



Kennywood • Idlewild & SoakZone • Sandcastle • Riverplex

Let's picnic!

We'll do the work. You'll have a ball!

The Economic Impact and Community Impact of
Kennywood Entertainment
on Pennsylvania and Allegheny County 2004 and 2015

Executive Report
June 14, 2005



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I. Executive Summary

Kennywood amusement park has been an important part of the spirit and culture of Western Pennsylvania since it opened more than a century ago. Local residents, as well as people from all over the country, have memories of family trips, school picnics and company outings at Kennywood. However, few community leaders and elected officials realize the significance of Kennywood Entertainment as an economic engine for the state and county.

Kennywood Entertainment includes not only Kennywood amusement park but also Sandcastle, Riverplex and Idlewild & SoakZone parks¹. Along with its restaurant and catering enterprises, these organizations combine to make Kennywood Entertainment the biggest provider of summer entertainment in the region and an important contributor to the business volume, employment, and government revenue of the Commonwealth of Pennsylvania and Allegheny County.

To accurately measure its economic and social impacts on the Commonwealth of Pennsylvania and Allegheny County in 2004 as well as its projected impacts in 2015, Kennywood Entertainment retained the services of Pittsburgh-based Tripp Umbach in March 2005.²

Goals of Kennywood Entertainment Economic Impact Study

Tripp Umbach was commissioned by Kennywood Entertainment to perform economic impact research and analysis to:

- Measure the business volume, employment, and government tax revenue impact of Kennywood Entertainment's Pennsylvania operations.
- Quantify the economic and social impact of Kennywood Entertainment employees.
- Outline the community benefit services provided by Kennywood Entertainment to the communities in which it operates.
- Quantify the projected business volume, employment, and government revenue impact of Kennywood Entertainment's operations in 2015, after the completion of Kennywood amusement park's 30 acre expansion and the opening of the Mon Valley Expressway.

¹ Kennywood Entertainment also includes Lake Compounce, an amusement park in Connecticut; however, Lake Compounce is not included in the Tripp Umbach study.

² Tripp Umbach is the leading provider of economic impact analysis for universities, academic health centers, and other organizations, having completed two national studies for the Association of American Medical Colleges (1996 and 2003), annual studies for Highmark Blue Cross Blue Shield (2003 and 2004), and multiple studies for the Greater Pittsburgh Convention and Visitors Bureau. Tripp Umbach has also completed statewide economic impact studies for all of the medical schools and their hospital affiliates in Pennsylvania (1995 and 2003), Virginia (1996) Ohio (2003) and Wisconsin (2004). Tripp Umbach has completed economic impact studies for more than 100 leading organizations over the past ten years.

Key Research Findings

Kennywood Entertainment has grown to be an important contributor to Pennsylvania's economy, as a major employer, business volume generator, and tax payer. Additionally, Kennywood Entertainment plays a vital role in the training and education of Western Pennsylvania's workforce and provides volunteer and charitable contributions to the communities in which it operates.

In 2004, the operation of Kennywood Entertainment generated more than \$136 million in business volume impact to the Commonwealth of Pennsylvania and over \$94 million in business volume impact to Allegheny County. Kennywood Entertainment supported more than 2,200 total full time jobs in Pennsylvania (both direct and indirect) and more than 1,450 total full time jobs in Allegheny County. Additionally, state government revenue generated by Kennywood Entertainment equaled more than \$9 million in 2004 and county government revenue equaled almost \$6 million in 2004.

Beyond these traditional economic benefits, Kennywood Entertainment impacts Pennsylvania communities in the following ways:

- Contributes more than \$375,000 in free tickets to Pennsylvania communities.
- Offers educational opportunities for Western Pennsylvania students through its provision of summer jobs providing higher than expected wages and benefits (allowing students to save money for college) as well as college scholarships available to employees.
- Serves as a training ground for Western Pennsylvania workers, providing valuable experiences in both customer service and entertainment industries.
- Provides park services to various non-profit organizations for fund-raising events. The Mon Valley Education Consortium and Magee-Womens Hospital both hold events at Kennywood Park. Idlewild & SoakZone host the annual Tour de Park YMCA 5K Race and each year "Girls on the Run", sponsored by Magee-Womens Hospital, takes place at Sandcastle.
- Conducts hundreds of school tours and provides speakers for community groups and events throughout the Western Pennsylvania region.
- Participates in the overall marketing of Western Pennsylvania through its cooperative advertising activities with Laurel Highland organizations.
- Contributes to the attractiveness of Western Pennsylvania as a tourist destination, especially for out-of-state visitors. Kennywood was designated a national historic landmark in 1987 and is known as "America's Finest Traditional Amusement Park". Idlewild was designated the world's second best amusement park for children in 2004 and Sandcastle is Western Pennsylvania's largest water park.

