

SOCIETY FOR INDUSTRIAL ARCHEOLOGY

51st ANNUAL CONFERENCE

**JUNE 7 - 11, 2023
GRAND RAPIDS,
MICHIGAN**

**GUIDEBOOK TO
GRAND RAPIDS**



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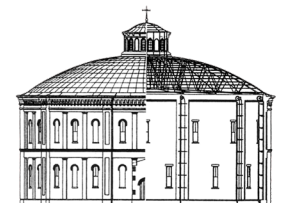
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SOCIETY FOR INDUSTRIAL ARCHEOLOGY
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COVER IMAGE

Huge piping, attached on one end to a barrel shaped object and on the other to a rectangular object. Installed by Berkey & Gay Company in 1930 to eliminate the dust problem in the neighborhood as described in a news article in the Grand Rapids Herald, January 12, 1930. (Source: Grand Rapids Public Library Digital Collections)

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GRAND RAPIDS 2023

INTRODUCTION

INTRODUCTION

GRAND RAPIDS AND WEST MICHIGAN'S INDUSTRIAL HERITAGE

Matthew L. Daley



Downtown Grand Rapids looking northwest before freeway construction, circa 1955. Photo courtesy: Grand Rapids Public Museum.

Named for rapids that no longer exist, the city of Grand Rapids has an industrial heritage and identity often overshadowed by the automobile's dominance in Michigan. Connoisseurs of furniture might know it by that industry, those involved in mining may know it for its gypsum deposits, and still others might remember its stint as the fictional home office for David Letterman's *The Late Show*. Yet, Grand Rapids' is at heart a manufacturing city that reflects the significant changes that have impacted so many urban areas.

Founded as a trading post in the early 1800s, the site at the rapids marked the end of navigation by ships able to sail on the Great Lakes. The rapids were also noted for their ability to potentially power mills and factories, a fact that travelers from the East remarked upon in the 1820s. Land speculators and surveyors arrived in the 1830s and ushered in a period of growth that would initially peak in 1836 with the "Land Rush" prior to Michigan's 1837 statehood. By 1838, Grand Rapids was a village and by 1850 had been chartered as a city.



Downtown Grand Rapids looking northeast, circa 1880. Photo courtesy: Grand Rapids Public Museum.

GYPSUM MINING AND LUMBERING

Having gained its start as a trading center along the rapids other industries were added to the city's economy. To the west and south of downtown on both sides of the river were surface deposits of gypsum. The initial use came in use on farms where it enriched soil. These surface mines continued into the 1850s when Daniel Ball and Warren Granger established a grinding facility to produce material for a faster drying wall plaster. Other companies entered the field, and by the 1890s had started underground mines extended beneath the Grand River in the downtown area.

With the growth of Chicago and settlement on the Great Plains, the market for lumber increased dramatically during the 1860s. The vast stands of white pine on the west side of Michigan began to be harvested with millions of logs floating down rivers into the ports along Lake Michigan. Grand Rapids had its share of sawmills as did Grand Haven, Muskegon, and Holland and other sites along the Muskegon and Grand River.

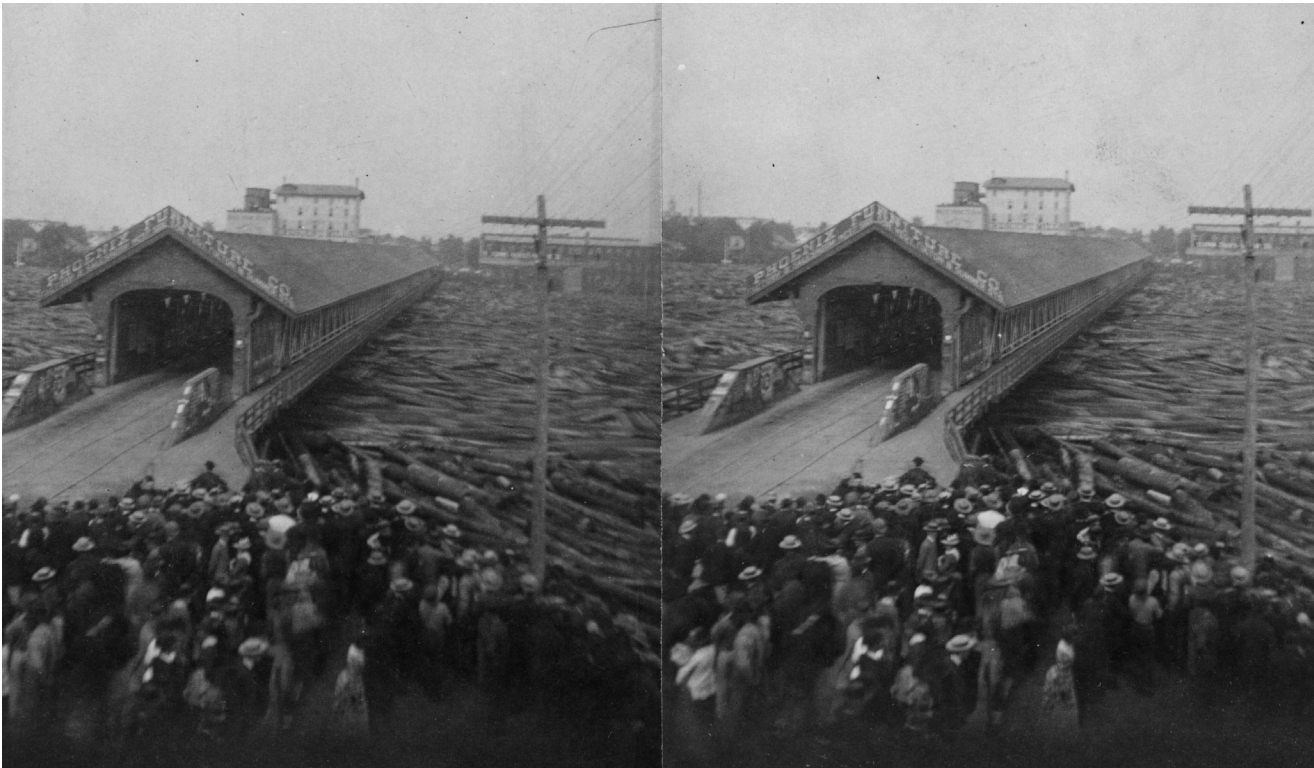
The bridges at Grand Rapids became bottlenecks during spring runs and even during periods of high water. The most significant log jam took place in July 1883 when heavy rains caused flooding that created a jam at and above the city 30-feet deep and seven miles long. Down-river in Ottawa County lumber boom companies dug canals into the riverbank to hopefully prevent even more

damage and still can be seen in the present. On July 26 the jam broke with an estimated 600,000 logs destroying nearly every bridge before rushing towards Grand Haven. It would mark the decline of the industry in West Michigan.

The arrival of railroads to Grand Rapids in 1858 from the east and then from the south 1870 meant not just transportation but also employment as well. Vast railyards and servicing facilities grew along with the freight logistic network as well. The Grand Trunk Western, Grand Rapids and Indiana Railroad, a subsidiary of the Pennsylvania Railroad, the New York Central's subsidiary the Michigan Central, and after 1899 the consolidated Pere Marquette all had major facilities. The Grand Rapids and Indiana and the Michigan Central had yards along present-day US-131 and the Grand Trunk on the north side of downtown, and the Pere Marquette constructed a new facility in Wyoming Township to the west. By 1925, over 15,000 Grand Rapidians worked for the railroads in one form or another.

FURNITURE CITY

The scale of the lumber industry helped to foster another and longer lasting industry in Grand Rapids. The city's position as the economic center of inland West Michigan, carpenters and other skilled woodworkers branched out into case goods and locally purchased furniture. As more settlers from the East arrived during



July 1883 Log Jam at the Pearl Street Bridge. Photo courtesy: Grand Rapids Public Museum.

and after the Civil War, they brought experience with water-powered factories and wood-turning machines as well.

To increase the speed of the river's flow, canals were built on both the east bank of the river in the 1840s and then on the west side in the 1860s. The East Side Canal initially provided power to sawmills but had shifted by the 1870s to factories. Both canals ran for about three-quarters of a mile through present day downtown. The combination of waterpower, machinery, and entrepreneurs in furniture sparked the city's furniture industry. As further use of the river, in 1880 one of the first hydro-electric generators entered service on the West Side canal.

Manufacturers during the 1870s applied increasingly sophisticated wood-working machinery not simply to low-priced furniture, but that of high-end models as well. To promote the city's goods, a special exhibit of Grand Rapids manufacturers had a prominent place at the 1876 Centennial Exposition in Philadelphia. Though a notable success, it also highlighted the ability of the largest manufacturers to exploit the combination of resources, location, and transportation along with marketing.

