Economic Impact Study for Lexington-Fayette Urban County Government Division of Parks and Recreation

Capstone, Spring 2006

By: Melynda Milburn

TABLE OF CONTENTS

Executive Summary……1

Outline and Introduction……..…4

Problem Statement……...5

Research Questions……..6

Literature Review……7

Conceptual Framework……..10

The Methodology……...18

The Data……20
Event Data Collection Table……...……...24

Estimated Economic Impact……..25
IMPLAN Results Table……25

Quality of Life……27

Conclusion/Results……...……28

References……..29

Appendixes
Franchised Baseball/Softball Totals Generated Chart……...31
Multiplier Chart……32
Local Zip Codes……33
Survey Purpose……..34
Telephone Call Sheet……35
Mailed Cover Letter……...36
Survey……37

Executive Summary

- When requesting funds, planning activities or soliciting input from the public or elected officials, the Lexington-Fayette Urban County Division of Parks and Recreation needs to be able to document the economic impact of its activities. The challenge is a lack of data to illustrate that impact. Considering this information gap, it would be even more difficult to gain support for a consistent funding source based on the economic impact of Lexington Parks and Recreation programs.

- The intention of this capstone is to answer the following questions:

    - Does Lexington Parks and Recreation have an impact on money being brought into Fayette County from the outside of the county?
    - What tool can be used to show the effect that Lexington Parks and Recreation has on the economy of Fayette County?
    - What are the impacts, if any, that Lexington Parks and Recreation has on the economy of Fayette County?

- This report provides a projected estimate impact of some of the primary events and services provided by Lexington Parks and Recreation that attract people from outside of Fayette County. The events and services included in this study are: Ballet Under the Stars, Woodland Arts Fair, Keeneland Arts Fair, Rental Facilities, Kentucky Senior Games, Bluegrass 10,000, Family Fun Fish Fest, and the Bluegrass Classic Stockdog Trials.

- The economic impacts include the direct expenditures of guests from outside of Fayette County to the events and services on admission fees, food and beverages, lounges and bars, retail shopping, lodging expenses, and transportation.

- Impacts also include *indirect* and *induced* economic activity.

    - Indirect activity results from subsequent rounds of economic activity reflecting spending by local interindustry purchases and local government revenues. This is done through the increased purchases of goods and services sold or produced in Fayette County as a result of the direct expenditures.
    - Induced economic activity results from the increase in economic activity generated by local consumption due to increases in employee compensation, proprietary income and other property income. This is done through increased expenditures by Fayette County residents receiving income as a result of the direct and indirect expenditures.

- Indirect and induced economic activity are typically referred to as "multiplier" effects. Multipliers recognize that when visitors to an event spend money in a community, their initial direct expenditure stimulates economic activity and

creates additional business turnover, personal income, employment, and government revenue in the host community.

- The economic model used to estimate the multiplier effect in this study is IMPLAN. Using the IMPLAN model the average multiplier was found to be on the order of 1.46 - meaning that each dollar of direct expenditures leads to an additional 46 cents of indirect and induced expenditures in Fayette County.

- Using the IMPLAN model, an estimate of direct expenditures by out-of-town visitors to the previously defined Lexington Parks and Recreation events and services was $934,265. Total new spending, the direct spending by visitors and indirect and induced spending is estimated to be $1,374,643, with new jobs estimated to be 23.8, and new annual wages of $469,495.

- Additional benefits such as quality of life enhancement and indirect benefits attributable to living near Lexington Parks and Recreation facilities must also be taken into consideration. Many of the services and facilities that are provided by Lexington Parks and Recreation were not taken into account in this study. However, there are numerous services such as Natural Areas, Senior Adult Programs, Community Center, Extended School Programs, the Equestrian Program, Summer Camps, and Athletics which increase the quality of life for Fayette County residents. It must also be taken into consideration that the desirability of living near such a facility instead of near a less attractive use, such as industrial or residential development tends to enhance property values. However, this study does not attempt to estimate any calculations for these additional benefits which are attributable to Lexington Parks and Recreation.

- This study will only examine expenditures of visitors from outside of Fayette County to events, due to the fact that an economic impact study should only relate to new money that is injected into an economy from people outside of the local area. It should not be dismissed that locals or those residing within Fayette County do have an effect on the economy of Fayette County. When locals choose to spend money within Fayette County instead of outside of the county, they are increasing induced spending in the area. However, one of the steps that was taken in this study in an attempt to remain as objective as possible was exclusion of local residents, so as not to include revenue that would have already been circulated in the local economy. With this aside, at the conclusion of this report in the appendix, there is a chart included that breaks down the total money generated from youth franchised baseball and softball leagues within Fayette County. These numbers merely take into consideration the fees that leagues and players pay, equipment costs, field upkeep costs, uniforms costs, trophy and banquet costs, and personnel costs. The numbers presented do not factor in any tournament play costs that may or may not be associated with each specific league. From a glance at these numbers, it is clear that local economic activity is a completely separate category of its own and therefore, this study will not

attempt to measure the local economic activity that occurs as a result of Lexington Parks and Recreation.

- This report along with other data should be collected and used by Lexington Parks and Recreation to document the economic impact of the various programs that they host. This information will be essential in gaining the necessary support needed for a consistent funding source for Lexington Parks and Recreation.

- Through this economic impact study and the use of IMPLAN, it is clear that Lexington Parks and Recreation does have an impact on money being brought into Fayette County from the outside. The average multiplier of the events surveyed in this study is 1.46.

- The next step for Lexington Parks and Recreation is to attempt to measure the economic impact they have as a whole on the economy of Fayette County. Therefore, attempting to determine the economic impact for all of the events and services that they provide. It could also be useful to conduct a complete quality of life analysis and a cost and benefit study.

