



ECONOMIC IMPACT OF THE



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## **INTRODUCTION**

Tourism is a key component of the Kentucky economy. A recent study for the Kentucky Tourism, Arts & Heritage Cabinet determined that tourism generated \$11.3 billion in economic impact for the state in 2010. Direct expenditures by tourists accounted for \$7.2 billion of this total. The state's tourism events are an important part of the Kentucky tourism industry. A major event, The Alltech FEI World Equestrian Games, was held in Lexington at the Kentucky Horse Park from September 25 through October 10, 2010. This event brought together competitors from around the world to compete in a number of equestrian events. The Games, which are held every four years, were most recently held in Aachen, Germany and the 2010 Games were the first time this event was held outside of Europe. The purpose of this study is to quantify the economic impact of the visitors who attended the event. The expenditures, wages, tax revenues, and jobs generated to the Kentucky economy were determined for these tourists.

## **ECONOMIC IMPACT**

### **Expenditures**

The Alltech FEI World Equestrian Games had a significant impact on the economy of Kentucky. The visitors to the event generated an infusion of over \$201.5 million to the Kentucky economy (Table 1). The initial round of expenditures, i.e. the direct expenditures, accounted for over three-fifths of this spending (\$128.2 million). The multiplier effect on the economy of these initial purchases (multiplier = 1.572) generated the indirect spending -- \$73.3 million.

**Table 1**

**ECONOMIC IMPACT OF THE 2010 ALLTECH  
FEI WORLD EQUESTRIAN GAMES**

<b>Total Expenditures</b>	<b>\$201,579,525</b>
Direct Expenditures	\$128,231,250
Indirect Expenditures	\$ 73,348,275
<b>Total Wages</b>	<b>\$ 45,211,324</b>
<b>Total State and Local Taxes</b>	<b>\$ 22,964,473</b>
State Taxes	\$ 18,384,533
Local Taxes	\$ 4,579,940
<b>Jobs</b>	<b>3,101</b>
Direct	2,170
Indirect	931

The direct spending by visitors of \$128.2 million provided a substantial economic impact for Kentucky at a time when the economy needed every boost it could receive. The economic impact of the Alltech FEI World Equestrian Games did not result in only a one-time infusion into the economy. The investment made by the Commonwealth of Kentucky in equestrian facilities at the Kentucky Horse Park will enable the facility to recruit many additional equine events and other events to the Park for years into the future. The cumulative economic impact of these events will result in a significant Return on Investment for the state by the Kentucky Horse Park.

Direct visitor spending benefits key elements of the tourism industry infrastructure. These include the facility itself, hotels, motels, bed and breakfasts, campgrounds and other lodging facilities, restaurants, automobile service stations, shopping centers and other retail outlets. The distribution of the \$128.2 million in direct expenditures in Kentucky among these businesses is reflected in Table 2. Event spending at the Kentucky Horse Park and lodging establishments received 43 percent and 31 percent, respectively. Food and beverage businesses and retail shopping also benefited substantially from this spending, 12 percent and six percent, respectively. Souvenir vendors took in three percent of the direct expenditures and transportation (car rental, gasoline sales, etc.) received two percent of these expenditures. In addition, a number of other businesses throughout the local and regional economies experienced increased revenues as a result of the event at the Kentucky Horse Park, particularly through the multiplier effect of the initial round of spending.

The direct spending varied by the location of the visitors' residence. Out-of-state visitors, including international, made up 70 percent of the visitors and accounted for \$109 million of the spending. Kentuckians contributed \$19.2 million to the total spending. Spending at the Games and on local and regional lodging dominated the expenditures for both groups. Food and beverage purchases also made a substantial contribution to the total spending for both groups of visitors. Overall a wide variety of businesses in addition to the Kentucky

Horse Park benefited from the \$128.2 million in direct expenditures of the visitors to the Alltech FEI World Equestrian Games.

The Alltech FEI World Equestrian Games visitor spending stimulated non-tourist businesses, such as agriculture, food processing, brewing and distilling, bottling, floriculture, and construction. For example, demand for hotel rooms can create demand for contractors who provide services to the hotel industry, which generates secondary demand for a wide variety of goods and services. Similarly, tourist demand for restaurant meals creates business not only for restaurants, but for producers and packagers of fresh and frozen foods and ultimately supporting businesses and manufacturers. This business activity also creates demand for professional services such as insurance, legal, and accounting. **Consequently, a healthy tourism industry means additional business for industries throughout the economy, both directly and indirectly through the multiplier effect of the visitor spending.**

The nature of tourism expenditures is such that they are not confined to a limited geographic area. Tourists make purchases as they travel to and from their destination. While at an event at the Kentucky Horse Park, they make additional purchases when they visit other attractions, retail outlets, and points of interest in the surrounding area. It is this tourist behavior that resulted in substantial additional spending in Kentucky outside of this event.

