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The Economic Significance Study on the Volleyball Hall of Fame and Its Charitable Impressions

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**The Economic Significance Study on the Volleyball Hall of
Fame and Its Charitable Impressions**

A Thesis Presented

By

Feng Xu

Submitted to the Graduate School of the
University of Massachusetts Amherst in partial fulfillment
of the requirements for the degree of

MASTER OF SCIENCE

May 2012

Hospitality and Tourism Management

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Hospitality and Tourism Management

DEDICATION

To my parents

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I would like to express my sincere appreciation to many people for the completion of the thesis. First and foremost, I should thank my thesis committee chair, Professor Rodney Warnick for his guidance throughout the research progress. He offered me many great advices and recommendations on the thesis, and spent his precious time in carefully reviewing my work for many rounds. His wisdom helped me solve many problems and his encouragement motivated me to keep moving forward. I would also like to offer my gratitude to my two thesis committee members, Professor Linda Lowry and Professor Albert Assaf for their insightful suggestions and comments. I also should thank the Volleyball Hall of Fame for providing essential assistance in the research process.

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ABSTRACT

THE ECONOMIC SIGNIFICANCE STUDY ON THE VOLLEYBALL HALL OF FAME AND ITS CHARITABLE IMPRESSIONS

MAY 2012

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Events and attractions are an important format of tourism, and it can attract visitors to areas where they are hosted. These events and attractions can have economic impact and significance in the local areas, since the visitors will spend money during their travel in the local areas, which may greatly benefit the local communities. The measure and estimate of the economic impact and significance becomes a big concern for the organizers of the events and attractions and the local governments, to justify the host of the events and attractions and gain the residents' support, as well as for the local residents, to evaluate whether they should back hosting the events and attractions. The Volleyball Hall of Fame is a kind of heritage attraction with the exhibitions of the history of volleyball and its legendary athletes, coaches, officials and leaders. It had the concentrated set of events during the month of October 2009, which attracted a great number of visitors, including leisure travelers, volleyball fans, athletic teams, etc. The Volleyball Hall of Fame also involved in a few non-profit causes and combined its events with charitable impressions. The purpose of this study is to assess the economic significance and impact of the Volleyball Hall of

Fame and its related events during a selected time period of October 2009, and furthermore it examined its charitable impressions.

There was an online survey conducted, receiving 380 usable responses, and among them, 102 cases indicated that they visited the Volleyball Hall of Fame and/or attended its related events in October 2009. The study followed the basic economic impact and significance assessment process proposed by Crompton and Stynes. The locals, casuals and time-switchers were identified prior to the economic impact assessment. The study assessed the economic contributions to the local community in two dimensions: (1) the economic significance assessment including all the visitors/attendees, and (2) the typical economic impact assessment, which excluded the locals, casuals and time-switchers, and applied a conservative multiplier to determine the real impact of visitors and the “new money” they bring into the local economy. The expenditures were divided into eleven categories, and then the overall economic significance, that is, the direct economic expenditures by all the visitors/attendees were examined. With the appropriate adjustments and exclusion of the locals, the casuals, and the time-switchers, the real visitors or tourists who bring “new money” into the economy were identified and their relative economic expenditures were assessed by the eleven categories. These figures were further adjusted by the application of a conservative multiplier to provide an estimate of the potential economic impact when real visitors came into the local economy and spent “new money” in the local areas. Group sizes and the lengths of the stay were also carefully examined to determine how they may also relate to the economic

significance and impact assessment. Additionally the study assessed the charitable impressions of the events by the visitors through a set of Likert scaled statements to measure and to evaluate visitors' awareness and level of support of the charitable participation of the Volleyball Hall of Fame, as well as whether the charitable impressions would promote the visitors' willingness to donate to the Volleyball Hall of Fame.

The study found that, although the Volleyball Hall of Fame is a small-scale heritage attraction with a number of concentrated events occurring in the month of October 2009, it did generate an economic contribution to the local community both in economic significance terms and overall economic impact assessment of new visitors to the region. Furthermore visitors had strong awareness of, and supported the Volleyball Hall of Fame's participation in the non-profit charitable events, and the impressions of participating in the non-profit charitable events were identified as possible means to promote visitors' willingness to donate to the Volleyball Hall of Fame.

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CHAPTER I

INTRODUCTION

Study Background

Tourism is one of the fastest growing sectors of the world economy (UNWTO, 2011). Tourism events and attractions today play an ever increasingly important role in bringing tourists to an area and in the development of any tourism-based economy. It is just not a destination that is needed to attract tourists, but there must be events and special attractions to bring in outside visitors to an area.

Furthermore, the ideas that emerge to travel to somewhere are usually motivated by the activities associated with attractions and events that take place in these destinations that grab the attention of the travelers (Crompton, 2010). Events, which may include festivals, sports tournaments, exhibitions, musical shows, etc., are an important format of the “programming” of attractions or the destinations to be visited. Tourists are willing to go to events in order to meet their needs and to further their involvement in highly selected activities provided at the event venues. The motivation and purpose of visiting attractions or attending events can vary, like fulfilling their interests and desires, relaxing from the work, having fun and enjoyment with families or friends, exploring new cultures, seeking adventure, or meeting new people (Crompton & McKay, 1997). In recent years, events have been more and more important to the tourism industry, especially as the number of attractions and special venues in regional destinations have increased in both size and

number (Jackson, Houghton, Russell, & Triandos, 2005). More cities or towns believe that events work as promising dimensions to attract people to destinations or to their areas, and thus an increased variety of places are organizing events or participating in event productions worldwide. Some events are even hosted by nations to attract the attention of visitors globally, such as Shanghai Expo, FIFA World Cup, the Olympics, etc. A successful event is beneficial to the local areas and economy by enhancing the areas' images, building business networking, increasing residents' morale, promoting the civic pride, and bringing economic returns to the local community when visitors come to the areas to participate in special events or activities and spend for local services such as accommodations, food and transportation (Dwyer, Forsyth, & Spurr, 2005; Gursoy, Kim, & Uysal, 2004; Lee & Taylor, 2005). Among these benefits, the local community benefits the most when it receives benefits by non-local money coming into the areas, and this is called the *economic impact*. This type of economic development is considered to be one of the most important issues in most communities by both the governments and the residents, because it can increase the tax revenue and bring in new money to the local economy supporting jobs and businesses. When this occurs, money coming into the local economy, and it also has a typical multiplier effect by providing rippled monetary effects (additional purchases and re-purchases of supplies, materials and goods, etc.), as well as providing income to those who reside in the areas, and also improving the local residents' quality of life (Crompton & Lee, 2000).

Concepts of Economic Impact and Significance

The measurement of the economic impact of events has recently received increased attention. *Economic impact* can be defined as “the net economic change in the incomes of the local residents and the jobs of the local community that results from the expenditures attributed to tourists associated with tourist policy, events, facilities or destinations” (Crompton, 2006; Tyrrell & Johnston, 2006). When an area hosts an event, it will usually assess the economic impact to the local community. The local government may want to know how much tax revenue increases due to the event, while the local residents may be interested in whether they could gain more income, or whether there might be more job opportunities, to promote their quality of life. Assessing economic impact is typically a large set of tasks that account for, measure and consider the direct, indirect and induced effects (Stynes, 1997). Another emerging concept is the measurement of the *economic significance*. Comparing with the economic impact, the economic significance typically measures the direct expenditures of the all types of visitors and tourists to events, and it can provide a general overview of the volume and magnitude of various expenditures for events from a simple, but straightforward perspective. It also provides additional marketing insights about the different types of visitors, attendees or tourists.

Most events can have an economic impact and significance on a variety of sectors of the local economy (Lee & Taylor, 2005). For example, tourism events may generate more economic activities for restaurants, transportation services and lodging as more people visit the areas and utilize these services. A positive and large

economic impact and significance may also justify the initial investments by the local community, and provide the evidence for the local government entities to obtain the residents' support for the local investments in infrastructure and services (Lee & Taylor, 2005). It is even more crucial for a periodic event, since the assessment of economic impact and significance is a reference to hosting the special scheduled events, and promoting confidence of the local community and residents to support the needs of a large influx of visitors to the host areas. The measurement of the economic impact and significance is needed to both document and detail the viability and investments in hosting of such events.

Thus, the economic impact study (EIS) becomes an essential measurement tool and process to undertake. An economic impact study is used to assess the economic returns that residents receive on their investments (Crompton, Lee, & Shuster, 2001), and it can help local residents, visitors, sponsors, organizers and governments make appropriate decisions (Frechtling, 2006). Some pioneers have developed the theories of the economic impact study in the previous literature, as well as some models to assess the economic impact and significance. However, some arguments still exist about different methods and measurements for accurately assessing the economic impact and significance, and achieving reliable results (Dwyer, Forsyth, & Spurr, 2004; Crompton, Lee, & Shuster, 2001; Tyrrell & Johnston, 2006; Dwyer, Forsyth, & Spurr, 2006). The basic economic impact study when appropriately designed and implemented can also contribute additional market

information about visitor behavior that can and should be utilized to improve events and attractions.

