

**ECONOMIC IMPACT OF THE BEREA
TOURISM AND TRAVEL INDUSTRY - 2009**

Prepared for:

Berea Tourist and Convention Commission

Prepared by

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EXECUTIVE SUMMARY

A detailed examination of the expenditure, employment, and tax impacts generated by the Berea tourism and travel industry, as well as the industry structure, has been conducted for the Berea Tourist and Convention Commission. The major findings of the 2009 study follow:

- The tourism and travel industry contributed \$52.0 million to the Berea economy in 2009. Direct expenditures by tourists accounted for \$36.7 million of this total.
- The tourism industry generated nearly \$10.8 million in tax revenues to government - \$4.4 million to the state, \$1.3 million locally, and \$5.1 million to the federal government.
- Residents of Berea spent an additional \$2.2 million with the local tourism industry. This direct spending created 38 jobs.
- A total of 816 jobs in Berea resulted from the industry in 2009. Direct expenditures created 622 of these jobs.
- Over one-third of the jobs created were in high wage occupations.
- The tourism-generated jobs provided over \$11.2 million in wages to Berea workers.
- Expenditures by category showed that food and beverage, transportation, and shopping purchases accounted for two-thirds of the dollars spent.
- Expenditures by industry sector reflected the importance of the lodging, pass-through, and attractions sectors to the local tourism industry. Over 87 percent of all direct spending was from these three sectors.

INTRODUCTION

The purpose of this study is to quantify the magnitude of the economic impact of the Berea tourism and travel industry in 2009. This is accomplished through the use of the Certec Model[®] designed for estimating tourism impacts at the state and local levels, in conjunction with an input-output model designed for estimating the indirect and induced effects of tourist spending. The procedures used are explained in detail in Appendix A.

Economic benefits begin when a traveler to the Berea area, either an Kentucky resident or an out-of-state visitor, spends money in the community. The typical purchases of visitors include goods and services such as lodging, food and beverages, gasoline, souvenirs, admission fees, entertainment, or other retail goods. This initial round of spending is referred to as the direct effects.

These direct expenditures create a "ripple-like" effect through the economy. The businesses receiving these dollars use them to pay wages and salaries, to purchase goods and services for the businesses, and to pay taxes. The individuals and businesses receiving these monies, in turn, spend them on goods, services, and taxes. This process is repeated through several rounds of spending until the "ripple" impact becomes insignificantly small. The combined impact of these several rounds of spending is referred to as the multiplier effect.

The total economic impact of Berea tourism is the combination of the direct effects and the multiplier effect expressed in terms of spending, jobs, wages, and taxes. It is important to note that tourism impacts all sectors of the local economy. **Tourism is big business in Berea.** The research findings presented in this report show the importance of tourism to the local economy.

Table 1

BEREA TOURISM AND

TRAVEL INDUSTRY ECONOMIC IMPACT - 2009

Total Expenditures	\$51,984,720
Direct Expenditures	\$36,738,318
Indirect Expenditures	\$15,246,402
Total Wages	\$11,272,144
Total Taxes	\$10,758,863
State	\$ 4,361,840
Local	\$ 1,335,997
Federal	\$ 5,061,026
Total Employment	816
Jobs (Direct Expenditures)	622
Jobs (Indirect Expenditures)	194

ECONOMIC IMPACT OF TOURISM

Expenditures

The tourism and travel industry made a total contribution to Berea's economy of \$52.0 million in 2009 (Table 1). The purchases made by travelers while in the community accounted for \$36.7 million of this total.

The difference between the total economic impact and the purchases of travelers was a result of the multiplier effect, i.e. the indirect expenditures. This was triggered by the initial infusion of dollars in the economy - the \$36.7 million. These direct expenditures had a "ripple-like" quality as they passed from one "layer" of the economy to the next. The magnitude of these economic benefits diminished during each round of re-spending for goods and services until only an insignificantly small sum was left. The sum of these "ripple" effects for the several rounds of re-spending of the initial dollars was the total multiplier effect of \$15.2 million.

