

# **Economic Impacts from Philadelphia's Historic and Culture Tourism**

**Submitted to  
Pew Charitable Trusts**

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# 1 Introduction & Overview

This analysis documents the estimated annual economic impacts to Philadelphia County (subsequently referred to as Philadelphia) from leisure tourism drawn by the city's cultural and historic attractions. The focus is on the city instead of the 5-county region<sup>1</sup> typically promoted and tracked by various city-regional tourism agencies, and the report does not include leisure tourism activity associated with professional sports or recreational attractions. This analysis follows a *performance benchmarking* evaluation by EDR Group of the leisure tourism segment of the 5-county economy—much of which was accounted for by visits centered on Philadelphia.

That evaluation has found that all *leisure tourism* currently accounts for over 70 percent of annual visitors to the Philadelphia region. In addition, compared to competitor destinations such as Boston and Washington, DC, Philadelphia posted the strongest annual growth in leisure visits from 2004 to 2005. Finally, while the region's overnight share of leisure visits (44 percent of all leisure trips to Philadelphia involve an overnight stay) is behind that of Washington, DC (61 percent) and Chicago (52 percent), overnight visitors to Philadelphia stay the longest amount of time—3.24 days. This positive length of stay combined with significant day-trip leisure visitor demand points towards a considerable economic stimulus for the city. This study will provide a measure of just how large that economic stimulus is in terms of jobs supported, business sales and household wages for Philadelphia based on 2005 leisure tourism activity.

## *A Context for Cultural-Historic Visits to Philadelphia*

This report examines how arts, cultural, and historic attractions in Philadelphia create positive economic impacts. For perspective on this subset of attractions both regionally (in the 5-county Southeastern PA area) and among the bundle of leisure tourism attractors we briefly note some key comparisons of this study's sample of attractions to findings published in *Portfolio 2006* published by the Greater Philadelphia Cultural Alliance. The city's arts-culture-historic attractions (67 attractions) under study

- Account for 31% the 218 arts-culture-historic attractions in the 5-county region
- Account for 25% of the 14,209 jobs (both artists and programming staff) tied to these types of attractions in the 5-county region
- Account for 64% of the total expenses tallied from the 218 attractions in the 5-county region
- Similarly require approximately 42% of their aggregate annual expenses for labor expenses,
- Account for 75% of the 2005 annual paid visits of institutions tracked in the *Portfolio*<sup>2</sup>

This document is organized as follows: *Section 2* describes the data requirements and the methodology behind estimating the city's economic impact related to leisure tourism; *Section 3*

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<sup>1</sup> Philadelphia, Bucks, Chester, Delaware and Montgomery counties.

<sup>2</sup> Both *Portfolio 2006* and this study rely upon the same data source, the Pennsylvania Cultural Data Project (PACDP) Survey database. Details of this database are described in a subsequent section of this report.

presents an aggregate profile of the 67 cultural and historic attractions/assets in the city based on 2005 annual information and defines how these data play a role in creating economic impacts; *Section 4* presents the estimates of economic impacts generated; and a conclusion is contained in *Section 5*.

## 2 Data / Methodology

### Data Sources

Detailed information on 63 of the 67 Philadelphia attractions was provided through a special extract from the Pennsylvania Cultural Data Project (PACDP). The PACDP is a collaborative project of the Greater Philadelphia Cultural Alliance, the Greater Pittsburgh Arts Council, the Heinz Endowments, the Pennsylvania Council on the Arts, the Pew Charitable Trusts, the Pittsburgh Foundation, and William Penn Foundation. The PACDP is operated by the Pew Charitable Trusts. The PACDP started in the fall 2004 and is sustained as an annual database recording the data profile (self-reported) of over 400 non-profit arts, cultural and historic attractions/organizations in Pennsylvania. The project provides a source of consistent and reliable information on the state's cultural sector. The Data Profile was developed with the assistance of focus groups of nonprofit cultural organization staff working in the areas of development, finance and marketing. The 5-county Southeast Pennsylvania region is home to 218 of these entities. The on-line survey captures numerous data points regarding each entity's financial and organizational details.