**Table 2****DISTRIBUTION OF DIRECT EXPENDITURES IN KENTUCKY****BY CATEGORY AND RESIDENCE OF VISITOR**

Type Of Purchase	Reside Outside Kentucky	Reside In Kentucky	Total
Lodging	\$35,506,515	\$4,104,156	\$39,610,671
On-Site at KHP (includes ticket sales, food and beverage, souvenir, and other spending at the event)	47,158,286	8,230,266	55,388,552
Food & Beverage (off site only)	12,538,078	3,316,808	15,854,886
Souvenirs (off site only)	2,906,540	838,381	3,744,921
Transportation	1,685,717	962,456	2,648,173
Attractions (off site only)	3,145,255	683,156	3,828,411
Shopping (off site only)	6,063,476	1,092,160	7,155,636
<b>TOTAL</b>	<b>\$109,003,867</b>	<b>\$19,227,383</b>	<b>\$128,231,250</b>

## **Wages**

The expenditures of travelers are the business receipts of the establishments patronized. A portion of these revenues is used by the businesses to pay their employees. Every dollar spent by travelers to the Alltech FEI World Equestrian Games produced an average of 22.4 cents in wage and salary income. The total wage and salary income generated by the event at the Kentucky Horse Park and paid by local businesses was over \$45.2 million (Table 1). These wages supported 3,101 jobs.

## **Tax Revenues**

Tourism and travel activity generates state and local taxes. A total of nearly \$18.4 million in Kentucky state taxes and nearly \$4.6 million in local taxes were collected as a result of the spending by the visitors to the Alltech FEI World Equestrian Games (Table 1). These \$23.0 million in taxes are a part of the \$201.5 million in total spending.

## **APPENDIX A**

### **DATA AND METHODS**

In simplest terms the economic impact of an event at a facility is a function of the number of visitors to the state where the event is being held and how much they spend while there. The research challenge is to accurately measure these quantities. A number of factors contribute to the complexity of this type of economic analysis. Among these factors are:

- the distribution and type of activities at the event;
- the type of lodging facilities visitors use and the cost of the lodging since this choice greatly impacts level of spending;
- the length of time the tourist spends at the event, and
- the size of the travel party.

The 2010 Alltech FEI World Equestrian Games sold and provided complimentary tickets to 419,853 visitors in September and October. Multiple equestrian events and numerous vendors were available to them during their visit to the Kentucky Horse Park. All of these activities contributed to the \$201.5 million in total economic impact resulting from the Games.

Over 70 percent of the visitors to the Games were from outside Kentucky. They arrived from 63 countries and all 50 states. The world-wide recession reduced their numbers from the initial expectation that over 85 percent of the visitors would be from outside Kentucky. Many more international visitors were expected than were able to attend.

### **Expenditure Data / Sources**

The information for this study was obtained directly from data supplied by the World Games 2010 Foundation, Inc., the Kentucky Horse Park, and the Kentucky Tourism, Arts and Heritage Cabinet including ticket sales, attendance figures, Kentucky Horse Park sales and attendance, vendor data and the Smith Travel Research lodging report. This information was supplemented by visitor spending data gathered from overall tourism economic impact statistics for the period of September 2010 – October 2010 as commissioned by the Kentucky Tourism, Arts and Heritage Cabinet.

### **Direct Effects**

Once the basic inputs to the Model were calculated, several statistical analyses were conducted using the equations of the Certec Model<sup>®</sup>. This Model was designed to provide expenditure estimates for the Alltech FEI World Equestrian Games.

## **Multiplier Effects**

The indirect and induced expenditures resulting from the initial infusion of money into the Kentucky economy were calculated using the RIMS II input-output (I-O) model developed by the U.S. Department of Commerce, Bureau of Economic Analysis. The output from the Certec Model<sup>©</sup> served as data input for the I-O model. The latter model provided indirect expenditures resulting from the spending by event attendees. The multiplier used for this research was 1.572.

The tax revenues resulting from this event were also estimated. These calculations were based on the RIMS II I-O model. This model is based on the current tax structure, both on a federal and state level and was developed specifically for Kentucky. All types of taxes are taken into consideration, including but not limited to sales tax, income tax and property tax.

The addition of the multiplier effects, as determined from the I-O model, to the direct effects, as determined from the Certec Model<sup>©</sup>, provided the complete picture of the economic impact of the Alltech FEI World Equestrian Games presented in this report.

## **Bottom-up vs. Top-down Measurement**

The Certec approach to this research challenge is based on information collected directly from Kentucky tourists and the Alltech FEI World Equestrian Games itself (bottom-up measurement) as opposed to a procedure that relies on the extraction of information from business data that was initially collected for a purpose other than the analysis of the tourism industry (top-down measurement).

It is the Certec position that tourism economic impact begins with the purchase of goods and services by tourists. Therefore, to most accurately measure the sum of these economic transactions requires data collected from both tourists and the Games operation that answer questions directly related to the research task at hand.

The Certec Model© is updated annually to measure the direct tourism economic impacts at the state and local levels. The data required as inputs include the spending pattern of visitors, in great detail, and business data such as the number of visitors to the event at the facility classified by a number of variables (type of accommodations used, length of stay, etc.).

## APPENDIX B

### DEFINITION OF TERMS

<b>Direct Expenditure</b>	the exchange of money or the promise of money for goods or services while traveling in Kentucky, including any advance purchase of public transportation, tickets, lodging or other items normally considered an incident of travel.
<b>Indirect Expenditure</b>	the second and subsequent rounds of spending of the travel dollars (direct expenditures) in Kentucky for Kentucky-produced goods and services; i.e. the multiplier effect.
<b>Input-Output (I-O) Model</b>	an economic analysis method which is designed to measure the indirect and induced effects of a direct change in a region's economy.
<b>Participant Day</b>	an individual spending one day or part of a day at a tourism or travel facility -- for example, three visitors spending one day is equivalent to one visitor spending three days.