Outline and Introduction

The following is a brief report designed to inform the Lexington-Fayette Urban County Government Division of Parks and Recreation and the Parks Advisory Board about the methodology used in estimating the economic impact of some of the primary events and services provided by Lexington Parks and Recreation. The events and services included in this study are: Ballet Under the Stars, Woodland Arts Fair, Keeneland Arts Fair, Rental Facilities, Kentucky Senior Games, Bluegrass 10,000, Family Fun Fish Fest, and the Bluegrass Classic Stockdog Trials. The report will also provide an estimate of these impacts.

The report begins with the problem statement and research questions, followed by a literature review, and then a description of the conceptual framework for analysis and how the results can be interpreted. The latter section provides a description of the methodology used in the economic model that was used to estimate the economic impact of the previously defined events and services provided by Lexington Parks and Recreation. The economic model used in this study was IMPLAN, an impact model developed by the Minnesota IMPLAN group.

This is followed by data and estimates of the economic impact of the previously defined events and services provided by Lexington Parks and Recreation. Although these numbers are purely estimates, they provide an indication of the extent of the impact of such events and services.

After the estimates of the economic impact are provided, there is a section focused on the quality of life enhancements for Fayette County residents attributable to Lexington Parks and Recreation. This is followed by a conclusion.

Problem Statement

When requesting funds, planning activities or soliciting input from the public or elected officials, the Lexington-Fayette Urban County Division of Parks and Recreation needs to be able to document the economic impact of its activities. The challenge is a lack of data to illustrate that impact. Considering this information gap, it would be difficult to gain support for a consistent funding source based on the economic impact of Lexington Parks and Recreation programs.

Research Questions

The intention of this capstone is to answer the following questions:

1. Does Lexington Parks and Recreation have an impact on money being brought into Fayette County from outside of the county?
2. What tool can be used to show the effect that Lexington Parks and Recreation has on the economy of Fayette County?
3. What are the impacts, if any, that Lexington Parks and Recreation has on the economy of Fayette County?

Literature Review

Over the past several years, the popularity and curiosity of park and recreation professionals about economic impact studies has surged due to the ability of the studies to reposition agencies by showing the contributions of parks and recreation agencies to economic development. It has been discovered that in order for park and recreation agencies to justify the allocation of additional resources, elected officials must be convinced that the agencies are delivering public benefits. Public benefits are benefits that accrue to most people in a community regardless of whether they use the agency's facilities or participate in the programs that it offers (Crompton 1999).

There are three categories that result in public benefits: economic development, environmental stewardship, and alleviating social problems (Crompton 1999). However, it must be kept in mind that the previously defined three categories still only receive funding support if they are viewed as a high priority in the community. Therefore, the task before a park and recreation manager is to determine which of the three public benefits is most important on the local jurisdiction's political agenda and then to show the potential of the park and recreation agency contributing to meeting that need.

Often times, economic development is a political priority because it is one way to enlarge the tax base. By serving as an enlargement to the tax base, more tax revenues are available for the government to use, which in turn is viewed as a way for the government to improve the quality of life for residents. The rationale for undertaking economic impact studies is to determine the economic return to residents (Crompton 1999).

Considering that economic impact studies use complex procedures, there is often a presumption in the minds of some audiences who are unfamiliar with the technique that

the analyses are "scientific," and therefore the outputs are objective. This is deceptive. Economic impact analysis is an inexact process and output numbers should be regarded as a "best guess" rather than as being inviolably accurate. There are several points in the analysis that inappropriate procedures can be used to generate high economic impact numbers to place an agency more favorably in the minds of elected officials (Crompton 1999).

According to many consultants for economic impact analyses, there are certain measures that can be undertaken to remain objective in economic impact studies and to stay away from attempting to generate high numbers. The five measures which will be discussed in further detail later are: exclusion of local residents, exclusion of time-switchers, use of income rather than sales output measures of economic impact, use of multiplier coefficients rather than multipliers, and careful interpretation of employment measures (Crompton 1999). Numerous studies indicate that it is necessary for the same principles to be applied to allow the study to maintain the necessary level of integrity (Crompton, Lee and Shuster 2001; Crompton and McKay 1994; Tyrrell and Johnston 2001).

According to many articles, economic impact studies often are not undertaken objectively and are rather used as advocacy documents. According to such authors, economic impact analyses are sometimes used to legitimize public support for the event rather than to identify the true impact of the event (Crompton and McKay 1994; Matheson 2002; Tyrrell and Johnston 2001).

An indicator to watch for when attempting to determine if economic impact studies are truly attempting to identify the true impact of an event is if the study is

conducted in-house. Organizations often use in-house staff which have a vested interest and may not have the appropriate expertise to conduct the study. Even with external consultants, it must be kept in mind that they may compromise research by only telling their clients what they want to hear (Crompton and McKay 1994). An economist offered the analogy that: "The fees for the study are like a religious tithe paid to a priest to come bless some endeavor" (Curtis 1993).

It is also important to keep in mind that with economic impact studies being a very inexact science, it is very possible that with five consultants, you would get five different sets of numbers. Considering that economic impact analyses can be done with varying assumptions and procedures, the result can be different impacts (Crompton and McKay 1994).

Due to the difference in results and the potential for organizations to use economic impact studies as advocacy documents, some decision-makers discredit their findings. One decision maker is quoted as saying, "Economic impact studies based on the multiplier are quite clearly an improper tool for legislative decision-making" (Hunter 1988). Regardless of the limitations and weaknesses that economic impact analyses have, if they are done objectively and knowledgeably they can serve as a very valuable and powerful tool. This is one reason it is crucial for advocates of economic impact analyses to ensure that the proper level of integrity and knowledge are going into such studies (Crompton and McKay 1994).

