

# CHAPTER 7

## Affected Environment

### *Introduction*

This section describes the existing environment that would be affected by the alternatives proposed in Chapter 6 of this Special Resource Study. The information should be considered as a baseline description against which the effects of each alternative can be compared in Chapter 8, Environmental Consequences.

### *Impact Topics*

#### **Natural and Recreational Resources**

**Physiography and soils.** The study area is in the Pittsburgh Low Plateau of the Appalachian Plateaus Province physiographic region. Deep valleys and ravine-like hollows extending from the hilltops into the river valley characterize it. The study area encompasses land on the south and north bank of the Monongahela River, where the terrain rises from the river's pool elevation of approximately 710 feet to more than 1,100 feet. The Monongahela River runs through the study area in sweeping curves, eroding the hillsides at the outer edge of each curve and forming broad alluvial plain areas within each curve. This topography was favorable for both the coal and steel industries. The cliff-like outcroppings made the coal easily accessible and the generous expanses of level land could support the steel mills.

The study area is underlain by typical coal of the main portion of the Pittsburgh Coal Seam. In the Monongahela River, the sedimentary bedrock formations were deposited in the Paleozoic era and consist primarily of limestone, dolomite and sandstone. The study area soils are ultisols: highly weathered soils that have very little humus and developed over noncarbonate sedimentary rocks. Much of the soil in the area has been greatly altered and is mainly covered by buildings and other urban structures.

**Surface Water Resources.** The Monongahela River flows north 129 miles from West Virginia, begins flowing west a few miles east of Pittsburgh and unites with the Allegheny River in Pittsburgh to form the Ohio River. The "Mon" River has been used to transport raw materials and finished goods to and from Pennsylvania. In recent years, recre-

ational uses have greatly increased along the river.

A 2001 USGS news release on water quality in the Allegheny and Monongahela River Basins reports that the water quality is generally good when compared to the national average. As a result of the area's coal mining history, the water is generally acidic (low pH) and high in metals and sulfate, particularly for streams draining mined areas. In some areas, coal discharge is the most influential and persistent factor affecting water quality. According to the report, however, new sources of acidic discharge from coal mining areas have not been observed, and water treatment and compliance with regulations for water discharged from active mines are contributing to a steady improvement in water quality. Pollution continues to influence water quality, with traces of PCBs, chlordane and DDT found, although, as the study reports, use of these compounds has been prohibited for two decades. Overall, as the report states, water quality has improved dramatically over the past twenty years, contributing to an increase in fish populations. Significantly, the Monongahela River currently supports recreational bass and walleye fishing in downtown Pittsburgh.

The Pennsylvania Department of Environmental Protection classifies the Monongahela River as a warm-water fishery. Because of its outstanding scenic value, the Pennsylvania Scenic Rivers Inventory identifies the river as a Priority Three Scenic River. The Army Corps of Engineers operates nine navigational locks and dams on the river, creating 9,400 acres for flat-water recreation. Lock and dam improvements are currently underway as part of the modernization plan for the lower Monongahela River. This plan will help address constraints to swift, large-scale barge traffic and spur-of-the-moment recreational boating. Lock and Dam 2 in Braddock, which is the nearest lock and dam to the study area, is scheduled to be replaced by a gated dam and renamed Braddock Locks and Dams in 2008. The Monongahela River supports swimming, boating, non-power and whitewater boating and fishing for trout, walleye, bass and perch.

**Vegetation.** The natural vegetation of the lower Monongahela Valley has been profoundly changed by the industrial activity in the area. White pine

and hemlock, once common to the area, were timbered for charcoal making, shipbuilding, lumber, and rail and mine building. Regenerated second and third growth forest are now common in forested areas. The only natural reserve and park close to the study area is Frick Park to the east of Pittsburgh. The most common trees found in this area are maples (*Acer spp.*), tuliptree (*Liriodendron tulipifera*), basswood (*Tilia americana*), and various species of oaks (*Quercus spp.*). A mixture of introduced and native species grows in the understory and forest floor including Dutchman's breeches (*Dicentra cucullaria*), Mayapples (*Podophyllum peltatum*) and dwarf larkspur (*Delphinium tricorne*).

The study area is a heavily developed urban area that has been for the most part cleared of natural vegetation, except for trees found in small city parks and the vegetation growing along the banks of the Monongahela River. The studio for Creative Inquiry at Carnegie Mellon University conducted an inventory of stream bank woody vegetation on the riverbanks and islands in the Pittsburgh Pool, 3 Rivers 2<sup>nd</sup> Nature Biotic Assessment 2000. Both banks along the Monongahela River were assessed. In some cases, abundance of species varied on the south and north banks. In general, native species are more abundant than introduced species along the Monongahela River banks; however many introduced species are well established.

Overall, native sycamore (*Platanus occidentalis*) is the most abundant woody plant along the Monongahela River, followed by two introduced species: tree of heaven (*Ailanthus altissima*) on the north bank and Japanese knotweed (*Polygonum cuspidatum/sachalinense*) on the south bank. Native willows (*Salix spp.*) are the third most abundant species growing on the south bank of the river. On the north bank, introduced white mulberry (*Morus cf. alba*) is the third most abundant woody plant. Other abundant woody plants along the Monongahela River include box elder (*Acer negundo*), silver maple (*Acer saccharinum*), black locust (*Robinia pseudoacacia*), elm (*Ulmus americana/rubra*) and wild grape (*Vitis spp.*). False indigo (*Amorpha fruticosa*) does not grow in any other riverbank in the Pittsburgh Pool except for the south bank of the Monongahela River.