The expenditure data were further classified by type of purchase. The communitywide distribution of these expenditures is provided in Chart 1. Spending on food and beverage accounted for 38 percent of these \$36.7 million in direct purchases. Transportation accounted for over 16 percent of all travel expenditures. Shopping and attractions collected 13 percent and 11 percent of the total, respectively. Lodging accounted for over 12 percent of the purchases and souvenirs nearly ten percent.

Where does this money go once it is in the Berea economy? Many hold the idea that it all goes to the service and retail sectors to support only low wage jobs. In reality, the economic benefits to the Berea area are far more widespread. It helps support dozens of local businesses that do not directly serve the community's tourists. It impacts banking, insurance, and real estate; transportation and public utilities; construction; agriculture, and manufacturing. This basic economic fact is still not fully understood by most citizens of the United States.

Expenditures by Sector

The contribution of the individual tourism sectors to the visitor expenditures varies widely. The communitywide distribution of these expenditures is provided in Chart 2. Lodging guests accounted for over 43 percent of these \$36.7 million in purchases. Individuals passing through the community accounted for the next largest share of this spending-over 24 percent. Attraction visitors followed with nearly 20 percent of the total spending. Those visiting friends and relatives in the community contributed nearly 11 percent. Campers provided two percent of the total.

The importance of the lodging and attractions sectors to tourism spending in the Berea area is substantial. They are the cornerstone of the area's tourism industry. Their continued growth is the key to a healthy tourism industry in the Berea area. The volume of traffic passing through the area on Interstate 75 also makes an important contribution with food and beverage, gasoline, and other retail store purchases.

Employment

In 2009, a total of 816 jobs (in FTEs [full time equivalents]) in Berea were due to the expenditures made in the tourism and travel industry (Table 1). The 2009 direct expenditures of travelers accounted for 622 of these jobs.

The employment opportunities were distributed throughout the community. A number of the jobs in the community are supported, in part, by tourism. Since tourism jobs are dispersed throughout the local economy, they are more difficult to identify than factory jobs. This contributes to the misunderstanding of the size and importance of tourism to the local economy.

The individual sectors of the industry had different impacts on the creation of employment. The travelers in the lodging sector lead the industry in job creation. The expenditures of the visitors within this sector generated 356 jobs. It was followed, in turn, by the pass-through sector (196 jobs), the attractions sector (160 jobs), the VFR [visits to friends and relatives] sector (86 jobs), and the campground sector (18 jobs).

The jobs created by tourism can be found throughout the occupational structure, not just in the service sector (Table 2). Over one-third of the jobs resulting from tourism spending (34.2 percent) were found in the high-wage occupations of professional and technical, managerial, sales, construction, craftsman, and operatives. Tourism produces a wide range of jobs in addition to the front line personnel such as desk clerks, waiters, and ticket takers travelers most often observe.

Table 2

TOURISM GENERATED EMPLOYMENT BY OCCUPATION

<u>Occupation</u>	<u>Jobs</u>
Professional & technical	35
Managerial	58
Marketing & sales	84
Administrative support	92
Construction	16
Craftsman	43
Agriculture & forestry	17
Operatives & fabricators	43
Laborers	33
Personal services	395
Total	816

Tourism stimulates non-tourism industries such as agriculture, fishing, meatpacking, food processing, brewing and distilling, bottling, floriculture, construction and appliance, furniture, and linen manufacture. For example, demand for hotel rooms can create demand for the services of contractors, which generates secondary demand for steel, bricks, lumber, tile, marble, glass, plumbing and air conditioning systems, elevator cars, carpets and a variety of other goods. Similarly, tourist demand for restaurant meals creates business not only for restaurants, but for producers and packagers of fresh and frozen foods, butchers, dairies, and ultimately, for manufacturers of farm implements and fertilizers. **Consequently, a healthy tourism industry means additional business for industries throughout the economy.**

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. In 2009 every dollar spent by travelers in Berea produced an average of 21.8 cents in wage and salary income.

The total wage and salary income generated by tourism and paid by local businesses was over \$11.2 million in 2009 (Table 1). The direct purchases of travelers accounted for over \$7.7 million of this total.

