

Acknowledgements

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Development of Significant Cultural Resources to Promote Economic Revitalization: A Case Study in Western Pennsylvania

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In 1985 the US National Park Service (NPS) conducted a reconnaissance survey¹ in the southern Allegheny region of western Pennsylvania. Responding to a 1984 Congressional mandate for such a report, the NPS evaluated natural, scenic, recreational, and cultural resources in this region. The agency found that nationally significant cultural resources could serve as a focal point for a regional tourism framework. The NPS recommended that a combination of local, state, regional, and national interests could collectively promote the development of visitor-oriented programs, interpretive exhibits and waysides, and access to significant sites described in its report.

A crucial factor in this area of forested hills and rolling countryside is the rapid change in the local economy. Plagued by double digit unemployment and lack of job opportunities, western Pennsylvania is currently in transition from a primary emphasis on transportation and heavy industry to a more diversified economic base. Population and employment statistics reflect this transition, and the future economic health of western Pennsylvania is contingent upon how well the economic base is diversified. Traditionally, the local economy depended heavily on transportation as well as mineral-based industries such as bituminous coal mining and iron and steel production. Today, heavy industry has given way to growth in the service sector.

Tourism is a major and growing element in the area's economy. Regional and state tourism promotion staffs recognize that visitor dollars are increasingly important to the economy of the southern Allegheny region and to the state as a whole. The Southern Alleghenies Travel Council and other area travel promotion agencies seek to increase tourism and tourist dollars to the area. In 1984 travelers spent nearly \$350 million dollars in western Pennsylvania. The total for the state reached 8 billion dollars in 1984, with tourism employing 200,000 workers. These expenditures become important when related to the increases in local/state tax receipts, employment and as an overall local economic stimulus.

Congressman John Murtha (12th district-Pennsylvania) represents an area east of Pittsburgh that contains suburbs, cities, small towns, and rural areas. The congressman, searching for new approaches to resolve the region's economic difficulties, introduced a motion that became incorporated in Public Law 98-473 (October 12, 1984) that, among other things, directed the National Park Service to "study roads in Pennsylvania in the area of Johnstown Flood National Memorial (NM) and Allegheny Portage Railroad National Historic Site (RR NHS) for consideration as Parkways." Congressman Murtha recognized beneficial economic impacts that NPS-managed areas have on local communities in his district and throughout the state and nation. For example, the Allegheny Portage Railroad NHS attracted 70,000 visitors in 1985 and Johnstown Flood NM² about 51,000. The 14 National Park Service administered areas in Pennsylvania attracted a total of some 11 million recreational visitors in 1985. On the larger issue of overall tourism impact, the congressman asserted in late 1985:

Tourism must be part of our effort at redeveloping the economic base of western Pennsylvania. It is difficult for many people to compare the impact of tourism with the obvious presence of a steel mill or a computer center. But tourism is the third-largest retail business in America, producing \$215 billion in economic development and 4-6 million jobs. (The (Johnstown) Tribune Democrat, November 30, 1985.)

The study team did not receive undue pressures from either agency officials or congress to find "something" significant to promote as a new park. Had the study team not found any nationally significant resources, that would have ended potential NPS involvement other than a minor assistance role.

What evolved during the study process was a purely technical evaluation of natural, cultural, scenic, and recreational resources of the southern Alleghenies. This was done through application of standard NPS criteria for national significance and integrity; analysis of the resources; and recommendations for protecting and making those resources accessible for visitor enjoyment and economic benefits.

A four member Denver Service Center (DSC)³ study team consisting of a landscape architect, historian, transportation specialist, and community planner worked closely with the superintendent and staff from Allegheny Portage Railroad NHS to produce, in seven months, a *Reconnaissance Survey of Western Pennsylvania Roads and Sites*. The team made its first field trip in March, 1985, and completed the study in late September. The document was released to the public at a press conference chaired by Congressman Murtha on November 29, 1985, and on January 31, 1986, the House of Representatives Appropriations subcommittee on parks and related agencies held field hearings in Johnstown on the plan's findings. Twenty-three representatives from various levels of government, private groups, and trade associations, enthusiastically endorsed the NPS report. The printed testimony supports the observation that western Pennsylvania contains a number of sites that could be developed as tourism magnets.