Although the 3 Rivers 2<sup>nd</sup> Nature Biotic Assessment 2000 focused on woody vegetation, limited data were collected on some specific herbaceous plant groups. Grasses (*Poaceae*) and sedges (*Cyperaceae*) are abundant on the north bank of the Monongahela River. Ferns (*Pteridophyta*) and

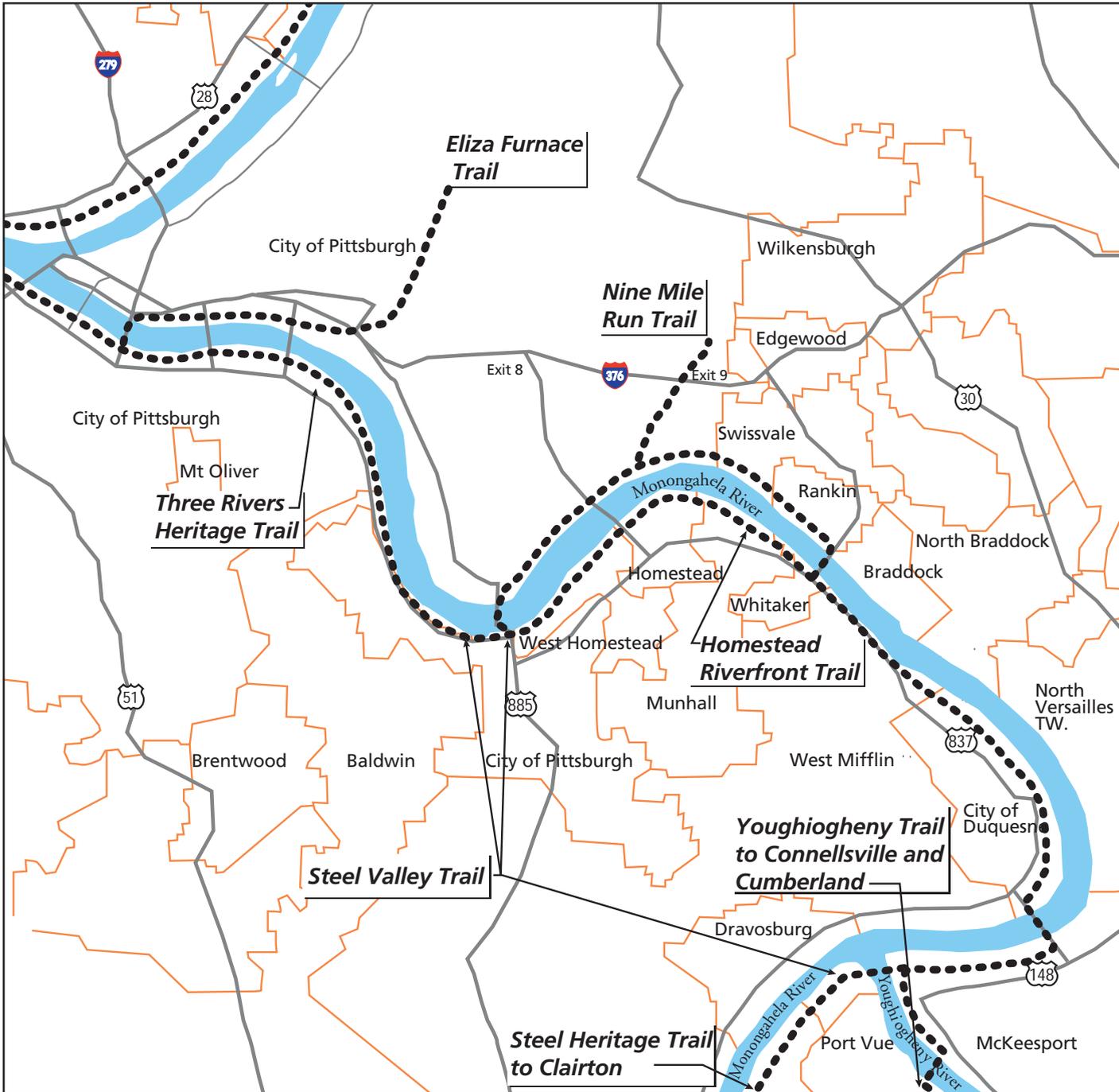
emergent aquatic plants are found along the river, but are not abundant. Purple loosestrife (*Lythrum salicaria*) is a rampant invasive plant in wetlands. Plants of this type have a relatively large presence here.

**Fish and Wildlife.** The species of birds that have been recorded in Allegheny County include the red-throated loon (*Gavia stellata*), common loon (*Gavia immer*), pied-billed grebe, horned grebe and the red-necked grebe. Of these birds, the pied-billed grebe is the only one recorded to have bred regularly in Allegheny County.

Until the 1970s, the Monongahela River contained almost no fish, except for the acid-tolerant flathead and channel catfish (*Pylodictis olivaris* and *Ictalurus punctatus*). Pollutants degraded the water quality and river basin, and the river suffered from vast fish kills. In recent years, fish populations have made a modest recovery since improved environmental controls have been in place. The reproduction of the paddlefish after reintroduction by the Fish and Boat Commission is evidence of the improved water quality of the river. This species was almost entirely eliminated from the Monongahela River due to pollution, channelization, dams and intensive fishing. The return of the sauger (*Stizostedion canadense*), a pollution-sensitive fish, is another encouraging sign of improved water quality. According to the Pennsylvania Fish and Boat Commission, game species in the Monongahela River include brook trout (*Salvelinus fontinalis*), yellow perch (*Perca flavescens*); several bass species among them the smallmouth bass (*Micropterus dolomieu*) and largemouth bass (*Micropterus salmoides*), white crappie (*Pomoxis annularis*), black crappie (*Pomoxis nigromaculatus*), bluegill (*Lepomis macrochirus*), pumpkinseed (*Lepomis gibbosus*), green sunfish (*Lepomis cyanellus*), tiger muskellunge (*Esox masquinongry*), longnose gar (*Lepisosteus osseus*), common carp (*Cyprinus carpio*), freshwater drum (*Aplodinotus grunniens*) and walleye (*Stizostedion vitreum*).

In recent years several non-game species have also returned to the Monongahela River. Non-game species include the gizzard shad (*Dorosoma cepedianum*), emerald shiner (*Notropis atherinoides*), mooneye (*Hiodon tergisus*), quillback (*Carpiodes cyprinus*), white sucker (*Catostomus commersoni*), northern hog sucker (*Hypentelium nigricans*), several redhorse species (*Moxostoma spp.*), logperch (*Percina caprodes*), shipjack herring (*Pomolobus chrysochloris*) and the sand shiner (*Notropis stramineus*).

**Figure 8: Proposed Regional Trail Network**



..... The proposed Steel Valley Trail is a segment of the great Allegheny passage and connects Three Rivers Trail, the Eliza Furnace Trail, the Nine Mile Run Trail, and the Homestead Riverfront Trail



**Waterfront trail at River's Edge, Homestead.** Rivers of Steel photograph.

**Threatened and Endangered Species.** According to the Pennsylvania Game Commission, the Pennsylvania Fish And Boat Commission and the Bureau of Forestry, the Peregrine Falcon (*Falco peregrinus*) is the only endangered species found around the Pittsburgh region. No nesting sites have been identified in the study area.

