Industry in Frederick City has traditionally drawn on the natural resources of the region and complemented its agricultural base. Although Baltimore City dominates the industrial history of Maryland, manufacturing significantly shaped the development of Frederick. The backcountry was largely dismissed until the mid-18th century, yet mills were already in place by the founding of Frederick Town in 1745 as a regional market center. Timber, limestone, and iron ore attracted business-minded speculators, while the region also gave rise to a flourishing tanning industry. These industries had their widest influence through the early 19th century. By the Civil War, milling, too, had lessened in response to the ascendance of steam-powered mills, the railroad, and the large grain farms of the Midwest. Dairy processing industries grew in Frederick County to meet the local shift toward dairy farming, as did canning to process fruit and vegetable crops. Nationwide trends in the manufacturing sector in the late 19th and early 20th centuries were reflected in the industries of Frederick and the surrounding county, particularly concerning employment and wartime supplies. For over 150 years, Frederick felt the effects of population shifts toward urban areas, and in the latter half of the 20th century experienced significant, continued growth in big office building industries. Frederick City thus reflects the changing character of industry over time in the Mid-Atlantic region.

Early History of Industry in Frederick Town

The Maryland colonial government and men of influence were slow to recognize the advantages of the Monocacy River Valley. Early speculators looking to transplant Eastern Shore agriculture and to locate mining opportunities largely dismissed the relatively treeless, open landscape with its rock outcrops. By 1729, however, at least one mill was operating in the region. Over the coming decades, English investors and settlers from eastern Maryland converged with German emigrants from Pennsylvania. In general, the Germans bought or leased land from English speculators and began to imprint their holdings with grain-based agriculture and industry. Lord Baltimore further encouraged settlement during a visit in 1732 by establishing a paper currency to help the economy and instituting a system of quitrent collections, which he appointed Daniel Dulaney to set up and administer. Lord Baltimore “opened” the backcountry for settlement the same year.

Several years later, Dulaney visited the region himself and was impressed with what he saw. He named in a 1744 report to Lord Baltimore many of the natural resources that would give rise to industries, stating that the region “[Equaled…] any in America for natural advantages, such as rich and fertile soil, well furnished with timber of all sorts, abounding with limestone, and stone fit for building, good slate and some Marble and to Crown all, very healthy.”

Dulaney was so impressed, in fact, that he began buying large tracts of land. He advertised the land and its inducements, particularly the soil and ample waterpower, to Palatine Germans in Pennsylvania who were already looking outside that

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1Frank W. Porter III, “From Backcountry to County: The Delayed Settlement of Western Maryland,” *Maryland Historical Magazine* 70, no. 4 (Winter 1975), 342.
colony for fresh land, and also to Germans who came directly from the old country through the port of Baltimore. They brought grain farming to the region and, as a result, grist and flourmills were established to convert wheat, rye, oats, and Indian corn into more easily transportable and marketable flour or meal. Milling thus became a prominent feature of the local economy. Distilleries and breweries, which required little skill to run, also grew alongside mills and processed grains into whisky, beer, and ale.²

In 1745, Daniel Dulaney laid out the town of Frederick. He envisioned a market center to complement and focus the developing grain farms and processing operations of the region. Placement of the town grid over part of Carroll Creek to the south and east also ensured the development of industry. Not only was this area too low and unsuitable for residences, but also the prevailing westerly winds would spare residential sections from odors. Dulaney saw the area’s proximity to Carroll Creek as ideal for an industrial quarter once improved with fill. With Daniel Dulaney’s active encouragement, the settlement of the Monocacy Valley progressed and Frederick County was partitioned from Prince Georges County in 1748. A number of the natural resources noted by Dulaney formed the basis for the local industrial development through the late 18th century. In Frederick Town several industries were especially prominent, including those associated with timber such as saw milling and furniture making; also tanning, brick making, limestone quarrying, and most of all flour milling and distilling. Although glass manufacturing played a notable role, its success was spotty and the economic impact less significant.

Lumber

Lumber was a significant draw for settlement and, literally and figuratively, built the industry. Numerous sawmills produced boards, planks, and other building or construction materials. By the time of the American Revolution, a number of “cabinetmakers” had begun manufacturing furniture in Frederick. Much of their work reflected the cultural styles of the German/Dutch/Swiss people in the trade. The McClearys and the Dahls were two prominent furniture makers, but several other businesses were also in town. The list of first lot holders in Frederick Town (Appendix I) shows that John Shellman, “Frederick Town’s first carpenter and joiner,”³ owned Lot 52 between East Church and Patrick Streets in 1751. Conrad Doll (Dahl?) and Nicholas Bunsell, both carpenters, sharing Lot 113 on the block between West Second and West Third Streets by 1764.⁴ Another pair of carpenters, Frederick Whitman and John Hummell shared part of Lot 108 on East Second Street by 1777.

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² Amy Lee Huffman Reed and Marie LaForge Burns, In and Out of Frederick Town, 1985, p. 11.
³ Reed and Burns, p. 51.
⁴ Reed and Burns, “Frederick Town Lot Holders 1748-1764,” see Appendix I; additional research found that the long, north-south lots of Frederick Town were largely subdivided by the 1780s, providing more individual lot frontage along the important Market Street commercial district. Apparently Doll purchased parts of Lot 112 and Lot 111 to form an east-west lot that fronted on Market St. on the 111 parcel. On this was later located Doll Brother’s general merchandise store (205-207 N. Market?).
Carpenters worked as builders, joiners (interior work), cabinetmakers, and even built coffins. According to local researchers, Reed and Burns, Conrad Doll was among the most versatile of carpenters:

Although Conrad Doll did all kinds of carpentry work, he was a joiner well known for cabinet making. Jacob Engelbrecht noted in his diary that he owned a desk made by Conrad Doll some years earlier. There are other records of his making chests, tables, bedsteads, and even a two drawer poplar work table for a glass artisan. Doll also constructed a bateau, a light flat-bottomed boat for use on the Monocacy River. From laying a threshing floor in a barn to cabinet work and boat building, Conrad Doll was a master craftsman.⁵

Due to uneven business in the relatively unsettled area, undertakers frequently applied their coffin-making skills and woodworking abilities to building furniture, as well.⁶ By the 19th century a number of furniture/undertaker businesses were located along East Patrick Street.