Staff at the Pew Charitable Trusts helped EDR Group identify which arts, culture, and historic attractions should be included in this impact assessment—63 of 67 organizations included participate in the PACDP, while the remaining four<sup>3</sup> do not. EDRG contacted those latter organizations directly and requested similar data points so that we could complete our analysis. All data on individual organizations are strictly confidential, and no information is presented here except in aggregated form for four basic categories – *Museums*, *Historic Sites/Venues*, *Performing Arts* and *Other* (see next section for a listing of select representation in each). From the PACDP data inventory we limited our requests to the following:

- Most recent reliable year of data (2005)
- Employment (paid) data
- Operational budget detail covering labor and non-labor annual expenses
- # of Visitors

As will become clear in the discussion of how economic impact modeling is conducted, there were additional data issues that could not be addressed by the PACDP database or through data requested from the 4 additional visitor attractions/resource. For issues such as extent of *resident employees* (i.e. percentage of employees who lived in Philadelphia versus elsewhere); reliance on *city-based suppliers*; prevalence of *local visits*; and the entire derivation of unique visits starting from the paid annual attendance figures on through to estimating what those visits translate into for spending, we turned to other data sources. These we describe under *Methodology*.

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<sup>3</sup> The National Constitution Center, Betsy Ross House/Historic Philadelphia Inc., Independence National Historic Park, and the Independence Visitor Center.

### Methodology for Measuring Associated Economic Impacts

A tourism attractor—regardless of the venue—has a stream of annual operating expenses related to employees (labor expenses defined in terms of payroll costs) and goods and services that fulfill needed supplies. In addition, leisure tourists inject visit-related spending into the city. Together these economic transactions define the direct impact of the tourism attractor. The direct spending of the facility or the visitor can be re-stated from dollars into jobs and income at visitor-serving businesses such as restaurants, hotels, or at the various supplier shops to the museum. The study objective is to focus on how much of this direct activity supports Philadelphia jobs and household earnings. For visitor spending, we know its location is Philadelphia. However for the annual operations & maintenance of any facility, the employees' place of residence isn't readily available while the geography of the supplier network is more complex and not easily identified.

We employ a Philadelphia County economic multiplier model, from IMPLAN<sup>4</sup>, to introduce these direct effects; the IMPLAN system then measures the added economic activity that is triggered. This additional effect is made up of indirect and induced impacts. Indirect impacts reflect the subsequent rounds of purchase interactions between local businesses across different industries to buy inputs for their respective production processes. They also pay households to supply labor to assemble/improve the inputs into a final product or service. When local households spend their after-tax earnings for household consumption it creates cycles of wage generation and more household spending. This describes the induced impact. The sum of the direct, indirect, and induced impact is the total economic impact.

### How Leisure Tourism Effects enter the Economic Model

When the city's leisure tourism workers are paid their earnings, it is the after-tax portion for city households that drives an analysis of household spending effects. The IMPLAN model uses the median household's spending pattern to determine the total economic impact of after-tax earnings on the county. This approach assumes that people spend their wages predominantly where they reside. These wage-driven impacts will be conservative since non-resident employees for these 67 facilities will spend some money in the city during their work week.

For the non-labor annual expenses of the 67 attractions, we collapse the economic model's detailed industries into eight broad categories of operational spending provided in the PACDP information (shown in Figure 3-1 in the next section). In absence of knowing where these institutions source their material and service requirements, we relied upon the model's default assumptions (city-specific regional purchase coefficients calibrated from local data) to identify the portion of local demand for goods and services that is fulfilled by Philadelphia businesses<sup>5</sup>. This ensures that (a) only the local content tied to the operational budgets of the 67 organizations generate additional economic impacts, and (b) only the margins (the markup portion) on local retail and wholesale transactions generate additional impacts.

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<sup>4</sup> The IMPLAN model has been used for many years in Philadelphia by the Economy League of Greater Philadelphia (formerly PEL) and by DVRPC CEO Council for Growth

<sup>5</sup>This technique is used when project data does not identify the *local vendor purchases* from the overall operational budget.

To calculate economic impact generation related to visitor spending, IMPLAN's detailed industries were collapsed to match the spending categories (and allocations) described in recent publications of visitor survey results by the Greater Philadelphia Tourism Marketing Corporation (GPTMC). Visitor spending on retail shopping is treated somewhat differently because most goods purchased consist of items imported from outside the city. Therefore a retail *mark-up* formula (known as *margins*) is used. The portion of the purchase that is *mark-up* is what triggers additional local economic impact. This margining adjustment is relevant when evaluating the retail, wholesale and transportation sectors.