### Recreational Resources

**Trails.** The 700-mile **Potomac Heritage National Scenic Trail** corridor is a general route along the Potomac River that connects natural and cultural resources from the Chesapeake Bay to Allegheny Highlands. The corridor passes through Virginia, Maryland, the District of Columbia and Pennsylvania. The three trails currently recognized as "official" segments include the 184.5-mile C & O Canal Towpath, the 17-mile Mount Vernon Trail and the 70-mile Laurel Highlands Trail.

The Allegheny Trail Alliance, a group of seven "rails to trails" organizations, is developing seven trails, totaling 150 miles, called the **Great Allegheny Passage**. This trail would link Pittsburgh with the western terminus of the C&O Canal Towpath in Maryland, a trail which runs another 185 miles to Washington, DC.

The **Steel Valley Trail** (formerly the Steel Industry Heritage Trail – under construction) is one component of the Great Allegheny Passage that will extend from Pittsburgh to Cumberland, MD, thus becoming part of the network of trails linked to the Potomac Heritage National Scenic Trail corridor. The Steel Valley Trail will serve as an important link among the Youghiogheny River Trail, the Three Rivers Heritage Trail, the Eliza Furnace Trail and the Montour Trail. The Steel Valley Trail will run along both sides of the Monongahela River, connecting Homestead and the Carrie Furnaces site via the Rankin Hot Metal Bridge. Furthermore, the Steel Valley Trail at the Carrie Furnace site will connect to the 200 acres of open space to become "Frick Park Extension." The Steel Valley Trail will draw attention to the area's rich history of the steel industry. The Steel Heritage Council will oversee planning and implementation of the 12- to 17-mile final trail, construction of which began in 1999.

The **Three Rivers Heritage Trail** will run along the Allegheny, Ohio and Monongahela rivers. The Three River Trail is also part of the Great Allegheny Passage and will connect the communities north of Pittsburgh with the communities along the Monongahela River. This trail will connect to the Steel Valley Trail near West Homestead.

The **Riverfront Heritage Trail at the Waterfront** is a 2-mile segment of the Steel Valley Trail spanning West Homestead, Homestead and Munhall boroughs along the Monongahela River. It will be built on the site of the former Homestead Works at the river's edge. The trail is being developed by Continental Real Estate, the developers of the Waterfront, in partnership with the Steel Valley Trail. The trail is scheduled for completion in 2002.

The **Eliza Furnace Trail** (opened in 1998) is a 2.6-mile trail that connects downtown Pittsburgh with the neighborhood of Greenfield. The Eliza Furnace Trail was named after the Eliza Blast Furnaces that once occupied part of the site. The trail has a great collection of art that interprets the history and stories of the trail, the river and the city.

Figure 8 shows the planned and existing trails in the study area.

**Parks.** The Pennsylvania Department of Conservation and Natural Resources conducted an in-depth study of the Steel Valley area's public recreation and park services. The study focused on the boroughs of West Homestead, Homestead and Munhall. The study determined that there is a need for more recreation programs. As the result of these findings, the Steel Valley Area Recreation Commission will be created, and a comprehensive parks and recreation plan will be undertaken. The two main parks in the study area are the small **Frick Park** in Homestead and **Kennedy Park** at the foot of the Homestead Carnegie Library in Munhall. Frick Park is one block in area with both trees and lawns, and Kennedy Park, once named Library Place, is a block of steep lawn with widely spaced trees. Both parks are important historic resources. Other open spaces in the area include: **Park Square** in Munhall, **Mesta Park** in West Homestead, **Les Getz Memorial Park** in Swissvale and **Rankin Park** in Rankin. The other recreational facilities in the study are mainly playgrounds and small parks.

Other parks in the Pittsburgh area include the **Southside Riverfront Park** about four miles east of Homestead on the south shore of the Monongahela River and **Frick Park**, a large natural reserve in the city, located east of Swissvale. As part of the planned improvements for the regional parks in Pittsburgh, the city added 200 acres of land to Frick Park.

**Boating.** Allegheny County has the highest number of registered boats of the state of Pennsylvania. In recent years, the Monongahela River has experi-

enced a significant increase in recreational use. Boating increased 25% between 1975 and 1979, with projections of a nearly 300% increase by the year 2030. Close to the study area there are two public boat launch sites on the Monongahela River: the City of Pittsburgh Ramp by Southside Riverfront Park and the Braddock Public Ramp. There are also several private docking facilities on the Monongahela River. Sandcastle Water Park is a highly used docking facility's in the lower Monongahela River; parking and boat docking are free of cost.

Activity on the Mon River includes other boat types such as canoes, kayaks and rowboats. The **Three Rivers Water Trail** is an effort by the Friends of the Riverfront to make outdoor river experiences accessible to the residents of the Pittsburgh region. One of their goals is to create non-motorized boat launch points along the three rivers. They recently established an access point upstream from the City of Pittsburgh public boat ramp in Southside Riverfront Park, which is located on the lower Mon River. Additional canoe/kayak access points along the Monongahela River are planned for the future. Sporting events such as annual Three Rivers Regatta have also become popular along the Monongahela River.

**Fishing.** Fishing has greatly increased in the Monongahela River in last twenty years. The water quality in the river has improved so that it now supports a great variety of game fish. Walleye and bass tournaments are now being held.

### **Historic and Cultural Resources**

**Archeological Resources.** It is assumed that the construction of Homestead Steel Works and the Carrie Furnace obliterated all prehistoric remains in the area. The majority of the former Homestead Works, except for the Battle of Homestead site and Carrie Furnaces Numbers 6 and 7, were torn down during the late 1980s and 1990s. There appear to be no visible archeological remains of the former Homestead Works because most of the site has been redeveloped. It is suspected, however, that all remains have not been obliterated. Furthermore, archeological remains may be present underwater on the Monongahela River at the site of the Battle of Homestead. The historic river levels of the Monongahela River have risen, resulting in the submersion of archeological remains along the riverbank.