Taxes

Tourism generates state and local as well as federal tax revenues. Berea tourism expenditures resulted in the collection of nearly \$10.8 million in tax revenues in 2009 (Table 1). Nearly half (\$5.1 million) went directly to the federal government through taxes including personal and corporate income, social security, and gasoline.

The Kentucky state treasury benefited from the addition of nearly \$4.4 million in tax revenues generated by tourism activity within the community. A major portion of these revenues were obtained through sales and excise taxes, and taxes on individual and corporate income.

Local government operations in Berea such as the city government and the Tourist Commission also benefited from tourism in the community. Local government agencies received over \$1.3 million in tax revenues as a result of the tourism industry. Property tax, business taxes, the restaurant tax, and the lodging room tax contributed to these local tax revenues.

PROPORTION OF REVENUES AT BERIA RESTAURANTS

A separate analysis of the restaurant sector was conducted to determine the proportion of revenues at Berea restaurants which are generated by visitors to the community as opposed to local residents. Multiple independent databases were generated in order to address the research issues from different perspectives. The economic impact study of the community provided a determination of the spending at Berea restaurants by out-of-county visitors to the community in 2009. An examination of the quarterly time-series data on the restaurant tax collected since it began in calendar year 2007 provided a determination of the restaurant tax collected for calendar year 2009. This, in turn, led to an estimate of total spending at Berea restaurants in 2009. A third database was the license

plate surveys made at 30+ Berea restaurants on both weekdays and weekends over a seven-week period from late May until mid-July. Included in the license plate survey were the downtown restaurants (Boone Tavern, Papa Leno's, etc.), the Richmond Road area (McDonald's, Sonic, Dairy Queen, etc.), the road to Exit 76 (El Rio Grande I, Mario's, KFC, etc.), Exit 76 (Cracker Barrel, Taco Bell, Dinner Bell, Hong Kong Buffet, etc.), and Exit 77 (Smoke House Grill, El Rio Grande II, Kentucky Artisan Center Café, and Subway)

The license plate survey database served as a cross-check on the rigorous data analysis of the restaurant tax collections and the economic impact study data. The conclusion reached from the detailed examination of the three databases was that over three-fifths (61 percent) of spending at Berea restaurants is generated by visitors to Berea and nearly two-fifths (39 percent) of the spending was from Madison County residents.

APPENDIX A

DATA AND METHODS

In simplest terms the economic impact of tourism is a function of the number of visitors to the community 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 of tourism attractions and industry infrastructure in the community;
- the type of lodging facilities visitors use since this choice greatly impacts level of spending;
- the length of time the tourist spends in the community;
- the size of the travel party, and
- the reason for visiting the community.

These are a few of the critical factors affecting the spending patterns of visitors. **Only the spending of non-Berea residents is included in this research. Locals contributed an additional \$2.2 million in direct spending to the local tourism industry and generated 38 jobs.**

Bottom-up vs. Top-down Measurement

The Certec approach to this research challenge is based on information collected directly from tourists and tourism businesses (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 tourism businesses that answer questions directly related to the research task at hand.

The Certec Model© was developed in the 1970s, and 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 rooms sold at lodging facilities and the number of visitors to attractions.

Expenditure Data

The information on the spending pattern of travelers to Berea is currently available for 2009 through the on-site survey research of Certec Inc. with Berea tourists. This research provides very detailed information on the spending of visitors in the area. For this project the 2010 data collected were adjusted to 2009 by correcting for inflation.

The expenditures per person per day were calculated. They are, by sector:

lodging	\$116.25
attractions	\$26.22
VFR	\$47.72
pass through	\$20.77
campground	\$19.55

Participant Days

Berea is divided into tourism sectors. Certec identified tourism and travel businesses operating in 2009 from a review of local tourism publications as well as several individual business brochures.

Certec designed surveys to collect business data from a stratified random sample of these businesses. The questionnaires are available in Appendix C. The information was collected through the Berea Tourist and Convention Commission with the assistance of Belle Jackson, Executive Director. Mail interviews were received from the owner and/or manager of each of those establishments during the period June through July 2010. The interview had as its primary focus the number of units sold (lodging rooms or campsites) or visitors to the facility. Complete interviews were obtained from 55.6 percent of the businesses in the sample.