The Volleyball Hall of Fame and Sports Tourism

Sports attractions and events, including sports championships and leagues, sports exhibitions, halls of fame, etc., have developed rapidly throughout the world. Many places, organizers and sponsors are willing to build sports attractions or host sports events to attract tourists and benefit the local economy. As one of the most popular sports in the world, as well as in the United States, volleyball is receiving the greater attention from a huge fan base, and a larger number of people involved in this competitive sport. This is a sport that requires great physical concentration and technical performance in a fast moving athletic activity and highly involving from both participants and fans who experience the game (FIVB, 2011). There were 10.6 million people in the United States participating in the sport of volleyball in 2010, and 4.2 million of them were considered as frequent participants, which refer to playing volleyball more than 20 days per year (SBRNet, 2011). While the activity has declined in overall interest, there used to be 20.5 million participants in 1993 of which 7.3 million were frequent participants. However it still appears to be a highly engaging and interesting activity for a large percentage of the population especially among young adults. At the NCAA collegiate level, the number of male teams has increased from 59 in 1993 to 90 in 2010 and the number of female teams has increased from 784 in 1993 to 1,025 in 2010. Overall, the number of young adult men

and women competing in volleyball at either the intercollegiate or interscholastic level has increased from 335.7 thousand in 1993 to 454.5 thousand in 2010.

The Volleyball Hall of Fame, located in Holyoke, Massachusetts is the kind of attraction with associated special and unique events that can contribute to the local economy. Like its sister hall of fame – the Basketball Hall of Fame, located in Springfield, Massachusetts; it has the potential to attract visitors through both its collection of artifacts and memorabilia, as well as the staging of special events associated with the importance and significance of the game to the local areas.

The game of volleyball was invented in 1895 by William G. Morgan in Holyoke, Massachusetts. In 1971, in order to promote the birthplace of volleyball, an ad hoc committee was established by the Greater Holyoke Chamber of Commerce, to prepare for the founding and construction of a unique place to house the Volleyball Hall of Fame. Seven years later, Holyoke Volleyball Hall of Fame, Inc. was established by the committee as a non-profit corporation for a living memorial to the history of the game of volleyball and its legendary athletes, coaches, officials and leaders. It was able to use the very successful Basketball Hall of Fame as a model. The Volleyball Hall of Fame finally opened publicly in 1987 in a local building, and moved to the Holyoke Heritage Park near the Children's Museum ten years later (VBHF, 2011). The Volleyball Hall of Fame is primarily organized by the Holyoke Volleyball Hall of Fame, Inc., and its purpose is to create events commemorating the game of volleyball and its historic legendary athletes, coaches, officials and leaders, and to develop partnerships with many sponsors. Spalding is their major corporate

sponsor, while Holyoke city council, USA Volleyball, and some regional volleyball associations are their organizational sponsors and supporters. The Volleyball Hall of Fame inducts the athletes, coaches, officials and leaders, who greatly contribute to the sport of volleyball into the hall every year through an induction ceremony held locally, and the history of volleyball and the honorees are exhibited in the hall for people to visit. The Volleyball Hall of Fame also organizes special events every year to attract tourists, to gain funds to support the Volleyball Hall of Fame activities, to highlight special charitable events and causes, and further through these events to contribute to the local tourism industry and economy.

The development and preservation of the game of volleyball and its related promotional activities and events do promote tourism. This is in a sense a dimension of *sports tourism* where visitors travel and visit areas through their interests in sports activities, events and sports history. This form of tourism has grown in recent years and more travel teams have been involved and more attractions are developed for the interests in sports, sports competition, sports viewing and appreciation. This type of tourism is suitable during the recession in recent years, since it usually does not cost so much when compared with some other types of tourism and cuts across multiple generations for enjoyment, including participants, organizers and fans who are involved with the game. However, these types of trips may also have substantial economic impact and significance even though they are of shorter duration and travel distance, such as halls of fame visits, local sports tournaments, and associated

memorable events, etc. This is because they travel in larger groups of individuals together to participate and experience the events.

Study Purpose and Significance

Despite its fast development as a segment of sports tourism, the visitation to halls of fame or events associated with such places are rarely studied in academic journals even though there is a targeted market and highly involved sports enthusiasts who follow and have invested in the game. The market analysis and the evaluation of the economic impact and significance of such places as the Volleyball Hall of Fame is even less studied even though considerable efforts go into preserving the history and legends of these games, its athletes, coaches, officials and leaders and attracting visitors to these areas for special events.

The purpose of the study is to assess the economic significance and a rudimentary economic impact measure of the Volleyball Hall of Fame and its related events to the regional community over a selected time period. The study attempts to measure the direct expenditures or “economic significance” of all the visitors and attendees to the Volleyball Hall of Fame and its related events within the local areas and with appropriate adjustments to estimate an “economic impact” of a series of events over the time period of October 2009 through the identification of “visitors” who bring new money into the economy; to examine the length of visitors’ stay in the regions; and to determine the basic market profile of the visitors including the usual group size and demographics. An additional dimension to this study is to further

analyze if the potential donations to the Volleyball Hall of Fame and its events are further enhanced by the impressions of charitable events held in association the event participation (e.g., DigPink). The study applied the basic economic impact and significance measurements to a heritage attraction and its related events, which were rarely focused on in previous studies. The study also has practical significance as it has attempted to provide the Volleyball Hall of Fame organizer, sponsors, governments and local residents with the preliminary assessment or benchmarks of the economic returns from the attractions and events, and helps them to evaluate and promote the value of the economic impact and significance of the Volleyball Hall of Fame and its related events on the local economy.

CHAPTER II

LITERATURE REVIEW

The concept of the economic impact study (EIS) has been developing for decades, and scholars have contributed to building and refining the framework of the theory by further developing the methods and measurements, and some specific cases had been studied. Heritage attractions, such as halls of fame, are increasingly popular in recent years, and however only a few studies were focused on the measurement of these kinds of tourism.

Theory of Economic Impact Study

There are a number of scholars who have examined the measure of economic impact over the years (Crompton, Lee, & Shuster, 2001; Dwyer, Forsyth, & Spurr, 2006; Frechtling, 1994; Jackson, Houghton, Russell, & Triandos, 2005; Smeral, 2006; Stynes, 1997). However, the scholar who has dedicated considerable efforts into the evaluation of such techniques is John Crompton of Texas A&M University, who is both a critic and innovator in reviewing and conducting pilot studies on the various aspects of the economic impact analysis. Crompton, et al. (2001) have systematically worked to improve the theory of the economic impact assessment to develop common frameworks for undertaking economic impact studies and to provide techniques for improved measurement through a variety of targeted cases. Over the course of nearly two decades, Crompton and associated scholars working with him have further

illustrated the conceptual rationales for undertaking economic impact studies, measuring economic impact and significance and expounded on four basic principles of economic impact studies, which need to be carefully considered when any such study is undertaken. These basic principles would include: “(1) the exclusion of local residents, (2) the exclusion of ‘time-switchers’ and ‘casuals’, (3) the use of income rather than sales measures, and (4) the careful interpretation of employment measures” (Crompton & Lee, 2000; Crompton, Lee, & Shuster, 2001). The data should be collected in very specific terms and techniques, and how the samples are selected and how the data is obtained from them is also very crucial in the measurement and the assessment of the economic impact and significance of any events, attractions or destinations.

For example, Crompton, et al.’s (2001) study proposed a proper solution by a survey questionnaire about a particular event, the Springfest Event in Ocean City, Maryland, and demonstrated the practical and highly refined approach to properly measure the economic impact. This study provided a standard framework and process for scholars and professionals to conduct economic impact studies. Many economic impact studies afterwards were based on this operational strategy for data collection and analysis.

Stynes (1997) presented a systematical introduction of the economic impact concepts and methods. The study included ten aspects of economic impact studies that need to be carefully considered. These include:

1. The general idea of economic impact studies.

2. The questions that economic impact studies answer.
3. The economic impact that tourism activity has on the local economy.
4. The multiplier effects.
5. The measurement of tourism economic impact.
6. The typical approaches for an economic impact study.
7. Some examples of economic impact studies approaches in tourism.
8. The steps for conducting tourism economic impact studies.
9. The possible questions when assessing or interpreting tourism economic impact studies.
10. The cost of economic impact studies.

In his studies that followed, Stynes (1998) applied the methods that were presented in the EIS framework to provide specific examples. His research work presented three cases using different approaches to estimate the economic impact of tourism. The major differences between the approaches were the methods of how to estimate the economic impact of visitor spending. They can be based on (1) expert judgment, (2) secondary data and published multipliers, or (3) visitor surveys and input-output models. Each of the three cases in the study represented one of the approaches respectively.

The economic impact studies usually start with estimating visitor attendance and expenditures. Critical to this approach is the visitor estimates and how the changes in visitor expenditures can be converted to the changes in the local income and employment by applying it to a projection model. The process for estimating and

measuring the visitor expenditures becomes very crucial in economic impact studies (Stynes, 1999).