The Historic American Engineering Record (HAER) carried out extensive work on the industrial archeology of the area, publishing in 1990 a

documentation of a multi-year project to identify significant historic buildings, structures and large equipment at the Homestead Works and Carrie Furnaces, the Duquesne Works, the Edgar Thompson Works and the National Works. The HAER study of the Homestead vicinity concluded that “. . . as a result of demolition, a new strategy must be developed that seeks to preserve individual buildings and pieces of machinery and links [sic] them to the broader patterns of technological, business, social and labor history within the Mon Valley. For it was the Valley that was the pre-eminent iron and steel center in the United States for much of the nineteenth and twentieth centuries.”<sup>35</sup>

Documents and artifacts collected from Homestead Works are currently controlled and stored by the Historic Society of Western Pennsylvania. The documents include records of the machine shop known as the “Big Shop” where machinery belonging to Homestead Works and other mills all along the Monongahela River was repaired. The artifacts include a blacksmith shop (hammers, sedges, oven), workers’ clothing and signs from the works. All artifacts have been catalogued and will be given to the Steel Industry Heritage Corporation in the near future.

**Ethnic Resources.** The economic promise of the steel industry in Homestead attracted many immigrants from within the United States and many areas of Eastern and Western Europe, resulting in an area rich in ethnic diversity. The occupational skills, traditions, strong religious beliefs and labor history form the foundation of the communities in the study area. These communities also share the impacts of the decline of the steel industry with plant closings and layoffs, suburbanization and the switch to more service-oriented industries.

During the steel era, Homestead became a central focus for numerous ethnic groups that settled here and in nearby towns. Immigrants from each particular nation or region lived in close proximity, developing distinct neighborhoods with their own churches, social halls, taverns and fraternal organizations. These churches and benevolent associations became important sources of social support to members of the community, evidenced by the large membership (more than 100 members) of fraternal organizations such as the Greek Catholic Union. Churches were the principal cultural expressions of Homestead’s ethnic neighborhoods. Though the populations have dispersed since the decline of the steel industry, the religious heritage of most of the ethnic communities still exists.

During the period before the Battle of Homestead in 1892, a great number of the workers were skilled, native-born, Protestant European-Americans. They were generally of Scottish or Scotch-Irish heritage and came from Virginia and New Jersey. English, Welsh and German immigrants followed, settling in Swissvale and Homestead, as well as in other industrial towns in the region. During the twentieth century, with the tremendous demand for unskilled labor, Homestead attracted great numbers of immigrants, especially Eastern European and African-American migrants. The population of Homestead grew around 4000% from about 500 in 1890 to nearly 20,000 by 1920.

The Slovaks made up a large percentage of the mill's workforce. They established in Homestead the National Slavonic Society, the First Catholic Slovak Union and later the First Slovak Building and Loan Association. The Slovaks also built **St. Michael the Archangel Church** in 1927, whose tower houses a magnificent sculpture of "St. Francis the Worker." African-American migrants came mostly from the South between 1892 and 1940. They built at least four churches and lodges including the **Precious Jewel Masonic Lodge**, which is one of the oldest African-American Masonic lodges in the country, an indication of the community's early organizational strength. The **Park Place A.M.E. Church** built in 1920 was an important religious center that is still standing. The Homestead Grays were a world-renowned Negro League baseball team at the time. **West Field** in Munhall was at one time the home field of the Grays. Today, the African-American community is still a large part of Homestead.

The Carpo-Rusyn, Croatian, Italian and Jewish communities also left a strong cultural and heritage imprint in the study area. The Jewish community in Homestead grew to be one of the largest mill-town Jewish communities in the Mon Valley. In 1894, they built the **Homestead Hebrew Congregation**, which is one of the largest and most architecturally notable synagogues in the Mon Valley. A substantial Italian community is still found in Swissvale and Rankin.

Italian is still spoken at Mass in the Madonna Del Catello Catholic church, built in 1920. The Italian San Simone Festival is a culturally important folk festival celebrated today in Swissvale. The Croatian community founded an important fraternal organization, the National Croatian Society, that had over 100 members. They are still a strong and well-organized community in Rankin borough, where they have various clubs and organize cultural activities. The Carpo-Rusyns were also a strong commu-

nity in Homestead. The national headquarters of one of their fraternal organizations, the Greek Catholic Union, was located in Homestead. They built three churches and formed the "Rusyn Peoples Home." **St. Nicolas Church**, built in 1937, continues as an important religious center in the community. Rusyns also built the Cathedral for the Byzantine Catholic churches throughout the Mon Valley, the **St. John the Baptist Byzantine Cathedral**. Today, the Byzantine Catholic church is still headquartered in Homestead.

The steel industry also attracted immigrant labor that was Polish, Gypsy, Bulgarian, Serbian, Czech, Hungarian and Rumanian. Sizeable Hungarian and Rumanian communities settled in West Homestead and Munhall. The **Gothic Revival Hungarian Reformed Church**, built in 1904, is still a religious center in West Homestead. Similarly to other groups, the Rumanians in Homestead established a club, the Rumanian Cultural Society, and the Polish community built several churches. Today, the Bulgaro-Macedonian Beneficial Association is an active organization in West Homestead.

Although the steel company did not control every aspect of the workers' lives in Homestead, the ethnic neighborhoods were greatly affected by the company's politics. The ethnic neighborhoods were, for the most part, located below the railroad tracks in what was known as the "Ward" district. These neighborhoods did not directly benefit from the "buying-goodwill" gifts of the corporation such as the **Carnegie Library** and **Frick Park**, which were built above the railroad tracks in the neighborhoods of the "native stock." Due to the wartime demands of WW II, Homestead Works expanded its operations, resulting in the demolition of a large portion of the Ward that was the port of entry neighborhood for immigrants coming into Homestead. Many institutions and communities were affected, such as the Rusyn Peoples Home, the Turners Club (German) and the only Gypsy community in the Mon Valley. Approximately 2,000 families were displaced.

The ethnic communities also shared the impacts of the steel industry's decline. As industries and populations left the area, ethnic communities began to break up and institutions have had to struggle to stay alive. The area that comprises Homestead, West Homestead and Munhall is thought to be the community whose ethnic infrastructure, both architectural and cultural, has remained the most unchanged through the twentieth century. The significant number of religious institutions that remain active and involved in the community attests to the strength of these ethnic communities.

Even as suburban development occurred and ethnic communities began to break up, traditions remained, as well as strong loyalties to the places where families and friends lived and worked. In recent years, people who had left Homestead, West Homestead and Munhall are returning to the area.

**Historic Districts and Structures.** Historic resources in the project area are associated with the Big Steel Era. At the turn of the century, the Homestead Works emerged as the largest and most productive steel producer of the world. At one time it employed nearly 15,000 workers, and life of the community revolved around it. The communities of Homestead and Munhall borough grew around the works, while the community of West Homestead grew around the Mesta Machine Company, once referred to as the “world’s largest machine shop under one roof.” These communities celebrated their history and accomplishments, which are still a source of community pride. This year, Munhall and West Homestead celebrated the 100<sup>th</sup> anniversary of their municipal founding.