In addition to Kennywood Entertainment's commitment to continue to provide the social benefits listed above, business volume, employment, and tax revenue impacts resulting from Kennywood Entertainment's operations will increase significantly over the next ten years. A portion of this increase will be due to the opening of the Mon Valley Expressway, which is projected to increase the number of visitors to Kennywood, Sandcastle, Riverplex, and restaurant and catering destinations. A 30 acre expansion of Kennywood amusement park is also expected to increase visitors to Kennywood by 2015 and planned expansions of operating days as well as park attractions are projected to increase visitation to Idlewild & SoakZone.³

By 2015, as a result of these increases in visitation, Kennywood Entertainment's state business volume impact is conservatively projected to equal almost \$173 million, an increase of 27% from 2004. Its business volume impact on Allegheny County is projected to equal almost \$118 million. Kennywood Entertainment is estimated to support over 2,800 full time total Pennsylvania jobs in 2015, both direct and indirect, and over 1,700 Allegheny County jobs. Finally, Kennywood Entertainment is projected to generate almost \$12 million in state government revenue and \$7.5 million in county government revenue in 2015.

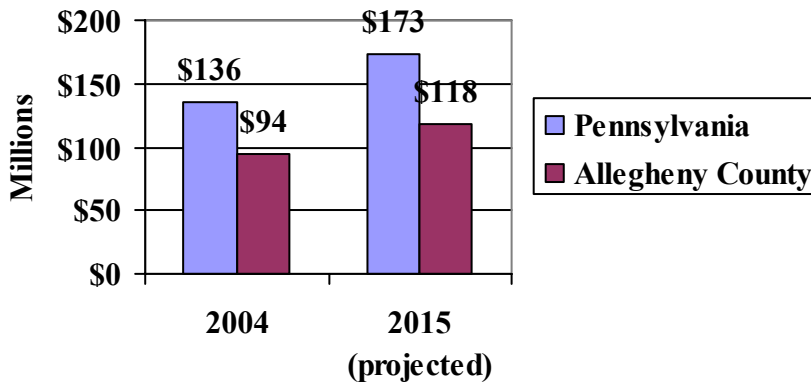
Kennywood Entertainment clearly makes significant economic and social impacts on the economies of the Commonwealth of Pennsylvania and Allegheny County. These impacts take the form of increased business volume, jobs, and government revenue, as well as charitable donations, scholarships, and job training. Kennywood Entertainment's impacts are projected to grow over the next ten years, resulting in an increase of 27% in total business volume impact on the Commonwealth of Pennsylvania by 2015.

³ Through its analysis of population and market trends, Tripp Umbach developed the following estimates used in the modeling of 2015 projected impacts: 27% increase in Kennywood amusement park visitors will result from the 30 acre expansion of Kennywood amusement park as well as from the opening of the Mon Valley Expressway; an average increase of 20% in Sandcastle, Riverplex, and restaurant/catering visitors will result from the opening of the Mon Valley Expressway; visitation to Idlewild & SoakZone will increase by 30% due to expanded park attractions and annual operating days. All financial projections are based upon 2004 dollar values.

Business Volume Impact of Kennywood Entertainment 2004 and 2015

Kennywood Entertainment’s Pennsylvania business volume impact equaled \$136,463,000 in 2004. This amount is expected to grow to \$172,820,000 in 2015, an increase of 27%. Kennywood Entertainment’s impact on Allegheny County in 2004 equaled \$94,013,000 and is projected to equal \$117,646,000 in 2015 (see Figure 1).

**Figure 1. Business Volume Impact
2004 and 2015 (Projected)**



Kennywood Entertainment’s annual economic impact on Pennsylvania is significant, especially when compared with other industries and organizations in the Commonwealth, many of which are recipients of financial support from state government (see Table 1). Although it generates the largest amount of economic impact, Kennywood Entertainment is the only organization in Western Pennsylvania’s large venue entertainment industry that does not receive government funding.