Conceptual Framework

The focus of this report is on the economic impact of visitors, which can be defined as people living outside of Fayette County, to events and services provided by Lexington Parks and Recreation on the Fayette County economy. This study only includes expenditures of visitors from outside of Fayette County to events because the economic impact should only relate to new money that is injected into an economy from people outside of the economy. Only the visitors to an event who live outside of the defined area, Fayette County in this case, and whose main reason for visiting the area is to attend the event, or who stay in the area longer and thus spend more money because of the event, would be included in an economic impact study (Crompton 1999).

The reason that expenditures by people who already reside in the defined area do not add to an event's economic impact is because those expenditures constitute a recycling of money that was already in existence in that area. The possibility exists that if these residents had not spent their money at the event, that they would have spent it now or later on other goods or services in the area. An example of this would be if a family of four spent $30 attending Ballet Under the Stars, it is likely to be $30 less spent on other entertainment, such as a movie theatre, in Fayette County. Thus, spending by local residents in association with an event is likely to be switched spending. This offers no net economic stimulus to Fayette County. Therefore, it is best practice to not include these amounts when estimating economic impact. It acts as a safeguard in presenting the most accurate results (Crompton 1999).

When reviewing economic impact studies it is important to examine if economists have included expenditures by locals in their study. Often times, all expenditures from an

event, including that of locals, will be referred to as "economic activity" or "economic surge" (Crompton 1999). This practice is used by some because it results in high numbers and is thought to be viewed more favorably by those desiring the study. However, economic activity or economic surge numbers are not very meaningful. They are often used to mislead stakeholders into believing that economic activity and economic surge are the same measures as economic impact.

If data exist that suggest that local residents stayed home for an event when they would have left town if the event had not taken place, then these local expenditures would be justified as an economic impact. This would be due to the fact that the money would be kept in the local area rather than having been spent outside of it. However, it is very difficult to collect these data and this study does not attempt in any fashion to do so.

In order to be as accurate as possible and to take all safeguards to keep the study from being overly optimistic, only visitors that reside outside of Fayette County and whose primary rationale for visiting is to attend the event or to take part in the service, or who stay longer and thus, spend more due to the event are included in the economic impact study. These measures allow for the exclusion of local residents, as well as "casuals," or people from outside of Fayette County who were already in the area due to other reasons and decided to go to the event rather than doing something else, and "time-switchers," or people from outside of Fayette County who had been planning a trip to the area, but changed the timing of their visit to coincide with an event. The logic behind excluding casuals and time-switchers from the study is that their spending would have taken place regardless of the event, although it might have been at a different time of the year (Crompton 1999).

Other safeguards that are taken in this study to remain objective and maintain a high level of integrity are:

- Use of multiplier coefficients rather than multipliers, it gives the most guidance to policy makers
    - Multipliers are calculated by the following formula:
        - Direct + Indirect + Induced Effects/ Direct Effects
    - Multiplier coefficients are calculated by the following formula:
        - Direct + Indirect + Induced Effects/ Injected Visitor Expenditures
- Careful interpretation of employment measures, avoiding limitations, making sure not to project full time jobs will be created when in reality they will not be

First it is important to factor in that all jobs created will not be filled by residents within the community. Employment estimates assume this to be true. Secondly, the employment estimates assume that all current employees are fully occupied and therefore the increase in visitor spending will require increased employment, when in reality this may not be the case. Thirdly, estimates include both full and part-time jobs and do not distinguish between them. It is also important to consider that many times, rather than new employees being hired, current employees may work more hours or overtime. Thus, decision-makers should not be misled into thinking the employment measure necessarily indicates full-time positions (Crompton 1999).

Therefore, it is necessary to keep in mind that the results presented in this report will be conservative. However, it is felt that it is more important to follow principles of integrity rather than manipulate the analyses and overstate the impact. Specifically, the report will address the impact of these visitors on:

- Direct Spending
- Indirect Spending
- Induced Spending
- Employment

Direct Spending is the amount of spending that was estimated by the visitors themselves to the various events and services that are included in this study. The initial direct expenditure stimulates economic activity and creates additional business turnover, personal income, employment, and government revenue in the host community (Crompton 1999). The spending has been broken into six categories for all events surveyed (the numbers in parentheses are the numbers from IMPLAN that represent that specific category), with an additional two categories for rental facilities (indicated with an *):

- Admission Fees (488)
- Food and Beverages and Lounges and Bars (454)
- Retail Shopping (449)
- Lodging Expenses (463)
- Transportation (451)
- Miscellaneous (455)

- Photography (465)*
- Rental Companies (473)*

This is the first round of visitor spending. Direct spending is the amount that entities who received the initial dollars spend on goods and services with other industries in the local economy and pay employees, shareholders, and self-employed individuals who live in the locally defined area.

Indirect Spending is determined based on the calculation of a "multiplier." Indirect spending is additional spending by businesses, which is stimulated by the initial direct effects. For example, a restaurant or business may need to spend more money to pay salaries, hire additional employees or purchase more supplies in order to sustain or enlarge their operations. This would be done with the customer's money. In this case, the increase in the purchase of additional goods or employment would be considered indirect effects. The numerous rounds of economic activity of spending by local interindustry purchases and local government revenues are known as indirect impacts. Indirect effects are the ripple effect of subsequent rounds of the initial visitor's dollars by local businesses and local government being recirculated (Crompton 1999).

Induced Spending is also determined based on the calculation of a "multiplier." Induced spending is spending by local residents who receive income and employment as a result of the direct spending by visitors. The critical point of induced spending is the fraction of spending by local residents on locally produced and/or traded goods. Induced impact is the part of household income that is spent locally on goods and services. It is defined as

the increase in economic activity produced by local consumption as a result of increases in employee compensation, proprietary income and other property income. Induced effects are additional ripple effects due to the direct and indirect effects, caused by employees of impacted businesses spending part of their salaries and wages in other businesses in the locally defined area (Crompton 1999). An example of this would be if 25% of spending by Fayette County residents was received as income by other Fayette County residents and there was $1,000 of direct spending, then $250 would be received as income by other Fayette County residents. These residents would then spend 25% of this $250 or $62.50 and so on.