The growth of the middle-class during the Gilded Age meant that furniture took on not only a commercial but

also a cultural significance. Furniture styles included Colonial Revival, Baroque, and even Asian styles of increasing intricacy and decoration. Grand Rapids' firms continued to apply machinery to their production methods and to reach new markets including that of railroad hotels and other large-scale buyers. Companies such as Berkey & Gay, Nelson, Matter & Co., Sligh, Stickley Brothers, and many other firms expanded their product lines to reach nearly every price point. Across West Michigan dozens of other firms also produced furniture and case goods of every conceivable type as well.

Beyond the production of specific furniture pieces, the city and region also required the services of artists, suppliers, and other related industries. Metal goods for hinges, rails, springs, and other decorative items and paint, varnish, upholstery, and other finishing items also operated. Furniture machinery firms moved to the city to service and produce their items. The colorful and highly illustrated catalogs required the skills of artists and printers as well. The use of woods such as teak and mahogany required the creation of trade networks worldwide to have those items selected, cut, and delivered. This utilized the vast rail network and freight houses of the city to ship their products to a global market.

To further secure their position, Grand Rapids and regional furniture manufacturers created the twice-



Union Depot train shed, circa 1910. Photo courtesy: Library of Congress

yearly Furniture Market as a showcase for buyers starting in 1878. This event would bring thousands of buyers, designers, external companies, and suppliers to the city for two to three weeks at a time. It allowed the region's producers to challenge Chicago and New York City as centers of the industry and to assert their position as leading designers and style-makers and not just copyists of historical styles. The market would continue until its end in 1965.

A network of associations and media also promoted Grand Rapids as a center for furniture. The Furniture Manufacturers Association and later the Furniture Makers Guild asserted the quality and identity of "Grand Rapids Made" furniture and related industries. The GRM logo was the most public display of the powerful organization that the largest companies and the city's financial institutions had created. A network of interlocking boards meant that the largely family-owned firms could utilize local connections for finance and to control competition within the market. Firms did not compete directly within a price point but instead spread those across makers to ensure a cohesive approach to the market.

This would extend into the labor market as well. Though largely known for its strong Netherlands immigrant com-

munity, German, Irish, Polish, and Lithuanians had also come to Grand Rapids. As furniture was not a difficult industry to enter, and a significant advantage came in wage costs with workers paid by the piece. This effort meant that companies worked to resist unionization and to ensure control over the labor market.

1911 FURNITURE STRIKE

Tensions would come to a head in April 1911 with the start of a four-month strike of the major furniture companies. The strike would reveal the fractures along ethnic, social, and political lines with Dutch workers having less support for the union than their Polish and Lithuanian counterparts. Religious and business leaders also clashed over the strike and had a significant role in its failure.

The strike would realign the city's political structure to having a greater interest in aligning with business interests and city-wide rather than neighborhood focused commission-based government. It would also lead to many workers leaving the industry as the higher wages in the rapidly growing auto industry began to reshape the state's labor market. The system of interlocking boards would also come under investigation and legal action as the 1910s went on.



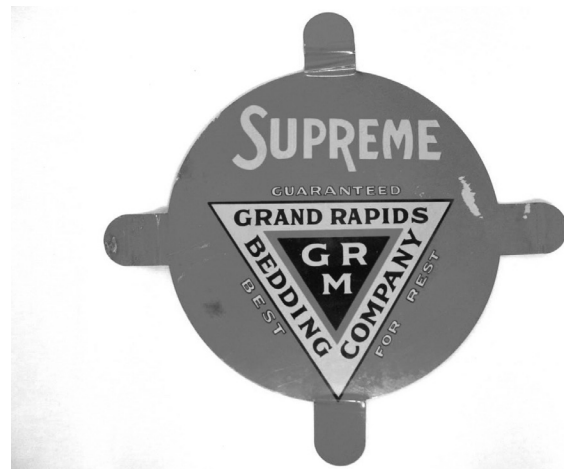
West Side Power Canal looking north from Fulton Street. Photo courtesy: Grand Rapids Public Museum.

ECONOMIC DIVERSIFICATION

The city's furniture industry faced growing challenges after the strike. Many firms saw the death or retirement of their founders, rising wages and new firms particularly in North Carolina eroded market share, and legal issues proved difficult to overcome. The Great Depression and World War II would further alter the furniture-making landscape of Grand Rapids particularly at the lower-price points.

New industries would move to the city particularly in equipment, tool and die, and the auto industry. Grand Rapids had been notable for the lack of a large-scale presence of Michigan's signature industry until the Great Depression. Looking for a new site to produce stamped auto bodies for its new model line in 1935, General Motors constructed a new 400,000 square foot facility to the south of the city. It would mark the entry of many legacy firms to begin seeking and gaining contracts as auto suppliers from seating to wooden trim components.

The furniture industry shifted away from bedroom suites to office suites as firms such as Steelcase moved to take advantage of the postwar economic boom. New firms such as Nucraft also moved into the sector while older firms such as Widdicomb and Kindel moved into reproductions and higher-price point markets for domestic furniture. Zeeland-based Herman Miller, for example, worked with designers Charles and Ray Eames to create the famous chair and other modern design classics. Other firms such as Irwin Seating moved into theater, auditorium, and stadium seating with innovations in



Tag showing the "Grand Rapids Made" trade label. Photo courtesy: Grand Rapids Public Museum

plastic and other production techniques. Though not nearly as large, the furniture industry had not departed, it had simply become more regional and specialized in its products and approaches.

Despite these changes, the years from 1950 to 1990 saw Grand Rapids face a number of challenges. From 1960 to 1970 the city lost its status as the "Second City" to Flint and its extensive network of auto plants. A series of annexations returned Grand Rapids to its former place by 1970 but reflected the shift to the suburbs. Efforts at urban renewal reshaped downtown yet did little to enhance its economic prospects. Dieselization of railroads and their economic troubles had



Phoenix Furniture Company factory on Fulton Street. Photo courtesy: Library of Congress.

reduced that workforce by two-thirds. The construction of I-196 and US-131 also removed railyards and demolished hundreds of factories, warehouses, and other industrial structures.

NEW DIRECTIONS

Civic leaders throughout the era continued their efforts to revitalize Grand Rapids' economy. A notable feature to the region is the high percentage of industries with strong ties to the local area. Though efforts such as urban renewal proved to be controversial in their impact, other ventures such as investments in higher education and the medical fields provided greater yields. The "Eds and Meds" focus has impacted manufacturing by drawing talent and a skilled workforce to the region in a complimentary fashion. New firms such as Gentex in auto parts and consumer goods, auto-industry supplier Magna International, and regional retailing company Meijer have expanded their operations in the region.

The shift in public attitudes towards urban areas has also contributed to the city's growth in population and changes in city neighborhoods. Historic preservation efforts since the 1960s have helped to retain much of

the city's industrial fabric that is now being repurposed into new uses while still maintaining the traditional look of many areas. The city's population has remained stable in total numbers for decades, in part to the city avoiding the tremendous changes in the auto industry since the 1970s. Though challenging economically, that stability has helped the city retain neighborhoods that have attracted new residents, enhancing the residential appeal of the region. Though not an industrial component, this has an impact as firms consider relocating or as the region can retain residents and skilled workforce.

Grand Rapids and the West Michigan region have experienced a host of changes since the height of the furniture industry. While they share in the issues that Michigan faces in the coming years, the region remains the fastest growing in the state both in population and economically. Despite the marketing brand as "Beer City," industry remains the foundation of Grand Rapids and its surrounding region as it has since the nineteenth century. That industrial presence and legacy can be found throughout the city and in the region wherever one looks. Grand Rapids may be a city upon a river, like many others, but it is a place with a heritage all its own.

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GRAND RAPIDS 2023

TOUR SITES

TOUR SITES

T-1 & S1: WALKING TOUR OF THE GRAND RIVER WATERFRONT AND DOWNTOWN GRAND RAPIDS



West side of the Grand River near today's I-196 overpass, 1911. Photo courtesy: Grand Rapids City Archives and Records Center.