In the early years, most economic impact studies were abused to reach a political purpose instead of disclosing the economic truth (Crompton, 2006). Organizing events needs substantial investments and many of these funds are made possible through local residents' tax structure and processes. The residents expect they will receive substantial returns from the investments, otherwise they are not willing to increase or support the tax rates imposed for these events, venues or attractions. Consequently estimates are derived that indicate a substantial positive economic impact to justify the hosting of the events or venues with the investments in order to obtain the tax support from residents to fund the event operations and construction of support facilities. In this context, Crompton (1995; 2006) found considerable biases in reaching the EIS numbers and in many cases these numbers were inflated to justify substantial taxpayers' investments. The numbers were largely based on the incorrect methods and techniques and inaccurate calculations in economic impact studies. The major practices that result in such inaccuracy are shown below (Crompton, 1995; Crompton, 2006). These factors include:

1. Misuse of multipliers.
2. Using incremental estimators instead of multipliers.
3. Inappropriate aggregation of data.
4. Inaccurately defining the study area.
5. Inaccurately counting the number of visitors.

6. Including local residents.
7. Including time-switchers and casuals.
8. Using fudged or inappropriate local multipliers.
9. Claiming total instead of marginal economic benefits.
10. Confusing turnover and multiplier estimates.
11. Ignoring the costs, such as displacement costs, opportunity costs, costs borne by the local community, etc.
12. Focusing on benefits only.
13. Capturing the consumer surplus.

Models and Techniques of Economic Impact Studies

In an economic impact study, it is very important to select a proper method or technique to measure the economic impact. There are several models and techniques developed by the scholars in their studies (Dwyer, Forsyth, & Spurr, 2006; Crompton, Lee, & Shuster, 2001; Smeral, 2006). Some of them are widely used, while others are quite new and have had limited use to date.

Input-Output Model

The Input-Output Model was developed by Leontief (1936), and has become the most widely used technique in economic impact studies. It is considered as the standard technique to estimate the economic impact of tourism. It is applied in most of the journal articles about economic impact studies published (Crompton, Lee, &

Shuster, 2001; Dwyer, Forsyth, & Spurr, 2004). An Input-Output Model is a mathematic technique that illustrates the flows of money and the linkages between industries in a study area (Stynes, 1997). To apply an Input-Output Model, it usually begins with estimating the total dollars injected in the local region due to the tourism events, including visitor expenditures, sponsors' fund, etc. (Dwyer, Forsyth, & Spurr, 2006), and the flow of the injected money is then traced as it would flow through the local economy. An Input-Output Model uses the Input-Output tables and applies the appropriate multipliers to convert the input into output in every sector, as well as the sales, income and employment. The spending in tourism events may have direct, indirect and induced effects, and contribute to the entire local economy (Stynes, 1997; Frechtling & Horvath, 1999).

However, some scholars pointed out that the Input-Output Model has serious limitations. To apply an Input-Output Model, the following assumptions should be satisfied (Dwyer, Forsyth, & Spurr, 2005). These assumptions include:

1. There must be a free supply of resources and there is no resource constraint.
2. The input and output is constantly proportional.
3. The model ignores the special price effects and financial effects.
4. The model ignores the change of the behavior of government budget sector.

Because of the unrealistic assumptions above, the Input-Output Model is also incomplete and inadequate, and some scholars believe the use of this technique will lead to incorrect results (Dwyer, Forsyth, & Spurr, 2004). Furthermore, these models tend to be used in the measurement of the economic impact of larger, more permanent

destinations and attractions when tourism events may be more limited in time, space and permanent facilities. Economic impact studies need to estimate the net impact to an economy resulting from tourism, and however the Input-Output Model does not capture the full effects. It only highlights the positive impacts of the tourism events, while it usually ignores the existing negative ones (Dwyer, Forsyth, & Spurr, 2006; Dwyer, Forsyth, & Spurr, 2004). These negative impacts can sometimes be huge, and it will lead to overestimating the final results (Dwyer, Forsyth, & Spurr, 2006). This technique has inherent biases as well (Dwyer, Forsyth, & Spurr, 2005), and the results from the Input-Output model are sometimes used for political reasons (Dwyer, Forsyth, & Spurr, 2004).

Computable General Equilibrium

Due to the limitations of the Input-Output Model, scholars try to find some other techniques that could describe the economic impact better. Computable General Equilibrium (CGE) is considered as one of the more proper methods that can assess full economic impact of tourism, reaching more accurate results (Dwyer, Forsyth, & Spurr, 2006). Actually, the Input-Output framework is embedded in the new CGE model, and however the new CGE model improves the older method by considering the economy as a whole, eliminating some of the unrealistic assumptions and allowing for some distinguished effects (Dwyer, Forsyth, & Spurr, 2006).

1. The CGE model has other nonindustrial sectors and the links between them are suspected to improve the measurement.

2. The exports, imports and international capital flows are considered in the CGE model and it captures the foreign exchange effects, allowing for the fluctuation of the exchange rate.
3. The CGE model considers the economic impact to the areas other than the host region.
4. The CGE model captures the effects on the tax revenue.
5. The CGE model incorporates the subsidies by governments provided to events.
6. The dollars from inside the region, such as the expenditures of the local residents, are considered in the CGE model.
7. The CGE model integrates the local economy into the national economy.
8. The CGE technique may model appropriate labor markets, and assess their influence to the economy.
9. During some events, the local residents may leave home to avoid the crowded visitors, and the CGE model may consider some of such displacement effects.
10. The resource constraints exist in the CGE model.

All these aspects help the CGE model illustrate the effects of the tourism activity on the entire economy and build the integrated system (Dwyer, Forsyth, & Spurr, 2004; Dwyer, Forsyth, & Spurr, 2006). However the CGE model also has its own drawbacks (Dwyer, Forsyth, & Spurr, 2006). These limitations include:

1. The CGE model needs too many assumptions, and it's too complex.
2. The CGE model has somewhat a lack of transparency, and the outsiders can hardly understand it.

3. It costs too much money and needs a substantial amount of money to conduct a CGE fully integrated study.

Tourism Satellite Account

Tourism Satellite Account (TSA) is a new statistical method to assess the economic impact of tourism, which is considered as a strategic program for the World Tourism Organization (UNWTO, 2011). As a new technique, TSA is developing fast throughout the world in recent years (Libreros, Massieu, & Meis, 2006; Statistic and Tourism Satellite Account Program, 2010). At the national level, there were sixty countries by early 2010 that had already set up a TSA or are recently developing one, and more countries are willing to have a TSA in the coming years (Statistic and Tourism Satellite Account Program, 2010). The purpose of a TSA is “to analyze in detail all the aspects of demand for goods and services associated with the activity of visitors; to observe the operational interface with the supply of such goods and services within the economy; and to describe how this supply interacts with other economic activities” (United Nation, Department of Economic and Social Affairs, 2008).

The term *satellite* refers to an extension of national accounting systems (Smeral, 2006; Bryan, Jones, & Munday, 2006). TSA estimates the economic impact of tourism from a new perspective. It focuses on “a regular stream of financial data that can be compared through different time and economic activities at regional, national and international levels” (Smeral, 2006), and it is used to measure the size of

tourism economy and its contribution to gross domestic product (GDP). The contribution of the tourism includes both direct effects and indirect effects which generate the value added, so the final TSA results should usually be adjusted due to the indirect effects and intermediate consumption (Smeral, 2006).

Methods of Assessing Expenditures

As has been reviewed in the previous section, a number of models and techniques of assessing economic impact have been developed. To apply these models and techniques, it is usually essential to estimate the expenditures in an event or within a region first. So an economic impact study must properly estimate the expenditures and this is a key requirement, and the expenditures estimation is one of the primary components in an economic impact study (Wilton & Nickerson, 2006). The expenditures in economic impact studies can usually include two forms: the expenditures by visitors (e.g., transportation, accommodation, food, etc.), and the expenditures by governments and organizers (e.g., construction, operation, development, etc.). These two types of expenditures can usually be obtained from different ways: the former ones are collected from visitor surveys, while the latter ones are acquired from the governments or organizers' records (Stynes, 1999).

Between these two kinds of expenditures, the expenditures by visitors seem more difficult to acquire, and need more complex techniques and larger investments in detailed measurement techniques. Frechtling (2006) reviewed and examined a

number of models and methods to assess visitor expenditures. The study identified three contexts for estimating visitor expenditures:

1. Occasion: visitor expenditures in a time period or at a specific event.
2. Venue: visitor expenditures in a specific study area.
3. Time frame: visitor expenditures in the past or in the future.

This study as well as some other studies further summarized and classified the methods of estimating visitor expenditures into following groups (Frechtling, 2006; Frechtling, 1994; UNWTO, 2000):

1. The data that can be publicly accessed.
2. Surveys, from family, visitors and tourism firms and organizations.
3. The data from a central bank or funds collection agency.
4. Expenditure models.
 - a) Expenditure ratio model.
 - b) Cost factor model.
 - c) Seasonal difference model.
 - d) Supply side judgmental model.
5. Direct observation.

These proposed methods are based on the three principles, that is, relevance, coverage and accuracy. Properly choosing one or some of the methods above will greatly help to create the most valid measures to estimate the visitor expenditures (Frechtling, 2006).

Measurement of Economic Impact Studies

Although there are several techniques to estimate the visitor expenditures as being listed in the previous section, among these techniques, visitor surveys are usually widely used in most of economic impact studies to collect data, especially in those studies using the Input-Output Models. Crompton, et al. (2001) proposed a standard instrument to estimate the visitor expenditures.

According to the rationale and basic principles of economic impact studies, Crompton, et al. (2001) collect data for economic impact studies in the following aspects (See Table 1 here).