The impact results from each run of the model—one for the annual operating budgets, the other for visitor spending—are combined to describe the total economic impacts in terms of Philadelphia's jobs, sales and local household income that can be credited to this leisure segment. The next section describes the *direct* effects from these 67 visitor attractions/resources.

### 3 Culture & Historic Attractions in the City of Philadelphia

Philadelphia continues to rely on its historical and cultural assets to draw tourists to its borders. It has many, well-known sites and activities that attract visitors from around the world. Tourism impacts the local economy in two ways: spending to operate the various sites/attractions and spending by visitors.

#### Operations of Cultural-Historic Attractions

Cultural and historic facilities contribute to the local economy when they purchase locally-provided goods and services and when they pay wages/salaries to their employees. To estimate impacts tied to the operational aspect of leisure tourism, EDRG use 2005 data provided to it by the PACDP with some supplemental data sourced directly from the few attractions that do not participate in the PACDP. Four aggregate cultural-historic tourism categories were used:

- Historical sites including the Lights of Liberty, National Constitution Center, Betsy Ross House, Independence Hall, the Liberty Bell, Stenton (an historic home located in Strawberry Mansion), Eastern State Penitentiary Historic Site and the Independence Visitor Center.
- Museums including the Philadelphia Museum of Art, the Institute of Contemporary Art, Franklin Institute, the Pennsylvania Academy of Fine Arts, the National Museum of American Jewish History, the Academy of Natural Sciences, the Please Touch Museum.
- Performing Arts including the Kimmel Center, Annenberg Center, Philadelphia Theatre Company, Philadelphia Orchestra Association, the Philadelphia Chamber Music Society, Philadanco, the Philadelphia Ballet Company, Opera Company of Philadelphia, Mann Center for Performing Arts, Mum Puppetheater.
- Other Attractions including the American Philosophical Society, Philadelphia Zoo, Philadelphia Art Alliance, Morris Arboretum, Latin Fiesta, Samuel S. Fleisher Art Memorial.

Together these four groupings encompass a total of 67 institutions located in Philadelphia County. Table 3-1 shows the breakdown of organizations by category as well as the number of jobs that each type of attraction contributes to the economy.

**Table 3-1. Number of Organizations, Jobs, and Contractors by Type of Attraction**

	Historic	Museum	Performing Arts	Other	Total
<b>Organizations</b>	8	22	24	13	<b>67</b>
<b>Jobs</b>	473	1,200	921	466	<b>3,060</b>
<b>Contractors</b>	4	166	199	152	<b>521</b>

As previously noted, the impact of spending by these attractions emanates from both labor payments and operating expenses. Table 3-2 provides the compiled data for 2005 wages paid by each category of attraction.

**Table 3-2. Annual & Resident Earnings by Type of Attraction**

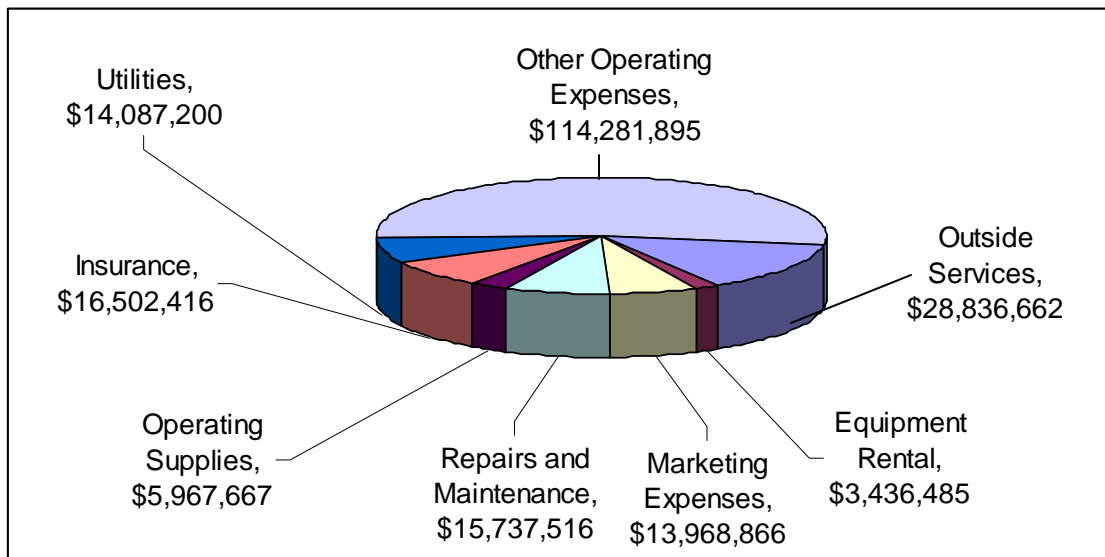
	Historic	Museum	Performing Arts	Other
<b>Annual Wages &amp; Salaries</b>	\$11,909,248	\$48,278,065	\$55,893,876	\$31,508,014
<b>Paid to Phil. Co. residents</b>	\$5,120,977	\$20,759,568	\$24,034,367	\$13,548,446
<b>resident %<sup>1</sup></b>	43%	43%	43%	43%