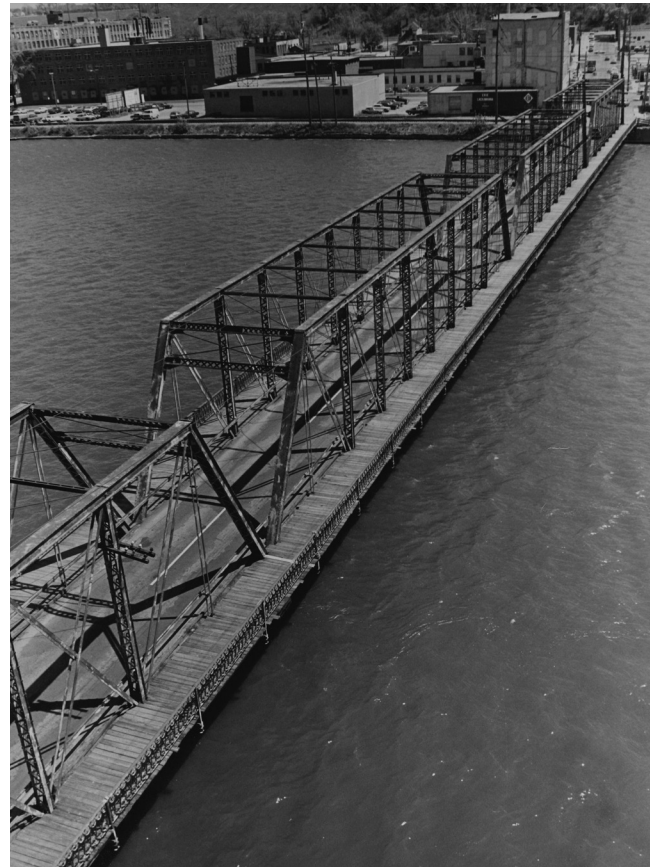
This walking tour departs from the hotel and moves south along the Grand River waterfront. Though significantly impacted by flood control measures, dams, highway construction, and urban renewal in the 1960s and 70s, the area still presents a rich legacy of the city's industrial heritage. Highlights of the tour include remaining industrial buildings visible from the conference hotel, public art, and the dams in the river. Further discussion includes the reshaping of the river itself and the West Side Power Canal.

Bridges including the Bridge Street Bridge built 1903-1904, the Gillette Bridge constructed for the Michi-

gan Railway Company interurban in 1915, the Grand Rapids & Indiana Railroad bridge built in 1892, and the Fulton Street Bridge built in 1928 are all featured parts of the tour. Perhaps most notable is the Sixth Street Bridge located across from the conference hotel. Built in 1886, the Pratt through-truss bridge was rehabilitated in 1975 through public effort and helped to foster Grand Rapids' preservation community's successes in the decades to come. It remains one of the city's signature structures. No longer does Grand Rapids face away from the river, it is now a core part of the city's identity.



Sixth Street Bridge looking southwest in 2023. Photo courtesy: Matthew Daley.



Sixth Street Bridge in 1975. Photo courtesy: Grand Rapids History Center.

T-2: FURNITURE, RAILS, AND MINES

Matthew L. Daley



Present day Nucraft factory, opened in 1985. Photo courtesy Matthew Daley.

Furniture is on the agenda for the start of this tour beginning with Nucraft in Comstock Park. Going north on Monroe Avenue, the tour passes through the East Side industrial section along the Grand River bringing us close to sites including the Coldbrook Pumping Station (built 1910), the Monroe Filtration Plant (built 1912) and the former Grand Rapids Chair Company facility. As in many cities, factories moved further out from the central city to suburban areas such as Comstock Park in Alpine Township.

Nucraft furniture began as a venture between designer B.E. Richardson and factory supervisor George W. Schad Sr. at the Stow-Davis Furniture Company. The initial designs in 1939 were wooden wastepaper baskets and letter trays produced in a small factory on Monroe Avenue. The company formally incorporated in 1946 and expanded their product line utilizing modern styles and creating a modular wall and desk combination system for offices. The flexibility of the system made it very popular during the 1950s and 60s.

By the 1970s, the Schad family had taken full ownership of Nucraft and faced a changing market that saw a decline in sales. George Schad's eldest son Tim, having worked at General Motors and other firms, joined the firm in 1979 to help rework the diverse product line. Tim Schad became President and CEO in 1984, the same year that the firm began offering a full line of conference

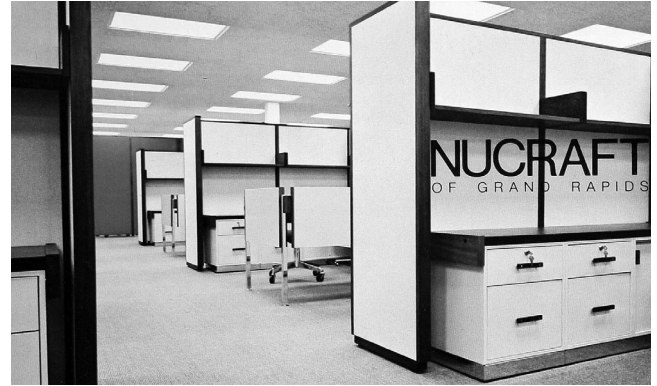
room furniture, a niche market where it remains a key player to the present day.

The change in products required a new plant, so the firm built and moved to its current facility on West River Drive. In 1998, Bob Bockheim from Haworth, another family-owned furniture firm, joined the company as President and COO. His work led to the transition of designing and marketing products to interior design firms, thus creating a closer relationship to consumers. Nucraft also returned to the casegood market focused on private office designs. These efforts in both market segments created a design-oriented and award-winning brand. Nucraft remains a family-owned brand with our host Matt Schad serving as CEO since 2016. The Nucraft facility highlights the manufacturing process of materials and design.

The tour then shifts to the nearby suburb of Walker and the Irwin Seating Company. The Irwin family has well over a century's connection to the furniture industry in Grand Rapids. Irwin Seating has its origins in 1907 as the Steel Furniture Company founded by three Irwin brothers, Earle, Eber, and Robert, along with two other investors. The firm focused on furniture with metal framing including opera, church, lodge, and later classroom furniture. Earle served as company president and brought in his son William in 1933 just after the family took full control of the company and changed the name



Nucraft original factory building in downtown Grand Rapids. Photo courtesy Matt Schad.



Nucraft furniture catalog circa 1980. Photo courtesy Grand Rapids Public Museum.

to Irwin Seating Company. The company ceased furniture production during World War II to create a subsidiary to manufacture M-1 carbines.

William Irwin as company head returned the firm to furniture production with a focus on classroom, auditorium, and theater seating in 1945. Classroom furniture became a successful product with bent plywood forms and steel framing with book storage beneath. The other product lines continued to expand, and with the introduction of injection-molded plastics, the lines became more ergonomic and flexible in uses. By the mid-1980s, the firm had become one of the leading producers of theater and auditorium seating with a global reach. Venues that have Irwin seating in 2023 include Carnegie Hall in New York City, U.S. Bank Stadium in Minneapolis, and the St. Cecilia Center closer to home in Grand Rapids.

To support this growth, Irwin Seating departed its former site on Buchanan Avenue south of downtown Grand Rapids in 1968 for its current location in Walker. To further diversify the product line, in 1991 the company purchased the Folding Bleacher Company to move into the telescopic seating market. Irwin also purchased the architectural fixed seating line from American Seating Company in 2016. The company remains a family-owned entity with William's son Earle S. "Win" Irwin (one of our hosts) becoming president and CEO in 1984. His son Graham assumed that role in 2015, with other sons, Andrew (another of our hosts) and Coke as vice presidents. The Irwin Seating family has also joined with other regional firms in leadership roles to draw new companies and talent to West Michigan. This effort reflects the long tradition in West Michigan's furniture industry of both innovation and family-owned entities providing the region with firms that identify with their communities.

West of Walker in Ottawa County is the city of Coopersville, the next stop on the tour. The Coopersville & Marne

Railway is a small volunteer run organization that runs passenger excursions between Coopersville and Marne. The tracks used today have a lineage nearly a century and a half old.

Coopersville was initially settled in the late 1840s and took its name from Benjamin Cooper who worked to have the area establish a station on the proposed railroad. The Detroit and Milwaukee Railroad laid the first tracks in 1858, with the first train calling at the town in June of that year, and completion of the line to Grand Haven a few months later. Primarily an agricultural community, the then village experienced severe fires that destroyed its business district in 1893 and again in 1898 with rebuilding taking place each time. In addition to the railroad, Coopersville became a power generating sub-station and stop on the Grand Rapids, Grand Haven, and Muskegon Railway interurban from 1902 to 1928. A largely restored interurban car can be viewed at the former sub-station facility in downtown Coopersville.