Eighth Avenue, the main street in the three towns, was always bustling with activity while the Homestead Works was in operation. In 1990, the National Register of Historic Places designated the area along Eighth Avenue a historic district, for its varied and representative selection of residential, institutional and commercial architecture typical of the layout of an industrial community of the period 1890–1940. Today, the historic district is listed on the Preservation Pennsylvania 2001 list of the ten most endangered historic places due to pressures to replace historic buildings in the district with new retail uses. Being on the list is thought to give a community more stature in applying for the Keystone Grants administered by the Pennsylvania Historical and Museum Commission. Community members, foundations and the local government are involved in preservation and restoration efforts. The borough of Homestead and private foundations are aiding property owners in façade restoration of buildings within the historic district. Other buildings will undergo full restoration once funds become available. The restoration of Homestead’s firehouse and former municipal building is a combined effort from the state and local government, foundations and the private sector. Despite much local support for the conservation of the historic and cultural resources in the area, valuable historic buildings are still being torn down to make space for new development.

**Historic Districts and National Register Resources.** The Homestead National Register Historic District represents a type of interaction between industry

and dependent communities that developed in industrial America between 1890–1940. The district encompasses more than 30 city blocks in the boroughs of Homestead, West Homestead and Munhall, 10 miles southeast of Pittsburgh. Homestead Historic District is composed of nonindustrial buildings constructed between 1890 and 1941. The district contains structures that were built as worker houses for the laborers in the steel mills. The majority of the structures date from the 1920s, but a substantial number are from the 1880–1895 period. The district is also composed of a number of structures that housed important religious institutions formed by the different ethnic groups that moved to the area during the steel-making era. Several of these churches, such as **St. John the Baptist Byzantine Cathedral**, are remarkable works of architecture and still house the same congregation that built the structures. Significant commercial buildings such as the 1926 **Pittsburgh National Bank** also contribute to the richness of the district. The **Leona Theater**, built in 1913, and **Chiodo’s Tavern** are landmarks of the days when Homestead was a favorite spot for entertainment. Within the historic district there is a distinct neighborhood, the **City Farm Plan Neighborhood**, which features superintendents’, workers’ and middle class housing, and the **Carnegie Library**. Many of the houses in this neighborhood date from the 1890s. The **Homestead High-Level Bridge** was listed in the National Register of Historic Places in 1986 and was built in 1937 to replace Brown’s Bridge. The bridge is a WPA-era structure that uses the first major application of a Wichert continuous truss. Aside from its material, the structure has no special relationship to the steel industry.

#### Key Historic Structures

- **The Bost Building**, located on Eighth Avenue in Homestead, was the headquarters of the Amalgamated Association of Iron and Steel Workers during the 1892 Homestead lockout and strike, and it housed the newspaper correspondents who covered the events. It was designated as a National Historic Landmark in 1999 and is listed as a contributing resource in the Homestead Historic District. The Steel Industry Heritage Corporation is rehabilitating the building as a visitor center. The building will also house a labor history exhibit, archives and offices.
- **Carrie Blast Furnaces Numbers 6 and 7 and the Hot Metal Bridge.** Built in 1906–1907, the furnaces are the only remaining pre-WW II era

blast furnaces in the Pittsburgh District. The Carrie Furnaces, located on the north bank of the Monongahela River in Swissvale and Rankin, provided iron to various plants up and down the valley until they were purchased by Carnegie Steel in 1898. Carnegie Steel built the Hot Metal Bridge in 1900-1901 in order to transfer hot metal, pig iron and raw materials across the Monongahela River from the Carrie Furnaces to the steel-making facilities in Homestead. By integrating the iron - and steel - making facilities, the Homestead Works, together with the Carrie Furnace Plant, emerged at the turn of the century as the largest and most productive steel mill of the world.

- **The Battle of Homestead Landing site** was the site where the armed Pinkerton detectives hired by Carnegie Steel arrived, on river barges, to confront Homestead workers, their allies and families in 1892. It was on this site that the Battle of Homestead took place. Main features include an 1892 brick pump house, which was present during the battle, approximately fifty circa 1883 wooden pilings, and an 1893 water tower. The site was denied National Historic Landmark designation on the grounds that later additions as well as massive alterations to the battle site itself, compromised its integrity. The previous owner rehabilitated the Pump House, which is now accessible to the public. The Steel Industry Heritage Corporation hopes to make it part of the “Big Steel Journey.”
- **Steel Workers’ Organizing Committee Monument** is an engraved obelisk erected in 1941 to honor steel workers who were killed at the Battle of Homestead in 1892 as well as to celebrate the return of the union to power. It is located within the Homestead National Register Historic District at the Homestead end of the High-Level Bridge.
- **Carnegie Library of Homestead** was built in 1898 in what became the borough of Munhall. The facility includes a Music Hall, Library and Athletic Club. It was intended as a personal peace offering gift from Carnegie to the community.
- **Mesta Machine Company** was the largest machining operation in the Pittsburgh area. It made parts for steel mills in the United States and around the world. The borough of West Homestead grew around the Mesta Machine Company. The company was closed in 1983, but reopened years later and it is still in operation

today. Related to the Mesta Machine Company is the **Bryce Mesta House**, home of George Mesta, company founder. This house is considered to be the only genuine mansion in the Historic District.

- **Homestead Pennsylvania Railroad Station** was listed in the National Register of Historic Places in 1983. The station, built *circa* 1890, is one of the most architecturally distinguished local railroad stations along the Monongahela River Valley. The station reflects Homestead’s importance during the Steel Era when a great number of people, including industrialists, immigrants and other laborers, traveled to and from the town by train.
- **Schwab Industrial School** was built in 1903 as a training school for workers. Charles Schwab, a Carnegie partner, constructed this facility at about the time of the sale of the company to U.S. Steel.

### *The Socioeconomic Environment*

The study area defined for this SRS lies in the heart of Allegheny County in western Pennsylvania and encompasses the boroughs of Homestead, West Homestead and Munhall on the south bank of the Monongahela River and the boroughs of Rankin and Swissvale located on the north bank of the river.

