

# A Review on Economic Impacts of a Heritage Tourism System

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#### Abstract

The US's past has frequently been used as a tourism subject. In 1988, a formal network of historical locations in southwest Pennsylvania that represent the area's industrial and cultural past was established. At a cost of \$88.2 million, 20 historical sites were renovated as part of The Path of Progress. 13 finished sites in the nine-county area were the subject of a five-year study that tracked their development and economic impact. The 13 venues had over half a million visitor days annually by 1998, with 74% of the visitors being non-residents. In 1998, non-resident visitors spent \$15 million in the area. In the year 1998, tourists who were not locals spent \$15 million in the area. These expenses had a \$33 million total impact on regional sales. The sum of \$470 million was the total sales effect of the whole network for the first eleven years of operation, with 64% of that amount coming from non-resident spending and 36 percent from capital expenditures. The impact of non-resident spending increased by \$16 million between the original sites' operations in 1988 and 1998. With the system's growth, more might be anticipated.

Keywords: Heritage, locations, region, attendance & finical etc.

#### Introduction

Popular themes for leisure travel include history. The pasts of both themselves and other tourists intrigue them. Think of the Egyptian pyramids, the Gettysburg battlefield, or England's Stonehenge. Our interest in the past is a celebration of culture and of time itself. Many national parks have a focus on geologic time and ecological events, making them timeoriented as well. These parks contain artifacts from human history, ranging from our most primitive to those of more developed societies. We have slowly collected, restored, and explained these artifacts 'cultures and histories. An additional setting for tourism is provided by the US's industrial and cultural legacy. US colonial history has attracted interest at Mystic, Connecticut; Sturbridge, Massachusetts; and Williamsburg, Virginia. The Ford Museum in Detroit, the Space Museum in Washington, DC, and the Steam town Museum in Scranton, PA are just a few examples of museums devoted to certain technologies. The majority of these centers are site-specific and don't deal with the regional nature of heritage development.

A regional tour system was established in southwest Pennsylvania to showcase three centuries of history. Development of the author in accordance. Its subject honors the journey of our country from agriculture and the extractive industries to the Industrial Revolution and our current mingling of cultures and traditions. The Path of Progress (POP), which consists of a collection of more than 20 historic sites that were refurbished over a ten-year period, 1988-1998, serves as a model for other local heritage systems. The system's general organization, annual attendance and revenue statistics, as well as the regional economic effects produced over a 13-year period, are all presented in the following document. Two sources of influence are taken into account: those related to the yearly regional spending by non-resident tourists and those organized from the growth and restoration of the historic monuments.

## Study of the Literature

Investigations of the economic effects of tourism have been conducted in relation to various local and leisure pursuits. The specific economic impact of recreational boating in Texas was studied by Stoll *et al.* in 1988. Their database was created using information from a mailed survey of boating sector businesses. For various aspects of the boating industry, the ratios of overall sales impact to direct impact (Type II multipliers) ranged from 2.3 to 3.3. The industry as a whole had a multiplier of 2.8.

The economic effects of all recreational travel along the Texas Gulf Coast were examined by Fesenmaier *et al.* in 1989 <sup>[1]</sup>. When Texas residents were asked how much they spent on regional travel, the average was determined to be \$57 per guest day. There were \$586 million in regional expenses overall each year. A Texas input-output model was used to

assess the regional and state-wide impacts, which were valued at \$1.2 billion and \$1.9 billion, respectively.

The financial effects of tourism on six important industries along the Oregon coast were identified by Johnson *et al.* in 1989. Survey results of local companies revealed the amount of tourist sales revenue, which was considered a direct impact. The personal and company revenue that the original sales generated served as the basis for the estimation of induced impacts. The list does not, however, include indirect effects. Between 0.16 and 0.92 percent of total revenue was generated by direct sales. Service stations and retail sales had the lowest coe\$cients, while the hospitality, food service, and amusement industries had the highest coe\$cients.

The economic impact of non-resident visits to state parks was calculated by Bergstrom et al. (1990) for a number of state economies. Their research was based on the Public Area Recreation Visitors Study (PARVS) at the national level, and economic evaluations were conducted using the impact analysis for planning (IMPLAN) model. The amount of the Type II multipliers for the various states varied from 1.80 to 2.46, depending on how complicated the state's economy was. In a nine-county area of Pennsylvania in 1995, Strauss et al. (1996a)<sup>[9]</sup> identified the economic effects of tourism. With a total attendance of 19.6 million visitor days, tourism was defined as a set of 26 activities. 41% of all attendees and \$284 million (\$59% of the total) in area spending were non-resident visitors. A regional IMPLAN model estimated the direct sales impact of nonresident visitors at \$191 million and the secondary (indirect and induced) impacts at \$369 million. Over 14,000 annual jobs were supported by \$190 million in pay and salaries from this. The lodging and food service industries accounted for 70% of the direct sales impact.