Table 1: State level economic impact of selected organizations

Name of Organization	State Level Net Economic Impact
<i>Kennywood Entertainment</i>	<i>\$136 million</i>
Pittsburgh Pirates ⁴	\$125 million
Penn State campuses in Western PA ⁵	\$120 million
Pittsburgh Steelers ⁴	\$85 million

⁴ Tripp Umbach’s estimates of the business volume impact of the Pittsburgh Pirates and Pittsburgh Steelers are based on a 2004 IMPLAN generated impact of all professional sports in Pennsylvania.

⁵ Tripp Umbach completed a 2004 economic impact study for all Pennsylvania State University campuses.

Finally, Kennywood Entertainment’s business volume impact is generated through the spending of the organization, its employees, and its visitors. The spending of the organization as well as the spending of its employees is dependent upon the revenue Kennywood Entertainment receives each year. A significant portion (11%) of this revenue comes from out-of-state sources and therefore represents true economic expansion of Pennsylvania’s economy.

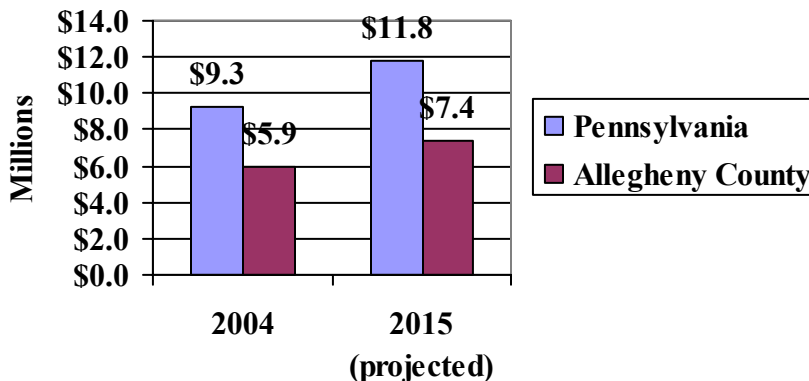
Government Revenue Impact from Kennywood Entertainment’s Operations

One of the most significant ways in which Kennywood Entertainment impacts the state and county is through the government revenue generated both directly and indirectly by the organization. In 2004, the statewide government revenue impact of Kennywood Entertainment equaled more than \$9 million. This impact includes \$1.9 million in direct state government revenue impact and \$7.5 million in indirect state government revenue impact.

Total government revenue generated for Allegheny County as a result of Kennywood Entertainment’s operations in 2004 equaled almost \$6 million. Included in this amount is a 1% Regional Asset District (RAD) tax paid directly by Kennywood Entertainment to Allegheny County to support regional attractions such as the Pittsburgh Zoo, PPG Aquarium, both Pittsburgh stadiums, and the Mellon Arena. Ironically, Kennywood Entertainment helps to financially support direct local competitors through this tax. As mentioned above, Kennywood Entertainment is the only large venue entertainment organization in Western Pennsylvania which does not receive RAD funds.

By 2015, the annual state government revenue impact of Kennywood Entertainment is projected to grow to almost \$12 million, an increase of 27% from its 2004 impact. Allegheny County government revenue generated by Kennywood Entertainment in 2015 is projected to equal more than \$7 million, an increase of 25% from 2004 figures (see Figure 2).

**Figure 2. Government Revenue Impact
2004 and 2015 (Projected)**



When analyzing the amount of tax revenue provided for each dollar of revenue received by an organization, Kennywood Entertainment emerges as one of Western Pennsylvania’s leaders in government revenue generation. Both the Commonwealth of Pennsylvania and Allegheny County are able to use the money generated by Kennywood Entertainment to improve services and quality of life for state and local residents.

A comparison of government revenue impacts shows that Kennywood Entertainment generates more money for state and local governments than many other local institutions.

Table 2: State government revenue impact of selected organizations

Name of Organization	State Level Government Revenue Impact
<i>Kennywood Entertainment</i>	<i>\$9.3 million</i>
West Penn and Allegheny General Hospitals ⁶	\$8 million
Highmark ⁷	\$5.9 million

Employment Impact from Kennywood Entertainment’s Operations

With over 4,000 employees (equaling 984 full-time equivalent positions), the total payroll and benefits provided to the organization’s employees makes Kennywood Entertainment a significant generator of employment in Western Pennsylvania. Total employment, including direct employment and jobs within the Commonwealth that are created in support of Kennywood Entertainment, is estimated to be 2,222 full time employees. Allegheny County residents occupy 1,452 of the 2,222 full time equivalent positions⁸.