Table 1 *The Questions in EIS Surveys and Its Purposes*

Questions	Purpose
The visitors' zip code of the residence	Exclude the local visitors
The particular date(s) that visitors stay in a region	Compare the economic impact in different time
The number of people in the travel group	Estimate the group size
The estimated amount of money spent on the categories, such as food, accommodations, transportation, admission, etc.	Estimate the visitor expenditures
Whether visitors would visit an area without events	Exclude the casuals
Whether visitors would go to an area in several months if not attending events	Exclude the time-switchers

Economic Impact Studies on Particular Events

While tourism events are increasing in number, scope and variety, the event organizers, sponsors, government agencies and local communities are paying more attention to the economic returns of tourism events than before. Not only did scholars conduct research on the theories and models of the economic impact study, but they

have also analyzed the economic impact of some particular events. The events that were studied can vary from small ones in regional areas, such as Scottish Highland Games in North Carolina (Chhabra, Sills, & Cubbage, 2003), to large international events attracting global markets, like the FIFA World Cup (Lee & Taylor, 2005). These studies also applied a variety of techniques and models, most of which were illustrated in the previous review of literature sections. Table 2 contains a sampling of some of the EIS studies published in recent years.

Table 2 Some Published Economic Impact Studies

Year	Author(s)	Study Title	Journal	Technique
2003	Gelan	Local economic impacts: The British Open	<i>Annals of Tourism Research</i>	Input-Output Model
2005	Lee, Taylor	Critical reflections on the economic impact assessment of a mega-event: The case of 2002 FIFA World Cup	<i>Tourism Management</i>	Input-Output Model
2006	Dwyer, Forsyth, Spurr	Assessing the economic impacts of events: A computable general equilibrium approach	<i>Journal of Travel Research</i>	CGE
2008	Ahlert	Estimating the economic impact of an increase in inbound tourism on the German economy using TSA results	<i>Journal of Travel Research</i>	TSA
2011	Li, Blake, Cooper	Modeling the economic impact of international tourism on the Chinese economy: A CGE analysis of the Beijing 2008 Olympics	<i>Tourism Economics</i>	CGE

Literature on Halls of Fame

There have been few academic studies on “halls of fame” in the previously published academic literature, and virtually no research on the Volleyball Hall of Fame; however, the number of sports tourism and related research in this area is

growing. Most of the large-scale studies were conducted on big events related to sport tourism and focus on the activities such as the Olympics, the FIFA World Cup and various championship sport series (Li, Blake, & Cooper, 2011; Lee & Taylor, 2005; Gelan, 2003). Researchers have defined some of the different types of sports tourists associated with special events, and there are three types of tourists who participate in sports events: active participants, event spectators and celebratory tourists (Turco, Riley, & Swart, 2002). Most of the previous studies of sports tourism focused mainly on the active participants and event spectators, while the latter one was usually ignored by scholars and researchers (Turco, 2004). In recent years, halls of fame are not only the exhibition of sports culture and legendary athletes, but they are also operated as tourism attractions, and hold and develop events associated with the legacy of the sport and its memories. These events also include pre- and post-season tournaments contributing directly to the halls of fame organization and to the local community (Ramshaw, 2010). There are several major halls of fame in the United States, and the attendance of these halls of fame is remarkable. While they are attracting an increasing number of visitors, it is also becoming important to analyze this kind of sports attractions and events stimulating the visitation, and to assess their economic effects.

Fyfe (2008) examined the Baseball Hall of Fame in its birthplace, Cooperstown, New York. The study assessed how the small town struggled to maintain its cultural heritage while developing the sports tourism economy. It also examined the long-term social and economic changes to the local community due to

the growth of sports tourism. The study found that although the town avoided some commercial businesses, such as building shopping malls and restaurants that would influence the environment and cultural values of the town, the sport and heritage of baseball did have an a valuable impact and theme, while traffic congestion existed, the number of visitors increased, and retail expansion still occurred and was unavoidable. The town's Main Street was no longer a shopping district for local residents, but it had become a street that was full of baseball-related shops and the community had embraced the significance of the historic value of baseball.

The study conducted by Ramshaw (2010) described different exhibition mechanisms used in halls of fame, museums and other heritage tourism attractions. They not only simply display the sports heritage and legendary athletes, but they also served as places for business, entertainment and education with specific sports related themes. They became increasingly interactive, and thus attracted more visitors and achieved the political, economic and social purposes that used sports as a platform for such activities and venues. There was also a case study conducted in this research, which was called the Olympic Hall of Fame and Museum at Canada Olympic Park in Calgary, Alberta, Canada, to illustrate these propositions.

Frost (2005) raised questions about sports heritage attractions, including: (1) whether the sports heritage attractions should be managed to make profit or should they serve to just be a normal museum for exhibition; (2) how these places should balance the commerce and heritage of a sports attraction; and (3) where such attractions should be located for maximum benefit. The study examined these

questions via a case study of the Australian Football League Hall of Fame, which was considered a failure.

Literature on Charitable Tourism

In the tourism industry, many tourism organizations also developed sport events or attractions associated with a variety of different charities. The charitable impressions of the events and attractions are usually considered not only to enhance the organizations' images and promote the tourists' interests in visiting, but also to fulfill their social responsibilities (Turner, Miller, & Gilbert, 2001; Eckardt, Goodwin, & McCombes, 2009).

Turner, et al. (2001) assessed the role and involvement of U.K. charities and the tourism industry. They examined three different levels of the charities' involvement in tourism and further presented their implications respectively. The three levels were: (1) charities operating outside the tourism industry, (2) charities operating inside the tourism industry, and (3) charities operating above the tourism industry.

Eckardt, et al. (2009) presented a report that systematically introduced the "travel philanthropy". They defined the term of *travel philanthropy* as "the donating of money, in-kind resources (office equipment, flights, accommodation) or time (mentoring or volunteering), occasioned by or facilitated by travel." It also discussed the questions of: (1) the reason for engaging in travel philanthropy, (2) the specialty about travel philanthropy, (3) the scale of travel philanthropy, and (4) the challenges

of travel philanthropy. Furthermore, the report presented a number of case studies to illustrate a variety of activities associated with worldwide travel philanthropy. This report mainly focused on the fundraising aspect in travel philanthropy.

As sports events are increasingly associated with charities, many companies are willing to sponsor these charitable sport events. Filo, et al. (2010) assessed the factors that affect the event participants' perceptions of the event sponsors and the relationships among the factors. The study found that (1) the recreation and the charity motives contribute to the event attachment, (2) the charity motives and the event attachment contribute to the sponsor image, (3) the sponsor image and the event attachment increase the intent for purchasing sponsors' products, and (4) the event attachment contributes to the intent for the future participation, whereas the sponsor image does not appear to contribute to the future participation alone.

CHAPTER III

METHODOLOGY

The Volleyball Hall of Fame in Holyoke, Massachusetts has been developing and moving through various development phases for more than 30 years. As a heritage attraction, it not only exhibits the history of volleyball and the hall of fame's inductees, but it also organizes several events every year as well. The exhibition hall and these events have now evolved to the extent that they bring an economic contribution to the local areas. However, there has been no study assessing the estimate or value of the economic impact of the Volleyball Hall of Fame through the review of literature. This study is the first attempt to estimate in an exploratory means how much the Volleyball Hall of Fame and its related events affect the local economy in the local areas, especially in Holyoke, Springfield and other Pioneer Valley areas, over a selected time period. As a permanent attraction, the Volleyball Hall of Fame attracts visitors all year round, and the timeframe selected of this study was October 2009. This period of time had the most concentrated set of events sponsored by the Volleyball Hall of Fame and was considered as a focal starting point for examination. There were several planned events during this period including the induction of the Volleyball Hall of Fame honorees for the previous year period. Table 3 presents some of the specific events held in October 2009.

Table 3 *The Volleyball Hall of Fame's Events in October 2009*

Event	Date	Place
Women's Volleyball High School Invitational Tournament	Oct. 10 & 11	Holyoke Community College
Volleyball Women's Collegiate Invitational	Oct. 23	Mt. Holyoke College and Smith College
Hall of Fame Inductee Banquet and Ceremony	Oct. 29	The Long Cabin Restaurant
Media Meet and Greet Event	Oct. 30	Volleyball Hall of Fame

The study covered the visitors and attendees who visited the Volleyball Hall of Fame and/or attended its related events in Holyoke, Massachusetts at anytime during October 2009. The expenditures of the different types of visitors and attendees and further their economic contributions to the local economy were examined based on the expenditure categories established by Stynes (1999) and Crompton, et al. (2001).

Data Collection

The data needed in the study was collected via the online survey tool, QualtricsTM (Qualtrics, 2012) and the pool of respondents was acquired from the data bank of visitors and attendees to the events, to the Volleyball Hall of Fame and to a campaign to acquire more email addresses during the events held in October 2009. A survey instrument was tested and pre-tested prior to the administration of the survey and developed to guide the respondents through the measurement of economic expenditure categories (Crompton, Lee, & Shuster, 2001). The survey consisted of eight sections, including:

1. Motivation to the Volleyball Hall of Fame and previous experience of the Volleyball Hall of Fame.

2. Travel information about the trip to the Volleyball Hall of Fame.
3. The visitor expenditures on the travel to the Volleyball Hall of Fame and its related events.
4. The satisfaction and open-ended comments of visitors.
5. Casual and time-switcher visitor identification.
6. Possible past and future visit to the areas.
7. The Volleyball Hall of Fame's participation in non-profit charitable events and causes.
8. Demographic information of visitors.