<sup>1</sup>State of the Center City, 2006, pg.13

The outlay for wages & salaries of these 67 organizations is slightly over \$147 million. For the wage driven impacts (i.e. household spending effects), only portion of after-tax labor payments made to city residents is considered. Approximately \$63 million of these facilities' aggregate wage bill is paid to Philadelphia residents.

Detailed data on the non-labor operating expenses was aggregated into the following categories: outside services, equipment rental, marketing, repair/maintenance, operating supplies, insurance, utilities and other operating expenses. Figure 3-1 shows the allocation of annual operating expenses-- which are nearly \$213 million in total.

**Figure 3-1. Allocation of Operational Spending by Cultural-Historic Attractions**



\*excludes payroll component of budget

**Visitor Spending**

Visitor spending in Philadelphia also generates significant economic impacts. The city and the outlying areas continue to be a major destination for visitors from the local area, the rest of the United States and abroad. Non-local visits typically mean spending on hotels, restaurants, tickets, etc. This visitor spending has multiplier effects that propagate through the local economy.

Only visitors that paid for admission to attractions were taken into account in our analysis<sup>6</sup>. There are a large number of non-paid visits—mostly from children on school trips—that are expected to generate relatively little spin-off economic activity. Table 3-3 shows the number of paid visits to each type of attraction. This information was obtained from PACDP and EDRG augmented data on annual visits from the few history-related venues (such as the Betsy Ross House, Independence National Historic Park) not included in the PACDP.

**Table 3-3. Annual Paid Visitation by Cultural-Historic Attractions**

Attraction	Paid Visitors
Historic	2,927,779
Museum	2,102,588
Performing Arts	1,489,823
Other	600,119
<b>Total</b>	<b>7,120,309</b>

<sup>6</sup> The exception is in the HISTORIC category. Visit data for Independence National Historic Park , and its Liberty Bell Center represent entirely free admissions. We exclude some percentage to reflect school group visits to be consistent the other three categories, and use the remaining visits to INHP and the Liberty Bell Center for the analysis.

By using this percentage of visitation figure, we could account for school groups, which, as noted above, do not spin off much economic activity. Further, EDRG did not count the 2,302,174 visitors to the Independence Visitors Center since nearly all also visit other sites in the Park.

Most visitors who come to Philadelphia see more than one attraction. Therefore, simply adding up the number of visitors at each venue would over-estimate the actual number of visitors. Applying an average of 2.75 venues per visitor to the total from Table 3-3, the estimate of total visitors was 2,589,203.

The length of visitors' trips affects how much is spent in the area. Overnight visitors spend more than those on a day trip. Therefore trips were divided into two categories: day trips and overnight trips. Overnight visitors represent 44% of all visitors to Philadelphia; this leaves 56% of visitors as day-trippers. This results in 1,139,249 over-night visitors and 1,449,953 day trip visitors. The high share of day trip visitors is likely a result of Philadelphia's close proximity to several metropolitan areas including New York City, Washington D.C., and Baltimore.

According to the GPTMC Summer 2006 Hotel Survey the average spending per over-night trip is \$899 per travel party of 2.38 persons. Dividing the number of overnight visitors by the average trip length (3 days) results in 379,749 over-night trips. Therefore, the total spending by overnight visitors to Philadelphia in 2005 was \$341 million. The GPTMC document also provided the proportion spent on hotel, dining, shopping, and other purchases. Table 3-4 shows the spending by these categories. *Other* reflects visitor spending for ground/sightseeing transportation, and on admissions to performing arts, spectator sports, recreation, and other amusement activities.