The rail connection grew more important with the growth of Grand Haven and Muskegon from lumber ports into manufacturing centers. A reorganization changed the name of the railroad to the Detroit, Grand Haven, and Milwaukee Railroad in 1878 with its purchase by the Great Western Railway of Canada. It then became part of the Grand Trunk Railway in 1882 drawing traffic from both Sarnia-Port Huron and Detroit crossings. The Grand Trunk was the last to create its own Lake Michigan car ferry by establishing service between Grand Haven and Milwaukee. The narrowness of the Grand Haven harbor had the company eventually move once it secured a right of way to Muskegon in 1933.

The Grand Trunk would eventually become part of the Canadian National Railroad Company in 1928. Along with the ferry service, the Grand Trunk operated a passenger station on the north side of downtown Grand



Current Irwin Seating facility built in 1968 in Walker, Michigan. Photo courtesy Grand Rapids History Center

Rapids, requiring a difficult backing procedure along the east side of the Grand River. The station on Michigan Street extended over the river as its line into the city from the east did not connect to the other major lines to allow the Grand Trunk to join in the city's Union Station south of downtown. Passenger service was discontinued on the Coopersville line in early 1960. The Grand Trunk sold the track section running from Grand Haven to Grand Rapids that Coopersville is situated on in 1987 to the short line Central Michigan Railway.

The Central Michigan line only operated for a limited time before selling to the Friends of the Coopersville & Marne Railway in 1989 for use as an excursion railroad. The vintage equipment is maintained by a volunteer staff and is included in a series of excursion trains and events throughout the year. Additionally, the organization services a limited number of businesses on the north side of Grand Rapids on its line. Coopersville & Marne operates a General Motors SW9, a General Electric 50-ton center cab, and has in 2023 acquired a General Electric 125-ton center cab from Consumers Energy from a retiring power plant. Additionally, the organization has a shop and a wide array of other vintage equipment and rolling stock at its facility.

Gypsum mining is one of the earliest and longest lasting industries in Grand Rapids. Farmers used gypsum as a soil additive for nutrients and to improve aeration. Surface mining for gypsum began on the west side of the river in the 1840s and expanded during the 1860s with the opening of Richard Butterworth's surface mines and other operations along Plaster Creek southwest of the city. Industrialist William T. Powers started subsurface



Steel Furniture Company on Buchanan Avenue SW founded in 1907 and renamed Irwin Seating Company in 1932. Photo credit: Grand Rapids Public Library Photo Collection, Grand Rapids History Center



Interior of the Steel Furniture Company on Buchanan Avenue SW founded in 1907 and renamed Irwin Seating Company in 1932. Photo credit: Grand Rapids Public Library Photo Collection, Grand Rapids History Center



Refurbished switch tower at Coopersville. Photo courtesy Matthew Daley.



General Motors SW9 switcher working near Grand Rapids. Photo courtesy Coopersville & Marne Railway.

mining at a site near Fulton Street on the Grand River's west bank near the current location of Grand Valley State University's downtown campus. The shafts extended 100 feet down into a seam of gypsum that dipped under the river to the Sixth Street Bridge near the conference hotel. Additional companies opened mines that extended beneath much of the valley floor on the west side.

Michigan Natural Storage provides temperature-controlled storage in warehouses and former gypsum mines in Wyoming, Michigan. The Alabastine Mining Company operated the site as an open-quarry facility in the 1890s before sinking an 85-foot shaft near Plaster Creek to gain access to a 12-foot-thick seam of gypsum. The company's calcination process heated, purified, and dehydrated the gypsum into a consistency for stucco or traditional plaster. Alabastine was marketed as a superior wall covering that could be painted on with a thick consistency. The idea being that it would resist moisture and be easily cleaned. It proved a popular option with designers like Gustav Stickley and Elbert Hubbard promoting its virtues. The mine eventually grew to have four miles of tunnels, each 30-feet wide, with 75 rooms branching off. In the initial years, mules were the main motive power and stables were constructed for their care.

The Alabastine Company continued operations even as the popularity of its signature product declined, eventually declaring bankruptcy in 1943. In 1946, businessman Bert Kragt acquired the property and opened it in 1957 as a storage facility for produce and other products that required cool and cold storage. This required reworking the above ground buildings, clearing some of the tunnels of equipment and adding concrete to the floors for ease of movement. The company continues to expand into above ground storage at sites across West Michigan. Its signature facility remains the mine which remain at a steady temperature in the 50s throughout the year. The Kragt family continues to own and operate the company.

Gypsum mining in the area continued until the closing of the Domtar Mine in Walker in 1999. The existence of extensive mine shafts across the region has created some concerns throughout the years, particularly in 2008 when a subsidence at the old Powers Mine in downtown Grand Rapids required stabilization. Studies regarding stability near I-196 have also examined the issue, but such incidents remain isolated.



Alabastine calcination plant from a postcard circa 1910. Photo courtesy Dilley Historical Collection, Grand Rapids History Center.



Inside the Alabastine gypsum mine in Wyoming Township, circa 1915. Photo courtesy Grand Rapids Public Library Photo Collection, Grand Rapids History Center.

SOURCES

Coopersville & Marne Railway, Vertical File, Grand Rapids History Center, Grand Rapids Public Library

Gypsum mining, Vertical File, Grand Rapids History Center, Grand Rapids Public Library

Irwin Seating Company, Vertical File, Grand Rapids History Center, Grand Rapids Public Library

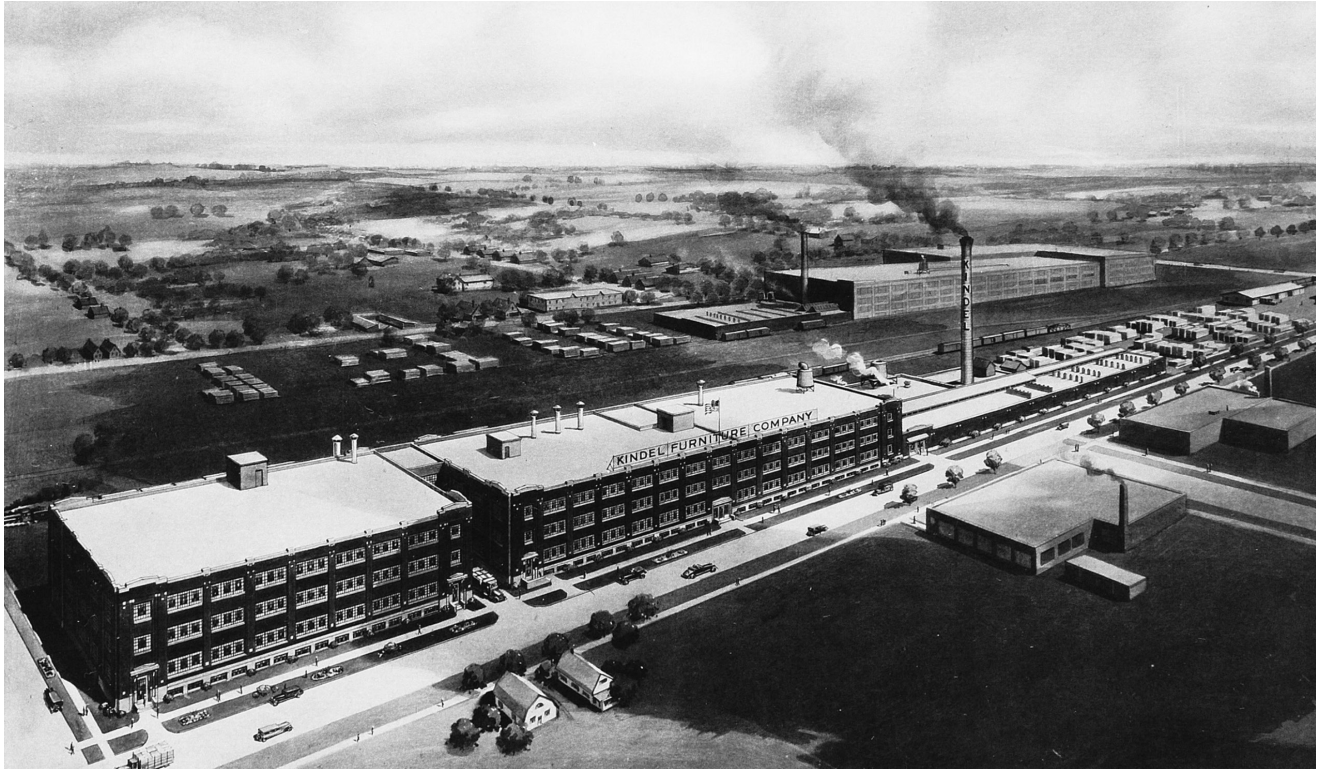
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F-1: TRADITIONAL FURNITURE, WATER AND SKY

Matthew L. Daley



Kindel plant at Cottage Grove and Division Avenue built in 1912. Photo from Hidden Qualities of Kindel Furniture, 1937, courtesy Grand Rapids Public Museum.