Study Area

The Volleyball Hall of Fame is located in Holyoke, Massachusetts, and the impacts of the Volleyball Hall of Fame and its related events focuses in the area of Holyoke. However, some visitors would like to stay in the neighboring cities or towns overnight, have dinner or do shopping there, that's why the Volleyball Hall of Fame also affects the economy of the areas nearby, such as Springfield and other Pioneer Valley areas.

The Pioneer Valley Region is located along the largest and longest river of New England, the Connecticut River in Western Massachusetts, including the three counties: (1) Franklin County, (2) Hampshire County, and (3) Hampden County. It is a well-defined area in Western Massachusetts, and is traversed by the north south corridor of Interstate 91 and the east west corridor of Interstate 90 also known as the

Mass Pike. The largest metropolitan statistical area in the three-county region is the Greater Springfield SMSA and it is bounded by the Hartford, Connecticut metro area to the south and the city area of Brattleboro, Vermont located to the north. The study areas consisted of Holyoke, Springfield and other Pioneer Valley areas, and the economic impact and significance of the Volleyball Hall of Fame to these areas was examined.

Travel Group

As a tourism attraction, tourists visit the Volleyball Hall of Fame and attend its related events typically in groups. Groups of family, groups of friends and groups of athletic teams are the most common forms of the traveling unit. People in a single group may have a similar set of travel behaviors and the money that is spent during the trip will usually be paid together by one or some of the people in a travel group for all the group members (e. g., a father/mother pays the entire bills for the family during a trip, and a coach takes charge of the whole expenditures of all the team members in a sports tournament). It is typically difficult to split the expenditures into every person in the group although some incidental expenditures may occur. Nevertheless, the largest expenditures (e. g., transportation, lodging, admission) are typically accounted by group expenditures and paid by a group leader. Should one attempt to capture the individual's expenditures, it would also lead to a serious bias, since some visitors in a group may not pay any money during the trip while some others pay for an entire group. Therefore, the study captured the expenditures by travel groups and individual

expenditures were then averaged across the groups to individuals, to achieve more accurate and reasonable results as recommended by Stynes (1997) and Crompton, et al. (2001).

Study Scope and Methods

The demographic background of the visitors is critical for the Volleyball Hall of Fame and the local community to better understand the visitors' behaviors and develop events and marketing strategies. The demographic background can also influence the spending behaviors, which are very important in measuring the economic impact and significance, since the expenditures in different categories are one of the most important values to examine. Therefore, this study first analyzed the demographic information of the visitors/attendees as provided by the respondents. This also included an analysis of the attendance and group profiles of the visitors/attendees.

One of the most challenging steps in this study was identifying the locals, who should be excluded in the typical economic impact assessment as recommended by Crompton, et al. (2001). Only the outside dollars injected can contribute to the local community by bringing "new money" into the region, while the local dollars spent by local visitors/attendees at the Volleyball Hall of Fame and its related events were considered an internal recycling of money. The rationale is that no new dollars will be generated to the local economy, but simply re-directed from one other choice to this choice nor were these individuals "real tourists or visitors". If the local dollars were

not spent in the events, they would be spent for other purchases within the areas either in the current timeframe or in the future (Crompton, Lee, & Shuster, 2001; Stynes, 1999; Chhabra, Sills, & Cabbage, 2003). Other types of visitors also need to be discounted or appropriately counted when completing an economic impact assessment.

Besides the local visitors, “casuals” and “time-switchers” should also be identified and excluded from the typical economic impact assessment as recommended by Crompton, et al. (2001). “Casuals” are referred to as the visitors who came to local areas for other reasons without initial intentions to visit the Volleyball Hall of Fame and/or attend its related events (Crompton, Lee, & Shuster, 2001). Thus the “casuals” are the kind of visitors who if they did not spend the money on the Volleyball Hall of Fame, they would likely spend the dollars somewhere else in the local areas. Consequently, these expenditures should not be attributed to the Volleyball Hall of Fame and its related events. “Time-switchers” are referred to as the type of visitors who would come to the local areas in a few months but switched the timing to coincide with the events (Crompton, Lee, & Shuster, 2001). If these kinds of visitors did not spend the money in the local areas at that time, they would come to the areas and have made the expenditures sometime later. Consequently, these expenditures should not be attributed directly to the Volleyball Hall of Fame and its related events either.

Since the visitors usually go to the events by groups, the measurement of the group size was critical for the organizers to plan events and to develop marketing

strategies. As has been mentioned, the average group size is also an important value in the economic impact and significance assessment. The study examined the group size to the Volleyball Hall of Fame and its related events in detail as this attraction brought slightly different travel group configurations.

The typical economic impact assessment usually excludes the locals, casuals and time-switchers, and this study followed these basic rationales. However, since the expenditures by locals, casuals and time-switchers do have economic value, it is important to provide some basic benchmark assessment as to the total expenditures of all the visitors whether the money is new or re-circulated through the economy. The true measure with the appropriate exclusions results in a more refined economic impact assessment while the inclusion of all estimated expenditures by all the visitors provides a measure of the “economic significance” of the total set of attractions and events. This study provided both dimensions: (1) an exploratory approach to the estimate of the economic impact and (2) the opportunity to measure the expenditures by all the visitor types, the economic significance, to determine the local impact of all expenditures for the events and visits to the Volleyball Hall of Fame and its related events.

To measure the expenditures of the visitors in the two dimensions, estimates of various types of expenditures were collected. The expenditures were divided into ten major categories, and the visitors were also able to specify other categories that were not included. These measures included:

1. Refreshments purchase while at the events.

2. Food or drinks purchased before or after the events.
3. Souvenirs or gifts.
4. Clothing or accessories specifically for the events.
5. Private/personal auto expenses.
6. Local attractions.
7. Overnight/lodging accommodations.
8. Transportation services.
9. Admissions/banquet tickets, tournament tickets, etc.
10. Clothing or merchandise purchased at the Volleyball Hall of Fame.
11. Other (Specified).

The study captured the expenditures by groups on each category above. The average expenditures per group in every category were also calculated. Then the average expenditures per group were divided by the average group size to obtain an individual average. First, after all of the expenditures were calculated, the overall economic significance of the total set of events and activities during the month were measured for all visitor types. This provides an estimate of the total estimated expenditures of all visitors for the month – the measure of the “economic significance”. Then, the appropriate adjustments were made by excluding the locals, the casuals, and the time-switchers and an “adjusted” or true measure of the economic impact (influx of “new money” into the local economy) was measured and estimated and projected using the appropriate economic multiplier to also estimate how money circulated in the local economy, both directly and indirectly. These measures were

based on the attendance estimates and were projected by the following equation.

(Stynes, 1997):

$$\text{Economic Impact} = \text{Number of Visitors} \times \text{Expenditures per Person} \times \text{Multiplier}$$

A local area multiplier was used to calculate the direct, indirect and induced impacts of the events to make the appropriate adjustments and assessed the economic impact. However the overall market size for these events was relatively small and the multiplier had limited value in this study as it was also measured on a relatively short-term basis of the activities occurring within the month of October 2009. However, a conservative multiplier was applied that provided some projected estimates of the potential impact in an exploratory examination. The multiplier in this study was supplied by the Massachusetts Office of Travel and Tourism and was a specific tourism multiplier calculated for the Springfield Metro SMSA and was 1.58 (D'Agostino, 2009).

The length of the stay in the local areas is an important indicator of the events' attractiveness, and it may also heavily influence the expenditures of the visitors, especially in the categories such as accommodations and food and beverage consumption. Basically the longer the visitors stay in the areas, the higher probability they will contribute more to the local economy through the need for these services. This study examined the length of the visitors' stay in the local areas to provide a better indicator of the nature of the travel to the region.

The study also examined the visitors' opinions and awareness of the Volleyball Hall of Fame's involvement and contribution to non-profit charitable events and

causes. There were additional statements developed based on the work of Filo, et al. (2007), utilizing Likert scaled statements that measured agreement and support of such events. These measurements examined and included the impressions of the Volleyball Hall of Fame and its support of a variety of different charities and a specific charity, DigPink, and whether the participation in the charitable events promoted visitors' willingness to donate to the Volleyball Hall of Fame.

CHAPTER IV

RESULTS

This chapter covered the full analysis of the Volleyball hall of Fame EIS study. Areas covered included response rate and administration statistics, demographic information, identification of locals, casuals and time-switchers, group size, economic impact and significance assessment, the length of the stay, and charitable impressions.

Response Rate and Administration Statistics

There were 1,244 survey questionnaires sent by email, and 422 responses were received. The response rate was 34%. Among the 422 responses, there were 380 usable cases. 102 (26.8%) of the cases indicated that they visited the Volleyball Hall of Fame building and/or attended its events during the month of October 2009, and they were considered as the visitors of the Volleyball Hall of Fame (The study used the term – “visitors”, to refer to both the visitors of the Volleyball Hall of Fame exhibition and the attendees of its related volleyball events). The other 278 (73.2%) respondents did not visit the Volleyball Hall of Fame or attend its events at this time period, but may have in the past or had some connection to the hall and its events.