Employment is based on an input-output model of production, where a relationship exists between the direct, indirect, and induced effect of an extra unit of visitor spending on employment in the defined local area (Crompton 1999).

In the appendixes on page 32 there is an example of the multiplier process. It assumes that visitors spend their money at four different types of establishments in the community. The initial injection of money represents the direct economic impact on the local area. There are then six ways the establishments receiving the initial funds can use the money they receive. They can spend it with:

- Other private sector businesses in the same area
- Employees or shareholders that live in the same area in the form of salaries, wages or dividends
- Local governments as sale taxes, property taxes, and license fees

- Private sector businesses located outside of the local area
- Employees or shareholders who live outside of the area
- Non-local governments as sales taxes or taxes on profits

Looking at chart on page 32 one can see how some leakages occur and how the chain of economic activity continues. The multiplier effect looks at expenditures from visitors outside of the local economy and how it flows throughout the economy. It is useful to think of the initial injection of outside money by visitors as ripples that occur in a tub of water when more water is poured into the tub. The tub symbolizes the economy and the additional water represents extra spending by the outside visitors. The ripples are the spread of money through the economy. However, just as with a tub of water and a drain, some of the money spent by visitors leaks out of the local economic system. This can occur by paying salaries or taxes to people or entities outside of the area or by purchasing goods or services from them. Only the dollars left in the local area after leakage has occurred represent the net economic gain.

The chart on page 32 depicts the multiplier process. The three local funds receiving money in the first round of spending, and in rounds to come where the spending did not leak out of the community, will continue to spend the money in the same previous listed six ways. The initial expenditure by the visitor will potentially go through several rounds as it trickles through the economy, with part of it leaking out each round until it dwindles to a negligible amount.

Again it is important to recall that apart from the economic impact of Lexington Parks and Recreation in terms of increased spending and employment in Fayette County

due to visitors to the area for such events, that there are additional benefits derived from Fayette County residents from Lexington Parks and Recreation. These additional benefits include both direct and indirect benefits. An example of a direct benefit would be entertainment and enjoyment that is derived from the events. An indirect benefit would be increased property values, due to the location of a park, to a nonuser of the park. This report by no means attempts to downplay the benefits, which will be referred to as quality of life benefits, in any way. The main emphasis of this study was to discover the economic impact of Lexington Parks and Recreation.

The Methodology

The IMPLAN model was developed by the Minnesota IMPLAN Group, Inc. This economic model was used to estimate the multiplier effect in this study.

It was decided to use IMPLAN over RIMS II and other economic models for the fact that it was capable of giving industry impact analysis for 528 industries. Many of the other economic models can not compete with IMPLAN's number of industries. RIMS II is only able to provide final impact analysis for 38 industries. However, a disadvantage of IMPLAN is that it has less recent data than RIMS II.

In this study, the IMPLAN model was used to provide a conservative estimate by disaggregating and analyzing impact by industry. For this study, eight of the 528 specific industries were chosen that were considered to be the most applicable for this analysis. The eight industries used were not all available in RIMS II. The following are the eight specific industries that were used:

- Admission Fees (488)
- Food and Beverages and Lounges and Bars (454)
- Retail Shopping (449)
- Lodging Expenses (463)
- Transportation (451)
- Miscellaneous (455)
- Photography (465)
- Rental Companies (473)

IMPLAN calculates eight measures of economic impact; however, only four are typically used. The four commonly used measures are: sales, personal income, value added, and employment. Personal income and the value added measures are perceived as the most appropriate due to the fact that they best fit the rationale for conducting economic impact studies.

The Data

In this report the impacts of eight annual events hosted by Lexington Parks and Recreation were estimated. The events and services that were chosen were selected because these events bring in the largest populations from outside of Fayette County. In order to determine the economic impact of other events, services, and tournaments hosted by Lexington Parks and Recreation, the same methodology using the same data categories can be used.

Data was collected for each of the eight events that were estimated for Lexington Parks and Recreation through self-designed surveys to obtain estimates of direct spending by visitors to the events in each of the previously defined eight categories or industries (Admission Fees, Food and Beverages and Lounges and Bars, Retail Shopping, Lodging Expenses, Transportation, Miscellaneous, Photography, and Rental Companies). The survey was targeted towards participants of events from outside of Fayette County. The respondents' zip code at their home address was used to distinguish who was from inside and who was from outside of Fayette County. Respondents from surrounding counties, that were not time-switchers or casuals, were treated the same as those from further away because this study was only interested in looking at total new spending coming into the Fayette County economy.

There are two columns for expenditures on the survey: amount spent in the Lexington area (i.e. gas purchased within Fayette County, fees paid to an entity within Fayette County, any expenditure made to an entity within Fayette County) and the amount spent outside of the Lexington area. The amount that is used in this study is the amount spent in the Lexington area from those residing outside of Fayette County. The

survey includes a column for amount spent outside of the Lexington area for the sole purpose of getting respondents to think in the mindset of keeping expenditures within and outside of the Lexington area separate. Therefore, the amount spent outside of the Lexington area does refer to the amount spent anywhere outside of the Lexington area, but that information will not be used for any purpose.

The survey was self-administered through a variety of different ways (mail out, over the telephone, on-site, and on-site entry) depending on the event and the information that was available on participants in the event. All efforts were taken to ensure that the response rate was kept at a reasonable level.