Once the processing of these data sets was complete, participant days by type of business were determined. The results of this analysis are presented in Chart 3. Total participant days to Berea in 2009 exceeded 965,000. Pass-through travelers accounted for nearly 45 percent of all visitor days, followed by attractions, after adjusting for multiple visits by (29 percent). The lodging and VFR sectors also provided a substantial number of participant days – 14 percent and eight percent, respectively.

Destination travelers to Berea totaled over 394 thousand persons (394,511). In addition, over 429 thousand pass-through travelers visited the community (429,243).

The information on participant days in Chart 3 in combination with the expenditure data in Chart 2 shows the importance of lodging guests and their much higher spending per person per day. Even though they account for one-half as many visitors to the community as does the attractions sector, the spending impact of lodging guests on the local economy is more than double that of attraction visitors.

Direct Effects

Once the basic inputs to the Model were calculated, several statistical analyses were conducted using the equations of the Certec Model[®]. Note that the Model was modified for use in this project to reflect the Berea tourism industry. This Model was designed to provide expenditure estimates at the sub-state (community) level for each of the industry sectors. These sub-state estimates by sector were combined to provide expenditure levels for the entire industry within the community.

Multiplier Effects

The indirect and induced expenditures resulting from the initial infusion of money into the Berea 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[®] served as data input for the I-O model. The latter model provided indirect expenditures resulting from the tourism industry.

The tax revenues resulting from this industry were also estimated. State and local tax revenues as well as federal tax revenues were obtained by using sector output generated by the Certec Model[®] with expenditure/tax relationships derived from I-O analysis.

Estimates of tourism and travel industry employment were generated in a similar fashion. Sector output from the Certec Model[®] was applied to expenditure/job relationships obtained from the I-O analysis. Employment generated by direct and indirect expenditures was obtained. The I-O model relationships also allocated the total employment generated to the occupation providing the service or product.

The addition of the multiplier effects, as determined from the I-O model, to the direct effects, as determined from the Certec Model[®], provided the complete picture of the economic impact of the Berea tourism and travel industry presented in this report.

APPENDIX B

DEFINITION OF TERMS

Direct Expenditure	the exchange of money or the promise of money for goods or services while traveling in Berea, including any advance purchase of public transportation, tickets, lodging or other items normally considered an incident of travel, but which may be purchased in advance of the trip.
Indirect Expenditure	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.
Input-Output (I-O) Model	an economic analysis method which is designed to measure the indirect and induced effects of a direct change in a region's economy.
Participant Day	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.
Travel and Tourism Industry	the tourism industry consists of all those firms, organizations and facilities (including accommodation, food, transportation, and related services) which are intended to serve the specific needs and wants of travelers.
VFR	Visit to friends or relatives.

APPENDIX C

Business Questionnaires

Office Use Only

County ____

Interview ____

BRTC10

BEREA HOTEL/MOTEL QUESTIONNAIRE

Please answer the following questions and return this sheet to Certec Inc. in the enclosed business return envelope by **June 25, 2010**.

1. Number of rooms sold during entire year - 2009. _____
2. Average number of guests per room - 2009. _____
3. Estimated proportion of guests from outside Berea _____
4. Number of rooms at facility at beginning of 2009. _____
5. What are the top five markets that visitors to your hotel/motel come from? Please list city and state.
 1. _____
 2. _____
 3. _____
 4. _____
 5. _____

Office Use Only
County _____
Interview _____
BRTC10

BEREA CAMPGROUND QUESTIONNAIRE

Please answer the following questions and return this sheet to Certec Inc. in the enclosed business return envelope by **June 25, 2010**.

1. Number of camper nights sold during entire year - 2009. _____
2. Average number of campers per site - 2009. _____
3. Estimated proportion of campers from outside Berea _____
4. Number of improved sites at facility at beginning of 2009. _____
5. What are the top five markets that visitors to your campground come from? Please list city and state.
 1. _____
 2. _____
 3. _____
 4. _____
 5. _____

NOTE: a camper night is defined as the rental of one campsite for one night. For example, one campsite rented for three (3) nights equals three (3) camper nights.