There are also clear differences between these tourism studies in terms of their impact definitions and economic modeling initiatives. The more recent studies, which often rely on an input-output model of the local economy, analyses the direct, indirect, and induced effects of tourism expenditures.



Fig 1: Path progress-tour rout of heritage sites.

The year 1988, with the Southwest Pennsylvania Heritage Preservation Board in charge. The effects were determined for the nine-county area that houses the POP system (Fig. 1). The development, preservation, & development of the POP system on the regional scale as well as the regional tourist expenditures incurred by non-resident users of the system were also taken into consideration as sources of funding. Through the use of a regional input-output model, the financial implications of these investments were calculated.

## The Region and the Path of Progress

According to PSDC (1995), the nine counties that make up the Path of Progress account for 16% of Pennsylvania's total area (7260 square miles) and 9% of its population (1.1 million) (Fig. 1). According to PASS (1996), the area is classified as having 64% woodland and nearly 30% farmland. The Allegheny Mountains, which run across Somerset, Cambria, and Blair Counties, are a notable geographical feature of the area. During colonial times, the Alleghenies posed a significant barrier to both the industrialization of the US and the settlement of the region.

The early attempts to traverse the Alleghenies, first by foot and wagons, then by canal and railway, are closely related to the history of the area. Fort Necessity and Fort Ligonier serve as illustrations of colonial outposts along the early route system, which is a fundamental motif of the POP system (Table 1). Other historical locations, including as the Somerset Historical Centre, Old Bedford Village, Friendship Hill, and West Overton Museums, interpret the earliest agricultural and trading villages from the colonial and post-Revolutionary eras.

When canal boats were hoisted over the Alleghenies using a complex network of inclined planes in the 1830s, it was known as the Allegheny Portage, which was a significant engineering achievement. The Alleghenies was crossed by a railway line in 1854, which included the Horseshoe Curve, making the canal system obsolete. The Johnstown Flood of 1889, which is remembered by the Flood Memorial and the Flood Museum, was connected to a bygone canal system. After this destruction, Johnstown constructed its Inclined Plane as a precaution and to make it easier for the city to grow along its higher altitudes.

The Altoona Railroaders Museum, which was rebuilt as a "state of the arts" cultural centre in 1998, has as its main focus a century of railway history. Tourists can ride the East Broad Top, a narrow-gauge railway that was used in the early 1900s to move coal and timber from the Alleghenies, forty miles east of this centre.

The Path of Progress was the name given to this collection of historic locations in 1988. POP is promoted as a collection of heritage sites that together allow visitors to leisurely yet methodically follow the development of culture over three centuries.

# **Study Methods**

This essay is a compilation of many studies.

A series of yearly studies from 1992 to 1996 (Strauss *et al.*, 1992-1996) <sup>[8]</sup> determined the costs and impacts associated with certain heritage sites along the Path of Progress. A regional input-output model was used to analyses the economic effects of visitor spending and capital investments. An examination of the entire system encompassing 13 operating sites was conducted as a result of this year-by-year evaluation of individual sites (Strauss *et al.*, 1996a) <sup>[9]</sup>. The creation of a monthly attendance reporting system for all sites was coordinated with this effort. As part of a larger tourist assessment of the area, several heritage centres were resurveyed in 1997 and 1998 (Strauss *et al.*, 1996a) <sup>[9]</sup>.

In order to interpret the influence of the overall system across a 13-year period, from 1986 to 1998, this paper employed the "ve-year series of impact studies as a base. Before the Path of Progress was formally established (1988), operations continued for two years. Thereafter, POP operations continued for 11 years. As previously mentioned, a meticulous record of attendance has been kept for every site since 1991.

The National Park Service kept attendance statistics at four NPS locations (Allegheny Portage, Fort Necessity, Friendship Hill, and the Flood Memorial), and kept comparable records at the Railroaders Museum, Horseshoe Curve, and Old Bedford Village. These records were used to determine attendance for the years 1986 to 1990. Based on trends created from the above mentioned sites, attendance at all additional sites between 1986 and 1990 was calculated.