Demographic Information

The demographic information gathered in this study included the gender, age, education level, the number of children in the household, marriage status, and

household income. The respondents were more male (53.8%); older (52.3% were 51 or older); married (67% married or living with significant other); well educated (67.7% held college degrees or more) and above average incomes (67.6% were from households with gross incomes over \$75,000 per year). The detailed results of the demographic background of the visitors are presented below (See Tables 4 through 9 here).

Table 4 *The Gender of the Visitors*

Gender	Numbers	Percentage
Male	50	53.8%
Female	43	46.2%
Not specified	9	N/A

Table 5 *The Age of the Visitors*

Age Group	Numbers	Percentage
0-20	7	8.0%
21-30	12	13.6%
31-40	11	12.5%
41-50	12	13.6%
51-60	30	34.1%
61 or above	16	18.2%
Not specified	14	N/A

Note: Max: 76, Min: 18, Average: 46.2, Standard deviation: 16.0.

Table 6 *The Education Level of the Visitors*

Highest Education Level	Numbers	Percentage
Some high school	7	7.5%
High school graduate	6	6.5%
Some college/Technical or vocational school	17	18.3%
Four-year college	31	33.3%
Post graduate degree	32	34.4%
Not specified	9	N/A

Table 7 *The Children Numbers in the Household*

Children in the Household	Numbers	Percentage
0	34	38.6%
1	18	20.5%
2	26	29.5%
3	8	9.1%
4	2	2.3%
Not specified	14	N/A

Table 8 *The Marriage Status of the Visitors*

Marriage Status	Numbers	Percentage
Single (Never married)	19	20.9%
Single (Divorced or widowed)	10	11.0%
Married	55	60.4%
Living with a significant other (Not married)	6	6.6%
Other	1	1.1%
Not specified	11	N/A

Table 9 *The Annual Household Income of the Visitors*

Annual Household Income	Numbers	Percentage
Less than \$18,000	2	2.6%
\$18,000 –\$24,999	2	2.6%
\$25,000 –\$34,999	4	5.2%
\$35,000 –\$49,999	6	7.8%
\$50,000 –\$74,999	11	14.3%
\$75,000 –\$99,999	19	24.7%
\$100,000 –\$124,999	10	13.0%
\$125,000 –\$149,999	10	13.0%
\$150,000 –\$174,999	5	6.5%
\$175,000 –\$199,999	3	3.9%
\$200,000 or more	5	6.5%
Not specified	25	N/A

The Residency of the Visitors

In the typical economic impact assessment, the expenditures from the local visitors are excluded, and only the non-local dollars injected to the local community are considered (Crompton, Lee, & Shuster, 2001). However, Crompton (2001) and Stynes (1999) did suggest that the measure of “economic significance” – the estimated accounting of all expenditures by all visitors related to the attractions and events are worth measuring and noting as important benchmarks. To distinguish the local and the non-local visitors, the zip codes for the primary residence of the visitors were gathered in the survey. The zip codes then were converted to the cities or towns by using Look Up a ZIP Code™ (USPS, 2012) on USPS website. Among the 102 cases of visitors, there were 93 of them specified their zip codes while 9 other visitors did not. The visitors were from 12 states of the United States, while most of them were from the northeastern states, and 73.1% of them were the residents of Massachusetts. There were also a number of visitors from some nearby states, such as New York (7.5%), Connecticut (4.3%) and New Hampshire (3.2%). The Volleyball Hall of Fame also attracted a number of visitors from the distant states, such as Colorado (3.2%), California (1.1%) and Texas (1.1%).

Table 10 presents the exact numbers and percentages of the visitors from each state. Also a map was created by BatchGeo™ (BatchGeo, 2012) to visualize the geographic dispersion of the visitors’ primary residences. This has been portrayed in Figure 1 here.

Table 10 *The Residence (States) of the Visitors*

States	Numbers	Percentage	States	Numbers	Percentage
CA	1	1.1%	NH	3	3.2%
CO	3	3.2%	NJ	1	1.1%
CT	4	4.3%	NY	7	7.5%
MA	68	73.1%	OR	1	1.1%
MD	1	1.1%	RI	1	1.1%
ME	2	2.2%	TX	1	1.1%



Figure 1 *The Geographic Dispersion of the Visitors' Residence*

The visitors were from 61 cities or towns dispersed in the 12 states. The town that most visitors came from was Holyoke (8.6%), where the Volleyball Hall of Fame is located, followed by Amherst (6.5%) and Westfield (4.3%). Basically, the towns or cities providing the most visitors were near Holyoke and along the Connecticut River, or Pioneer Valley areas (See Table 11 here).

Table 11 *The Residence (Towns or Cities) of the Visitors*

City or Town	State	Numbers	Percentage
Holyoke	MA	8	8.6%
Amherst	MA	6	6.5%
Westfield	MA	4	4.3%
Belchertown	MA	3	3.2%
Longmeadow	MA	3	3.2%
South Deerfield	MA	3	3.2%
Wilbraham	MA	3	3.2%

Identification of the Local Visitors

To identify the local visitors, it was necessary to define the local areas first. In this study, the places in Massachusetts with less than 15 miles distance from Holyoke were considered as the local areas. It is about a 15 to 20 minutes driving distance from Holyoke, and the visitors of the Volleyball Hall of Fame used the services in these neighboring cities and towns, and they could contribute economic expenditures to these areas. The visitors whose primary residence was in these areas were defined as the “local visitors”. The definition of these areas best defines the “shopping areas” of the community where typical shopping for recreation, athletic and general shopping experiences would occur. The study utilized zip codes to identify these areas and as collected through the survey instrument.

The zip code of Holyoke is 01040, and the zip codes of the areas with less than 15 miles from Holyoke is referred to Appendix (The areas outside Massachusetts were omitted). There were 67 zip codes altogether that satisfy the criteria about the local residence. The visitors whose primary residence’s zip codes were other than these ones listed in Appendix were considered as the non-local visitors.

Some of the cities or towns may have multiple zip codes, whereas a certain city or town should be considered as a whole economy, and the study was not going to separate a city or town into different parts, so if one of the zip codes of a city or town was included in the list in Appendix, the entire city or town was considered to be in the local areas.

According to this algorithm, there were total 36 cases (35.3%) of the visitors to be considered from the local areas, and the 57 cases (55.9%) were from the non-local visitors, while 9 cases (8.8%) did not specify the residence.

Identification of the Casuals and Time-Switchers

Then the casuals and time-switchers were also identified. Three questions were designed to identify the casuals and time-switchers.

1. Would you have come to Holyoke or the neighboring areas at this time of the year even if these volleyball events were not being held?
2. If “yes” above, would you have stayed longer, the same length of time or stayed a shorter length of time?
3. Would you have come to Holyoke or the neighboring areas in the next six months if you had not come to the Volleyball Hall of Fame events during the month of October 2009?

The respondents who answered “yes” in the first question and “the same or longer length of time” in the second question were considered as casuals, while the

respondents who answered “yes” in the third question were considered as time-switchers.

There were 26 cases of visitors among the 57 cases (non-local visitors) indicating that they were casuals or time-switchers. Therefore there were 31 cases indicating that they were not locals, casuals or time-switchers which qualified for the measurement of the typical economic impact assessment of the Volleyball Hall of Fame and its related events. All types of visitors were considered in the measurement of the “economic significance” of the visitation to the Volleyball Hall of Fame and its related events.

Group Size

As has been mentioned earlier, many visitors traveled to the Volleyball Hall of Fame and attended its related events in groups. Some of the leisure visitors may travel with their families or friends, while others were comprised of teachers or coaches who may lead their students or athletes to the related volleyball events, such as volleyball tournaments as either participants or spectators. The average group size is an important value in the economic impact assessment, as well as it is critical for the event organizer to know the usual group size in order to better develop its marketing strategies.

Among the 102 cases, there was an average of 9.46 people in a single group, and the standard deviation was 10.1. Most of the groups had less than 10 members, and the group size of almost every group was under 30, whereas only 3 groups were

over 30. The largest group had 45 people in their team. The details of the group size of the 102 cases are presented here in Table 12.

Table 12 *The Group Size*

Group Size	Number of Groups	Percentage
1-10	61	59.8%
11-20	27	26.5%
21-30	11	10.8%
31-40	2	2.0%
41 or above	1	1.0%

Economic Significance and Economic Impact Assessment

Typically the economic impact assessment excludes the expenditures from locals, casuals and time-switchers (Crompton, Lee, & Shuster, 2001), since it focuses on the new dollars coming into the local areas. However, including these parts of expenditures can also provide an additional dimension to determine the local impact of expenditures for the visits to the Volleyball Hall of Fame and its related events from all types of visitors. This is called the measurement of the economic significance of the events and attractions and it is an appropriate benchmark measure. The economic impact assessment goes beyond this measure, adjusts for the locals, casuals and time-switchers and constructs the measures based on the concept of actual new money coming into the local economy. Therefore this study assessed two measures: (1) the economic significance assessment including all types of visitors, and (2) the typical economic impact assessment, which excluded the locals, casuals and time-switchers and applied a conservative multiplier.