Office Use Only

County _____

BEREA ATTRACTION QUESTIONNAIRE

Please answer the following questions and return this sheet to Certec Inc. in the enclosed business return envelope by **June 25, 2010**.

1. Number of visitors to attraction during entire year-2009 _____
2. Estimated proportion of visitors from outside Berea _____
3. What are the top five markets that visitors to your attraction come from? Please list city and state.
 1. _____
 2. _____
 3. _____
 4. _____
 5. _____

Office Use Only

County _____

Interview _____

BRTC10

BEREA BED & BREAKFAST QUESTIONNAIRE

Please answer the following questions and return this sheet to Certec Inc. in the enclosed business return envelope by **June 25, 2010**.

1. Number of rooms sold during entire year - 2009. _____
2. Average number of guests per room - 2009. _____
3. Estimated proportion of guests from outside Berea _____
4. Number of guest rooms at facility at beginning of 2009. _____
5. What are the top five markets that visitors to your bed & breakfast come from? Please list city and state.
 1. _____
 2. _____
 3. _____
 4. _____
 5. _____

Office Use Only

County _____
Interview _____
BRTC10

BEREA STORE/SHOP QUESTIONNAIRE

Please answer the following questions and return this sheet to Certec Inc. in the enclosed business return envelope by **June 25, 2010**.

1. Number of visitors to store/shop during entire year-2009 _____
2. Estimated proportion of visitors from outside Berea _____
3. What are the top five markets that visitors to your store/shop come from? Please list city and state.
 1. _____
 2. _____
 3. _____
 4. _____
 5. _____

APPENDIX D

Visitor Questionnaire

Berea Tourism Questionnaire

Thank you for taking the few minutes needed to answer the following questions concerning your trip to Berea. **Please complete the questionnaire and return it to the research personnel.** The questionnaire is confidential. Nowhere are you asked to identify yourself. Any demographic questions are for statistical purposes only. **Please circle the number for the response you select unless the question asks that you write in your answer.**

1. Let us begin by asking the **zip code for your residence?** _____

2. **How many visits** have you made to the Berea area in the past two years?
 1. First Visit
 2. _____ [record total number of visits if more than one]
 3. Local resident of Madison County

3. Please classify the **type of trip** you are taking.
 1. Day trip
 2. Short trip (less than 4 days with at least one overnight stay)
 3. Vacation (4 days or more)
 4. Business/convention trip
 5. Other, specify _____

4. What **type of overnight accommodations** will your travel party use while in Berea?
 1. Hotel or motel
 2. Bed & breakfast
 3. Home of friends or relatives
 4. Campground
 5. Other, specify _____
 6. No overnight stay - Go to Question 6.

5. **How many nights** will you spend in Berea on this trip? _____

6. Including yourself, the **number of people in your immediate travel party** is _____

7. What **restaurants** are you going to dine at while in the Berea area on this trip.
 1. _____
 2. _____
 3. _____
 4. _____

CONTINUED ON NEXT PAGE

The next section asks for expenditures made in Berea while on this trip to the area. The community extends from College Square in downtown Berea to the Old Town

Artisan Village at North Broadway to the Exit 76 area of Interstate 75 to the Kentucky Artisan Center at the Exit 77 area of Interstate 75.

8. Please provide the **expenditures** that your travel **party has made or will make in the Berea area on this trip** for each of the following categories:

\$ _____ Lodging
\$ _____ Restaurant meals
\$ _____ Groceries including any soft drinks
\$ _____ Alcoholic beverages
\$ _____ Gasoline and other service station expenses
\$ _____ Local attractions (admissions & other fees)
\$ _____ Souvenirs
\$ _____ Shopping
\$ _____ All other expenditures

9. Indicate the highest grade or year of school completed by the head of your household.....(Check only **ONE**)
1. Some high school
 2. High school graduate
 3. Some college
 4. College graduate
 5. College post-graduate studies
10. What is the occupation of the head of your household? _____

Thank you for assisting us with this important project. Your response is appreciated and will be most helpful.