the anchor tenant’s move-in deadline. The success of these efforts meant that the space was fully leased a year after completion, despite a soft market for office space in the Cincinnati area.

**Preserve the historic integrity of the building.** The building’s success is attributable in large part to maintaining the architectural character of the original structure. Further, the acquisition of historic tax credits provided essential financing for the project, and the meticulous restoration of the landmark became a source of pride for the professionals involved and an asset to the community.

**Good communication is a high priority among the project team members.** To achieve compliance with the NPS historic rehabilitation guidelines, team members needed to be able to communicate clearly and efficiently with each other. These efforts included coordinating with state and federal agencies, as well as a local preservation consultant.

**Don’t underestimate branding opportunities.** The historic significance and the rigorous rehabilitation of the Ford Factory, combined with its high public visibility, created an excellent opportunity for providing tenant signage on the building.

**Documentation of the structure is essential to successful rehabilitation and adaptation.** Obtaining accurate interior measurements and the production of architectural drawings were critical to the conversion from industrial to office space and the restoration of the historic exterior.

**Find a lender with vision and flexibility.** LaSalle Bank saw opportunity where others saw difficulties.
**PROJECT DATA**

**BUILDING TYPE:** Class B mid rise

**LAND USE INFORMATION**

- Site area (acres/hectares): 3/1.2
- Gross building area (square feet/square meters): 200,000/18,580
- Net rentable area (square feet/square meters): 115,000/10,683.5
- Number of parking spaces: 400
- Surface: 140
- Structured: 260

**LAND USE PLAN**

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<thead>
<tr>
<th>Unit Type</th>
<th>Area (Square Feet/Square Meters)</th>
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<tr>
<td>Buildings</td>
<td>33,000/3,065.70</td>
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<tr>
<td>Paved areas (including surface parking)</td>
<td>87,680/8,145.5</td>
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<tr>
<td>Landscaping/open space</td>
<td>10,000/929</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>130,680/12140.2</strong></td>
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</table>

**OFFICE INFORMATION**

- Percentage of NRA occupied: 100%
- Number of tenants: 4
- Average tenant size (square feet/square meters): 25,000/2,322.5
- Largest tenant size (square feet/square meters): 60,000/5,574
- Rental range (per square foot/square meter per year): $10 to $11.50/$107.64 to $123.74
- Average length of lease: 3 to 10 years

<table>
<thead>
<tr>
<th>Office Tenant Size</th>
<th>Number of Tenants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 5,000 square feet (464.5 square meters)</td>
<td>2</td>
</tr>
<tr>
<td>Between 5,000 and 10,000 square feet (464.5 and 929 square meters)</td>
<td>0</td>
</tr>
<tr>
<td>More than 10,000 square feet (929 square meters)</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>4</strong></td>
</tr>
</tbody>
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**DEVELOPMENT COST INFORMATION**

- **Site Acquisition Cost:** $250,000
- **Site Improvement Costs (On and Off Site):** $354,000
  - Grading: $62,000
  - Sewer/water/drainage: $103,000
  - Paving: $158,000
  - Curbs/sidewalks: $21,000
  - Landscaping/irrigation: $10,000
- **Construction Costs:** $6,752,000
  - Superstructure/restoration: $758,000
  - HVAC: $636,000
  - Electrical: $338,000
  - Plumbing/sprinklers: $345,000
  - Elevators: $227,000
  - Fees/general conditions: $900,000
  - Finishes: $1,076,000
  - Graphics/specialities: $50,000
  - Window repair and replacement: $2,422,000
- **Soft Costs:** $2,694,000
  - Architecture/engineering: $184,000
  - Project management: $130,000
  - Leasing/marketing: $700,000
  - Legal/accounting: $300,000
  - Taxes/insurance: $100,000
  - Title fees: $20,000
  - Construction interest and fees: $850,000
  - Environmental: $410,000
- **Total Development Cost:** $10,050,000

**ANNUAL OPERATING EXPENSES**

- Taxes: $6,000
- Insurance: $33,000
- Security: $19,409
- Repair and maintenance: $258,376
- Janitorial: $47,480
Legal: $10,000
Management: $27,237
Tenant improvements (per square foot/square meter): $25/$269
Operating costs (per square foot/square meter): $3.47/$37.34

DEVELOPMENT SCHEDULE
Site purchased: January 2001
Planning started: January 2001
Sales/leasing started: January 2001
Construction started: March 2003
Project completed: November 2003

DIRECTIONS

From Cincinnati/Northern Kentucky International Airport: From airport exit merge onto KY 212 via ramp. In less than a mile (less than 1.6 kilometers) merge onto Interstate 275 heading east toward Interstate 71. Take Interstate 71 heading north toward Cincinnati. After about 9.5 miles (a little more than 15 kilometers) take the US Route 42 North/Reading/Florence exit. Keep left at fork in the ramp. Stay straight onto Reading Road/US 42. Turn right at Lincoln Avenue, and left into the building about a quarter mile (a little less than half a kilometer) down Lincoln Avenue.

Driving time: Approximately 21 minutes in nonpeak traffic.
The developers sought to turn an early 20th-century manufacturing plant into modern loft office space while preserving the open, industrial character of the building.
The six-story building at 660 Lincoln Avenue was originally constructed in 1915 by the Ford Motor Company to manufacture Model T automobiles.
Investing $500,000, Fisher Design’s retail environment group had a major role in designing its new office space, which features a metal and glass industrial-themed interior.
Fisher Design has created distinctive office space at the Historic Ford Factory that has become a significant part of the firm's image.
The spacious lobby features a pristine showpiece Model T Ford that was actually produced at the Cincinnati plant.