Initially the DSC team focused on a seven county region in the southern Alleghenies that consists of Bedford, Blair, Cambria, Fulton, Huntingdon, Somerset, and Westmoreland counties. Bonded by cultural and geographical similarities, this region has many historical, natural, and scenic resources and diverse opportunities for year-round outdoor recreation. Visitors enjoy skiing, sight-seeing, boating, swimming, horseback riding, fishing, hiking, camping, and hunting, and there is potential for enhanced tourism. Access to the region from the Pennsylvania Turnpike (I-76) to the south may be gained in less than an hour's driving time by using U.S. highways 220, 219, 119 or historic route 30. Pittsburgh is about 85 miles to the west, and Washington, Philadelphia, and Baltimore about 3-4 hours by car.

The study area included parts of two major North American physiographic provinces—valley and ridge to the east and north and the Appalachian Plateau to the west and north. The highest area that bisects the study area is the Allegheny Front, a formidable mountain ridge during the region's settlement and one that physically separates the region today.

Following fieldwork and data analysis, the team identified a two county core study area (Blair and Cambria) with nationally significant and intact transportation and industrial resources. In addition to natural, scenic, and recreational attributes in the Cambria and Blair county area, the cultural resource base was found to provide the greatest potential for a new tourism focus. The resources of these two counties are linked by geography and man-related activities. The DSC team evaluated two major concentrations of cultural resources in Altoona and Johnstown as well as scattered ancillary resources in outlying areas (Plate 1). The two groupings of resources, if properly



Plate 1: Pennsylvania Railroad Shops, Altoona, PA (Ca. 1889)

managed and promoted, could serve as an integral part of an increased visitor interest in the southern Alleghenies region and provide the foundation for a tourism-oriented approach to economic growth and development. No federal fee acquisition of private property has been recommended; instead a series of options to identify, protect and interpret significant resources, as well as attract more visitors, has been submitted for public scrutiny.

The Resource Base

The southern Alleghenies reflect a rich and diverse history. As with many regions throughout the nation, the historical origins and development of western Pennsylvania were marked by exploration and settlement as well as bloody conflict between Native Americans and the advancing pioneers in the mid-18th century. Although agriculture provided an early mainstay to the local economy, transportation was the original growth industry in western Pennsylvania. This was followed by iron and steel production.

Roads and Canals

The region witnessed improvement from ancient Indian paths to trails and primitive roads, and the construction of frontier tollroads such as the 77-mile-long Huntingdon, Cambria and Indiana Turnpike in the early 1800s. In the 1820s and 1830s the state built the Pennsylvania Main Line Canal, a major east-west corridor through the area. This canal linked Philadelphia with Pittsburgh. In 1831, construction had reached the tiny frontier community of Hollidaysburg, at the eastern side of the steep Allegheny Front. By 1834 the innovative Allegheny Portage Railroad connected Hollidaysburg with Johnstown, 37 miles to the west.

The 37-mile Allegheny Portage Railroad consisted of a series of ten inclined planes—five on one side of Allegheny Mountain and five on the opposite side. Traffic moved upward and downward on both series of planes. Each plane had two tracks with an endless hemp cable moving up one track and down the other, to which the ascending or descending cars were attached. The weight of the ascending cars was balanced against the descending cars on each plane. Steam locomotives moved the cars between the planes. The highest point on the route was 2334 feet above sea level, nearly 1400 feet above the canal basin at Hollidaysburg and about 1150 feet above Johnstown. The horizontal railroad tracks were laid on two rows of stone "sleepers" with metal fasteners set into the rock. The tracks of the planes were iron straps nailed to wooden rails and held in place by wooden cross-ties.