Though the origins of the furniture industry in Grand Rapids came initially from local entrepreneurs, the early twentieth century brought new producers without ties to the city. One of these was Charles Kindel who had established his firm as the Kindel Bedding Company in Denver in 1899, moved to St. Louis in 1904, and then finally to Grand Rapids in 1912. It also gained a new name, the Kindel Bed Company which manufactured convertible Davenport beds in a variety of styles. The company built a large facility at Cottage Grove and Division among other firms involved in the furniture industry.

From the 1930s to the 1980s, Kindel diversified into the production of additional residential furniture as the market changed. This ability to change with the styles, along with the quality of its leadership, helped the firm survive the Great Depression and other challenges that led so many of its competitors to depart the city for locations in North Carolina and other states. In 1982,

Kindel shifted its business model to manufacture of authentic reproductions using traditional methods of decoration, woodworking, and veneering. The sheer range of styles from French Provincial, English, Italian, and Asian designs reflect the versatility and craftsmanship of the firm.

With contracts with the Winterthur Museum's collections, the National Trust for Historic Preservation, and then branching into special order designs, the firm has experienced continued success. The acquisition of other companies has also brought new product lines to the firm, and the production of specialty line reproductions has also enhanced Kindel's portfolio. Having moved to its current facility in Wyoming, Michigan, the 1912 building underwent renovation but burned in May 2011. Though a modern facility, Kindel's production methods, distinct to the city's furniture producers, is what makes our visit to the site such a valuable one.

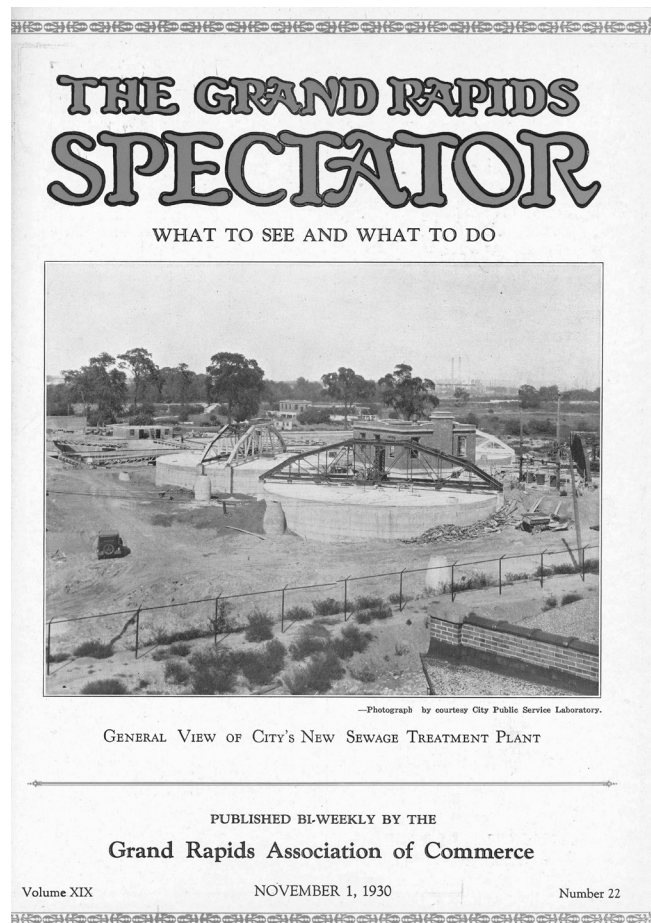


Present day Kindel production facility on Eastern Avenue in Wyoming, Michigan. Photo courtesy Matthew Daley.

The tour then moves to the Grand Rapids Water Resources treatment facility, a city owned entity that manages a regional system that provides water and sewage treatment to communities in Kent and Ottawa Counties. With a regional network of 137 square miles and a population served of 280,000, the facility reflects the multiple water systems in the area.

The work to provide water to the city began in 1875 with the formation of the Grand Rapids Water System that drew water from the Grand River and provided it within a system of wooden and later tile and metal pipes throughout what is now the downtown area. As the city's industries grew, tensions increased over the quality and availability of water as dams and waste had an impact on the river. The creation of a city-owned system in the late nineteenth century also faced issues as questionable practices to improve water quality and construction costs raised serious political issues.

The necessity of water, however, did result in the construction of the Coldbrook Pumping Station in 1910 north of downtown on today's Monroe Avenue. This facility allowed for fewer pumping stations and provided water outside of the valley on both the east and west sides of the Grand River. The same year saw the construction of the Monroe Filtration Plant further up Monroe Avenue to better address water quality. Population growth required the expansion of the facility in 1922 and again in 1935. It would also be part of Grand Rapids' pioneering use of fluoride in drinking water in 1945 to improve dental health in the city.



Construction of the new Grand Rapids Sewage Treatment plan, 1930. Photo courtesy Grand Rapids History Center.



Aerial view of the Saugatuck Gap Filler Radar Annex. Photo courtesy of the Friends of the Mt. Baldhead Radar Station

The construction of the Lake Michigan Filtration Plant in West Olive, Ottawa County in 1962 greatly expanded water capacity and replaced the original facility. The Monroe plant was retained as a backup until 1992 when it was closed and sold. It now operates as an events center and has received significant alteration and modernization.

In 1930, the city opened its first sewage treatment facility along Market Avenue, the site being visited on this tour. Located next to the Pere Marquette Railway's Wyoming Yards, the site also housed the city's piggery that consumed food waste that came from the required separation of garbage. This operation continued until 1952 when the city began utilizing landfills. The treatment part of the site expanded several times in the 1960s and 1970s with reductions in discharge to the Grand River. This reflects the city's changing relationship with the river that continues to the present with on-going discussions for the restoration of the rapids to the waterway.

From Grand Rapids, the tour goes to the Lake Michigan shoreline at the villages of Saugatuck and Douglas to view a unique part of Cold War history, the Saugatuck Gap Filler Radar Annex. Traveling through West Michigan gives little evidence of the enormous stands of white pine and hardwoods that once covered the Lower Peninsula in the 1830s. With the expansion of the Chicago lumber market in the 1860s, nearly every river on the Lake Michigan coast featured sawmills and docks to ship lumber. Saugatuck and Douglas were no exception,

being formed in 1868 and 1870 respectively. Another community, Singapore was located within the areas of highest dune action and eventually it was abandoned due to the effort required to protect buildings and rails from dune formation.

The combination of the dunes, the large flooding of the Kalamazoo River, and the water route to Chicago made the transition of Saugatuck and Douglas into tourism areas a rapid one. The dunes along the Lake Michigan coast from Indiana to the southern coast of Michigan's Upper Peninsula are among the largest on freshwater in the world. The most notable is Sleeping Bear Dunes National Lakeshore 180 miles to the north.

Saugatuck and Douglas became art colonies and resort areas like South Haven to the south during the late nineteenth century. As traveler tastes changed and the older resorts faded, Saugatuck became a destination for the LGBTQ+ community starting in the 1970s. Douglas, slightly inland, also has a sizable summer population and focuses more on the riverfront. The Cold War, however, brought an incongruous addition to the area.

To defend against bomber attack by the Soviet Union, the Semi-Automatic Ground Environment (SAGE) system of radar and networked computer systems was constructed in the 1950s. These large radars had gaps in their coverage, especially at lower altitudes, and a system of smaller stations was constructed to enhance coverage. Mount Baldhead in



The Michigan Maritime Museum's 1812-era topsail schooner Friends Good Will. Photo courtesy Matthew Daley

Saugatuck was selected because of its 230-foot height and position close to Lake Michigan's level surface. Several other stations were constructed in Michigan and fed their information into the central network based at Custer Air Force Station near Battle Creek.

Construction began in 1957 and the AN/FPS-14 radar went live in 1958. The station consisted of a series of outbuildings for the diesel generator, network connections, and computer equipment. The centerpiece was a 70-foot-high three-legged tower with a 20-foot platform housing the radar antenna inside of a 26-foot-diameter white fiberglass radome. The station is largely intact and can be seen from specific angles from Saugatuck and particularly the Lake. The station was upgraded to the AN/FPS-18 radar in 1963, but advances in satellite and radar coverage made the station redundant and it was decommissioned in 1969.

