Wheeling through History

Downtown & South Side

Highmark® Blue Cross Blue Shield
South Side

The development of the South Side began in 1763, when the King George III of England presented John Ormsby with about 2,400 acres along the south bank of the Monongahela River as payment for his service during the French and Indian War. The land was divided into four boroughs: South Pittsburgh, Birmingham, East Birmingham, and Ormsby. The boroughs were annexed to the City of Pittsburgh in 1872.

The South Side became synonymous with industry, from the glass houses so prominent in the 19th and early 20th centuries to the later dominance of iron and steel that helped establish Pittsburgh's reputation as the "Steel City." With industry as its draw, waves of immigrants came to work in the mills from Germany, Ireland, Poland, Lithuania, the Ukraine, and the Slavic nations. They built their own schools and churches, where they could continue their native customs and speak their native languages, many of which are still evident today.

Though heavy industry is now mostly gone from the neighborhood, it left a notable footprint on the landscape, with many of the former industrial and ethnic sites reused for new commercial and residential purposes. The South Side has successfully adapted to the changing times by maintaining its buildings and sense of history as it has established itself as one or the preeminent retail, commercial, dining, and residential neighborhoods of Pittsburgh.

The Tour Begins:
Welcome to the Historic South Side

The Route
This ride begins at the Bessemer Furnace in Station Square then follows the South Side Trail heading east past Bryan Sand and Gravel and hugging the south shore of the Monongahela River all the way through the historic South Side. At the Southside Works (the former site of the Jones & Laughlin South Side Works) the tour turns north across the Hot Metal Bridge and heads toward the Panther Hollow trail for a ride through Four Mile Run along Saline Street. The trip back to Station Square follows the Eliza Furnace Trail on the north side of the river until the trail's end. The adjacent Smithfield Street Bridge returns riders to Station Square.

Station Square and P&LE Railroad
The area that is today known as Station Square is rich in history that spans back to the late 18th century, in the days when Fort Pitt occupied the area that is today the Point. Station Square was at the foot of a high ridge once known as Coal Hill (today's Mount Washington). It drew interest from early settlers who were able to mine the rich coal seams. It was also a prime space for industry because of its location on the South Shore of the Monongahela River across from the Golden Triangle. These natural resources led to the South Side's development into a major transportation center.
The Pittsburgh and Lake Erie Railroad (P&LE) served Western Pennsylvania and Eastern Ohio when Pittsburgh was the center of America’s steel industry. Chartered in 1873, the P&LE transported limestone, coal, coke, iron ore and scrap to the mills in the area. They also provided inter-plant transfers between different mills in the area, and often shipped finished steel to customers. The P&LE came to be known as the “Little Giant” because it operated only 0.1% of America’s railroad track mileage, yet it hauled 3% of its freight tonnage.

Along with industrial concerns, the P&LE provided passenger rail service. After World War II, however, the increase in use of automobiles and air transportation led to a sharp decline in passenger service. By 1970, the PL&E had lost much of its passenger traffic and the demand for handling freight. The area that was once PL&E railway complex has today been turned into a mixed-use commercial area known as Station Square.

Clinton Iron Works
The Clinton Furnace was Pittsburgh’s first successful blast furnace for making pig iron at the Clinton Iron and Steel Company. Operations began in the modern day Station Square in 1859, using Connellsville coke as fuel. The Clinton furnace was a metal-encased vessel, an advanced technology for its construction date. The success of the Clinton Furnace played an important role in establishing Pittsburgh as the center of iron and steel making. The furnace ceased production in 1927.

Bessemer Furnace
Bessemer Court at Station Square is dedicated to the industrial history of Pittsburgh and is named after the huge steel structure that sits in the middle of the square. This structure, which came from the A. M. Byers plant in Ambridge, is a 10-ton Bessemer converter from the 1930s. These furnaces were used to convert molten iron into steel through the Bessemer process that was patented by Henry Bessemer in 1855. The key principle in the process was the removal of impurities from the iron by air that was blown through the molten iron. This oxidation also raises the temperature of the iron mass and keeps it molten.

While revolutionary in its time, the open hearth process soon became the more popular steel production method because it allowed for more control over the process, leading to a more consistent final product.
Smithfield Bridge

Known as the City of Bridges, the best estimate for the total number of bridges in the city is 446, or about 7.5 bridges per square mile. The oldest of Pittsburgh’s bridges that stand today is the current Smithfield Bridge that was designed by Gustave Lindenthal and constructed in 1883. The bridge marks the site where the first bridge in Pittsburgh, a wooden covered toll bridge, was erected in 1818. Destroyed by fire, the wooden bridge was replaced with a suspension bridge (1846) designed by John Roebling, which was in turn replaced by today’s Smithfield Bridge.