The surveys that were mailed out were accompanied with a cover letter explaining the survey's purpose, and a self-addressed stamped envelope to return the survey. An advantage of using the mail out survey was that respondents had already incurred all of the expenses with the event and were better able to estimate all of their expenses. However, the major disadvantage of this method is that the return rate of completed surveys tends to be rather low and this obstacle proved to be true in this study. Two follow-up letters were sent with a duplicate questionnaire and an additional self-addressed stamped envelope to those who did not respond to the initial letter. The first follow-up letter was sent to non-respondents after two weeks and the second follow-up letter was sent out in four weeks after the original mailing.

The surveys that were administered via mail represent a form of probability sampling. This method was a random sample of probability sampling, where random number tables were used to determine that every n^{th} person would be included in the

sample. All visitors to the event from outside of Fayette County that contact information was available for had an equal chance of being chosen.

The on-site approach that was used with two of the events was conducted by either asking visitors to the event the questions on the survey or by handing them a clipboard with a survey to complete themselves while waiting for it to be completed. Two disadvantages incurred with this approach were that some visitors did not seem to be in the mindset to carefully provide answers due to the event taking place and secondly, considering that some of the expenditures requested had not yet taken place, they had to be projected. The same disadvantages apply to the on-site entry approach that was used.

The on-site approach is an example of non-probability sampling. Even though probability sampling is preferred to non-probability sampling because it ensures more accurate representation, there are many events that do not allow or it is not feasible for probability sampling to occur. One such example is with the on-site approach. Considering that there is no gated entry and the events are conducted in an open perimeter, there are no alternatives to using a non-probability, convenience sample. The sample for a convenience sample is selected primarily based on accessibility or convenience. With the on-site approaches used in this study, it was attempted to introduce as much randomness as possible by approaching every n^{th} or 5th adult that was passed by within the event. However, it must be taken into consideration that some visitors to the event may never pass by the interviewer and others may pass by multiple times, so visitors' chances of being surveyed are not equal and not known. Therefore, considering that the results from the survey may be unrepresentative, this must be accepted as a limitation of the study.

The difference in the on-site entry approach versus the on-site approach is that with the entry approach, every 5th adult entering the event during a certain time period was asked to complete a survey and with the on-site approach, every 5th adult passed within the event was approached and asked to complete a survey. Events with a gated entry were able to use the on-site entry approach. However, events that did not have a gated entry were unable to stop visitors upon entry and instead had to result to approaching every 5th adult passed by the interviewer within the event in regards to completing the survey.

The on-site entry approach is an example of probability sampling. The form of probability sampling used in this example is systematic sampling, which is the most common form of probability sampling used in economic impact studies. This form can only be used at events that have a gated or controlled entry point and are conducted by selecting every nth adult entering or leaving the site.

The respondents that were contacted over the phone were given the purpose of the survey and then asked the questions included on the survey. A couple of advantages with this approach were that the response rates were fairly high and respondents had already incurred all of the expenses with the event and were better able to estimate all of their expenses. However, a disadvantage with this approach was that some of the telephone numbers listed were illegible, some numbers had been disconnected and the potential respondents could therefore not be reached, and some potential respondents did not have a listed contact telephone number.

The surveys that were administered over the telephone also represent a form of probability sampling. This method was a random sample of probability sampling, where

random number tables were used to determine that every n^{th} person would be included in the sample. All visitors to the event from outside of Fayette County that listed a contact telephone number had an equal chance of being chosen.

The total number of people in attendance at each of the events was provided by Lexington Parks and Recreation staff. Random license plate surveys were also conducted by Lexington Parks and Recreation staff to determine the percentage of out of county participants to the event, when data was not available to indicate the exact percentage of out of town participants.

Event Data Collection								
	Stockdog	**Rentals**	**10000**	**Ballet**	**Keeneland**	**Fish**	**Woodland**	**Senior**
Total People at Event	525	170	3940	9462	9727	229	883	951
Number non-F.C. Surveyed	61	7	39	18	23	28	34	26
Total People outside F.C.	228	17	1182	1137	3560	69	391	773
Percentage of People outside F.C.	43	10	30	12	37	30	44	81
Total Responses	71	7	49	53	33	29	35	26
Number Attempted	80	17	200	60	40	40	38	35
Number Surveyed	71	7	49	53	33	29	35	26
Response Rate	89	41	25	88	83	73	92	74
Number of non-F.C.*	6	0	6	1	8	0	1	0
Number of Casuals/Time-switchers	4	0	4	1	1	0	0	0
Number of Surveys Local	0	0	0	33	1	1	0	0
Collection Method	On-site	Mail	Mail	On-site Entry	On-site Entry	Phone	On-site	Phone

Estimated Economic Impact

Based on the data that are inputted to calculate direct spending, IMPLAN determines total spending or economic activity, employment, and created or additional wages. The survey results were used to estimate for all people who attended the event from outside of Fayette County. The actual results from the surveys were tabulated and then divided by the total number of people that were represented by the surveys (if one survey indicated that there were five people in their group i.e. the number of people they typically pay the bills for, the total food and beverage spending was divided by five to determine the per head spending). Then the numbers were tabulated and estimated for the total number of people in attendance at the event from outside of Fayette County. The following table lists the outcomes for the events based on the surveys.