Obenderfer & Sons, 26 E. Patrick Street, ca. 1906 (From Pictorial History of Frederick, p.161)

The abundant supply of trees provided raw material for charcoal to fuel the iron furnaces and some of the limekilns across the county. Limestone underlay much of the Frederick Valley lowland and smaller limestone formations were found in the Piedmont upland. It had a variety of uses. The burning of lime made it useful for building material (mortar, plaster, pointing and stucco), as a road material, and for agricultural use. Lime also played a critical role in glass and iron production as flux.

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⁵ Reed and Burns, p. 52.
⁶ Furniture folder, Historical Society of Frederick County.
Tanning

Together, lime and lumber, specifically the bark of oak and sumac along with some chestnut, provided the means to process hides in the tanning industry in Frederick. Tanning leather developed as an industry in Frederick during the late 18th century and after its height in the early 19th century, decreased in significance although several businesses were long lasting. It, along with butchering and other compatible and similarly odiferous industries, was concentrated along Carroll Creek to the south and east of the town.

Only the master tanner needed to have specialized skills, whereas the laborers worked a range of tasks. Tanning required little start-up capital or new technology, but needed plentiful supplies of water, lime and tannin. Raw hides were first cleaned and soaked in a lime and water solution to loosen the hair. Next, they were de-haired and scraped in a process called “beaming.” The hides were soaked in a solution of water and ground bark for many months and then dried, scraped, cut, and oiled before shipment to market.

Frederick Town contained four of the forty-seven tanneries in the county in the mid-1770s. One of these, the Birely Tannery, held the distinction of being in operation for over one hundred fifty years. Frederick Birely and his brother came to Frederick Town in 1776. They built on lots formerly used as tanneries by Mattias Nead and the Fout family in the 1760s. The Birely Tannery was built circa 1800 to the west of Carroll Creek and south of Carroll Street. Frederick Birely’s sons took over the operation in 1806. The tanners supported many other businesses, including saddlers, cobblers, and other leatherworkers. By 1810, Frederick Town contained eight tanneries, which were predominantly along Carroll Creek.

Glassmaking

Conditions in Frederick County were also favorable for the production of glass from local sands. The region had all the necessary components: silica from the sand in the creeks and river, clay deposits, and an abundance of timber for fuel and building construction. The first “glass house” was built in Frederick County prior to 1771 on Tuscarora Creek north of Frederick Town on land owned by Daniel Dulaney (shown on

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7 F.W. Besley, The Forests of Frederick County (Baltimore: Maryland State Board of Forestry, 1922), 14-15.
the 1808 Varle map, Figure 6, as the “Old Glass Works”).\textsuperscript{12} Between the late 18\textsuperscript{th} and early 19\textsuperscript{th} centuries there were four glass factories located on the outskirts of Frederick Town. On Bennett’s Creek, on the tract called Gantt’s Garden, three German families, Kramer, Foltz, and Eberhart, established another factory. Joseph Doll’s store ledger indicated that, “Conrad Foltz paid his store bill with four boxes of window glass valued at thirty-six pounds.”\textsuperscript{13} Following Foltz’ death in 1784, the building and equipment were sold to John Frederick Amelung.\textsuperscript{14} The Amelung glassworks, called New Bremen, was soon established in a new building but lasted only until 1804 before closing its doors in bankruptcy.\textsuperscript{15} The Amelung glassblowers and artisans moved to other parts of the county. One factory was near modern Urbana and another along the “Possum Town Pike.”\textsuperscript{16} Thomas Johnson purchased some machines from New Bremen and established glass works on Bush Creek, called Aetna, and continued the Tuscarora Creek factory, which he had purchased in 1787. All of these glass factories, relatively small in scale, worked only intermittently and failed to profit. Glass manufacture in the Frederick area was gone by the turn of the 19\textsuperscript{th} century.\textsuperscript{17}

**Brickmaking**

Brick works played a very important role in the development of Frederick beginning in the mid-18\textsuperscript{th} century and through the early 20\textsuperscript{th} century. By the time of the American Revolution, a number of houses in Frederick were made of brick. John F.D. Smyth in 1775, a Tory prisoner held in the home of Charles Beatty on Market Street, described Frederick as “built of brick and stone, there being very few timber houses in it.”\textsuperscript{18} And in 1789, Jedidiah Morse described the town with approximately 300 houses, “mostly brick and stone.”\textsuperscript{19}

These early soft bricks were pressed into molds and fired in beehive kilns. A number of masons worked in Frederick Town during the 18\textsuperscript{th} century, but they were usually not distinguished as bricklayers or stonemasons; among the early lot owners of Frederick Town, only John Peltz, owner of part of Lot 131 on N. Market St. in 1777, was described as a “Brickmaker” (see Appendix I). It is likely that builders made or used both. Increasingly, building codes specified brick for chimneys and as the 19\textsuperscript{th} century progressed brick manufacture was an active industry in Frederick (see 1858 Bond Map showing three Brick Yards on South St., E. Patrick St., and N. Market St.).\textsuperscript{20} By the

\textsuperscript{12} Reed and Burns, p. 99, citing the Joseph Doll Ledger, 1771, located in the Historical Society of Frederick County library collection.
\textsuperscript{13} Reed and Burns, p. 104.
\textsuperscript{14} Ibid.
\textsuperscript{15} Williams, p. 268.
\textsuperscript{16} Marshall L. Etchison, “John Frederick Amelung,” 1945, Historical Society Records, MS 32, Box 19, Folder 11, Historical Society of Frederick County.
\textsuperscript{20} Reed and Burns, *In and Out of Frederick Town*, 51-52.
1825 Frederick County tax assessment, brick was by far the most prevalent construction material (see Appendix II, Historic Contextual Overview...).

Iron

Extracted materials were used in other areas, as well. Iron furnaces operated in Frederick County primarily from the 18th to the early 19th centuries. The complexes included iron mines to unearth the ore, limestone quarries for flux, lumber for charcoal, farms to grow feed for animals, workers’ housing, and usually a grist mill and a saw mill. Forges were often associated with the furnaces. Workers included hired hands, indentured servants, and slaves. Although most of the iron furnaces operated beyond the Frederick Town boundary, a few were in close proximity. Fielder Gantt built the Fieldera Furnace (also spelled Fielderea) in 1789-1790 three miles from Frederick on the Harpers Ferry Road. The iron ores were of questionable quality and only one blast was completed. The property was sold in 1791 and a gristmill erected on the site.