**Table 3-4. Over-night Visitor Spending by Category**

Type of Purchase	Over-night Visitor Spending
Other (17.2%)	\$58,719,931
Shopping (16.1%)	\$54,930,992
Dining (29.6%)	\$100,991,140
Hotel (37.1%)	\$126,580,112
<b>Total</b>	<b>\$341,186,287</b>

For the spending associated with day-trip visitors we make a slight adjustment to the number of day trip visitors, 1,449,953, by removing 5 percent<sup>7</sup> to account for visits by Philadelphia residents. Average trip spending for a day visit is approximately \$200<sup>8</sup> which translates into \$84 per person, using the average trip size of 2.38 persons—remember, this amount includes admission fees. Excluding the Philadelphia residents who make a day visit to a museum, an exhibit, a performing arts event leaves 1,308,582 day visitors who spend \$84 each on average

<sup>7</sup> This may be conservative. The GPCA 2006 *Portfolio* reported that one in five people from the 5-county SE PA region hold annual subscriptions to arts & cultural institutions.

<sup>8</sup> Based on \$899 trip spending for the over-night segment *less* the expense of 2 hotel rooms nights (approx. \$300) *divided by* 3 day trip length.

during that visit. This amounts to almost \$110 million. Table 3-5 shows the distribution of spending by day trip visitors<sup>9</sup>.

**Table 3-5. Day Trip Visitor Spending by Category**

Type of Purchase	Day Trip Visitor Spending
Other (27.3%)	\$30,008,415
Shopping (25.7%)	\$28,249,680
Dining (47%)	\$51,662,839
<b>Total</b>	<b>\$109,920,9369</b>

This direct effect of leisure tourism will be used in the Philadelphia County IMPLAN model to measure subsequent economic impact generation reported in the next section of this report. This analysis resulted in the total impact of over-night and day trip visitor spending in the local economy.

## 4 Economic Impacts Generated

The estimated total economic impacts from cultural-historic tourism in Philadelphia for 2005 are shown in the set of three tables below. They report impacts in terms of business sales, labor income (which is labor earnings *plus* fringe benefits), and the associated jobs. Tables 4-1 and 4-2 present the results from the two distinct events that drive local tourism impacts—operations at local attractions and visitor spending. Table 4-3 presents the roll-up of these two sets of results and is interpreted as the overall economic impact of leisure tourism for the city.

Recall (from Section 2-Methodology) that the direct economic impact (or effect) of annual operations of this aggregate bundle of 67 attractions is described by what has to be spent to operate these facilities/sites/performances. That spending is basically for labor (payroll which *equals* wages/salaries and benefits) and supplies (goods and services). Indirect and induced economic impacts (measured with an IMPLAN model) occur from the stimulus the local portion of the annual budget creates—these can range from employees who are Philadelphia residents spending their after-tax wages within the city to a local catering operation (fulfilling a contract with a museum) making purchases with a local produce wholesaler.

<sup>9</sup> In absence of a Philadelphia day visitor spending profile we relied upon the profile associated with the over-night visitor excluding the *lodgings* purchase and normalizing the budget share of the remaining visitor purchases.

**Table 4-1. Impacts from Annual Operations of Cultural-Historic Attractions, 2005**

Impact metric	Type of Effect		Total
	Direct	Indirect & Induced	
Sales (mils.\$ 2006)	*\$214,334,644	\$151,933,996	<b>\$366,268,640</b>
Labor Income (mils. \$ 2006)	\$195,565,287	\$98,760,782	<b>\$294,326,069</b>
Jobs	**3,581	1,851	<b>5,421</b>

\*The direct effect\_ sales represents non-labor spending for the 67 organizations, not actual revenue.

\*\*Direct jobs include 521 contractors.

Source: EDR Group and Philadelphia County (2004) IMPLAN model

Annual operations support 5,421 jobs in Philadelphia (3,581 are with the 67 facilities/sites), and \$366 million of business activity among Philadelphia businesses. The indirect and induced labor income effect reflects several factors: (a) 43 % of direct labor payments are assumed to go to Philadelphia residents, (b) the after-tax wage portion of labor income (approximately 50% of labor income) is what is used to measure Philadelphia household spending effects.