Most of these gap-filler sites have been demolished or significantly altered, making Saugatuck's among the most well-preserved. The Mount Baldhead Radar Station Preservation Work Group along with the Saugatuck-Douglas History Center worked to document and preserve the site culminating in the listing of the site on the National Register of Historic Places in late 2022. The original volunteer group has now evolved into the Friends of the Mt. Baldhead Radar Station, continuing the preservation and documentation work, and working with the History Center on tours such as ours.

The last stop on the tour takes us to South Haven, Michigan, and the Michigan Maritime Museum. Located at the mouth of the Black River, South Haven served as the initial settlement point for Van Buren County in the 1830s. Like other Lake Michigan ports, it started as a lumbering center before transitioning to a combination of agriculture and resorts. Located a relatively short distance across Lake Michigan from Chicago, the expanse of dunes and the slow-flowing river made the community an attractive one for vacationing city residents.

Along with the resorts that extended along the dunes and inland along the river, agriculture shaped the other major part of South Haven's economy. Peaches and apples grew in the microclimates created by the Lake's impact on temperature, and the ability to ship them quickly from the harbor to Chicago ensured their freshness. In the 1930s, hybridized blueberries were introduced and added to the mix. The water route would continue until the last passenger and freight ships ended service in 1941. By then trucks had taken over the transportation work.

The Michigan Maritime Museum began in the mid-1970s as a local effort to present the area's history in relation to Lake Michigan. The site expanded over the years into an operation that specializes in historic watercraft and the commercial fisheries that were part of South Haven's and the rest of the Michigan coastline's economy starting in the 1860s. The museum

has a flotilla of operating vessels including the *Friends Good Will*, a replica of an 1812-era topsail sloop. An additional building houses restored and original U.S. Lifesaving Service and Coast Guard watercraft. The museum also acquired the Jesko Fishery that operated from 1932 to 1988 and adjoins the museum property. A new Maritime Heritage Center opened in September 2022 greatly expanding the interpretive and public areas. The museum provides a window into the efforts to maintain harbors and manage the complex Great Lakes maritime system.

Please note that the climb up Mt. Baldhead is on 300 wooden steps to the top. There is also a new interpretive display on the site at the base of the dune in the 1904 Pump House.



Michigan Maritime Museum's newly opened Maritime Heritage Center, September 2022. Photo courtesy of the Michigan Maritime Museum

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Saugatuck Gap Filler Radar Annex, National Register Nomination, 2022.

F-2: BELTS, DAMS, AND BOATS

Matthew L. Daley & Rebecca Smith-Hoffman



Clipper Belt Lacer office building in 1936. Photo courtesy Grand Rapids City Archives and Records Center



Old Clipper Belt Lacer facility being prepared for renovation, 2023. Photo courtesy Matthew Daley

Belt drive machinery was critical to the furniture industry's operations and belt suppliers quickly set up shop in Grand Rapids. Power transmission drives with flat belts made of chrome leather were essential components of factory systems. These pliable belts, while more efficient, tended to split with intense use. Repairs required hand sewing or lacing the ends together – a time-consuming process. James Barns Stone (1861-1915), a Grand Rapids native began to repair industrial belting and sold a belt fastening system using long and short leg wire hooks in 1905. This system allowed most workers to repair damaged belts on the factory floor.

In 1905, Stone purchased the patent rights to a lacing

device now called the Clipper Lacer, and established J. B. Stone & Company in partnership with his brother, Frank A. Stone (1859-1938).

The Flexible Belt Lacing Company was incorporated in 1908, and in 1909 James Stone sold his interest in the company. Construction of a new factory on Front Avenue was completed in 1912, when the company once again changed its name to the Clipper Belt Lacer Company. The company also began to institute a few progressive employment practices including profit sharing, a nine-hour working day, and group health insurance. By 1916, Clipper Belt had become an important Grand Rapids company with a growing domestic and international busi-



Current design, administration, and production facility for Flexco. Photo courtesy Matthew Daley



*Hardy Dam Powerhouse.
Photo courtesy HAER
Collection, Library of
Congress*



*General view of the
Hardy Dam site from the
top of the embankment.
Photo courtesy HAER
Collection, Library of
Congress*

ness. They operated branch offices in London and Paris and employed one hundred workers, including fourteen traveling salesmen covering North and South America, the West Indies, Australia, and Asia.

From the building constructed in 1912, the complex eventually expanded to include eight buildings where Clipper Belt continued manufacturing operations until

1982. At that time, like so many other Grand Rapids industries, the company constructed a modern 100,000 square foot, single-story factory in the Oak Industrial Park on the outskirts of the city.

In 1994 Flexco, of Downers Grove, Illinois, purchased the company. Flexco was founded in 1907 as the Flexible Steel Lacing Company, which produced a hinged



Muskegon Union Depot, built 1895. Photo courtesy Matthew Daley

belt fastener that was sold by J. B. Stone in the United Kingdom early in the twentieth century. Clipper Belt Lacer changed its name once again in 2008, becoming Flexco Grand Rapids. In 2021, it moved into a 288,000 square-foot, state-of-the-art factory at Northridge Drive in Walker (a suburb of Grand Rapids), where it continues to manufacture conveyor belt fasteners, including some that bear a strong resemblance to those patented by J. B. Stone in 1907.

The tour then takes a ride north to Consumers Energy's hydroelectric facility, Hardy Dam on the Muskegon River near Newaygo. Serving the Grand Rapids market, Hardy Dam is a significant change from the earliest use of hydro-electric power in the city in 1880. An earth-filled embankment dam, the site creates a 4,000-acre impoundment called Hardy Dam Pond that reaches 110 feet deep and has a nearly 50-mile shoreline. Hardy Dam was the last of three dams constructed on the Muskegon River, the first two being the Rogers Dam opened in 1906 and Croton Dam opened in 1907. The largest of the three facilities, Hardy Dam also has the greatest generation capacity of any facility in the Lower Peninsula at 31.5 megawatts installed.

The Muskegon River dams were the centerpieces of the utility conglomerate created by the Foote brothers, William and James, and their partner Samuel Jarvis in 1886. Recognizing the growing market for electricity in Grand Rapids, the company moved to establish the Muskegon River facilities to supply that market. They also

took advantage of innovations in high-voltage transmission lines to prevent power loss over the 50-mile distance from the Croton Dam.

To further expand capacity beyond Croton and Rogers, engineer William Fargo designed a larger site that required concrete for the base to address issues with the soft soils. By using a highly successful hydraulic sluicing method for moving the soft soils to create the dam, the company began construction in the fall of 1929. When opened in March 1931, Hardy Dam had a height of 120 feet and a total length of 2600 feet with 1,000-foot base. Named for George Hardy, the head of the Commonwealth & Southern holding company that financed the dam, the facility proved an immediate success.

Hardy Dam has undergone a series of upgrades to its generating equipment, including recently in 2009 to reach its current power rating. With its Spanish Colonial Revival Architecture, the site is readily viewed from the roadway along the top of the embankment and from additional views around the impoundment and downstream. The interior of the facility shows the combination of craftsmanship and the changes required to maintain efficient production. Added to the National Register of Historic Places in 1997 and documented by the Historic American Engineering Record, the site, along with its neighboring dams, is of great significance.

Next the tour takes a drive to the city of Muskegon, roughly paralleling the path of the Muskegon River. Along



Charles Hackley House on Webster Avenue, built 1887. Photo courtesy Matthew Daley

the way we will see several bridges and the historic village of Newaygo along the bend in the river. An opportunity to view the older Croton Dam from 1907 is also a part of the tour at this point.

Muskegon was initially settled in the 1830s at the mouth of the Muskegon River where it empties into the 4100-acre Muskegon Lake. Unlike many ports along the Lake Michigan coast, the dunes and river created a large, protected body of water with wetlands and sufficient area for settlement. With the demand for lumber from Chicago's market and the Great Plains during the late 1850s and into the 1860s, over fifty sawmills lined the shores and made Muskegon one of the busiest ports on the Lakes. In 1887 alone, over 665,000,000 board feet of lumber were produced by the city's mills.

Charles Hackley came with his family from Michigan City, Indiana in 1856 and established with his business partner, Thomas Hume, the Hackley-Hume Lumber Mill on Muskegon Lake. After the peak years of the 1880s, Michigan's Lower Peninsula forests were largely cleared, and even Hackley's mill closed in 1894. Unlike his fellow lumbermen, Hackley remained in Muskegon and along with Hume and Newcomb McGraft established the Muskegon Industrial Fund to draw new businesses to the city. Hackley also embarked on a program of philanthropy that helped to fund the city's schools, established the city's library in 1890, and helped rebuild the city after fires in the 1890s.