During the American Revolution, the foundries of Frederick County (and Washington County, created in 1776) played an important role in the production of munitions for the Continental Army. Both the Catoctin Furnace and the Hughes brothers’ Mt. Aetna furnace (Antietam Furnace) produced canons during the war. Frederick Town also produced munitions on a smaller scale. In 1775, a convention of Maryland delegates ordered the establishment of a “gun-lock factory” in Frederick. According to Scharf, writing in 1882, the factory was located on the lots “now occupied by the coal-yard of Mr. Groshon, Messrs. Tyson & Son’s warehouse, and J. E. Gifford’s [Sifford] marble-works.” (see attached enlargement of the site c. 1873) This location of the 1775 gun-lock factory on what is now called “Cannon Hill” may serve as explanation for the industrial hill’s curious name.

Milling

The predominant industry across Frederick County was milling. Frederick Town and the farms of the surrounding county prospered into the late 19th century largely due to the yields of grain agriculture and attendant industries. Farmers were faced with the expensive and inconvenient problem of transporting their harvested products to distant processing facilities until the local mills and distilleries purchased grain sold in bulk and processed it into flour and meal, or whisky. The Monocacy and its tributaries powered the mill wheels, and the grain was ground between two millstones, sifted and refined, and then channeled into troughs for packaging. The type of flour depended on the moisture content of the grain, quality, starch and gluten content, and the fineness of grinding. They ranged from fine pastry flours to bran for animals.

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21 Wasch, p.146
22 See for example, “Shipping Notice” in Miscellaneous Papers, Box 8, Folder 72 McPherson Papers, Manuscript Collection, Frederick County Historical Society, Frederick, Maryland.
24 Williams, p. 95; Scharf, p. 129, Scharf cited FCLR Liber BD 2, folio 471.
In Frederick Town, Jacob Bentz’ stone mill was constructed on his Long Acre tract on the west edge of town by 1787 (see photo). A second flourmill operated on Carroll Street by the early 19th century. Soon, Frederick County had more processing facilities than Baltimore City and Baltimore County. Refined products from the region were brought to Frederick for shipment by wagon to the port of Baltimore for New England, the West Indies, and Europe (via England).

**Miscellaneous Industries**

Smaller industries supported agriculture and everyday life in the 18th century. Blacksmiths provided shoes for animals, building supplies, and wagon equipment. They also played a significant role in outfitting and furnishing new houses. Coopers made barrels for storing and shipping flour and grain. Many households grew flax and made homespun, while local weavers also produced linen and woolen goods.

Individual craftsmen conducted many of these industries such as textile production, blacksmithing, carpentry and leatherwork out of home-based shops. A list of Frederick Town’s earliest lot owners compiled from land records reveals the remarkable variety of craftsmen in Frederick during its earliest years (for complete list see Appendix I, *Historic Contextual Overview for the City of Frederick*). Jacob Engelbrecht, a tailor in Frederick Town beginning in the early 19th century, wrote in his diary in 1826: “…today I moved my shop from the small house of Mr. Conrad Reitmeyer to my house next to the Bentztown Bridge.” Beginning in the 19th century, a number of these industries, especially textiles and furniture making, evolved from the local, craft level into corporations as larger-scale manufacturing took hold in the coming centuries.

**19th Century: Frederick’s Industrial Bloom Ending with WWI**

Industry in the 19th century expanded as Frederick did, particularly responding to construction needs and the demands and innovations of agricultural practice. Lime and bone fertilizer manufactories and machine shops became more predominant as the century wore on. Brick making continued to be important. The iron and glass works of the 18th century went out of business, but by the end of the 19th century growing trends in consolidation and manufacturing on a larger scale brought textile and clothing factories and canning plants. These industries provided employment and contributed to the economic health of the region.

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26 Terry Reimer, *One Vast Hospital: The Civil War Hospital Sites in Frederick, Maryland After Antietam* (Frederick, MD: National Museum of Civil War Medicine, 2001), 92.


28 Reed and Burns, *In and Out of Frederick Town*, 24-27.
In the first half of the 19th century, the prosperity of the greater region and movement into the Ohio territory encouraged the establishment of turnpikes, the National Road, Chesapeake and Ohio Canal, and the Baltimore and Ohio Railroad. Frederick Town, however, was never directly connected to the C&O Canal and was linked to the B&O and Pennsylvania Railroad system only by branch lines. The routes brought faster and more efficient means for the transportation of manufactured goods, particularly flour, to major port cities.

The B&O Railroad lateral branch reached Frederick in 1831 and passed through a significant concentration of industrial sites. The rails entered the town from the south and east, crossing East South Street to reach the rail yards between Carroll and Water Streets to the south of Carroll Creek (see 1854 Pittar map and 1873 Atlas maps). Although this route lay partly in response to the existing industrial sector, it also offered inducement for the location of more companies. The area surrounding the railway by the end of the 19th century included brick works, packing plants, canning plants, and dairies in addition to the older tanneries and lumberyards. Other companies, such as the Montrose Iron Works, the Brookey Brick Company and Frederick Iron and Steel, developed as the East Street (formerly Love Lane) corridor expanded into industry with the laying of the Pennsylvania Railroad. Endeavors in transportation, moreover, took place during a period of technological innovation that also influenced industrial development in Frederick.

Agricultural Implements

Farmers began using machinery for its promise of higher yields, greater efficiency, and fewer workers to employ. Many machine shop proprietors made timely accommodations in step with the farmers. They arranged to be the local agents for an inventor in addition to fashioning their own innovations. Calvin Page of Frederick, for example, opened his shop in 1835 originally as the Eagle Iron Works (corner of W. South St. and Mantz, 1873 Atlas, Eighth Ward). Page was the representative for the Chicago-based McCormick Company and sold ninety McCormick reapers between 1850 and 1860. He also sold Dorsey Self-Reapers, a competitive model to the McCormick. Such shops made a range of tools, including horse rakes, corn planters, grain drills, plows, and portable steamers. The number of agricultural implement makers expanded after the Civil War, but after 1890, the local industry diminished as steel replaced iron and company mergers closed smaller offices.