### **Socioeconomic Baseline Conditions**

The study area experienced cycles of growth and prosperity since its emergence as an important industrial center in the late 1800s. Jobs drew many immigrants to the area, and the population soared in the early twentieth century. With the collapse of the steel industry in the early 1980s, however, the economic base of the area was devastated. The Mon Valley lost 17,000 jobs. Residents began to move elsewhere in search of employment, leading to a major population decline in the area. Although the overall population of the study area has continued to decline and a major economic turnaround has not yet occurred, the population of some boroughs—Munhall, Rankin and Swissvale—ceased to decline between 1998 and 2000. The population growth in these boroughs is most likely the result of affordable housing. New developments in the study area are indicative of changed perceptions about the area and may lead to additional population increase in upcoming years.

The 2000 U.S. Census data shows that the overall population has continued to decline in the study

area. The population of Allegheny County declined 4.1 percent in the last ten years. In comparison with other municipalities of Allegheny County, the boroughs of Homestead, West Homestead, Munhall, Rankin and Swissvale experienced significant declines in their populations between 1990 and 2000. Munhall borough was one of the 25 municipalities in Pennsylvania with the largest numeric decrease in its population between 1990 and 1994. However, between 1990 and 2000 the population declined by 6.8 percent, about 3 percent less than the decline in population between 1980 and 1990. Homestead had the largest population decrease of all boroughs, a 14.6 percent decline between 1990 and 2000. The population of West Homestead declined by 11.9 percent, followed by Swissvale with a decline of 9.3 percent between 1990 and 2000. In Rankin, the population declined by 7.5 percent between 1990 and 2000. Between 1998 and 2000, however, this trend changed in the boroughs of Munhall, Rankin and Swissvale, where the population has grown an average of 2.5 percent.

Munhall borough, the most populous municipality, has approximately 12,300 residents (U.S. Census 2000). Median household income is \$23,883 (1990 data), well below the 1990 national average of \$30,056 and the state average of \$29,069. Borough residents are 95 percent white. African-Americans constitute about 3 percent of the population, and Asian-Americans, Native Americans, Latinos and residents of two or more races make up 2 percent of the population.

The borough of Swissvale is the second biggest borough in population with approximately 9,700 residents with median household income of \$23,773 (1990 data), about 18 percent below the national and state averages. Borough residents are 74 percent white. African-Americans comprise 22 percent of the population, Asian-Americans and Latinos constitute 2 percent and residents of two or more races make up the remaining 2 percent of the population.

Homestead borough has a population of about 3,600 residents. Median household income is \$20,388 (1990 data), about 30 percent below the national and state averages. Residents of Homestead borough are 51 percent African-American and 43 percent white. Asian-Americans constitute about 3 percent, Latinos and Native Americans make up less than 1 percent, and residents of two or more races constitute 3 percent of the population.

The borough of Rankin has a population of

approximately 2,300 residents. Median household income is \$10,872 (1990 data), about 63 percent below the national and state averages. Borough residents are 69 percent African-American, 28 percent white, residents of two or more races make up about 2 percent of the population, and Asian-Americans, Native Americans and Latinos constitute about 1 percent of the population.

West Homestead borough has approximately 2,200 residents. Median household income is \$22,298 (1990 data), about 33 percent below the national and state averages. Borough residents are 90 percent white, African-Americans constitute about 9 percent of the population, Asian-Americans, Native Americans and Latinos make up less than 1 percent of the population.

Unemployment varied significantly among the different boroughs in the study area. Only 3.6 percent of Munhall borough was unemployed in 1998, while in Rankin unemployment was 9.6 percent; followed by the borough of Homestead, 7.3 percent; West Homestead, 5.1 percent; Swissvale, 4.3 percent. The service and retail sectors are the major employers in the boroughs, followed by manufacturing and construction. The majority of residents work in Pittsburgh or in neighboring boroughs such as at West Mifflin where there are several manufacturing companies and service-sector jobs. Manufacturing and heavy industry represent only 15 percent of all jobs in the Pittsburgh region; the remaining 85 percent of all jobs are service-sector jobs.

**Land Uses and Ownership.** From the end of the nineteenth century to the 1980s, industrial use dominated the landscape in the lower Monongahela Valley. The study area began to change from a highly industrial area to mostly residential when the steel industry collapsed in the early 1980s.

With the demolition of the Homestead Works, new development occurred on the waterfront, which is now mixed use. Within the three boroughs of Homestead, West Homestead and Munhall, the majority of land is in residential use. On the north bank, the majority of the land in Swissvale is also in residential use, while in Rankin the site of the Carrie Furnace occupies a full third of the half-mile-square borough with remaining land mostly residential.

There are commercial and mixed-use land uses throughout the study area, with the heaviest concentration at the Waterfront development in

Homestead and in the central business district of Homestead along Eighth Avenue, between Sarah Street in West Homestead to Library Place in Munhall. Industrial uses no longer dominate the study area. The only remaining heavy industrial use is at the northwestern edge of West Homestead. There are also three other sites in West Homestead, Homestead and Munhall that are light industrial in nature. Major efforts to clean up and redevelop former industrial sites are under way in the region. Upstream on the Monongahela River, beyond the Homestead vicinity, the communities of Braddock and Duquesne still have active steel mill operations.

Real estate companies, foundations, not-for-profit associations or individuals privately own the majority of the historic resources of the study area. The SIHC owns the Bost Building. Different owners including owner-residents, institutions and owners of commercial buildings own most structures within the Homestead National Heritage Historic District. The Cleveland-based Park Corporation owns the Carrie Furnaces. Continental Real Estate purchased the land of the former Homestead Steel Works, including the Battle of Homestead Landing site from the Park Corporation. The SIHC plans to buy the Hot Metal Bridge from its current owner, the Monroeville-based Transtar Inc. The Pittsburgh History and Landmarks Foundation owns the Homestead Pennsylvania Railroad Station.

**Development and Transportation Context.** After the Homestead Works closed, the county, state and other public entities launched several initiatives to reoccupy vacant lands and replace the economic engine that was provided by the plant, summarized in the remainder of this section. Figure 9 shows the location of key development initiatives within the project area.

The new 360-acre Waterfront development on the site of the former Homestead Works is transforming the riverfront into a mixed-use area, with commercial, residential, office and recreational uses. This new development encompasses portions of the boroughs of West Homestead, Homestead and Munhall extending from the Pump House to the west side of the Homestead High-Level Bridge. It covers approximately 80 percent of the land once occupied by Homestead Works. With the completion of the “Town Center” part of the Waterfront Development, adjacent to the High-Level Bridge, in October 2001, the development was at 65 percent completion. In addition to “big box” retail uses, the Waterfront includes an apartment community, a marina and a regional park with community fea-

tures. A Riverfront Heritage Trail, which is part of this development, will offer access to the river. This will be the first time since these communities were built that there will be public access to the riverfront.