Table 4-2 shows the resulting economic impacts from the visitor spending of \$541 million tied to overnight and day visits. There are almost 5,909 jobs initially required at the various visitor-serving establishments (restaurants, hotels, retail outlets, amusement & recreation services etc.) which garner \$171 million in labor income. After subsequent economic transactions are triggered (more supplies are purchases, more wages are generated) total economic impacts in Philadelphia are \$743 million of business sales and \$288 million of labor income; a total of 8,189 jobs are supported.

**Table 4-2. Impacts from Spending by Cultural-History Tourists, 2005**

Impact metric	Type of Effect		Total
	Direct	Indirect & Induced	
Sales (mils.\$ 2006)	\$462,075,289	\$281,417,167	<b>\$743,492,456</b>
Labor Income (mils. \$ 2006)	\$171,111,172	\$117,226,816	<b>\$288,337,988</b>
Jobs	5,909	2,280	<b>8,189</b>

Source: EDR Group and Philadelphia County (2004) IMPLAN model

Table 4-3 shows the economic impacts emanating from all aspects of the Philadelphia's cultural-historic tourism bundle. These results are the combination of Tables 4-1 and 4-2. Every dollar of spending from among this bundle of 67 cultural-historic organizations is associated with a total of \$2.70 of sales in the city's economy, and each job is associated with a total of 3.8 jobs in the citywide economy.

**Table 4-3. Combined Impacts from Philadelphia's Cultural-Historic Tourism, 2005**

<i>Impact metric</i>	<b>Type of Effect</b>		<b>Total</b>
	Direct	Indirect & Induced	
Sales (mils.\$ 2006)	\$676,409,933	\$433,351,163	<b>\$1,109,761,096</b>
Labor Income (mils. \$ 2006)	\$366,676,459	\$215,987,598	<b>\$582,664,057</b>
Jobs	9,490	4,131	<b>13,610</b>

Source: EDR Group and Philadelphia County (2004) IMPLAN model

## 5 Conclusions

Philadelphia's cultural and historic attractions play a vital role in the vibrancy of the city as a destination, drawing both over-night leisure trips and considerable day-trip visits. Apart from an estimated 5 % of annual day-trips by local residents, Philadelphia drew approximately \$451 million of visitor spending into its economy (imported money) as a result of these 67 cultural and historic attractions/resources. This spending supported a total of 8,189 jobs, \$743 million in business sales, and \$288 million in labor income.

The annual operations of these 67 attractions combine for an aggregate operating budget totaling approximately \$409 million (including all labor costs, namely wages and benefits) for 2005. This spending, with some proportion going to Philadelphia suppliers of goods and services and to earnings for city households, creates total impacts of 5,421 jobs, \$366 million in business sales, and \$294 million in household income.

The combined total impacts arising from leisure tourism in Philadelphia around its cultural and historic attractions are 13,610 jobs, \$1,109 million in business sales, and \$582 million in labor income. The 9,490 direct jobs associated with these attractions represent 1.3% of jobs and .9% of income in Philadelphia County. Counting all tourism-related industries in the city (arts, recreation, entertainment, lodging, and eating/drinking establishments), the total rises to 64,809 jobs and \$1.8 billion in income. As a share of the county's economy, they represent 8.6% of total employment and 5.6% of total income in Philadelphia County<sup>10</sup>. The share of jobs in tourism-related industries is similar to other areas with a high concentration of historical attractions--such as Boston and Washington D.C.--which have 8.9% and 7.8% of total jobs in these industries, respectively<sup>11</sup>. Recently, as other industries have suffered unemployment in Philadelphia, jobs related to tourism have grown significantly. From 2004 to 2005, jobs in lodging and food services increased by 1.9% while jobs in arts and entertainment increased by 8.6%<sup>12</sup>.

These results demonstrate the importance of developing and maintaining the city's cultural and historic assets of both local and national importance. The economics of arts- and culture-based

<sup>10</sup> Overall, Philadelphia County has 752,728 jobs and \$39 billion in income.

<sup>11</sup> Calculations for total jobs and income along with tourism-related jobs and income for Philadelphia County, Boston and Washington D.C. were tabulated using data from the *Bureau of Economic Analysis* (BEA) data for 2005.

<sup>12</sup> These figures were taken from the *State of the Center City 2006* report, p.11. They represent Philadelphia County, not just the Center City.

tourism highlight that this is a valuable prong in the city's ongoing economic development strategy and they also add to the quality of life in Philadelphia.