29 “Record of Sales of the McCormick Company,” printed in George Anthony Douglas, “An Economic History of Frederick County, Maryland to 1860” (Ph.D. diss., Johns Hopkins University, 1938), 57-48, 34 n. 57; Middletown Valley Register (Middletown, MD) 25 March 1859; Martin Paul Schipper, “The Sources of Change in Farming in Frederick County, Maryland 1790-1840” (Masters thesis, University of Maryland, 1985), 31.

Ketchum's Combined Harvester, Improved 1858 as a Reaper, from AMERICAN AGRICULTURIST, November 1858.

Thresher advertised in AMERICAN AGRICULTURIST, 1872
**Industry in the Civil War Era**

By 1857, a nationwide economic recession set in that continued to the onset of the Civil War. Manufacturing slumped and unemployment increased in Baltimore and western Maryland. Leading manufactures in Maryland in 1860 were flour and meal, men’s clothing, cotton goods, sugar refining, leather, machinery, copper smelting, boots and shoes, oysters (canned), pork, beef, iron, ships and boat building, cigars, woolen goods, lumber, furniture, and liquors. Frederick County ranked third, behind Baltimore County and Baltimore City, at $2,894,169 in value of manufactured products and had about five hundred sites. By 1863 the war brought a better economic view as the government outfitted itself with supplies. Frederick maintained a largely pro-Union stance. Manufacturers tended to favor high tariffs to protect their products from the competition of foreign goods.

The war pervaded Frederick County and the town became a focal point of movement and activity for both Confederate and Union armies. Jacob Engelbrecht wrote in 1861, “In our town, every thing is knocked into pie. Mechanics have no work. Stores, do not [have] hardly any thing except groceries which people must have. No building going on. In the brick yards the weeds are growing up on their drying beds. The whole yard looks as if they had been idle for years… In fact, the times are so gloomy that people hardly know what to get at.”

Frederick was in the path of repeated incursions by the Confederate army, each time followed by the Union forces, during the summer months of 1862, 1863, and again in 1864. An important supply depot on the B&O line on the edge of Union territory, Frederick and its surrounding farmland was an attractive target for the hungry and ill-equipped Confederates. Soldiers gravitated toward barns, mills, houses, and other structures for protection and supplies. David Best, for example, on his farm about 2 miles south of Frederick (now Monocacy National Battlefield), claimed damages for use of his blacksmith shop and tools by the U.S. Army en route to Antietam in September of 1862.

Frederick also served as a major hospital site for the Union army after the battles of South Mountain and Antietam in 1862. Among the buildings used were at least two industrial sites, converted into makeshift hospitals. Wounded Confederate soldiers used...
the Valentine Birely Tannery on the west side of Carroll Street (currently the location of the C. Burr Artz Library; see 1854 Pittar map). The other site, John W. Miller’s Butcher Shop, was located on E. Third St. at Maxwell Alley (now an apartment building).

Other uses included McCausland’s soldiers finding the Grove family’s limekiln for a lookout. Once General Lewis Wallace evacuated Frederick after the Battle of Monocacy, Confederates moved in and demanded ransom of $20,000. The Town of Frederick pointed out in its war claim that government stores induced the attack. It had five warehouses and two barracks full of supplies, including Brown’s (Brown & Rohrbach’s later known as Ramsburg’s Fertilizer Warehouse on the corner of E. All Saints and Carroll Sts), Tyson’s Warehouse and the B&O Freight Depot (on Carroll Street), Coppersmith Hall (corner of E. Church and Market Sts, D. and D. Barracks No.1 and No. 2 (better known as the Hessian Barracks on S. Market St.) and Bantz’ (on Brewer’s Alley). The warehouses were further equipped with medical stores, workshops, blacksmith shops, wagon-makers shops, repair shops, paint shops, “and in fact everything needed for the use of a well-equipped army.”

**Industrial Development Post-War**

Recovery from the Civil War collided with and helped to promote several general trends, including population shifts to urban areas, industrialization, and labor management. By 1870 Frederick County ranked second in value of manufactures, after Baltimore County. The *Census of Manufactures* showed that by 1880 canning, fertilizer, and iron and steel industries had replaced tanning, sugar refining, boot and shoe manufacturing. The quarrying of granite and limestone also declined. Furthermore, a series of legislative actions decreased the regular, ten- or twelve-hour workday of the 1860s to a nine-hour day for many industries by 1910. In 1912 a law limited the workday of women to ten hours, or a total of sixty hours per week, except for the industries of fruit canning and vegetable and retail mercantile establishments outside of Baltimore. Simultaneously, machinery replaced skilled craftspeople with unskilled workers who tended the machines. As Eleanor Bruchey has written,

> A dramatic example is that of the canning industry, where both the canmakers and the workers who filled the cans fought mechanization, to no avail. The cans had been handmade and the fruits and vegetables processed by hand. The 1880s saw machinery perform both tasks. By 1890 one-half to three-quarters of the men had been replaced by women and children. A single automatic machine made a can from a sheet of tin.

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38 Quynn, *The Diary of Jacob Engelbrecht*, September 24, 1862; Reimer, p. 92.
39 Reimer, p. 104.
40 William Jarboe Grove, *History of Carrollton Manor, Frederick County, Maryland* (Frederick: Marken and Bielfield, 1928), p. 245.
41 Manakee, *Maryland in the Civil War*, 76-77.
42 Frederick City war claim, 1-2, 14, Historical Society of Frederick County; see also Reimer, *One Vast Hospital*, 2001.
Other machines labeled and boxed the filled cans. Thus not only were wages reduced, but the size of the work force in 1900 was much diminished while production increased impressively.”