The Waterfront is expected to contribute to the economic revitalization of the area. As many as 40,000 customers will go to the Waterfront on a weekly basis, potentially generating business opportunities for the Eighth Avenue Business District. In addition to the Waterfront development, two major customer call centers recently opened in West Mifflin and McKeesport that will create more jobs for the area. New stores have also opened in the Century Three mall area in West Mifflin. This area has been a major commercial center in the area providing many service-sector jobs.

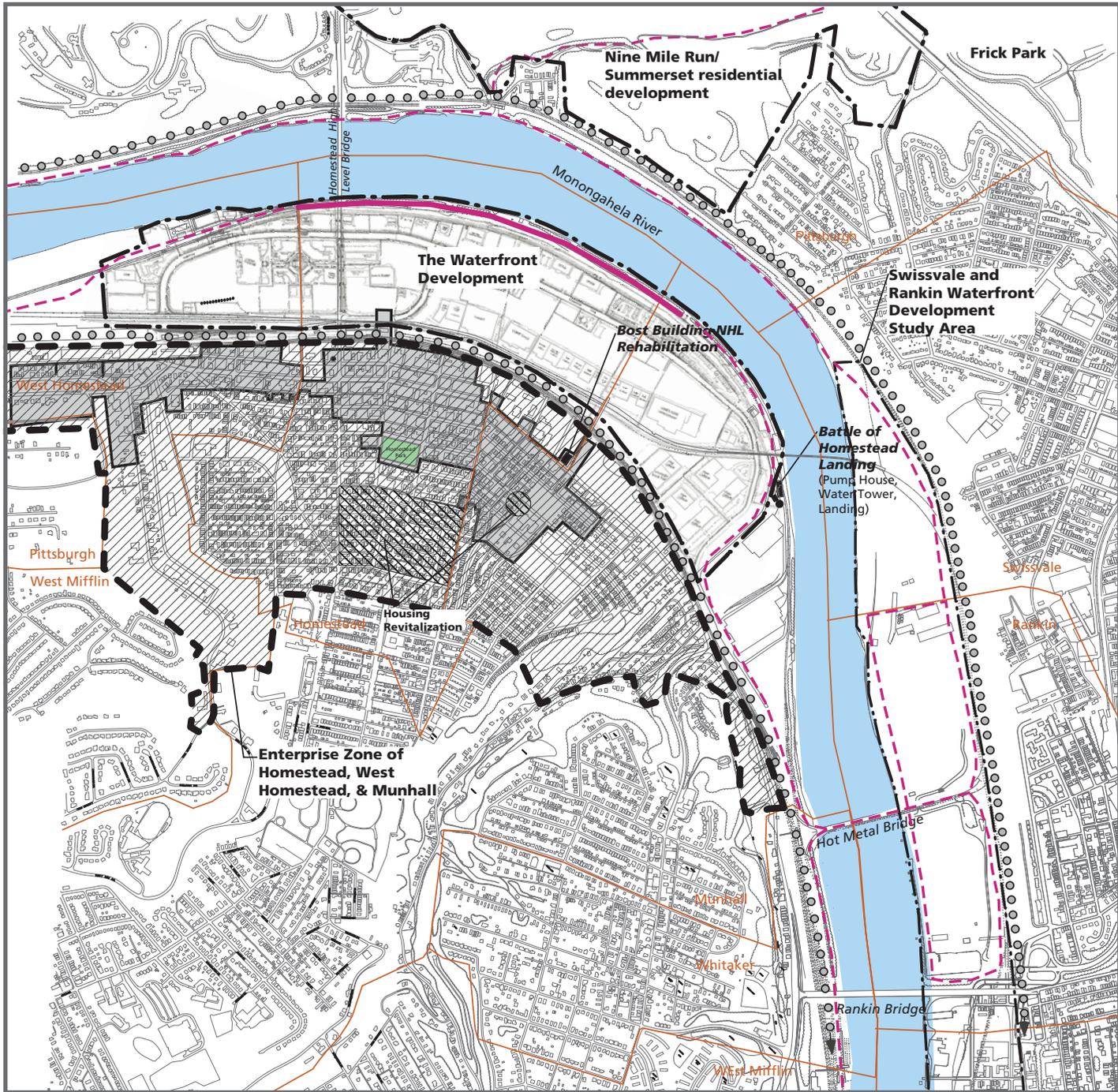
**The Comprehensive Urban Design Study and Plan for Homestead, West Homestead and Munhall**

includes a range of initiatives that are designed to reinforce the existing historic commercial core of the Homestead vicinity and to capture positive momentum associated with the Waterfront Development, which is likely to evolve into the commercial center of the study area. While the Waterfront draws customers to Homestead, there is a risk that the success of this new development could draw investment and activity from the historic Eighth Avenue Business District. This study suggests linkages between the new development and older commercial area, new parking, streetscape improvements and other redevelopment proposals to rehabilitate vacant structures for commercial uses in Homestead, West Homestead and Munhall.

The Allegheny County Redevelopment Authority is working on a redevelopment plan for the Carrie Furnaces site, which spans the boroughs of Rankin, Swissvale, Braddock and North Braddock. This major initiative has proposed mixed use development on vacant parcels on either side of the Carrie Furnaces 6 and 7, integrated with interpretive and visitor improvements to the furnaces. Proposals are in the public input stage of the process.

The Allegheny County Redevelopment Authority supports a housing plan, in collaboration with the Mon Valley Initiative, that involves building rehabilitation, façade design, streetscape improvements and green space development in the area of Homestead bounded by West and McClure Streets and between 12<sup>th</sup> and 15<sup>th</sup> Avenues. The Homestead Housing Revitalization project will

Figure 9: Planning and Development Initiatives in the Homestead Vicinity



**Special Resource Study and Environmental Assessment for Battle of Homestead and Carrie Furnaces 6 and 7**

National Park Service  
 United States Department of the Interior  
 Approximate Scale in Miles



- - - - - Proposed Trail
- Completed Trail
- ◀ ◉ ◉ ◉ ◉ ▶ Proposed Mon-Fayette Expressway (North & South alternative alignments)
- |— SIHC Restoration Projects
- Homestead National Register Historic District
- Enterprise Zone
- Proposed Housing Revitalization
- Current Development Projects
- Ongoing Planning Studies

include a mix of rehabilitation and new construction. This rehabilitation will contribute to the revitalization of the heart of Homestead and will aid in integrating this area with the new commercial developments on the riverfront.