Thus heavy barges were hauled over the steep hills between the two communities. Despite this ingenious system, the Pennsylvania Canal heyday ended quickly. However, while it lasted, it had sparked much growth in the frontier communities astride its path. Hollidaysburg, Johnstown, and Blairsville owed much to its development.

Railroads

By the 1850s the Pennsylvania railroad had reached the Allegheny Front, acting as a stimulus to the formation and development of Altoona. The construction, in 1854, of the Horseshoe Curve⁴, just west of the city, permitted trains to ascend the Allegheny Front and cross the mountains. Muleshoe Curve, an equally important construction project on the Allegheny Portage Railroad, was made obsolete along with the entire system when the new railroad began operations. Horseshoe Curve has provided a vital link in east-west rail traffic since the 1850s and this engineering marvel continues to serve Conrail (successor to the Pennsylvania Railroad) as a mainline transportation system.

The Pennsylvania Railroad constructed its support facilities in Altoona. Huge locomotive works known as the Altoona machine shops and Altoona car shops provided stable employment for thousands of workers since the mid-19th century. Altoona attracted the finest

mechanics, engineers, artisans, and craftsmen of the day, and it was a veritable mecca of 19th century railroad technology. A department of physical testing was established in 1874, a chemical laboratory a year later, and a bacteriological laboratory in 1889. By 1889, with demand outpacing capacity to produce, the Pennsylvania Railroad had built the Juniata shops for the construction of locomotives. This complex was located northeast of the Altoona car shops. Buildings and tracks covered an area of 218 acres and according to one historian comprised the "largest group of railroad shops in the world." (Alexander, 1947:133.) This complex employed 11,200 persons at its prime; by the end of World War II, 7,000 locomotives had been built in Altoona (Plate 2).



buildings have been demolished to avoid unfavorable taxes on unused plant and equipment.

Although much is known about the history and socioeconomic impact of the Pennsylvania Railroad in Altoona, no actual site surveys or evaluation work has been conducted at the former locomotive works or car shops. Local preservation groups, such as the Railroaders' Memorial Museum are attempting to fund evaluation of extant significant cultural resources before the buildings and equipment are destroyed.

Iron and Steel

Along with the growth of transportation, the iron and steel industry at Johnstown grew to national importance in the mid-19th century. From its early days the iron industry was localized in Pennsylvania and elsewhere throughout the eastern U. S., a local industry with small output and economic impact. For example, a small iron industry prospered in Johnstown in the early and mid-19th century because of the availability of ore, limestone, and wood, along with a good transportation system afforded by the Pennsylvania Canal. On the other side of the Allegheny Front, Juniata Iron became renowned throughout the eastern seaboard for its high quality. But as local raw materials were depleted and the need for additional capital intensified, the iron industry became concentrated, and Johnstown emerged as one of the early centers. Although the giant Carnegie Steel Company and its successor U. S. Steel Corporation in Pittsburgh have garnered the limelight through the years, early technological development in Johnstown helped spark subsequent growth elsewhere.

The Cambria Iron Company began in Johnstown in 1852 and was regarded by its contemporaries as the greatest of the early iron and steel works. By 1860, just prior to the Civil War, the Cambria Iron Company had 1,900 employees on its rolls and was the largest iron-making firm in the nation, and by the late 1880s, it employed 7,000 workers.

Daniel J. Morrell, general manager of the Cambria Iron Company from 1856 to 1884, either brought to Johnstown or kept there the leading metallurgists and technicians of the iron industry. This favorable situation was instrumental in helping introduce the revolutionary Bessemer process (developed in England) of steel making to the United States in the mid-1860s. Experiments with the Kelly converter, considered by many industry authorities as a precursor to the Bessemer converter, also occurred at the Cambria Iron Company between 1857 and 1862. Thus the Cambria Iron Company provided a prime training ground for many technicians who furthered subsequent growth of the steel industry in the Monongahela River valley near Pittsburgh in the mid-1880s.