Similar to this, the ratio of visitors who were residents compared to visitors who were not residents for each of the 13 sites between 1991 and 1998 was trended in order to estimate the likely individual ratios for the earlier period. Both resident and non-resident visitors' spending patterns at the 13 sites were assessed in the same way.

The effect assessment for planning (IMPLAN) system produced the economic effects of spending on capital and non-residents. A computerized modeling system called IMPLAN offers a regional input-output study of economic activity in terms of 10 industrial groups, covering as many as 528 sectors. MIG, Inc. is currently responsible for maintaining the system, which is chargeable (MIG, Inc., 1996)<sup>[12]</sup>.

The data bases used by IMPLAN are regularly updated, with the most recent POP studies using a 1993 economic base whereas the initial POP studies used US data from 1986. In addition, our research team revised the nine-county model to reflect changes in employment within important industries and allied trade connections.

### Results

## **Capital Expenditures**

One of POP's guiding ideas was to create and maintain a respectable network of historic sites that authentically represented the area's past. The region's growth was taken into account from both a technological and cultural standpoint. Both public and private sites were incorporated into the system's interpretation process. The Southwestern Pennsylvania Heritage Preservation Commission chose the locations, and they were accompanied with development plans that improved the preservation, interpretation, and capabilities of the diverse sites.

Designing, restoring, and expanding the POP system cost the area a total of \$88.2 million (Fig. 2). The first 13 operating facilities, their affiliated parts, and associated POP infrastructure received close to 70% of the funding. The remaining 30% went towards site development and repair for the system's future sites. These will include a working coal mine in Cambria County, increased canal work in Blair and Indiana Counties, and an automobile history museum in Bedford County.

### Attendance

The 13 active sites saw an average of 430,000 visitor days (one person visiting for a portion of a day) annually during the two years before the Heritage Commission was established. Visitors from outside the nine-county area (non-residents) made up nearly 57% of the attendees. The Inclined Plane, the Flood Memorial and Museum, Fort Necessity, Fort Ligonier, Old Bedford Village, and the horseshoe-shaped Curve were the main attractions, drawing about 80% of non-resident and overall visitation.

The Johnstown Flood Memorial and Flood Museum's opening after renovation saw the first significant rise in visitors in 1989. This year, visitation at the Memorial nearly tripled to 104,000 visitor days, and increased significantly at the neighboring Flood Museum. The Inclined Plane saw a boost in use as well.

The three Johnstown locations contributed almost entirely to the POP system's increase in attendance. The system as a whole had a 60,000 decrease in visits the following year. Admissions at the Monument and the Museum were still 50% greater than it had been before the rebuilt Johnstown sites had experienced their initial increase in interest.

The following spike in attendance happened in 1992, the year the brand-new Horseshoe Curve venue was officially opened.

This year, Horseshoe received more than 120,000 visitor days overall, which is a four-fold increase from the previous year's attendance? The next year, attendance dropped to 80,000, and in more subsequent years, it has further decreased to 55,000 visitor days. Another element of attendance at Horseshoe was a progressive increase in non-resident guests, who made up over 80% of all attendees in 1997-1998 from just over 70% in 1990-1991 to that point.

Over the years 1993 to 1998, overall system attendance has decreased, falling below 500,000 visitor days in 1996 but increasing recently in 1998 (485,000). Once more, the opening of a new facility-this time the Railroader's Museum in Altoona-in 1998 led to a double increase in visitors to this location.

Additionally, the percent of non-residents, attendees at all sites increased between 1993 and 1998, rising from 66% in 1993 to 75% in 1995 and remaining at this level in 1998 (Fig. 3). Three peaks in non-resident attendance have been noted by the system: 400,000+ in 1992, 380,000 in 1995, & 360,000 in 1998. Non-resident attendance increased at an average yearly pace of roughly 11% from its initial foundation in 1986-1987 to the first peak in 1992.Since then, the system has seen a two percent annual reduction in enrollment among non-residents.

## Spending by Non-Residents

The amount and nature of expenditures made by non-resident visitors are the main factor influencing the effects of tourism. Essentially, these costs imply an infusion of "new" money into a local economy through export. Providing amusement services. The various levels of direct, indirect, and induced impacts are established by the "financial response of the various sectors to these expenditures" (Strauss *et al.*, 1996a) <sup>[9]</sup>.