The Carrie Furnaces are nearby 200 acres of open space to the west that will be added to Frick Park, a large nature reserve and park owned by the City of Pittsburgh. The extension of Frick Park is the result of the Nine Mile Run project, a major development and greening effort on a previous brown-field site. The Nine Mile Run project is a collaborative effort between public and private organizations to plan and develop the old slag slopes in the city of Pittsburgh and restore the Nine Mile Run stream, a major tributary into the Monongahela River. In addition to the open space, a new housing development known as "Somerset at Frick Park" is being constructed.

The Mon-Fayette Expressway is a proposed 65-mile highway that would connect Pittsburgh to Cheat Lake in West Virginia. There are two proposed alternative routes that each run through the study area. The North Shore Alternative (the preferred alternative) runs parallel to the north bank of the Monongahela River through North Braddock, Braddock, Rankin and Swissvale to Pittsburgh and abuts the northerly edge of the Carrie Furnaces property. The South Shore Alternative runs along the south side of the Monongahela River passing through Duquesne, West Mifflin, Whitaker, Homestead and West Homestead. Under the North Shore Alternative, there would be access to the Carrie Furnaces site via an exit ramp provided near the site.

### *Visitor Experience and Tourism*

**Regional Context.** Tourism in western Pennsylvania centers on Pittsburgh and Allegheny County, with some 3.9 million people visiting annually. The Greater Pittsburgh Convention and Visitors Bureau estimates that 26 percent of visitors to the Pittsburgh area venture out and visit other points of interest in the region and that visits to cultural attractions, museums and historic sites are the primary activity of leisure travelers to Pittsburgh. From the 1995 *American Travel Survey*, most visitor trips to the Pittsburgh area originate from Pennsylvania, followed by Ohio, New York and Virginia. The most frequent metropolitan area origins are: Washington, Baltimore, Columbus, Buffalo, Philadelphia and Cleveland. The majority of these travelers come for pleasure, including visiting friends and leisure.

The city of Pittsburgh is rich in industrial heritage, historical neighborhoods and museums, and attracts domestic and international visitors. In 1999, the Pittsburgh region ranked third after the Hershey Dutch Country and Philadelphia Countryside regions in total direct travel expenditures in the state of Pennsylvania.<sup>36</sup> Traveler spending directly supported 47,042 jobs within the region. Tourism dollars, according to the Greater Pittsburgh Convention and Visitors Bureau, support the food, lodging and retail establishments. In 1996, visitors spent \$554 million on food purchases and \$295 million on retail.

Much like the rest of Pennsylvania, shopping is the most popular tourist activity in Pittsburgh.<sup>37</sup> With the exception of the Carnegie Museums and the Duquesne Incline, all the top visitor attractions of Pittsburgh include shopping as one of their activities. After shopping, the most frequent activity was visiting a museum. The historic district in Homestead has the potential of becoming a major visitor attraction if it could offer both a culturally enriching experience and good shopping.

The Senator John Heinz History Museum opened in 1996 and features both permanent and temporary exhibitions focusing on the history of western Pennsylvania. The museum also houses a theater, library and archives, museum store, cafe and the offices of the Historical Society of Western Pennsylvania. The museum is the only attraction in the Pittsburgh metro area that interprets the steel industry heritage of the region. The museum shows a comprehensive video of the steel industry and has a permanent exhibit featuring Homestead that deals with the lives of the workers in the steel mills. Since 1996, the number of visitors has increased significantly every year, with a total of approximately 105,000 visitors in 2000, many of which are school groups. The museum plans a major expansion by 2004 that can be expected to increase its appeal and attraction and is anticipated to result in expanded visitation, projected at 150,000. The museum's exhibitions cover a variety of themes and times related to the region's history.

Other major cultural attractions in the Pittsburgh area include: the Carnegie Museum of Natural History and Carnegie Museum of Art (327,328 visitors in 2000), the Carnegie Science Center (579,668 visitors in 2000), the Pittsburgh Zoo (801,062 visitors in 2000), the Andy Warhol Museum (59,026 visitors in 2000) and the National Aviary (85,226 visitors in 2000).

### **Homestead, West Homestead and Munhall.**

Although visitor attractions in the study area are still quite limited, in recent years the area has experienced a significant increase in activities that are drawing attention to that side of the valley. Major nearby recreational attractions in the area include the Sandcastle water park that draws about 800,000 visitors over the three-month summer period and the historic Kennywood Amusement Park that attracts over 1 million visitors annually.

In Homestead, West Homestead and Munhall, the scale of current tourist attractions and activities has been quite modest. In 1993, the Steel Valley Arts Council created the *Eighth Avenue Days Festival*, which usually lasts two days. For the summer of 2001, the *Eighth Avenue Days* festival was changed to the *Eighth Avenue Arts Festival* to mark the centennial celebrations of Munhall and West Homestead and ran throughout the summer. A first exhibit in June attracted 650 visitors and the August exhibit over 500. The festival is expected to become an annual event in the future. The *Pierogie Festival* celebrates the region's ethnic history with a family day of food, music and dance. It is the most attended festival of the area with about 1,500 visitors. It takes place at the Sandcastle water park in

West Homestead.

There is no tour of the historic district or individual historic buildings. Once facade restorations take place, tours of the historic district could be organized in a similar fashion to the *Take a Walk on the North Side* tour of Pittsburgh's North Side. In a recent article the *Pittsburgh Post-Gazette* compared Eighth Avenue in Homestead with Carson Street on the South Side, pointing out that both are commercial belts with mill-worker pasts and architecturally rich. The article concluded that the South Side was not inherently well placed for the vibrant recovery it made; neither is Homestead poorly placed. In 1997, the South Side was the eighth most visited attraction in the Pittsburgh area and the North Side ranked seventh after downtown Pittsburgh, Station Square, Airmall, the Carnegie Museums and the Duquesne Incline.<sup>38</sup>

**Swissvale and Rankin.** The Carrie Furnaces have the potential of becoming a tourist attraction in the area. Its proximity to the proposed Steel Valley Trail would give the site great visibility.