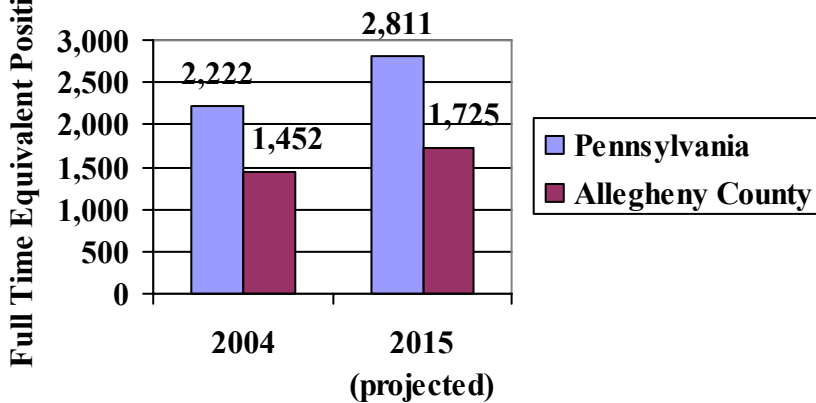
In 2015, Kennywood Entertainment’s state employment impact is projected to equal 1,245 direct and 1,566 indirect full time equivalent jobs (2,811 jobs total). Of the 2,811 FTE positions 1,725 will be held by Allegheny County residents.

⁶ Tripp Umbach completed economic impact studies for West Penn Hospital and Allegheny General Hospital in 2003.

⁷ Tripp Umbach completed economic impact studies for Highmark Blue Cross Blue Shield in 2003 and 2004.

⁸ Tripp Umbach developed a Kennywood Entertainment Pennsylvania employment multiplier of 2.26 and an Allegheny County employment multiplier of 2.05.

**Figure 3. Employment Impact
2004 and 2015 (Projected)**



Beyond the generation of jobs for local residents, Kennywood Entertainment is committed to providing educational opportunities and work experience for young people living in and around the communities in which the parks are located. Because most of the direct jobs generated by Kennywood Entertainment are seasonal, students employed in the summer at Kennywood parks are able to work to save money for higher education without sacrificing study time during the school year. Employees are offered higher than average wages and benefits for seasonal employment, and new employees are given 40 hours of instruction when they are hired. Each year, Kennywood Entertainment also provides college scholarships to five employees at each of its parks.

Kennywood Entertainment serves as a training ground for employees to gain valuable work experience. The skills acquired by Kennywood Entertainment employees can be used not only in customer service environments but, for those employees performing in Kennywood Entertainment's many shows throughout its parks, also in the entertainment industry.

The Impact of Kennywood Entertainment Programs and Services to the Community

Kennywood Entertainment provides much more to the communities in which it operates than just the business volume, government revenue, and employment impacts generated through its operations. In 2004, Kennywood Entertainment provided 14,500 tickets to children's charities in Pennsylvania. These tickets had a fair market value of \$375,275. In addition, because of its donation of more than 156,000 pounds of food to local food banks between 1999 and 2005, Kennywood Entertainment has received a certificate of appreciation designating it as a member of the Pittsburgh Food Bank's "Three Rivers Table".

Kennywood Entertainment provides its facilities to local non-profit organizations, including the Mon Valley Education Consortium, Magee-Womens Hospital, and the YMCA, for various fundraising events. Each year hundreds of school tours of the parks are hosted by Kennywood Entertainment and speakers are provided for various events throughout Western Pennsylvania.

Kennywood Entertainment also provides jobs to area residents that might otherwise have a difficult time finding employment. In recognition of Kennywood Entertainment's effort to employ its students, St. Anthony's School (which provides opportunities for mentally challenged children) awarded Kennywood Entertainment its 2003 Opportunity Award. Additionally, Kennywood Entertainment was awarded the Employer of the Year Award by Goodwill Industries and has partnered with Life's Work of Western Pennsylvania to provide employment opportunities for disadvantaged workers.