**Milling and Fertilizers**

The military presence after the war slowed the return to normal life. Many farmers could not sow "a handful [sic] of wheat” because of troops, which likely trickled down to affect milling. Millers, however, invested in new technologies. By 1870 many of them had replaced overshot milling wheels with turbines, or even steam engines. A second technological change, also in the 1870s, was the introduction of the rolling process to the United States. Milling continued at Brunner’s City Mill on Bentz Street and at Kemp’s Steam Flouring Mills on Carroll Street, but with technological improvements (see Titus Atlas maps, Figures 26 and 27). In 1878, James Gambrill, who owned Araby Mills south of Frederick, expanded and bought Kemp’s steam-powered mill on South Carroll Street in Frederick. He installed roller mills there in 1882. This purchase allowed Gambrill to increase production to 45,000 barrels of flour per year. Other milling operations also continued. Across Carroll Street, Tyson’s Phosphate Factory (41 S. Carroll) had made agricultural fertilizer since 1867 and DeLashmutt & Son (59 S. Carroll; later occupied by Ramsburg) since 1878; the Ramsburg Fertilizing Company factory (South St. extended, see Titus Atlas map, Fig. 27), had also been in operation since 1867. Yet the 1880 manufacturing census reported 85 mills in Frederick County producing over $1,000,000 worth of flour. Even with impending market changes, flour milling was still an important part of manufacturing. The concentration of mills and fertilizer plants along the Carroll Street sector showed the continued response of industry to agriculture in Frederick County.

**Canning**

Frederick County significantly contributed to Maryland’s position as one of the largest canning states in the nineteenth century, but larger factors also shaped the industrial character of the city.

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44 Jacob Miller, December 7, 1862, on file at the Western Maryland Room, Washington County Free Library, Hagerstown, MD.  
46 Quinn, The Diary of Jacob Engelbrecht, p. 1094.  
49 Charles W. Miller, “General Directory of Frederick City,” (Frederick, MD: W. T. Delaplaine & Co., 1886), p. 5; 1887 Sanborn Fire Insurance Co. map, Frederick City, microfilm collection, Maryland Room, C. Burr Artz Library, Frederick, MD.  
Canning was introduced to the region in 1868, when Louis McMurray purchased four acres of land in the city of Frederick on the corner of Bentz and South Streets. In 1870, McMurray patented a machine that sealed cans, replacing the old capping system. This allowed him to cut costs as thirty unskilled boys replaced fifty trained tanners. Initially, McMurray contracted with local farmers for corn, but by 1880 he supplemented the supply with produce from his own farm. His Frederick factory was the largest corn-canning factory in the United States. From the farm to the canning, McMurray came close to owning all factors in his factory, from making tin cans and wooden packing crates, all the way through the canning process. McMurray employed over one thousand men, women and children in this venture; field workers and processing employees made a flat fee, while huskers, cutters and cappers worked at piece rates. Together they produced $240,000 worth of canned foods. By 1886, the plant was expanded and McMurray employed over one thousand additional workers on a seasonal basis. His Frederick factory went from an annual production of 75,000 to 100,000 cans of corn to 3,000,000 cans of corn per year.

The McMurray plant changed Frederick. It was the first large factory in the county and while local praises of the McMurray plant were loud, there were also unexpected consequences. In 1886, the Frederick County health department voiced its concerns that the McMurray plant was discharging wastewater into local water supplies, and that the corn husks and horse manure were not being properly disposed. Between poor privy facilities for the workers and the rotting vegetables in the factory, the McMurray plant was partially blamed for a diphtheria outbreak in the city. Despite this criticism, McMurray built a second canning facility at Bartholow’s Switch on the B&O (located about half way between Monrovia and Mount Airy).

In Frederick, other entrepreneurs followed suit and by the first decade of the 20th century, three packing plants clustered around the B&O line along Commerce Street. In 1891, the Frederick City Packing Co. was in operation just east of South Carroll Street, and by 1904, had been joined by the Monocacy Valley Canning Co. and the Colt & Dixon Packing Co. All three of the companies processed both vegetables and fruit into the middle of the 20th century, and the Colt & Dixon Company continues through its descendent the McCutcheon’s Apple Company.

Tanning

Other agriculture-based industries experienced significant decline, such as the tanning industry. Frederick tanners together produced 100,000 finished hides per year in the first half of the 19th century, near equivalent to a single medium sized tannery in a

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53 Scharf, History of Western Maryland, p. 492,
54 “Report on Sanitary Condition of Frederick County, October 28, 1886,” printed in Scharf, History of Western Maryland, p. 569.
55 Williams, p. 401; 1904 Sanborn Fire Insurance Map, Frederick City, microfilm collection, Maryland Room, C. Burr Artz Library, Frederick, MD.
In 1866 only forty-four tanneries remained in Frederick. Two primary factors brought its demise: the depletion of necessary natural resources, particularly oak bark and hide supplies, and the rising popularity of synthetic materials. Tanneries imported bark from Pennsylvania and, hides now came from Texas and South America. Larger tan yards in Frederick, such as the Eclipse Tannery owned by Schley and Brookey on East Patrick Street, processed 5,000 to 6,000 hides per year and marketed them as far away as Minnesota, New York and Texas. The Birely Tannery, at 215 E. Patrick Street, stayed in the family for over one hundred years and was the last remaining tan yard in the city. In 1925, the firm specialized in harness leather, calf upper and sheep leather. Its trademark was “Grandfather’s Oak.” Tannin was produced locally into the 1950s, though on a smaller scale, and had a market particularly for home use. Most tanneries were unable to survive the general decline of the leather industry, which was particularly severe after World War I.

**Textiles**

Textile manufacturing experienced similar problems. In 1870 Frederick County reported eight woolen mills with thirty-eight employees. The small, rural mills were victims of the growing textile centralization as larger mills with more expensive machinery priced out the smaller, older factories. Interestingly, manufacturers of clothing moved in to the area. Knit goods became more popular after 1870 and the market grew even larger as the technology for producing jerseys and knots improved. By 1880, Frederick County had no woolen mills, but did contain fourteen clothing factories. In 1887, David Lowenstein, M.E. Getzendanner and Thomas Haler organized the Frederick Seamless Hosiery Company and in 1889, the founders created the new Union Manufacturing Company. The factory on the east end of the city of Frederick included the hosiery mill, a shirt factory, a dye house, and printing plant. The company was more successful with hosiery than shirts, so within six months the shirt factory was turned into a second hosiery mill. The plant, with over 300 workers, was one of the largest employers in Frederick and among the early places women were regularly employed.