The Economic Significance Assessment

As has been examined in the previous section, the average group size was 9.46, and the expenditures are other critical values to assess the economic significance. According to the survey results, the average total expenditures per group were \$372.22 and the average expenditures per person were \$39.35. Table 13 presents the average expenditures in every category both per group and per person for all types of visitors.

Table 13 *The Expenditures by Categories (Including All the Visitors)*

Category	Expenditures per Group (\$)	Expenditures per Person (\$)	Percentage
Refreshments purchase while at the events	32.25	3.41	8.66%
Food or drinks purchased before or after the events	62.01	6.55	16.66%
Souvenirs or gifts	15.04	1.59	4.04%
Clothing or accessories specifically for the events	32.19	3.40	8.65%
Private/personal auto expenses	33.15	3.50	8.91%
Local attractions	0.08	0.01	0.02%
Overnight/lodging accommodations	92.11	9.74	24.74%
Transportation services	41.11	4.35	11.04%
Admission/banquet tickets, tournament tickets, etc.	34.86	3.68	9.36%
Clothing or merchandise purchased at the Volleyball Hall of Fame	28.45	3.01	7.64%
Other	0.96	0.10	0.26%
Total	372.22	39.35	100.00%

Note: There were 3 of the total 102 cases did not specify their expenditures.

Since the timeframe selected for the study was the entire month of October 2009, the attendance included all the visitors who came to visit the Volleyball Hall of Fame and/or attended its related events during this time period. The estimated number of attendance was 2,500. This measure was estimated based on the documented attendance at the Volleyball Hall of Fame during this time period, the attendance at the volleyball tournaments documented through high school and collegiate sport statistical tracking, and vendor counts at the special ceremonies (the induction ceremony, press conferences, etc.). Consequently, the overall direct economic significance = $\$39.35 \times 2,500 = \$98,375$ when including all types of visitors.

Table 14 presents the direct economic expenditures, that is, the economic significance in every expenditure category when including all the visitors.

Table 14 *The Direct Economic Expenditures by Categories (Including All the Visitors)*

Category	Expenditures per Person (\$)	Direct Economic Expenditures (\$)
Refreshments purchase while at the events	3.41	8,525.00
Food or drinks purchased before or after the events	6.55	16,375.00
Souvenirs or gifts	1.59	3,975.00
Clothing or accessories specifically for the events	3.40	8,500.00
Private/personal auto expenses	3.50	8,750.00
Local attractions	0.01	25.00
Overnight/lodging accommodations	9.74	24,350.00
Transportation services	4.35	10,875.00
Admission/banquet tickets, tournament tickets, etc.	3.68	9,200.00
Clothing or merchandise purchased at the Volleyball Hall of Fame	3.01	7,525.00
Other	0.10	250.00
Total	39.35	98,375.00

The Economic Impact Assessment

The expenditures in this section only captured the groups that were identified that they were not locals, casuals and time-switchers. Thus in this scenario, the average total expenditures per group were \$643.58 and the average expenditures per person were \$68.03. The average expenditures were substantially higher because these visitors typically used more services locally. Table 15 presents the average expenditures in every category both per group and per person.

Table 15 *The Expenditures by Categories (Excluding the Locals, Casuals and Time-Switchers)*

Category	Expenditures per Group (\$)	Expenditures per Person (\$)	Percentage
Refreshments purchase while at the events	48.33	5.11	7.51%
Food or drinks purchased before or after the events	99.06	10.47	15.39%
Souvenirs or gifts	11.12	1.17	1.73%
Clothing or accessories specifically for the events	53.10	5.61	8.25%
Private/personal auto expenses	65.16	6.89	10.12%
Local attractions	0.00	0.00	0.00%
Overnight/lodging accommodations	194.48	20.56	30.22%
Transportation services	87.10	9.21	13.53%
Admission/banquet tickets, tournament tickets, etc.	37.74	3.99	5.86%
Clothing or merchandise purchased at the Volleyball Hall of Fame	47.00	4.97	7.30%
Other	0.48	0.05	0.08%
Total	643.58	68.03	100.00%

As has been mentioned, the estimated attendance during this time period was 2,500. However in this section, the locals, casuals and time-switchers should be

excluded. As has been examined, there were 31 cases out of 93 cases (which specified their residence) (33.3%) identified that they were not locals, casuals and time-switchers, so it was estimated that 33.3% of all the attendance were not locals, casuals and time-switchers, that is, 833 visitors. The actual money spent by the visitors from outside the region who bring new money into the local economy was \$56,669 ($\68.03×833). A conservative multiplier was also applied to estimate the potential economic impact or both direct and indirect effects of this money coming into the local economy and then circulating. Consequently, the overall estimated potential economic impact = $\$68.03 \times 833 \times 1.58 = \$89,537$. This estimate excluded the locals, casuals and time-switchers. While these numbers appear small, they were based on approximate estimations and were for events that attract relatively small numbers of visitors. For example, the Hall of Fame Induction Ceremony and Dinner attracted only 218 individuals (Rosskothén, 2012).

Table 16 presents the direct economic expenditures in every expenditure category when excluding the locals, casuals and time-switchers.

Table 16 The Direct Economic Expenditures by Categories (Excluding the Locals, Casuals and Time-Switchers)

Category	Expenditures per Person (\$)	Direct Economic Expenditures (\$)
Refreshments purchase while at the events	5.11	4,256.63
Food or drinks purchased before or after the events	10.47	8,721.51
Souvenirs or gifts	1.17	974.61
Clothing or accessories specifically for the events	5.61	4,673.13
Private/personal auto expenses	6.89	5,739.37
Local attractions	0.00	0.00
Overnight/lodging accommodations	20.56	17,126.48
Transportation services	9.21	7,671.93
Admission/banquet tickets, tournament tickets, etc.	3.99	3,323.67
Clothing or merchandise purchased at the Volleyball Hall of Fame	4.97	4,140.01
Other	0.05	41.65
Total	68.03	56,668.99

Assessment of the Length of the Stay

Now that the study has assessed the economic significance and estimate the economic impact, a few additional measures were considered which were associated with the economic significance and impact measures. One of the most important items to consider is the length of the stay of visitors. This also serves to validate the expenditures in terms of the types of visits and their respective duration. Since the overnight accommodations accounted for the highest percentage among the total expenditures, here we used number of nights instead to assess the length of the stay. Of all of the visitors, the average number of nights was 0.99. Many of the visitors did not stay overnight at all. Only 39 visitors (38.6%) indicated that they stayed one or

more nights during these events, and among them, 17 (16.9%) visitors stayed for two or more than two nights. However, two (2.0%) visitors also indicated that their groups stayed in the local areas for six nights, which were the highest among all the visitors. Table 17 presents the length of the stay of the visitors in the local areas.

Table 17 The Number of Nights

Number of Nights	Number of Visitors	Percentage
0	38	37.6%
1	22	21.8%
2	4	4.0%
3	10	9.9%
4	1	1.0%
6	2	2.0%
N/A	24	23.8%
Not specified	1	N/A

Note: N/A refers to the respondents who identified themselves as the residents of the Holyoke/Springfield Area.

Assessment of the Charitable Impressions

The Volleyball Hall of Fame emphasized the non-profit charitable events and causes during their October events. The impressions of participation in non-profit charitable events and causes might promote the tourists’ interests in visiting the Volleyball Hall of Fame and provide an exchange concept of “giving back” and “community involvement” and recognition of the associations with known causes.

Measure scales were developed to examine the charitable impressions of the events by visitors. The statements can be divided into four categories: (1) the visitors’ general impressions of participation in non-profit charitable events and causes; (2) the

impressions of participation in a program called DigPink during October 2009; (3) the visitors' level of support in some specific non-profit charitable events and causes; and (4) the likelihood that visitors donate to the Volleyball Hall of Fame when it supports non-profit charitable events and causes.

All of the statements in the four sections regarding these impressions were measured on a Likert Scale from 1 to 7 (with the higher number indicating a higher level of agreement with the statements in all the scales). Overall, 82.5% of the visitors were aware of the DigPink program and 64.1% felt the Volleyball Hall of Fame participation as expected and few (15.2%) were surprised that the Volleyball Hall of Fame was involved. Overall, the respondents were most supportive of the various "pink" campaigns followed closely by the cancer charities including the Relay of Life, Coaches for Cancer, and the Jimmie Fund. While there is considerable interest in the attachment of charity events to the athletic events for fund raising opportunities, there was no measured indication until this section of the survey was completed for the Volleyball Hall of Fame. Here, 61.4% indicated that they would donate to the Volleyball Hall of Fame when it supports non-profit charitable causes and events. The results of each statement by the calculated means are listed here in Tables 18 to 21.