The Muskegon Industrial Fund's efforts would prove successful as major firms such as paper mills, Brunswick (maker of billiard tables and other recreational products), and Continental Motors made Muskegon into a major manufacturing center. Other firms in metal working, electronics, and foundries rounded out the city's diversified industrial base. Despite this, the years from 1970 to the 1990s saw the decline of heavy industry in Muskegon with a realignment toward more specialized manufacturing, services, and tourism.

We will drive through Muskegon's Historic District, added to the National Register of Historic Places in 1982, bounded by Clay, Webster, Second, and Sixth Streets. Within it are the Hackley and Hume Houses, the Hackley Public Library, St. Paul's Episcopal Church, among other structures. Just a few blocks away is the West Michigan Dock and Market Corp's Mart Dock located on the remnants of the city's lumbering port. From this vantage



The Mart Dock main warehouse Muskegon waterfront. Photo courtesy Matthew Daley



Former Muskegon Hosiery Mill on Western Avenue, built 1895. Photo courtesy Matthew Daley

point, the view includes some of these industrial facilities as well as examples of the city's efforts to revitalize the shores of Muskegon Lake.

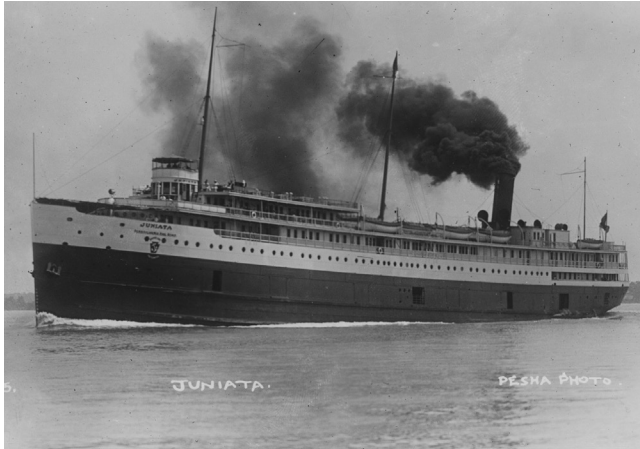
The tour proceeds down Lakeshore Drive to the dock of the *Milwaukee Clipper*, the oldest and last passenger ship on the U.S. side of the Great Lakes. Originally named *Juniata*, the steel ship was launched in December 1904 at the Cleveland yard of the American Ship Building Company and became part of the Erie & Western Transportation Company, also called the "Anchor Line." This entity operated a fleet of package freight and passenger ships between Buffalo, New York and Duluth, Minnesota. All the ships had names related to rivers in Pennsylvania, as did the *Juniata's* passenger fleet mates *Tionesta* (1902) and *Octorara* (1910).

While not the largest passenger ship, the *Juniata* at 361 feet in length could carry 350 passengers in comfortable Edwardian staterooms in the wooden upperworks. Along with its Buffalo to Duluth route, the ship also made charter runs to Chicago, Mackinac Island, and Thunder Bay, Ontario. The 1912 Panama Canal Act required railroads to divest of their Great Lakes fleets and combine them into the Great Lakes Transit Corporation. The subsequent decline of Great Lakes passenger

travel and the effects of the Great Depression resulted in the company laying up *Juniata* and its fleet mates in 1936 at Buffalo.

Juniata was purchased in 1940 by the McKee family, owners of the Sand Products Corporation of Muskegon, to be put into passenger service between Milwaukee and Muskegon. The ship entered the Manitowoc Shipbuilding Company's yards that year and had its wooden cabins removed both to comply with new fire standards and to receive a complete modernization. The new cabins were designed by naval architect George Sharp in an Art Deco style that featured extensive fireproofing in the staterooms and public spaces. The quadruple expansion steam engine remained in place, but the conversion to fuel oil made the large funnel only cosmetic as a smaller stack vented the exhaust. The ship received a new name, the *Milwaukee Clipper*.

Entering service in the spring of 1941, the *Milwaukee Clipper* carried a maximum of 200 passengers and 120 automobiles on a seasonal, two or three round trip daily schedule. Though still popular, the vessel retired from service in 1970s. Plans involving a "flotel" and other uses fell through and in 1980 the ship was moved to Navy Pier where it served as a museum until 1989. The *Milwaukee Clipper* was added to the



Juniata in her original configuration, circa 1910. Photo courtesy Fr. Edward J. Dowling S.J. Marine Historical Collection, University of Detroit Mercy



Milwaukee Clipper after rebuilding in 1941. Photo courtesy Great Lakes Maritime Collection, Alpena George M. Fletcher Public Library

National Register of Historic Places in 1983 and designated a National Historic Landmark in 1989. The ship was purchased by Hammond, Indiana in 1990 for use as a marina receiving ship until being replaced and tied up in South Chicago. In late 1997, the *Milwaukee Clipper* was sold to SS Milwaukee Clipper Preservation, Inc. and returned to Muskegon where it is cared for by volunteers.

The ship is docked at the former Grand Trunk Western

Railroad's car ferry slip. The remains of the apron and counterweights to ensure fit are in place and can be viewed. Though the rails have been largely removed, it is a distinctive site to visit. Further, the dock for the high-speed cross-Lake ferry the *Lake Express* is also to the east of the *Milwaukee Clipper*, reflecting the port of Muskegon's continued significance.

This tour entails two extended travel times of 55 minutes each.

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F-3: PRESERVATION, RESTORATION, AND DEMONSTRATION

Matthew L. Daley, Nan Jackson & Vern Mesler



Douglas Dauntless SBD-1 undergoing restoration, 2022. Photo courtesy Matthew Daley.

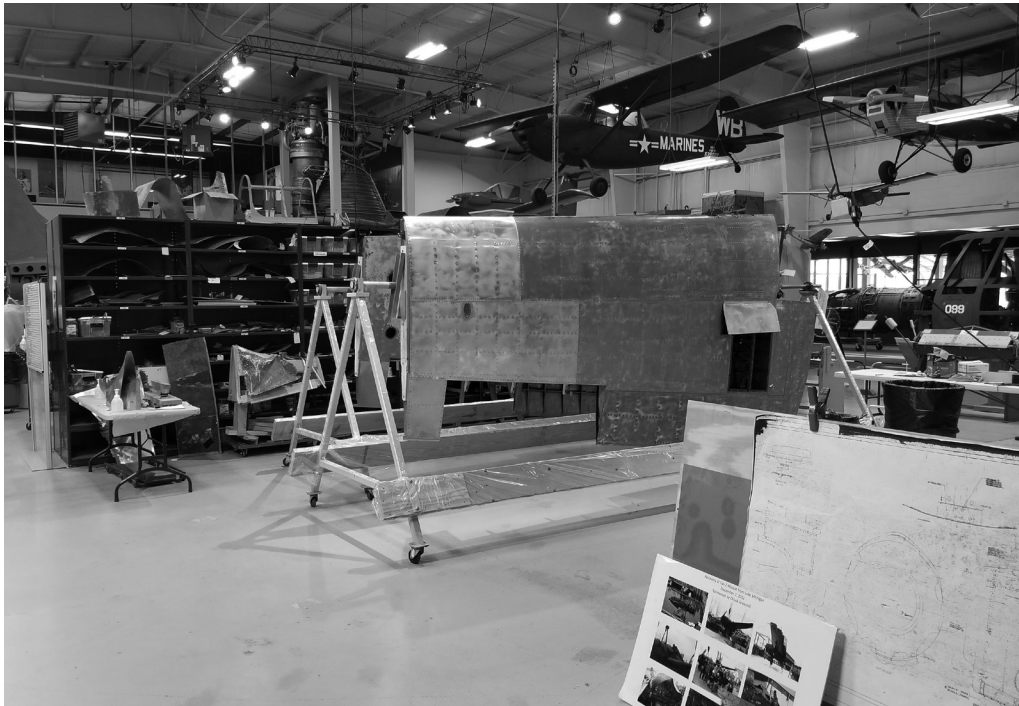
West Michigan has a strong emphasis on preservation and restoration of historical sites and artifacts both in public settings and museums. This tour takes participants to some of the unique locations where this is taking place. Heading south, the first stop is in Kalamazoo, initially settled in 1831 and incorporated as a city in 1884. The city expanded from regional manufacturing and agricultural products into pharmaceuticals through the Upjohn Company founded in 1886 and now a part of Pfizer. The Gibson Guitar Corporation, founded in 1902, also produced a variety of stringed instruments in Kalamazoo until 1984. Taxi producer Checker Motors operated in the city until 2009 and produced its famous A-series cab from 1958 to 1982 in its Southside neighborhood plant.