**Brick Works**

The demise of craft level industries was counterbalanced by the rapid expansion of Frederick, to which local building suppliers responded. Benjamin F. Winchester

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57 Thomas, Phase III Recovery, III-32, citing Wilson 1941.
58 Porter, Maryland and Its Industrial Developments, p. 184; Scharf, History of Western Maryland, p. 621.
61 Clark, History of Manufactures in the United States, II, pp. 443-444.
62 Williams, History of Frederick County, pp. 619-620.
operated two brick works in Frederick during the 19th century. He supplied 800,000 bricks for the City Hall and the Market House took about 800,000; the Deaf & Dumb Asylum took about 2,500,000; and the jail and sheriff’s house 800,000. The Frederick Brick Works, founded in 1891, succeeded Winchester’s operation and was one of the larger and longer-lasting brick works. Production of its trademark “Frederick Reds” multiplied by several times by the first decade of the 20th century. Although in 1903 Frederick also contained Peter Brooke’s and D.W. Zentz’s brick works, it was experiencing the trend toward consolidation that closed many American brick companies.

**Turn of the 20th Century Changes**

Since the mid-19th century, the nation shifted from an agriculture-based economy toward manufacturing and factory-produced goods. By 1914, more Marylanders worked in industry than in agriculture and the population became concentrated in urban areas. Frederick City reflected this trend, and expanded significantly in the first decades of the 20th century. New industrial sectors grew in response to the conversion to dairy and orchards by the remaining farms around the city, filling the vacuum left by a decrease in the traditional grain-based industrial economy and attendant businesses. Many of the industries in mid-Maryland continued into the 20th century and evolved with the influence of the two world wars that dominated the first half of the century.

Industrial development was primarily concentrated on the eastern edge of town, along the B&O and Pennsylvania Railroad right-of-ways. By 1908 McMurray’s West South Street canning facility was gone and Frederick’s industrial focus shifted to the three packing plants on Commerce and East South Street, several brick works (E. South and East Sts.), and a number of emerging dairy companies (Excelsior Dairy on E. 7th St., White Cross Dairy on Wisner Ave., Ebert’s Dairy on N. Market St. extended). Small subdivisions were created specifically as housing for employees of local industries. One of them, along Water Street between East South and B&O Streets, may have been associated with the nearby packing companies or the with the B&O Railroad. The Nicodemus Ice Cream Company constructed an enclave of ten bungalows on Pennsylvania Avenue, south of East Patrick Street extended, in 1924. Originally platted to include fifty-six lots, the subdivision was never completed beyond the ten original dwellings and was sold to Southern Dairies, Inc. in 1928.

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63 Engelbrecht, p. 1116.
64 “Frederick Brick Works” [article on-line] (accessed 19 March 2002); available from http://www.frederickbrickworks.com/; Internet; The Physical Features of Carroll County and Frederick County, p. 145.
68 Frederick Co. Land Record, Deed Book 368, page 240.
Dairy

The grain-based agricultural economy shifted to dairy and the development of its own attendant industries. Grain products declined to such a degree that flouring and gristmill products disappeared completely from the 1900 census of manufactures.\(^{69}\) Dairy processing in creameries and factories became standard and tended to consolidate into fewer, if larger, dairies. By the early twentieth century, any butter or cheese made at the farm was also consumed there, rather than sold at market. Most plants relied on a few employees—many had less than five workers—and only the largest had more than fifty laborers.\(^{70}\) The primary operation was the White Cross Milk Plant on the west bank of Carroll Creek, East Patrick Street extended. The plant could handle 10,000 gallons of milk per day. Located on the B&O Railroad, refrigerated cars took the milk to city markets.\(^{71}\) The dairy and ice-making industries went hand-in-hand. Locals and large companies both sold ice. The Hygeia Ice Company in Frederick, for example, made six thousand tons of ice per year from mountain water that was distilled before use. The company had two machines for ice making and twenty-five employees.\(^{72}\) Other companies drew ice from Thurmont, or produced ice in conjunction with ice cream.

Lime

Lime companies had offices and plants inside Frederick, with quarries primarily to the south, and were a significant industry. Two large companies, LeGore and M.J. Grove (at Limekiln south of Frederick), dominated the industry. The LeGore Lime Company opened in 1861 and had at least two quarries; the northern quarry (near Woodsboro) produced a higher quality of lime. In the 1940s, the plant had a production capacity of 100 tons per day and an office in Frederick. As the lime market was seasonal, large lime plants included storage facilities, so lime could be shipped as needed.\(^{73}\) Although lime was abundant, it was of uneven quality, and the local lime producers tended not to be selective. This meant, in general, that they produced a quality of lime best used for agricultural purposes. On the other hand, they required fewer technological upgrades and the older style pots and mixed feed kilns were adequate.\(^{74}\) Other fertilizers in addition to lime were also produced. By 1913 the Ramsburg Fertilizer Company had an office and warehouse in Frederick located on East South Street, and a factory a mile outside of town, employing between thirty and forty workers. The company made fertilizer from bone and carried out its business in Virginia, West Virginia, Maryland, and Pennsylvania. It made four brands—Excelsior Plant Food, Old Virginia Compound,
Ammoniated Bone, and Dissolved Bone. As the 20th century continued, however, agriculture industries were superceded by manufacturing-based enterprise.

The Frederick region continued its recovery from the Civil War well into the 20th century, when two world wars would stimulate new industrial production. Tanning and distilling by the turn of the century had diminished, but the growing trend toward consolidation meant that fewer, larger plants replaced the smaller businesses, masking some of the shift in production. Milling was no longer as predominant as it had been, but agriculture continued to be significant. Dairy and orchard farms, beginning in the late 19th century, replaced the grain-based industries and manufacturing again shifted to accommodate them. The world wars brought technology-based industry to Frederick, but the older businesses altered their production for wartime needs.

20th Century Industry

International events would soon affect the local economy. The United States joined the Allied Powers of Europe in war in 1914. Once Britain effectively blockaded the Central Powers, America sold its foodstuffs and manufactured goods almost entirely to the Allies. Supplying the war effort brought a boom of prosperity to American industries, farmers, and exporters. The administration of industry had also changed markedly from its localized, craft production character of two hundred years prior; instead, a growing number of businesses were consolidated under corporate ownership. Although Baltimore continued to dominate industrial manufacturing, the next three highest producing cities were all located to the west. Frederick ranked fourth in the state, after Hagerstown and Cumberland.