Finally, Kennywood Entertainment's employees and shareholders provide community benefits beyond the benefits provided directly by the organization. Tripp Umbach estimates that Kennywood Entertainment employees donate more than \$2 million annually in charitable giving and volunteer services within the Commonwealth of Pennsylvania⁹. Not included in this figure is the value of charitable work provided by shareholders of Kennywood Entertainment, most of whom live in the region.

The Impact of Kennywood Entertainment on Other Regional Attractions

Not included in the economic impact findings highlighted in this report is the impact that Kennywood Entertainment has on the visitation of other attractions throughout Western Pennsylvania, especially by out-of-state visitors. Many out-of-state residents travel to Western Pennsylvania to visit one of Kennywood Entertainment's parks. While staying in Western Pennsylvania, many of these people attend other regional attractions that they would not have visited if they hadn't come to Pennsylvania to go to Kennywood Entertainment's parks. This generates revenue for other attractions and indirect revenue for organizations providing services to support the attractions. Tripp Umbach did not analyze the specific amount of this impact.

To illustrate the unique attractions that generate out-of-state as well as local visitors, listed below are a few awards received by Kennywood Entertainment which recognize the special qualities of the parks (see Table 3):

⁹ Due to the nature of Kennywood Entertainment's seasonal employment, Tripp Umbach modeled Kennywood Entertainment employee volunteerism and charitable donations at 50% of the average value of employee volunteer hours and 50% of the average annual employee contribution.

Table 3: Awards and recognition received by Kennywood Entertainment

Kennywood Entertainment Park	Award
Idlewild	Oldest operating amusement park in PA; 3 rd oldest in U.S.
Idlewild	World's Second Best Amusement Park for Children, 2004 Golden Ticket Award
Kennywood	Best International Traditional Amusement Park of the 20 th Century, 2001 Roller Coaster Club of Great Britain Award
Kennywood	National Historic Landmark Designation, 1987
Kennywood	St. Anthony's School 2003 Opportunity Award
Kennywood	Employer of the Year Award, Goodwill Industries
Kennywood	Outstanding Contribution to Help Feed the Hungry, 2004, Pittsburgh Food Bank
Kennywood	The Best Dark Ride Park in the World, 2005, The Dark Ride and Fun House Enthusiasts (DAFE)
Kennywood Entertainment	American Business Ethics Award, 2001, Society of Financial Service Professionals
Kennywood Entertainment	Family Business of the Year Award, 1998, Katz School University of Pittsburgh

II. Economic Impact of Kennywood Entertainment on the Commonwealth of Pennsylvania and Allegheny County 2004 and 2015 (Projected)

With a business volume impact in 2004 of more than \$136 million, the annual operations of Kennywood Entertainment have a truly substantial economic impact on the state and county. Kennywood Entertainment has a significant direct impact on the state, and the benefits of these initial expenditures ripple through the Pennsylvania economy providing economic benefits, through the multiplier effect, to many Pennsylvania residents.

A. Business Volume Impact 2004 and 2015 (Projected)

The Direct and Indirect Expansion of the State Economy Attributable to Kennywood Entertainment

Kennywood Entertainment's direct economic impact stems from the spending of Kennywood Entertainment for capital improvements and goods and services; the spending of staff; and the spending of visitors to Kennywood Entertainment facilities. In addition, these direct, first-round expenditures, received as income by businesses and individuals in the state, re-circulate through the economy in successive rounds of re-spending. The end result is a multiplied economic impact that is a linear result of the organization's presence and its spending patterns.

The results of this analysis include:

1. Total Business Volume Impact

In 2004, Kennywood Entertainment had a business volume impact on Pennsylvania of \$136.5 million. This impact is projected to grow to \$172.8 million in 2015.

In 2004, this economic impact was comprised of \$59.3 million in direct state business volume impact and a further \$77.1 million in indirect state impacts accruing to the economy through the multiplier¹⁰. In 2015, direct state business volume impact is projected to equal \$75.1 million and indirect state impact is projected to equal \$97.7 million (see Table 4).

¹⁰ Tripp Umbach used a conservative state business volume multiplier of 2.3 and a county multiplier of 1.6 in this study.