IMPLAN Results									
	Stockdog	Rentals	10000	Ballet	Keeneland	Fish	Woodland	Senior	TOTAL
Direct Impact	78795	137998	83850	4548	326890	894	115462	185828	934265
Indirect Impact	14124	27602	15544	778	55253	160	20940	36168	170569
Induced Impact	21512	39974	23535	1024	99103	270	31640	52752	269810
Total Output	114430	205574	122929	6349	481246	1324	168042	274749	1374643
Employment Direct	0.8	3.1	0.5	0.1	7.8	0	2.8	3.9	19
Employment Indirect	0	0.3	0	0	0.7	0	0.3	0.5	1.8
Employment Induced	0	0.5	0	0	1.4	0	0.4	0.7	3
Total Employment	0.8	4	0.5	0.2	9.8	0	3.5	5	23.8
Emp. Comp. Earnings	25030	45108	28042	1022	124987	339	37115	62595	324238
Emp.Comp. Indirect	4604	9243	5072	259	17777	51	6836	11859	55701
Emp. Comp. Induced	7140	13269	7812	340	32896	89	10502	17510	89558
Total Earnings	36774	67619	40926	1621	175659	479	54454	91963	469495
Multiplier	1.45	1.49	1.47	1.4	1.47	1.48	1.46	1.48	1.4625

As can be seen from the table, the Keeneland Arts Fair brings in the largest total output at $481,246. It also has the highest total employment at 9.8 and generates total

employment compensation earnings of $175,659. The multiplier is pretty standard at 1.47. The second largest event in terms of economic generation that was surveyed is the Kentucky Senior Games with a total output of $274,749. The total employment is 5 and total employment compensation earnings of $91,963. The multiplier is also very standard at 1.48.

The smallest in terms of economic generation of the events is the Family Fun Fish Fest, which has a total output of $1,324, a creation of 0 employment, and therefore total employment compensation earnings of 0. This is to be expected, considering that the majority of participants to this event are from within the county or would have been in the country regardless of the event and therefore their expenditures are not included in the economic impact study.

It is interesting to consider that Ballet Under the Stars has the second smallest total output at $6,349 and was the second largest in terms of attendance with 9,462 participants and 1,137 being from outside of Fayette County. This shows that although the event had the third largest number of participants from outside of Fayette County, that the actual spending in the different categories from participants, as well as the amounts they spent factor into determining the extent of the total impact of the event.

Quality of Life

The previous analysis has primarily focused on the economic impact of Lexington Parks and Recreation, in terms of expenditures. However, it is important to consider that these estimates do not attempt to include any measure of the benefits provided to Fayette County residents that accrue from means other than through economic impact. There are a vast array of benefits derived from Lexington Parks and Recreation to citizens of Fayette County that increase their quality of life through ways other than economic means.

One example is that through services and events provided by Lexington Parks and Recreation, many youth are given activities to participate in that keep them from becoming involved in other activities that are not favorable or healthy, such as spending time on the streets or becoming involved in drugs. Activities and events provided by Lexington Parks and Recreation not only offer the opportunity to engage Fayette County residents, but they also offer the chance to educate them on areas that they may not have been informed. There are also quality of life benefits derived from such events and activities like having a good time, offering family centered activities, providing cultural activities, and many others that this report will not attempt to identify. The main point is that one does not want to disregard the fact that Lexington Parks and Recreation does have an impact on the quality of life for Fayette County residents and the objective of this report is not to argue that there is merely an economic impact.

Conclusion/Results

It is the conclusion of this study the Lexington Parks and Recreation does have an impact on money being brought into Fayette County from the outside, that this economic impact study was an effective tool to show the effect that Lexington Parks and Recreation has on the economy of Fayette County, and the impacts of Lexington Parks and Recreation on the economy of Fayette County are as follows:

- An average multiplier from events hosted by Lexington Parks and Recreation of 1.46
- An estimate of direct expenditures by out-of-town visitors to the eight events surveyed of $934,265
- An estimate of total new spending (direct, indirect and induced) by out-of-town visitors of $1,374,643
- An estimate of 23.8 new jobs created
- An estimate of new annual wages of $469,495

Once again, it is important to consider that this study did not attempt to identify additional benefits such as, quality of life enhancement and indirect benefits that are attributable to living near Lexington Parks and Recreation facilities and participating in such events and services. It is also crucial to remember that there are a vast array of other services and events provided by Lexington Parks and Recreation that were not factored into this study. Therefore, the numbers and economic impact reported in this study are by no means all inclusive of all of the benefits, nor economic impact that is attributable to Lexington Parks and Recreation.

REFERENCES

Archer, B.H. (1973). "The Impact of Domestic Tourism." Bangor: University of Wales Press.

Briassoulis, H. (1991). "Methodological Issues: Tourism Input-Output Analysis." *Annals of Tourism Research,* 18: 485-95.

Crompton, John L. (1999). "Measuring the Economic Impact of Visitors to Sports Tournaments and Special Events." Ashburn, VA: National Recreation and Park Association, Division of Professional Services.

Crompton, J.L., S. Lee and T. Shuster (2001). "A Guide for Undertaking Economic Impact Studies: The Springfest Festival." *Journal of Travel Research*, 40 (1): 79-87.

Crompton, J.L., and S.L. McKay (1994). "Measuring the Economic Impact of Festivals and Events: Some Myths, Misapplications and Ethical Dilemmas." *Festival Management and Event Tourism*, 2 (1): 33-43.

Curtis, G. (1993). Waterlogged *Texas Monthly September* 5:7.

Dunnavant, K. (1989). "The Impact of Economics." *Sports Inc.*, March 13, 31-33.

Dwyer, L., P. Forsyth and R. Spurr (2005). "Estimating the Impacts of Special Events on an Economy." *Journal of Travel Research*, 43 (1): 351-359.

Fridgin, J.D. (1991). "Dimensions of Tourism." East Lansing, MI, American Hotel and Motel Association.

Matheson, V. (2002). "Upon Further Review: An Examination of Sporting Event Economic Impact Studies." *The Sport Journal*, 5 (1): 2.

McHone, W. Warren and Brian Rungeling (2000). "Practical Issues in Measuring the Impact of a Cultural Tourist Event in a Major Tourist Destinations." *Journal of Travel Research*, 38:299-302.