The Great Depression caused severe unemployment and economic trouble that was eased by New Deal programs. Industrial and agricultural prices and wages rose, yet the recovery was only partial. The next world war stimulated industry to produce to capacity and to absorb the unemployed. Industry became literally and symbolically a nation-building enterprise. Some companies expanded in Frederick to meet wartime supply demands, but lost employees due to population shifts toward urban areas and men leaving for service. Many companies dramatically changed their output to meet the war market. Others, such as dealers in scrap metal supplied material to larger companies and significantly expanded. Frederick Junk Company, for example, located on Chapel Alley, became a partnership in 1936 and estimated a monthly average of 500 tons of scrap iron and 30 tons of scrap metal during the war years.

A decreased work force interrupted basic operations. The LeGore Lime Co. abandoned some of its functions during the war because too few men were available to operate the stone unit. Lime production continued in a reduced capacity, “The product

75 International Magazine of Industry, June 1913.
was supplied to dealers and farmers for agricultural use in the crop and soil amendment program. It was shipped in bags and in bulk by truck and car. Total production averaged 25,000 to 30,000 tons per year, including some low-priced materials representing a dollar volume of $250,000.”

The M.J. Grove Lime Kiln complex encompassed sixty acres including the quarries and twenty-five regular employees. The company instituted a labor management program during the war to utilize labor to the best advantage. After Pearl Harbor, the company expanded its ready-mix concrete operation in connection with Camp Detrick but stone crushing and road construction activity halted.

Other industries did not experience the same problems. Osborn I. Price and Joseph B. Price of Frederick organized Price Brothers in 1914 for the manufacture of electrical devices, mostly for radio communication. The company became involved in the development of radio equipment in World War I. It expanded to supply the defense program for World War II with radio equipment and other electrical and mechanical products for military purposes. Although the metalworking and electronics companies showed some of the most dramatic contributions to the war effort, contracts systemically boosted industry in mid-Maryland even for smaller operations. The Wm. D. Bowers Lumber Company of Frederick, for example, was founded in 1868 and after Pearl Harbor its business aided in the expanded farm program, housing projects, and building supplies across the region.

Particularly in the case of World War II, the contrast was remarkable in the pre- and post-war products of some companies. The Everedy Company was founded as the Everedy Bottle Capper Company in May of 1920. It began with a factory building on East Street in 1922, producing a range of metal items for domestic use, including “Speedy-clean chrome cooling utensils, Everedy Door Hardware, Everedy Home Bottling Equipment, Evercraft Modern Gift Merchandise.” This larger complex was completed in 1942 and connected the East Street buildings to the new warehouses on East Church Street Extended. The total complex had nearly doubled in size and took advantage of this space by securing numerous World War II manufacturing contracts. After the war the Everedy Company produced “Anti-Tank Mines, navy Anti-submarine floats, grenades, grenade adapters, rocket parts, bomb parts.”

Other industries more simply transitioned their raw materials and skills to the government’s needs. The Muse Tailoring Company in Frederick was related to the Baltimore-based Schloss Bros. & Co., Inc., founded circa 1880. “The company made

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80 Price Brothers Company, Maryland Manufacturers’ War Industry Survey, 1948, Historical Society of Frederick County.
83 The Everedy Company, Maryland Manufacturers’ War Industry Survey, 1947, Frederick County Historical Society.
mostly officers’ uniforms on direct contract for the Army, and some enlisted men’s trousers and overcoats. At the beginning of the war, before the government contracts came through, some officers’ uniforms were made for the retail trade. The Frederick factory was almost entirely given over to government work, while the Baltimore plant largely turned out civilian products, with some trousers and jackets for the government.” During the war, the Frederick plant pants shop was closed and the area set up for the production of coats.” The company increased production through piecework and overtime. Workers received on-the-job training, and it employed a wartime peak of five hundred people; four hundred in peacetime. The company also gained collective bargaining agreements after accepting war work with the Amalgamated Clothing Workers and United Garment Workers.84

Post World War II and Industrial Decline

Despite the changes in industrial production wrought by the special needs of a wartime economy, Frederick City post-WWII appeared little changed. The 1955 Frederick City Directory cited a continued presence of agricultural-based industry:

Business in Frederick, to a large extent, revolves about the farming operations of the county. There are many large vegetable-canning factories, milk-receiving plants, creameries, ice cream, abattoir, feed, fertilizer and silo plants.

There are three corn-canning factories in Frederick and a number of plants in the county. Frederick is a pioneer in this industry.

Frederick County produces more goldfish than any other part of the U.S.

Frederick is the home of one of the largest brush-making factories in the country. The inventor of the brush-making machine, who also invented the match-making machine, was a Fredericktonian.

A large Frederick foundry manufactures centrifugal pumps, which are very widely used. This plant also specializes in stokers, ash conveyors, ornamental lamp posts, manhole frames and covers, and gray iron castings up to 20 tons.

Frederick has one of the largest hosiery mills in the East.

Frederick County is rich in limestone deposits and a number of enterprises are engaged in the stone and lime business. Several lime concerns are among the largest industries of the kind in the U.S.85

Throughout the second half of the 20th century, however, with each passing decade agricultural production and distribution became more peripheral. The relatively

small manufacturing companies such as the Ox Fibre Brush Company and Union
Knitting Mills, failed to compete in the developing international economy. The primary
focus of the city centered more on the business of retail sales, based on a growing urban
and suburban population. Many of the former industrial complexes of Frederick City in
fact now house retail establishments, particularly for the sale of antiques. Surviving
industrial activities include the Frederick Brick Works on South Street (although no
longer actually producing brick) and the M.J. Grove Lime Company (now called
Genstar), which quarries limestone for gravel.

Post-war development of the Washington, D.C. and Baltimore metropolitan area
with government research and administrative facilities, as well as a number of corporate
headquarters, became a significant employment source in the region. Construction of the
Eisenhower Defense Highway (Interstate Routes 70 and 270), beginning in 1956,
provided high-speed transportation corridors between Frederick and the two cities as
well. The impact on Frederick County and Frederick city was phenomenal and continues
today as a large segment of the population now works outside of the city and even the
county.