Table 4: Kennywood Entertainment business volume impact on State and County 2004 and 2015 (Millions)

	Pennsylvania 2004	Pennsylvania 2015 (projected)	Allegheny County 2004	Allegheny County 2015 (projected)
Total Business Volume Impact	\$136.5	\$172.8	\$94	\$117.6
Direct Impact	\$59.3	\$75.1	\$58.8	\$73.5
Indirect Impact	\$77.1	\$97.7	\$35.3	\$44.1

The direct impact is comprised of the following impact components:

a. Direct spending by Kennywood Entertainment for capital improvements, goods, services and supplies.

This category of impact includes the spending by Kennywood Entertainment for improvements to facilities and capital equipment purchases made with Pennsylvania and Allegheny County contractors and vendors (an average of spending over the previous five years was used for the 2004 impact). In addition, the category also includes the purchase, from in-state and in-county vendors, of goods, services and supplies. These may include a broad range of purchases such as food and beverage supplies, administrative supplies, computer consulting, etc. (see Table 5).

Table 5: State and County impact of direct spending by Kennywood Entertainment for capital improvements, goods, services and supplies 2004 and 2015 (Millions)

	Pennsylvania 2004	Pennsylvania 2015 (projected)	Allegheny County 2004	Allegheny County 2015 (projected)
Direct Impact	\$21.9	\$26.7	\$16.1	\$20.4

b. Direct spending by staff.

While organizations such as Kennywood Entertainment spend substantial money in the state on goods and services, one of their biggest benefits to the economy is their direct payroll. Kennywood Entertainment has a combined payroll and benefits obligation to staff of more than \$23.3 million annually. This money goes to Pennsylvania residents who spend most of their disposable income in the state. Adjusting for savings and taxes, the total payroll from Kennywood Entertainment generated almost \$18 million in direct state impact through staff spending in 2004 (see Table 6).

Table 6: State and County impact of direct spending by staff 2004 and 2015 (Millions)

	Pennsylvania 2004	Pennsylvania 2015 (projected)	Allegheny County 2004	Allegheny County 2015 (projected)
Direct Impact	\$18	\$22.7	\$8.7	\$10.8

c. Direct spending by visitors.

Throughout the year, thousands of people from Pennsylvania and other states visit one of Kennywood Entertainment’s facilities. Visitors from out-of-state and out-of-county bring with them spending (not including spending at Kennywood Entertainment facilities) in the state and local economy for accommodations, gifts, services and other items during their stay. In 2004, out-of-state visitors to Kennywood Entertainment generated \$19.5 million in the Pennsylvania economy (see Table 7). The Allegheny County impact is even greater than the Pennsylvania impact due to the fact that each impact figure includes spending by out-of-area visitors only. Kennywood Entertainment’s Pittsburgh facilities attract many Pennsylvania residents living outside of Allegheny County. Spending by these visitors is included in the Allegheny County impact but not the Pennsylvania impact.

Table 7: State and County impact of direct spending by visitors 2004 and 2015 (Millions)

	Pennsylvania 2004	Pennsylvania 2015 (projected)	Allegheny County 2004	Allegheny County 2015 (projected)
Direct Impact	\$19.5	\$24.8	\$34	\$42.3

2. Additional Business Impacts Allocable to Kennywood Entertainment

In addition to the annual, recurring impacts of the spending categories outlined above, businesses in the state have invested heavily to support the business volume generated by Kennywood Entertainment. The Tripp Umbach impact model calculates the two principal components of these investments: real property development and inventories committed to Kennywood Entertainment-related business.

In 2004, Pennsylvania businesses invested a total of \$20.2 million in real property developments to support their business with Kennywood Entertainment. 2004 business inventories in the state allocable to Kennywood Entertainment-related business volume are calculated to be \$16.9 million (see Table 8).

Table 8: Additional State and County impacts 2004 and 2015 (Millions)

	Pennsylvania 2004	Pennsylvania 2015 (projected)	Allegheny County 2004	Allegheny County 2015 (projected)
Total Value of Business Property Committed to Business Volume	\$37.1	\$47	\$25.6	\$32
Value of Business Real Property	\$20.2	\$25.6	\$13.9	\$17.4
Value of Business Inventory	\$16.9	\$21.4	\$11.7	\$14.6

B. Impact of Kennywood Entertainment’s Operations on State and County Government Tax Revenues 2004 and 2015 (Projected)

Tax Revenues to the State of Pennsylvania and Allegheny County Allocable to Kennywood Entertainment

Tripp Umbach estimates that more than \$9 million in State government tax revenue was generated directly or indirectly by Kennywood Entertainment in 2004. This impact is projected to grow to almost \$12 million in 2015 (see Table 9).