Our focal point is the Air Zoo, established in 1979 as the Kalamazoo Aviation History Museum but renamed for its collection of animal themed historic aircraft. Suzanne and Preston Parish, a Women's Airforce Service pilot

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and U.S. Marine Corps pilot respectively, created the museum based on a shared love of historic aircraft. A Curtiss P-40 Warhawk painted desert pink is the museum's mascot.

Along with displays of historic air and spacecraft, flight simulators, and related exhibits, the Air Zoo is a Smithsonian Affiliate, particularly for its work in historic aircraft restoration. Currently, the museum is restoring two World War II aircraft recovered from the bottom of Lake Michigan, a Douglas Dauntless SBD-1 and a Grumman FM-2 Wildcat. The former slid off the deck of the training carrier U.S.S. *Wolverine* in November 1942 and the latter slid from the deck of the training carrier U.S.S.



Air Zoo Restoration Center, 2022. Photo courtesy Matthew Daley.

Sable in December 1944. This is the third Dauntless restoration that the Air Zoo has undertaken and reflects the quality of their work. The tour will interact with the Restoration Team and see their efforts up close as this painstaking work takes place.

Leaving the Air Zoo, the tour travels past Battle Creek, Michigan, home of the Kellogg Company maker of Corn Flakes and other products, founded in 1906. The company emerged out of the work of brothers John Harvey Kellogg and William Keith (W.K.) Kellogg and the Battle Creek Sanitarium that operated according to principles of the Seventh Day Adventist Church. W.K. Kellogg went on to establish the company that remains headquartered in the city. Tours of the production facility ended in 1987. Other food manufacturing firms such as the Post Company also called Battle Creek home, along with a diverse array of manufacturing and metal working industries. Located in Calhoun County, the area is the site of the tour's next stop.

The Calhoun County Historic Bridge Park is a unique resource that preserves six of Michigan's historic bridges in a county park located on the Kalamazoo River near Battle Creek. Dixon's Bridge, a stone arch railroad bridge built by the Michigan Central Railroad around 1890, is original to the site. The focus of the tour will be the five metal truss bridges of different designs from various counties in the state, all restored specifically for pedestrian use in the Historic Bridge Park. The Charlotte Highway/Centerline Bridge is a stunning double-intersec-

tion pin-connected Pratt through truss, 180 feet long, built to cross the Grand River in Ionia County south of Portland, Michigan in 1886. The bridge now spans the entrance to the Historic Bridge Park, allowing visitors to see its faithfully replicated floor beams from the road below the bridge.

The Charlotte Highway/Centerline Bridge and three other bridges in the park are made of wrought iron, with shop-riveted members that are pin-connected: the Gale Road Bridge, a single span Pratt through truss built in 1897 by the Lafayette Bridge Company of Indiana, unusual in being built at a skew (resulting in challenges for its restoration); the 133rd Avenue Bridge, a pony truss built in 1897 by the Michigan Bridge Company; and the Bauer Road Bridge, a Pratt through truss built around 1880 by Penn Bridge Works and restored by using parts from an identical bridge on nearby Tallman Road in Clinton County. In addition to this collection of pin-connected wrought iron bridges is the 20 Mile Road Bridge, a steel bridge with riveted connections that required extensive restoration due to deterioration from rusting.

The tour of the Historic Bridge Park will feature discussion of the restoration processes by Vern Mesler, whose crew was responsible for carrying out the repair, restoration, and re-erection of the wrought iron and steel bridges. Assistant Director of Community Development of Calhoun County, Doug Ferrall, will provide additional perspective and context.



Verne Mesler leading a tour through the Calhoun County Historic Bridge Park. Photo courtesy Verne Mesler and Nan Jackson.



Photo: Nan Jackson 2005

Bridge work crew, 2005. Photo courtesy Nan Jackson.



Riveting demonstration participants. Photo courtesy Verne Mesler and Nan Jackson.

After visiting the Historic Bridge Park, the tour continues to Lansing Community College's West Campus where the hot rivet process will be demonstrated by trained craftsmen who are also skilled instructors. Anyone who wishes to try their hand at driving rivets will be able to do so. Hot riveting was a key restoration process for the work done to preserve Michigan's historic truss bridges for the Calhoun County Historic Bridge Park. The restoration work at the park has led to ongoing training in riveting at Lansing Community College and to the specification of riveting by MDOT for rehabilitation of some of Michigan's highway bridges currently in use, such as the Cut River Bridge in the Upper Peninsula. Most of the riveting done in fabricating Michigan's iron and steel bridges was done in the shop of the bridge company where the large bridge members were constructed using powerful pneumatic or hydraulic rivet equipment. The final erection of a bridge with riveted connections required riveting onsite with portable field rivet hammers. This work was much more visible to the general public and is commonly the



Riveting demonstration participants. Photo courtesy Verne Mesler and Nan Jackson.

image most people have of the rivet process, with the four-member rivet “gang” of heater, catcher, bucker-up, and driver. In the restoration of the bridges for the Historic Bridge Park and for the hands-on demonstration, the pneumatic Boyer field rivet hammer is used, even though in a shop environment.

REOLDS TRANSPORTATION MUSEUM



Finally, the tour will also visit the nearby R.E. Olds Transportation Museum to encounter Lansing’s long automotive legacy. Founded in 1842 and incorporated as a city in 1859, Lansing gained its role as state capital after the Michigan legislature decided to move the capital away from Detroit and its proximity to Canada and potential British invasion. Located on the Grand River, the city served as a regional hub for manufacturing and agricultural goods. The establishment of the Agricultural College of Michigan, now Michigan State University, in 1855 in East Lansing further enhanced the area’s significance.

Ransom Eli Olds (1864-1950) worked at his family’s steam engine firm and eventually entered the automobile business in 1897. In 1899, Olds formed the Olds Motor Vehicle Works with lumber magnate Samuel Smith. Moving production to Detroit, the Curved Dash Oldsmobile of 1901 gained attention as one of the first mass-produced automobiles selling nearly 4,000 in 1904 alone. This was the same year that Olds left the company and returned to Lansing to form the REO Motor Car Company. The Olds Motor Works was purchased by General Motors in 1908 and eventually discontinued in 2004.



1906 Mama and Baby REO cars. Photo courtesy R.E. Olds Transportation Museum.

Olds had a significant impact on Lansing’s development into a center for automobile and automobile parts production. Additionally, the city’s tallest building, Capital National Bank Tower built in 1931 (now called Boji Tower) received significant financial backing from Olds.

The idea for the R.E. Olds Transportation Museum came from a 1977 recommendation by the Greater Lansing Chamber of Commerce for the establishment of museum to preserve the city’s automobile heritage. Opened in 1981, the museum is housed in a former engine manufacturing facility that was specially rehabilitated for the museum’s needs. The museum’s extensive collection of historic vehicles and artifacts is complimented by the James D. Butt Archives that focuses on Lansing’s automotive and manufacturing history.

This tour entails two extended travel times of 55 minutes each.

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S-2: WALKING TOUR OF GRAND RAPIDS' HERITAGE HILL AND CHERRY HILL DISTRICTS

Matthew L. Daley



Looking north from Lyon Street at the industrial section of downtown Grand Rapids, 1911. Photo courtesy: Grand Rapids City Archives and Records Center.

Leaving from the hotel, this tour moves through the rapidly changing industrial district that anchored the north side of the downtown area until the recent past. The increasing mix of residential and industrial uses reflects the years prior to the city's encounter with urban renewal in the 1960s and the vast changes also brought by the construction of I-196 along the city's east-west axis and US-131 on the north-south along the west side of the Grand River. At the same time, urban renewal brought an interesting mix of Mid-Century Modern architecture to the city where older industries once stood.

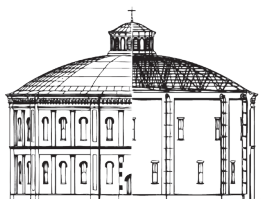
Further changes came in the 2000s as the city's health-care sector expanded dramatically and remade the Michigan Street corridor into "Medical Mile." These new

structures are also embedded within the older sections of the neighborhood and have brought new uses to these areas.

The geography of the Grand River Valley limited sprawl, meaning that even houses of factory owners were not located too far away. This walking tour examines the industrial legacy, urban renewal, and historic architecture of downtown and nearby historic districts of Heritage Hill and Cherry Hill up the side of the valley.

This tour goes up the side of the valley which has a significant grade, participants should have appropriate footwear and be aware of this.

NOTES



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