Frederick City has hosted a number of significant industries. Together, they
reflect the relationships between technology and natural resources, local and national
commerce, and agriculture and processing. Frederick thus represents the changing role of
industry in the nation.
Temporal Limits

1745-1956. The industrial history of Frederick City continues to evolve. Although most true industrial activity has been replaced by retail space and office complexes, a few hold-outs continue to operate in the city, including the Dairy Maid Dairy, Morningstar Dairy, Frederick Brick Works, and McCutcheon’s Fruit Packing plant, the importance of industry in the economy of Frederick has significantly diminished.

Associated Property Types

Manufacturing. Foundry, brush factory, knitting mill, brick works, silo factory, machine shop, bottling works, glass works.

Processing. Flour or gristmill, sawmill, feed mill, fertilizer plant, tannery, creamery, diary, limestone quarry, canning factory, abattoir, ice plant, brewery, bakery.

Service. Laundry, automobile service garage.

Cottage/Home-based. House or storefront (difficult to identify except through documentary evidence).

Archeological. Potential archeological sites may be considered for demolished building sites.

Locational Patterns of Property Types

Manufacturing. Industrial manufacturing sites are primarily located on the east side of town, East Street and East Patrick Street, with the heaviest industries (Montrose Iron & Steel) fronting onto railroad lines.

Processing. These agriculture-related industries are often located along Carroll Creek (mills and tanneries). The later processing industries such as dairy and canning are found along the railroad rights-of-way. The greatest concentration of sites in the Cannon Hill area centered on S. Carroll and E. South Streets.

Service. Service industries tend to be smaller in size and found on alleys, such as Chapel Alley, or within residential neighborhoods.

Cottage/Home-based. Many were historically located along Market and Patrick Streets (according to Engelbrecht’s Diary). These will require direct documentation to identify.
Associated Properties

(note: no comprehensive survey has, to date, been conducted to identify extant properties associated with industry in Frederick City; this list is therefore preliminary and incomplete. Starred properties were recorded on Maryland Determination of Eligibility forms as part of this context/survey project or were previously recorded during other survey projects)

Manufacturing.
- Silo and Tank Factory (East St.)
- Tuscarora Glass Works (site)
- Page Foundry (site, South and Ice Sts.)
- Coca-Cola Bottling Plant (N. Market St. extended)
- Moxie Machine Co. (dance studio, E. 2nd and E. Church St. triangle)
- C.C. Carty’s Furniture Factory (Civil War Medicine Museum, E. Patrick St.)
- Obenderfer & Sons Furniture Co. (26 E. Patrick St.)
- *Montrose Iron & Steel (E. 7th St.)
- *Ox Fibre Brush Factory (E. Church St. extended)
- *Union Manufacturing Co. Knitting Mills (E. Patrick St.)
- *Geo. Kehne Wholesale Confectioners (bottling works, E. All Saints St.)

Processing.
- Birely Tannery (site, S. Carroll St.)
- Gideon Bantz Tan Yard (site, w/s of Court St. on Carroll Creek)
- Ebert’s Ice Cream Co. (N. Market St. extended)
- M.J. Grove Lime Co. (Genstar, E. South St.)
- Tyson’s Fertilizer Factory (S. Carroll St.)
- Bentz/Zentz/Brunner/Frederick City Mill (site, Bentz St.)
- Hygeia Ice Co. (site, corner of E. Patrick and East Sts.)
- McCutcheon Plant (Wisner and South Streets)
- G.L. Baking Co. (S. Carroll St.)
- Coca-Cola Bottling Co. (N. Market St. extended)
- *Mountain City Mills (Delaplaine Arts Center, S. Carroll St.)
- *Ramsburg Fertilizer Warehouse (S. Carroll)
- *Frederick Co. Farmers Exchange Feed Mill and Grain Elevator (S. Carroll)
- *Frederick City Packing Co. (Commerce St.)
- *Monocacy Valley Canning Co. (Commerce St.)
- *Colt & Dixon Canning Co. (FHD-1299, E. South St. at Wisner Ave.)
- *White Cross Milk Co. (Wisner Ave.)
- *Nicodemus Ice Cream Co. (Morningstar Dairy, E. Patrick St.)
- *Excelsior Dairy (E. 7th St.)
- *Crystal Plate Ice Co. (East St. at E. 3rd St. park)
- *Frederick City Abbatoir (F-3-222, E. South St.)

Service.
- Ideal Garage Co. (E. Patrick St.)
Frederick/Gastley Junk Co. (Chapel Alley btwn 3rd and 4th Sts./now on East St.)
Gem Laundry (S. Market St.)
*Crystal Laundry (Chapel Alley between 3rd and 4th Sts.)

**Threats to Resources**

Immediate threats to resources are primarily on the canning factory lots along Commerce Street, owned the City of Frederick. The extension of East Street to South Street impacted the Monocacy Valley Canning Co. lot, completely bisecting it. The Monocacy Valley Canning Co. Packing and Processing building, located on the east side of East Street extended is thought to be the only surviving “processing” building in Frederick associated with the canning industry (others still extant are primarily warehouses). Many of the Cannon Hill/Carroll St. industrial properties are now adaptively used and therefore relatively protected. Several of the remaining dairy buildings are also being used adaptively. Industrial sites, in general, are threatened by technological changes. These may require dramatic changes to the building while its use retains its historic association.

**Relative Occurrence**

The southeastern section of Frederick, centering on Cannon Hill, remains heavily associated with industrial development, although few industries continue to operate. The East Street corridor, including E. Church and E. Second Streets extended, also remains dominated by industrial buildings and sites. Elsewhere through the city, small service industries are individually scattered.

**Survey Needs**

A comprehensive survey of all industrial resources within the modern corporate limits would complete what is now only a sample of surveyed sites. Such a comprehensive survey would help determine potential Industrial Districts that may be National Register eligible.

**Research Needs**

The attached historical context could be significantly augmented by documentation of associated sites through a comprehensive survey. With each site researched, new information is gleaned concerning significant people, activities, and places within the larger Frederick City context. Important subjects associated with industrial development in Frederick City were not addressed in this context, including worker housing and cottage industries (home crafts or trades).
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