Table 9: State and County government revenue impacts 2004 and 2015 (Thousands)

	Pennsylvania 2004	Pennsylvania 2015 (projected)	Allegheny County 2004	Allegheny County 2015 (projected)
Total Government Revenue Impact	\$9,328	\$11,812	\$5,942	\$7,429
Direct Impact	\$1,877	\$2,377 ¹¹	\$5,254	\$6,568 ¹¹
Indirect Impact	\$7,451	\$9,436	\$688	\$861

Kennywood Entertainment generates significantly more in direct taxes to local and state governments than most organizations that generate the same amount of revenue (see Table 10).

Table 10: Direct State and County government revenue payments from Kennywood Entertainment 2004 (Thousands)

	Pennsylvania 2004	Allegheny County 2004
Total Direct Tax Payments	\$1,877	\$5,254
Payroll Tax	\$262	\$883
Property Tax	\$96	\$569
Sales Tax (includes tax on retail sales)	\$392	\$1,573
Unemployment Tax	\$144	\$536
Amusement Tax	\$389	\$1,652
Other	\$594	\$41

In addition to the substantial direct tax payments that Kennywood Entertainment makes to the state and county, its spending with Pennsylvania businesses generate large-scale revenues for the state in the form of sales tax, corporate net income tax and capital stock/franchise taxes.

¹¹ Tripp Umbach estimated that Kennywood Entertainment’s direct tax payments would increase by the same percentage as its overall business volume impact increases.

C. Impact of Kennywood Entertainment’s Operations on Employment in State and County 2004 and 2015 (Projected)

The Direct and Indirect Expansion of Employment in the State and County Attributable to Kennywood Entertainment

Perhaps the benefit that comes closest to home for Western Pennsylvania residents is the sheer number of Pennsylvania's citizens who depend on Kennywood Entertainment, either directly or indirectly, for their jobs and livelihoods. A total of 2,222 full time equivalent jobs in Pennsylvania in 2004 were directly and indirectly attributable to Kennywood Entertainment¹².

During 2004, Kennywood Entertainment employed 4,154 employees (984 full time equivalent positions or FTEs). While this direct employment is significant, the actual extent of Kennywood Entertainment’s employment impact on the state is considerably larger. The business volume generated by Kennywood Entertainment creates jobs in a broad range of sectors throughout the state's economy. These jobs are proportionate to the service needs of Kennywood Entertainment and its related populations (staff, visitors, etc.). In addition, the government tax revenue generated at the state and local levels by Kennywood Entertainment and its business volume also creates government employment opportunities (see Table 11).

**Table 11: State and County employment impacts
2004 and 2015 (full time equivalent positions)**

	Pennsylvania 2004	Pennsylvania 2015 (projected)	Allegheny County 2004	Allegheny County 2015 (projected)
Total Jobs (FTEs)	2,222	2,811	1,452	1,725
Direct Jobs (FTEs)	984	1,245	708	842
Indirect Jobs (FTEs)	1,238	1,566	744	884

¹² Tripp Umbach developed a Kennywood Entertainment Pennsylvania employment multiplier of 2.26 and an Allegheny County employment multiplier of 2.05.

III. Methodology

A. Impact on State Business Volume and Government Tax Revenue

Kennywood Entertainment is a major employer in the Commonwealth and, as such, a major generator of personal income for state residents. Businesses operating within Pennsylvania in the wholesale, retail, service and manufacturing sectors benefit from the direct expenditures of the institution and its staff, and visitors. In addition, many of these direct expenditures are re-circulated in the economy as recipients of the first-round of income re-spend a portion of this income with other businesses and individuals within the state. This re-spending is termed the "multiplier" or "indirect" effect.

This economic impact analysis measures the effect of both direct and indirect business volume and government tax revenue impacts of Kennywood Entertainment. The methodology employed in the calculation of these impacts is derived from the standard set of impact research tools developed by the American Council on Education (ACE)¹³ for the measurement of institutional impact. The ACE-based methodology is well established, having been used in hundreds of impact studies throughout the United States.