In 1810, just above where the south end of the Smithfield Bridge stands today, Nicholas Roosevelt (Teddy’s Granduncle) set up shop to build the first steamship, the New Orleans. The New Orleans set sail for Natchez in 1811 and the age of the steamboats was born.

Blowing Engine

Iron production requires vast quantities of raw materials (coke, iron ore, and limestone), as well as immense amounts of air to initiate and sustain the smelting and tapping processes. This huge machine is a vertical cylinder blowing engine used for blowing or pushing air into a blast furnace. This was one of six that ran at the Shenango Furnace Company in 1912. There are three general types of blowing engines: vertical, horizontal and vertical-horizontal. Vertical engines are run by steam, while horizontal run on furnace gas. The blowing engine pushes air into the blast furnace’s hot stoves where it is superheated (to 1800 + degrees) and blown into the blast furnace providing the heat for the iron smelting process. Air from the blowing engine is also required to push the melted iron out of the furnace in a process called tapping.

Torpedo Car

Torpedo cars (also called submarine cars) are used to transport molten metal around steel mills. The cars are filled from above and, once at their destination, can rotate to pour their contents into ladles. This torpedo car was taken from the Homestead Steel Works after it closed in 1986.

Bryan Sand and Gravel

Bryan Sand and Gravel has been located on this site since 1883. Today Bryan Sand and Gravel receives 750,000 tons of aggregate a year for use in manufacturing ready-mix concrete, but the sand piles along the Monongahela hint at an earlier industry – glass. The Monongahela River’s sand is high quality quartz sand that supplied more than 60 glass factories that operated in the South Side during the 1800s.
A. M. Byers
Established in 1862 as Byers and McCullough Pipe & Tube Works, the iron works on this site flourished for over a century. Byers Pipe, as it was named for the majority of its existence, maintained a successful small business in the age of Big Steel by sticking to a high-demand niche market. It used traditional iron-making technology to produce wrought iron pipe to serve the oil and gas industries that exploded throughout southwestern Pennsylvania in the early twentieth century. Byers pipe was also frequently used for irrigation as farming became more commercialized in the region.

Oliver Steel
Henry Oliver, a prominent Pittsburgh industrialist in the late 19th century, invested in two Pittsburgh iron mills along with William J. Lewis and John Phillips. One was a small nut and bolt mill on Liberty Avenue. The second was a small plant at Tenth and Muriel Streets on the South Side of Pittsburgh, which they combined with another mill building there. By 1880, Henry Oliver had purchased his partners’ shares, making him the sole owner of these companies. He began to turn his attention to steel manufacturing, installing Clapp-Griffiths furnaces that were capable of a daily output of 150 tons. As technology progressed further, he added a two-ton Bessemer converter to the plant. Oliver ran this business until he died and his son-in-law, Henry R. Rea continued the business until it closed in 1923.

The Monongahela River
Mile for mile, the Monongahela River is one of the world’s mightiest rivers, a fact not lost on a 19th century historian who wrote, “A trip up the Monongahela is an amazing experience – imagine the smoke and noise from 62 glass factories, 350 coal mines and 25 steel mills plus hundreds of other large and small industrial enterprises lining its banks.”

As early as 1772, the Mon’s importance was recognized by the Colonial Assembly who declared the Pennsylvania portion of the Monongahela a public highway and began clearing it for navigation. Today the Port of Pittsburgh is the 2nd busiest inland port in the nation shipping more tonnage then Philadelphia, St. Louis and Chicago. The Port receives and ships more than 40 million tons of cargo each year and much of that tonnage is coal. Traveling from mines in West Virginia and the Connells ville, PA region, coal is brought up the Mon to several remaining industrial facilities, such as the Clairton Coke Works.

Oliver Iron and Steel Company, c. 1900. Courtesy of Rivers of Steel National Heritage Area
Jones and Laughlin South Side Works

In 1850, B. F. Jones invested in the promising iron industry at a little mill in Brownsville, Pennsylvania. He repeated his investing strategy a few years later when he bought into the iron works of Bernard and John Lauth, a small iron works located on the south back of the Monongahela River across from the growing town of Pittsburgh. Seeing the advantages of consolidating his interests, he dissembled his Brownsville iron works, loaded it on to barges and floated it down to the South Side location where the new partners created the American Iron Works. In 1854, James Laughlin, then president of the First National Bank, obtained an interest in the new company and when one of the Lauth brothers sold his interests to the new partners in 1861, Jones and Laughlin Steel Corporation was born.