Annual non-resident spending from the POP system (Fig. 4) increased at a rate that was consistent with the rise in non-resident attendance. Non-resident expenditures over the years 1986-1987 averaged \$7.7 million yearly before the POP system was legally established. After POP was created, costs increased to \$11 million in 1989, the year the Flood Memorial and Museum was opened. 1992 saw the realization of a second peak of \$16 million with the opening of the new Horseshoe Curve facility. After 1992, spending fell but was kept within the \$14-\$15 million annual level. Non-resident spending reached \$16 million in 1998 after the new Railroader's Museum was opened.

#### **Financial Effects**

For the objectives of this study, the economic effects were separated into two groups: those related to non-resident tourist spending and those coming from capital investments in site development. Each source was identified according to the total sales impact it had on the local economy, which took into account all of the direct, indirect, and induced effects. Capital expenses for each project were divided into the planning-design and construction-restoration phases. This divide was, on average, 18 and 82%, with each component being examined independently in the IMPLAN model. Over the course of the 13-year period, the \$88.2 in capital expenditures had a total regional impact of \$168.5 million. This represented an average multiplier of 1.91 between expenditures and total sales.

The majority of these investments generated 94% of their value in direct effects. The indirect effects on other industrial sectors in the area contributed around 54% of the value of the direct effects. Finally, the pay and salary component of the direct and indirect impacts accounted for around 32% of the generated impacts. The National Flood Memorial and Museum opened its doors in 1989, and during that year, the overall impacts from non-resident spending at all locations rose to \$23.4 million. In the year 1992, when the new Horseshoe Curve went online, a second peak was seen. \$33.8 million was the total regional impact of all locations for this year. Although annual impacts fell to \$28.2 million in 1994, they gradually rose in the years that followed, reaching an estimated \$33.0 million in impacts in 1998.

In general, non-resident spending patterns have revealed that as direct effects, roughly 75% of these expenditures stay inside the regional economy. These effects were primarily seen in the retail industries that cater to visitors (lodging, food services, and related goods and services). The remaining 25% of expenses were connected to the acquisition of imported products and services, which resulted in a loss to the local economy.

The exchange of goods between the primary industries as well as other local firms makes up the following level of impacts. In all, 32% of the value listed as total direct impacts were indirect effects. The household spending of earnings and wages generated within all of the tourism-related sectors was the source of the third level of impacts, which were referred to as induced impacts. The value of these induced impacts was 110 percent greater than the sum of direct and indirect consequences. The labor-intensive nature of the majority of tourism-related trades and the labor-dependent nature of the majority of retail and service sectors catering to household requirements were the two reasons that contributed to the large scale of the induced impacts.

# **Summary of Impacts and Allocations**

Effects on visitor spending during a period of 11 years were \$301.8 million. The capital expenditure for site development resulted in impacts of an additional \$168.5 million, bringing the total to \$470.3 million. Since each of the sites was in operation before the formal formation of the POP system, it is possible to dispute whether the current POP system should be given credit for this overall impact. One method for calculating the "net gain" that could be attributed to the POP system is to deduct the pre-POP impacts (\$16.5 million year) from the effects that have been observed over the previous 11 years. According to this method, the net gain in impacts over the course of the 11-year period came to \$120.9 million, or almost \$11 million per year.

# **Conclusions and Synthesis**

Has the financial commitments made in the POP the system's growth and restoration proven to be wise investments? Several C.H. Strauss, B.E. Lord/Journal of Retailing and Consumer Services 8 (2001) 199-204 203 "nancial aspects of the system might be taken into consideration when answering

this question. First, the \$88.2 million in total capital investments encouraged more economic activity in the region, with a total impact estimated at \$168.5 million.

Over the next 11 years of operation, the renovated and extended system continued to draw more visitors. The net gain in impacts from tourist spending was \$120.9 million, as was previously identified. In conclusion, the \$88.2 million in capital investments resulted in impacts of \$168.5 million on their own, plus an additional net gain of \$120.9 million from tourism-related impacts, for a sum of \$289.4 million. This would represent a gain from the initial investments of more than three times.

These comparisons are rather deceptive, though, as impacts are merely a measure of overall economic activity and do not account for the profits made from such investments. The best we can say is that these investments produced a certain amount of gross economic activity. The question of whether this level of activity was sufficient to justify the initial investments is not addressed here and may instead be a matter of policy. However, we are aware that these effects will persist and ought to get worse if the POP system is enlarged. These benefits are quantifiable and ought to be included in any equations relating to policy.

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