The ACE methodology employs linear cash flow modeling to track the flow of institution-originated funds through a delineated spatial area.¹⁴ For Kennywood Entertainment's impact analysis, spreadsheet models were developed for the organization as a whole, as well as for individual facilities, with the models measuring impact on the state and county economies and government revenues. Figure 4 shows the general structure of the impact models used.

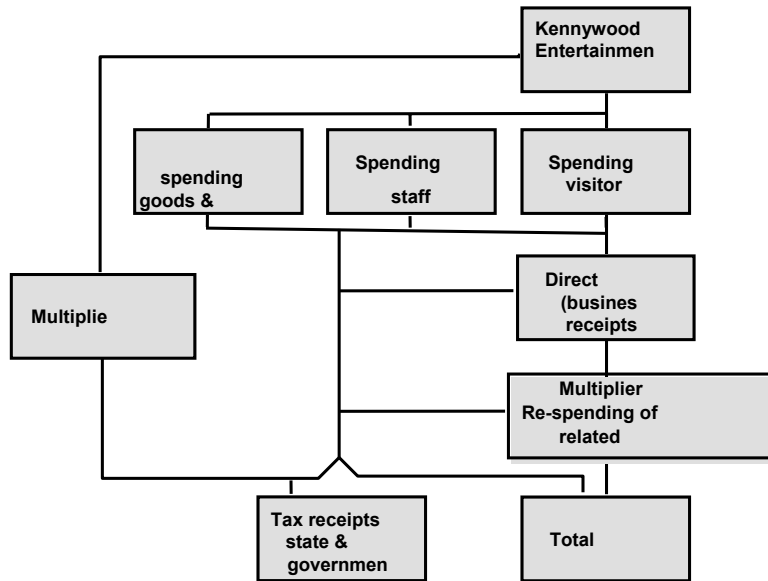
By using this economic impact model, the Tripp Umbach research team has been able to provide Kennywood Entertainment with a detailed quantification of the total direct and indirect impact of the organization on the economies of Pennsylvania and Allegheny County. The impact models provide measures of business volume and government tax revenues allocable to Kennywood Entertainment, together with breakouts of the individual categories of spending that comprise the total impact (e.g. institutional capital spending, staff spending, visitor spending, etc.).

¹³ Caffrey, John and Isaacs, Herbert, "Estimating the Impact of a College or University on the Local Economy," American Council on Education, 1971.

¹⁴ The ACE methodology is highly adaptable to different geographic scales. It is suitable for measuring impact on neighborhoods, municipalities, counties, states, regions or nations. In the study reported herein for Kennywood Entertainment, the impact of the organization is measured at the state and county scales.

Figure 4

Economic Impact



B. Employment Impact

The research used for this study measures the direct employment impact of Kennywood Entertainment. In addition, the research quantifies the indirect employment generated at state and county businesses by expenditures originating from Kennywood Entertainment. A state employment multiplier of 2.26 and a county employment multiplier of 2.05 were generated by Tripp Umbach for the Kennywood Entertainment project.

Appendix: Glossary of Terms

Business Volume Model	Calculates capital account, goods and service, staff, and visitor spending, as well as the value of business property.
Government Tax Revenue Model	Calculates the amount of tax (e.g., income, sales) received by the Commonwealth of Pennsylvania from Kennywood Entertainment-related businesses and populations.
Total Business Volume Impact	Direct impact multiplied by indirect impact multiplier (state multiplier = 2.3, county multiplier = 1.6).
Direct Impact	Sum of total expenditures for capital, goods and services, staff, and visitor spending.
Indirect Impact	Standard multiplier as recommended by American Council on Education representing the re-spending taking place in the study area (2.3 times direct impact for state, 1.6 times direct impact for county).
Capital Account Expenditures	A five-year average of spending on equipment, buildings and land.
Goods, Services and Supplies Expenditures	Total non-capital and non-payroll spending for the 12-month period of the study (2004).
Total Expenditures by Staff	Sum of spending for rental housing and non-housing items by those residing in the area and general spending in-area by those not residing in the area.
Value of Business Property	Calculates the value of business real property and business inventory committed to Kennywood Entertainment's business volume.
Pennsylvania State Model	Calculates the impact on the entire state of Pennsylvania.
Allegheny County Model	Calculates the impact on Allegheny County.
Study Period	2004 and 2015 (projected).