The only integrated steel mill located within the Pittsburgh city limits, the plant occupied about 200 acres along the Monongahela River. Jones and Laughlin was known for a process called “cold rolled” steel. Patented by Bernard Lauth in 1859, this process involved passing cold bars of iron and steel through hardened rollers and acid bath producing thinner, smoother, and stronger steel.

Four Mile Run

Named for a stream that flowed into the Monongahela River about four miles up from The Point, Four Mile Run is one of the city’s most isolated neighborhoods. Tucked away under the Parkway East, it is literally passed over by thousands of motorists daily but visited by a scant few.

The neighborhood has been known by many names: The Saline Valley, 4-Mile Run, Ruska (or Rusyn) Valley, or mostly common – “The Run”, this neighborhood had one of the largest populations of Carpatho-Rusyns in the United States. In the early 20th century these immigrants from the Carpathian Mountains in Poland, Ukraine, and Slovakia came to work in the mills - many of them walked to work from their small, unpretentious homes in the Run to J&L’s Eliza blast furnaces. Their church was the center of the community and the original small wooden church that was first erected in 1910 was replaced in 1935 with the stately, golden-domed St. John’s Chrysostum. A landmark for motorists on the Parkway East, St. John’s is best known as the church that Andy Warhol and his family attended.

Pgh Connelsville/ B&O RR

Pittsburgh Junction Railroad opened its line September 1884. The line ran between the Pittsburgh & Connellsville Railroad at Laughlin Junction and the Pittsburgh & Western Railroad at Willow Grove. All of the companies were acquired by the Baltimore & Ohio Railroad by 1902.

B&O Boxcar, c. 1920.

Courtesy of Rivers of Steel National Heritage Area, Pressed Steel Car Company Collection
Panther Hollow
About ½ million years ago, the Ice Age advanced into western Pennsylvania and changed the landscape of the Appalachian Plateau that would become the site of the city of Pittsburgh. At that time, the region’s three rivers came together near East Liberty and the Mon flowed northward through what is now the 150 foot deep Junction Hollow. Over the eons subsequent ice sheets blocked rivers and streams and continued to reshape the plateau into our now familiar hills and valleys. The last time the Mon was pressed to change its course was about 75,000 years ago when the Wisconsin glacier moved southward and forced the Mon into its present course.

Eliza Furnace/
Pittsburgh Technology Center
One of the first blast furnaces in Pittsburgh, the Eliza Furnace would grow to a 48-acre mill site along the north shore of the Monongahela River.

James Laughlin and Benjamin F. Jones built two blast furnaces called the Eliza furnaces in 1859 directly across the river from the American Iron Works (later the Jones and Laughlin Steel Company). Blast furnaces were usually named after women (wives, daughters, or mothers of the owners), and Eliza was a common name in both the Jones and Laughlin families. They were in operation by 1860, just in time to meet the increased demand for iron and steel products to serve the Civil War and rising railroad company demands. The furnaces became an iconic feature of the Steel City because of their close proximity to the downtown area, until they were demolished after the mill closed in the 1980s.

The brownfield formerly occupied by the Jones & Laughlin mill on the north side of the Monongahela has been successfully redeveloped into the Pittsburgh Technology Center, which houses both research and light industrial ventures.

Metaltech
Metaltech, Inc. is a manufacturing company located on the site that was formerly Jones & Laughlin Steel. Metaltech produces galvanized steel coils for use in the automobile, appliance, construction, and building industries. It opened in 1984 and currently employs 85 people. Metaltech, Inc. represents the transition of Pittsburgh industry from heavy steel production to more specialized products.

Created by an act of Congress in 1996, the mission of the Rivers of Steel National Heritage Area is to conserve, interpret, promote and manage the historic, cultural, natural, and recreational resources of steel and related industries in Southwestern Pennsylvania.

The Rivers of Steel National Heritage Area
The Bost Building
623 E. 8th Avenue
Homestead, PA 15120
412-464-4020
www.riversofsteel.com
Downtown and Southside:
10.6K (about 6.5 miles)
A more detailed map can be found at http://www.bikely.com/listpaths/srchkey/YPA