The most important single innovation of the pre-Civil War years came out of the Cambria plant in 1857—John Fitz's three-high rolling mill. With this breakthrough in rolling iron in mass quantities,

Cambria became the technological leader in producing iron rails for the rapidly expanding railroad industry. The production of quality rails established Johnstown as one of the nation's foremost iron and steel centers. By 1876 Cambria's rail production exceeded any other American plant, with 10 percent of the total nationwide rail output.

The Cambria Iron Company also employed other new technology in the 1860s and 1870s, including the open-hearth process of steel production. The celebrated 'Cambria Link' barbed wire helped fence the open range of the American west, and a huge output of springs, plow steel, rakes, and harrow teeth, and other agricultural implements flowed from the Cambria Iron Company in the late 19th century.

Despite rapid growth in the steel industry, which resulted in the demolition of many early buildings and equipment, and the disastrous floods that have plagued Johnstown through the years, remnants of the original Cambria Iron Company exist on the grounds of a Bethlehem Steel Company plant in Johnstown⁵. Even though the 1980s' precipitous decline in steel production has led to the razing of many Bethlehem structures in Johnstown, at least six buildings dating from the early Cambria Iron Company remain: an 1854 blacksmith shop, an adjacent office building, a pattern shop/wood shop with a hose tower, a car shop, an iron foundry, and a later-19th century office building in downtown Johnstown that survived the great 1889 flood (plate 3). Similar to the lack of survey and evaluation of the Conrail facility in Altoona, little site specific work has occurred at the Bethlehem plant (Cambria Iron Company) in Johnstown.

While it is true that the two active heavy industrial centers are not presently conducive to preservation activity or visitation, the resolution of certain health and safety issues would fit these complexes for serving the tourist public. Many basic industrial plants throughout the nation are open to public tours. Effective methods must be devised to separate visitors from active industrial processes and to protect visitor safety in touring historic facilities.

Concepts for the Future

Using these nationally significant cultural resources as a foundation, several alternatives for preservation, interpretation, and development associated with the origins and growth of western Pennsylvania seem appropriate. The options offer preliminary guidance on how significant cultural resources in the southern Alleghenies should be treated, and contain several implementation approaches. While the strategies address natural, recreational, and scenic resources, those that present the most potential for attracting new visitors are the cultural resources.

The first alternative, individual site preservation and promotion, emphasizes site-specific preservation of a number of significant cultural resources in Cambria and Blair counties. Preservation activity would be conducted on a site-specific basis by existing organizations without any umbrella coordinating agencies. It entails the structural preservation of:

1. Pennsylvania Canal features
2. Allegheny Portage Railroad NHS
3. Staple Bend Tunnel
4. Horseshoe Curve
5. Pennsylvania Railroad (Conrail) Locomotive Works
6. Cambria Iron Company Buildings
7. Johnstown Flood National Memorial

Visitors would be offered low-key opportunities to learn about specific sites as they relate to the origins and development of western Pennsylvania, especially themes of transportation and basic industrial growth. They could receive interpretive materials and on/off site presentations without any comprehensive interpretation of the

themes—transportation and iron/steel production. Johnstown and Allegheny provide the primary focus. The major resources related to

road for such a designation would be based on aesthetic qualities foremost.

If construction of a new road seemed more appropriate, the possibility of designing and constructing a new parkway would be evaluated. If a parkway concept results, it should not be considered just another road, but instead as a linear park through scenic lands where a road encourages visitor appreciation of the area's rural countryside, farmsteads, and small towns.

The parkway option could upgrade the quality and heighten the range of visitor experience. Its primary purpose would be to dedicate a strip of land for improving aesthetic experiences while uniting nationally significant cultural resources such as the Allegheny Portage Railroad NHS, Johnstown Flood NM, and perhaps portions of the Pennsylvania Main Line Canal.