Siegfried, J. and A. Zimbalist (2000). "The Economics of Sports Teams and Their Communities." *Journal of Economic Perspectives*, 14 (3): 95-114.

Steinback, S.R. (1999). "Regional Economic Impact Assessments of Recreational Fisheries: An Application of the IMPLAN Modeling System to Marine Party and Charter Boat Fishing in Maine." *North American Journal of Fisheries Management*, 19 (3): 724-36.

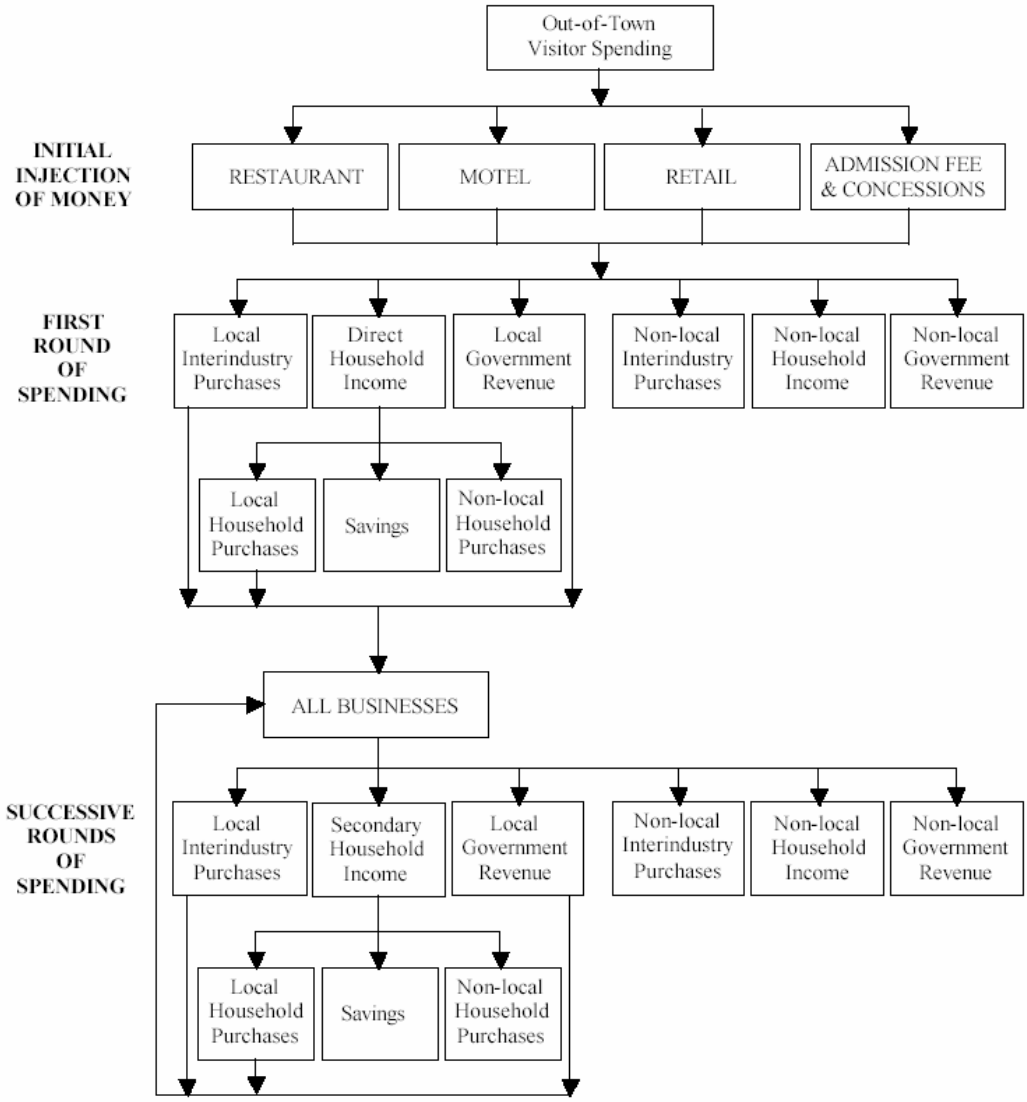
Tyrrell, T. and R. Johnston (2001). "A Framework for Assessing Direct Economic Impacts of Tourist Events: Distinguishing Origins, Destinations and Causes of Expenditures." *Journal of Travel Research*, 40 (1): 94-100.

Wagner, J.E. (1997). "Estimating the Economic Impacts of Tourism." *Annals of Tourism Research*, 24: 592-608.

Yuan, M.S., and S.M. Yuan (1996). "Sixteen versus None Expenditure Categories in Tourism Surveys: Is There a Difference?" *Journal of Travel Research*, 34: 59-63.

Appendixes

Franchised Baseball/Softball	**Total Generated**
Bluegrass Girls Fastpitch	$70,939.50
Dixie Youth Baseball	$44,204.13
Eastern Little League	$82,100.70
Gardenside Little League	$61,226.95
Kirklevington Senior Baseball	$48,394.40
Northern Babe Ruth	$31,507.30
Northern Cal Ripken	$97,935.60
Southeastern Babe Ruth	$58,015.85
Southeastern Cal Ripken	$202,475.93
South Lexington Babe Ruth	$45,972.52
South Lexington Youth Baseball	$140,643.95
Southwest Lexington Pony Baseball	$102,625.79
Total Generated	**$986,042.62**


Out-of-Town Visitor Spending
INITIAL INJECTION OF MONEY
RESTAURANT
MOTEL
RETAIL
ADMISSION FEE & CONCESSIONS
FIRST ROUND OF SPENDING
Local Interindustry Purchases
Direct Household Income
Local Government Revenue
Non-local Interindustry Purchases
Non-local Household Income
Non-local Government Revenue
Local Household Purchases
Savings
Non-local Household Purchases
ALL BUSINESSES
SUCCESSIVE ROUNDS OF SPENDING
Local Interindustry Purchases
Secondary Household Income
Local Government Revenue
Non-local Interindustry Purchases
Non-local Household Income
Non-local Government Revenue
Local Household Purchases
Savings
Non-local Household Purchases

<u>Local Zip Codes</u>

40502-40517
40522-40524
40526
40533
40536
40544
40546
40550
40555
40574-40596

Purpose: The purpose of the survey is to determine, by sampling methods, the economic value of the Bluegrass Classic Stockdog Trials to Fayette County. Selected visitors to the Stockdog Trials are being asked to complete a survey form which will provide enough information for us to be able to calculate the dollar impact on the community of all visitor spending during the festival.

Survey Completion Time: The survey is likely to take approximately 60 seconds to complete. This time estimate should be provided when approaching potential survey respondents.

Survey Audience: The target audience for this survey is people who are visiting the Stockdog Trials from outside Fayette County.

Locals: For the purpose of this survey only, locals are defined as people who have their primary residence in Fayette County (zip codes 40502-40517, 40522-40524, 40526, 40533, 40536, 40544, 40546, 40550, 40555, 40574-40596). Since people already living in the local economy aren't bringing in any new money from the outside, they are not a part of the target audience for this survey.

Selecting Someone to Approach: For this survey to be scientific it must be as random as possible. To facilitate randomness, a uniform method is used to determine who to approach to complete a survey. Count the flow of people approaching you and every 5th person, is the target person. However, only approach adults to complete the survey. If the 5th is not an adult, then the next adult encountered should be approached.

Opening Approach: When approaching someone to interview, move toward them and make eye contact. Smile and greet them with, "Hi, I'm with Lexington Parks and Recreation." Make sure you have made eye contact and then ask, "Could you please take a moment to help us by completing this important survey." Hold up the clip board with survey. "It will only take about 60 seconds to complete and will help us improve the Stockdog Trials.
If they agree, or if they hesitate, ask them "What's your zip code."
If they answer and it is not a local zip code, immediately hand them the clip board and ask them to complete the survey and return it to you.
If they answer a local zip code, say "Thanks, you've just completed the survey. Wasn't that easy." Then record the local "hit" on a separate counting sheet. Then restart your random 5th person again.

Lexington-Fayette Urban County Government
Division of Parks and Recreation
Melynda Milburn, Intern
469 Parkway Drive
Lexington, Kentucky 40504
(859) 288-2963
FAX (859) 288-2989

Hello, my name is Melynda Milburn and I am calling on behalf of the Lexington-Fayette Urban County Division of Parks and Recreation. We were wondering how you enjoyed your recent experience at the Kentucky Senior Games.

We are conducting an economic impact study and need your help. The survey is four questions and only takes about 60 seconds to complete. It is also completely confidential. Can you help me out?

Thank you for your time.

Lexington-Fayette Urban County Government
Division of Parks and Recreation
Bill Carman, Deputy Director

469 Parkway Drive
Lexington, Kentucky 40504
(859) 288-2900
FAX (859) 288-2989

July 5, 2005

Dear Bluegrass 10,000 Participant,

We are currently working with the Lexington-Fayette Urban County Division of Parks and Recreation to conduct an economic impact study of the various services that are provided to the community. One of those services is the Bluegrass 10,000. In order to conduct the economic impact study, I need to gather some information from a random sample of people who participated in the Bluegrass 10,000 in 2005.

Attached you will find a one page survey, that only takes a minute to complete. If you could kindly fill out the survey and return it in the postage paid envelope, we would greatly appreciate it. In order to be able to complete the economic impact study, we are asking that you complete and return the enclosed survey by Monday, July 18, 2005. This survey is completely confidential and your name will not be used in conjunction with any of the information that you provide. Thank you again for your help.

Sincerely,

Bill Carman
Deputy Director

Recreation Survey

1) What is the zip code at your home address? _____

2) Which of the following days will you be at this event? (Please circle **all** that apply)
Wednesday Thursday Friday Saturday Sunday

3) How many people (**including yourself**) are in your immediate group? (This is the number of people for whom you typically pay the bills. e.g., your family or close friends)

_____ people

4) To better understand the economic impact of the Bluegrass Classic Stockdog Trials, we are interested in finding out the approximate amount of money you and other visitors in your immediate group will spend, including travel to and from your home. We understand that this is a difficult question, but please do your best because your responses are very important to our efforts. **DURING THE COURSE OF YOUR VISIT, WHAT IS THE APPROXIMATE AMOUNT <u>YOUR IMMEDIATE GROUP</u> WILL SPEND IN EACH OF THE FOLLOWING CATEGORIES:**

TYPE OF EXPENDITURE	Amount spent in the Lexington area	Amount spent outside the Lexington area
A. Admission / Entry Fees	$_____	$_____
B. Food & Beverages (restaurants, concessions, etc.)	$_____	$_____
C. Lounges & Bars (cover charges, drinks, etc.)	$_____	$_____
D. Retail Shopping (clothing, souvenirs, gifts, etc.)	$_____	$_____
E. Lodging Expenses (hotel, motel, etc.)	$_____	$_____
F. Private Auto Expenses (gas, oil, repairs, parking fees, etc.)	$_____	$_____
G. Rental Car Expenses	$_____	$_____
H. Any Other Expenses *Please identify:* _____	$_____	$_____

5) Would you have come to the Lexington area <u>at this time</u> even if this event had not been held?
Yes_____ No_____

5a. If "Yes", did you stay longer in the Lexington area than you would have done if this event had not been held?
Yes_____ No_____

b. If "Yes" (<u>in 5a</u>), how much longer? _____day