A scenic road or a newly constructed parkway would link the region's unique resources to promote the area's identity. A scenic road designation, a parkway project, or a more formal designation of existing U.S. 22 as a state scenic highway would promote the idea of a major tour route.

The fourth and last study alternative—regional cooperative development and promotion—highlights a more comprehensive appreciation of cultural and historic sites, and emphasizes their accessibility, use, and protection. Not only would the significant cultural resources at Johnstown's Cambria Iron Company, Altoona's locomotive works, and Horseshoe Curve receive attention, but so would lesser known cultural resources that provide additional education about the region's role in transportation, and the coal, iron, and steel industries.

To expand the transportation theme, certain portions of the Pennsylvania Canal including turning basins, canal locks, and canal traces would be interpreted. The area of interest would be the canal remnants to the east and west of the Allegheny Portage Railroad NHS.

To integrate the history of coal mining with iron production in the region, several locally significant sites that predate the Cambria Iron Company would be interpreted. Early iron producing facilities such as Mt. Etna in Blair County, including workers' cabins, company store, and furnace, would provide a complete ensemble, and at Vintondale in Cambria County, the Eliza Furnace remains extant. Marsteller, in northwestern Cambria County, provides one of the region's best examples of a company coal town. Complete with abandoned mines, tailings piles, housing, and a company store, Marsteller provides a glimpse of the lifestyles and conditions of the coal industry in the early 20th century.

To interpret the rail era, not only would the Altoona locomotive works and the nearby Horseshoe Curve receive attention, but also Muleshoe Curve and the Johnstown rail station. As the area's frontier iron industry evolved into large-scale steel production, the demand for and local availability of iron ore, limestone, clay, and coal was as important as development of the canal and railroad to move finished goods to market.

As discussed in the previous alternatives, a scenic road or parkway would link these resources along with a series of integrated tour routes. Tour routes would utilize existing roads in the region and would be well marked with the appropriate logo or symbol. The establishment of a series of tour routes provides visitor exposure to additional regional themes, attractions, and visitor services and promotes interest in coal mining, local handicrafts, mountain and lake recreational sites, and the rural landscape.

Various cultural resources would be interpreted in a comprehensive visitor experience. To maximize visitor exposure and opportunities, efforts should be made to integrate them into a regionwide tourism promotion:

1. **Visitor information centers.** At strategic regional crossroads, information centers would provide the traveler with brochures and maps about tourism opportunities in the southern Alleghanies. The purpose of any center should be to attract interstate travelers and acquaint them with locally available tourism opportunities.
2. **Johnstown visitor information center.** Johnstown station could be used as the initial stop for visitor information and orientation. Through audiovisual programs, exhibits, maps and handouts, the center would stimulate further investigation of why this community became an early center in American industry.
3. **Cambria Iron Company.** Opportunities to view the remaining six buildings are crucial to the understanding of their significance to the growth of the area's industrial economy.
4. **Cambria Iron Company office building.** To gain an understanding about the historical evolution of iron and steel production in the Conemaugh River valley, the Cambria Iron Company office building in downtown Johnstown could serve as an interpretive center. Historical displays, audiovisual programs, and other materials could provide a link between past and present.
5. **Bethlehem Steel.** No tour or visit to Johnstown would be complete without an understanding of what has evolved in the steel industry, what current technology has accomplished, and what it means to the region and nation. Modern steel-making is an education in the forces that combine energy and raw materials to make consumer goods. Some creative way should be found to allow visitors to observe this process.
6. **Horseshoe Curve.** It is important to interpret the Allegheny Portage Railroad stop by acquainting visitors with the engineering technology that made it obsolete. The NPS could cooperate with the city of Altoona in the development and interpretation of the site.
7. **Hollidaysburg.** This community is an important link in the portage railroad story. Hollidaysburg was the western terminus of the Juniata Division⁷ of the Pennsylvania Canal, and here the boats were placed on inclined railroad cars for the journey over

the Allegheny Front. Through an interpretive exhibit or wayside, the visitor could learn how this important system functioned.

8. **Altoona Locomotive Works.** The historically significant complex is currently a part of the Conrail repair works. Visitors could observe locomotive repair work activity and photograph late 19th century industrial structures.

Conclusion

As of this writing, funds have been appropriated for research and planning, and a Draft Action Plan has been prepared. Thus far local reaction has been extremely favorable, but the need for coordinated action remains. A unified approach to publicize significant resources for enhanced visitation and economic development has yet to be implemented. According to a key point made in the 1985 *Central Pennsylvania Tourism Opportunity Analysis* too many small groups are trying to carry out their own tourism promotion programs. For example, in Cambria County three groups and one umbrella organization market their area to the business, family, and group travelers: The Cambria County Tourist Council, the Prince Gallitzin Tourist and Trade Association, the Tourist and Convention Committee of the Greater Johnstown Chamber of Commerce, and the Southern Alleghenies Planning and Development Commission. Each of these groups has its own budget, overhead expenses, and marketing strategy.

To overcome this fragmentation, the **Analysis** states:

It would behoove representatives of the county organizations to work with the Matching Fund coordinator of Pennsylvania's Bureau of Travel Development to determine how arrangements for cooperative tourism promotion could be made without jeopardizing existing state matching grants. According to that official, if the county tourist promotion agencies (tpa) in the area organized formally into one regional effort, the new agency would be eligible for matching funds, providing the necessary tpa designation change was made by each county involved. Our office would be willing to assist them in the necessary paperwork that is needed for any tpa merger. (Central Pennsylvania Tourism Opportunity Analysis, 1985.)

Soon after the NPS released the *Reconnaissance Survey*, The (Johnstown) *Tribune-Democrat* commented:

The (NPS) study provides further proof that the region need not be a tourism lightweight. But coordination must replace fragmentation, although that does not necessarily dictate an unbending regional approach to the tourist trade.....

At issue now is whether the area will be able to get together to decide on a course of action and who will do what tasks. Or will officials simply stumble along on the basis of suspicions, jealousies, and individual pride. (Tribune-Democrat, December 4, 1985.)

Presently local preservation interests are preparing a proposal for matching National Trust funding for such a study in Johnstown. Congressman Murtha and his staff are preparing a bill to ask for ongoing NPS involvement. Local interests and organizations have banded together to attract funding and organizational support for historic preservation in Johnstown and Altoona and elsewhere in the Southern Alleghenies of western Pennsylvania for nationally significant cultural resources as a means of helping rebuild the local economy.

It will likely take combined efforts at the local, state, and federal levels, involving both the private and public sector, to insure the protection of the region's significant cultural resources and thus provide the needed focus for a major new tourism promotion. While it should not be considered a total panacea, the success of this new effort will help give needed diversity to the region's economy and will bring widespread visitor recognition of the role these significant cultural resources played in the industrial growth of the United States.

Endnotes

- 1 A reconnaissance survey involves identification and description of an area's resources, evaluation of the significance of those values against standard NPS criteria, and analysis of the need for protection of the area's resources. Rich Giamberdine, Mike Spratt, Keith Dunbar and Ron Johnson prepared this study. Many of the ideas presented herewithin represent the collective ideas of the four planners.
- 2 Allegheny Portage Railroad NHS commemorates an 1830s trans-Allegheny transportation system and Johnstown Flood NM is the site of an earth dam that failed on May 31, 1889, causing a flood that resulted in \$17 million of property damage and that took some 2200 lives.
- 3 The Denver Service Center provides nationwide planning, design, and construction assistance to the entire NPS. This large central office employs approximately 530

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Economic Values of Wildlife and Fisheries¹ —What Importance are Those Values in Decision Making?—

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