Table 18 *The Visitors’ General Impressions of Participation in Non-Profit Charitable Events and Causes*

Statement	Average
Among a number of different organizations, the Volleyball Hall of Fame is committed to using a portion of its profits to help non-profit events and causes.	5.18
The Volleyball Hall of Fame gives back to the communities in which it does business.	5.26
Local non-profits in the Holyoke/Springfield area benefit from the Volleyball Hall of Fame.	5.06
The Volleyball Hall of Fame integrates charitable contributions into its business activities for events and causes.	5.11
The Volleyball Hall of Fame is involved in corporate giving for charitable events and causes	4.95

Table 19 *The Impressions of Participation in “DigPink” Program*

Statement	Average
I was aware of participation in the “DigPink” program.	5.88
I believe that participation in “DigPink” was expected of the Volleyball Hall of Fame.	5.05
I was surprised by the participation in the “DigPink” by the Volleyball Hall of Fame.	3.02

Table 20 *The Visitors’ Level of Support in Some Specific Non-Profit Charitable Events and Causes*

Events or Causes	Average
The Jimmie Fund – Children’s and Adult Cancer Survival Fund	5.23
Blue Campaigns for Prostate Cancer – Events for Male Prostate Cancer	4.75
Live Strong Foundation – that supports people in managing & surviving cancer	5.06
Pink Campaigns for Breast Cancer Awareness – Events for Female Breast Cancer	5.85
Relay for Life – Events to Celebrate and Remember Those Affected by Cancer	5.53
Coaches for Cancer – sport events associated to fight cancer issues	5.24

Table 21 *The Likelihood that Visitors Donate to the Volleyball Hall of Fame*

Statement	Average	Highly Likely	Likely	Somewhat Likely
How likely are you to donate to the Volleyball Hall of Fame when it supports non-profit charitable causes and events?	4.99	14.0%	28.0%	19.4%

CHAPTER V

CONCLUSION

In this final chapter, the results are discussed and summarized. In addition, the findings of this study provide the basic conclusions about the results and recommendations to the management of the Volleyball Hall of Fame are made as well as recommendations for future research on event based economic impact and significance types of studies.

Discussion

Expenditures are the most important values to assess when conducting an economic impact and significance study, however, the different demographic background of visitors may affect their spending behaviors. Therefore evaluating and analyzing the demographic information of visitors is an important initial task. Furthermore, it is critical to consider who should be counted and who should be excluded when conducting these measures. This study analyzed the demographic information and geographic dispersion of the visitors from several dimensions. The male visitors accounted for more than half (53.8%) of the total visitors, while most of the visitors were middle-aged adults. From an education perspective, a majority of the visitors were well educated and more than 60% of the visitors had at least bachelor degrees. Many of the visitors (38.6%) did not have any children in their households, and some others (50.0%) had one or two children, whereas only a few visitors (11.4%)

had more than two children. Although many visitors did not have any children, most of the visitors (60.4%) were married, which accounted for more than half of the entire respondents. The household income is another important dimension that influenced the visitors' spending. The annual household income of the visitors basically followed the normal distribution, and most of them had the annual income between \$50,000 and \$150,000, which accounted for more than half of the entire respondents (65.0%). Most of the people were in the category of \$75,000 - \$99,999 (24.7%).

From the demographic statistics, the Volleyball Hall of Fame and its related events attracted many middle-aged and well-educated visitors, and these people are usually wealthy. Many of the visitors were married but had few children, so they probably would spend more money on leisure travel including special interests or lifestyle sporting pursuits such as following the game of volleyball and being involved in it, including visits to the Volleyball Hall of Fame. The profiles of the visitors and in particular the teams and group sizes indicated a portion of the visitors were team based as groups. It is also likely that a portion of the visitors were relatives and/or families and friends of the volleyball participants playing in these tournaments. Since most of the events of the Volleyball Hall of Fame currently were tournament-related, it would be beneficial if the forms of the events could be extended to cater to these types of visitors' interests and needs.

As has been mentioned, the length of the stay might greatly affect the expenditures of visitors. The study identified the numbers of nights the visitors stayed for the various events. Of all the visitors, 37.6% of the visitors did not stay overnight,

while only 21.8% of the visitors stayed for a relatively short period -- one night. Since the expenditures on the overnight accommodations accounted for the largest part of the total expenditures, many of the visitors preferred not to stay overnight or to condense the numbers of nights they stayed for into a shorter time frame. This was also likely explained by the type of volleyball events held during the month of October 2009. These were largely regional or local volleyball high school and college events that would draw visitors from the region as opposed to a national crowd or an inter-regional group of volleyball teams competing in larger national or regional tournaments and competitions.

The group size is another important dimension in the economic impact and significance assessment, and it is also critical for the organizer and local community to plan the events and develop marketing strategies. From the survey results, the average group size was 9.46, while there were many of the groups that were comprised of less than 10 members, which were most likely the groups of families or friends following or supporting the participants. However there were a few groups with more members, which were likely the athletic volleyball teams or groups of volleyball enthusiasts attending the volleyball tournaments organized by the Volleyball Hall of Fame. Although not totally clear from the analysis here, some visitors may have been comprised of teams traveling and viewing other teams play (these teams were largely spectators). It should also be noted that these events alone generated nearly as much visitation to the local areas as compared to the regular visits to just the Volleyball Hall of Fame's physical location annually.

The study assessed the two different measures of the economic expenditures during the month of October 2009 – the economic significance of expenditures by all types of visitors and the economic impact of new money coming into the local economy from the visitors when excluding the locals, casuals and time-switchers. When the typical economic impact assessment was measured, the expenditures by the locals, casuals and time-switchers were excluded. The average expenditures per group and per person were \$643.58 and \$68.03 respectively, which were split into eleven categories. Among all the categories, the overnight accommodations (30.22%) and the food or drinks (15.39%) accounted for the highest portion of all the expenditures. When accounting for the overnight accommodations, the visitors spent almost one third of their total expenditures during the travel on this category. Thus the Volleyball Hall of Fame would more greatly benefit the local community when such events required some level of overnight accommodations.

Furthermore, among all the categories, only a few visitors spent dollars on the local attractions. There might be three major possible reasons for it: (1) there were very few local attractions available or the visitors were unaware of the possible attractions to visit during their stay at that time; (2) the events of the Volleyball Hall of Fame were sufficient for visitors' interest at the time and place held for the events; and (3) it is apparent from the nature of this type of travel they were not here for extended stays and likely not looking to extend their stay in the areas to visit other local attractions. Since it is beyond the scope of this study, it could be analyzed in future research.

The overall attendance of the Volleyball Hall of Fame and its related events was about 2,500 in October 2009. Although it does not seem like a high number, the attendance was more significant in October 2009 than in other months, since there were the most concentrated set of events during the calendar year. Among these visitors, there were approximately 33.3% of the visitors who were considered as “real visitors” that were not locals, casuals and time-switchers. Although the study did not fully assess the exact indirect and induced impacts over the entire year or a longer time period, as a measure of estimation, a conservative multiplier was used to provide some estimates of the potential economic impact within this relatively short time period as a benchmark measure. The overall estimated potential economic impact was \$89,537 when the locals, casuals and time-switchers were excluded for this time period. If these types of events could be periodically held throughout the course of the year, then more economic impact from outside visitors to the region would likely be realized.

When all types of visitors, including locals, casuals and time-switchers were included, the average group and individual expenditures were considerably lower. Here these numbers were \$372.22 per group and \$39.35 per person. Therefore the locals, casuals and time-switchers contributed less to the local economy overall in a direct set of expenditures and draw down the averages and overall impacts. The overall direct economic expenditures, that is, the economic significance was \$98,375, and it would be inappropriate to apply economic impact multipliers in these measures. This is because both local and external monies were being mixed and the locals were

not bringing new money into the areas but rather were simply circulating existing money in the local economy. Nevertheless, it provided a measure of economic significance and a benchmark measure of the overall measure of expenditures for these types of events. Also, it provided some level of measure as to whether these were real “tourist events or attractions” or more likely local community events and services.

As a small heritage attraction, the Volleyball Hall of Fame did bring an economic contribution to the local community in October 2009, mostly attributed to its concentrated events in that month. The visitors came to the local areas in October 2009 were much more than some other months. It would appear that events are important vehicles for the Volleyball Hall of Fame to attract visitors and promote the game of volleyball and also contribute to the local economy. Planning and programming appropriate events periodically should be carefully considered in their marketing strategies and future development.

The Volleyball Hall of Fame also participated in a specific non-profit charitable event, the DigPink program. This survey assessed the impressions of this program and other charitable causes and measured the actions and associations with the Volleyball Hall of Fame’s involvement and the associated giving back to the local community through its events. Most of the visitors had an awareness of the Volleyball Hall of Fame’s efforts with DigPink that was held in October 2009, and few of them were surprised at it. They appreciated its charitable participation by the Volleyball Hall of Fame compared to all other similar types of charitable events and causes. The

involvement in charitable events appears to have some value and potential for greatly enhancing the Volleyball Hall of Fame's image and representing its social responsibility. The visitors believed that the participation in charitable events had been a usual and expected practice of the Volleyball Hall of Fame. The visitors also revealed a strong level of support for a variety of other specific charitable events, such as Pink Campaigns for Breast Cancer Awareness, Relay for Life, Coaches for Cancer, etc. The visitors also showed a considerable level of probability that they were willing to donate to the Volleyball Hall of Fame when supporting non-profit charitable events. Whether they did contribute was not measured, but it was likely that such donations program could or should be possible and further developed. Therefore the Volleyball Hall of Fame's participation in the non-profit charitable events and causes appears to be positively perceived and supported by the visitors and supporters and it might promote visitors' interests in visiting the Volleyball Hall of Fame, attending its events and eventually spend more locally for such causes and in the local economy in terms of related expenditures.

Summary

As a promising type of tourism, heritage attractions are receiving increasing attentions from visitors. However, few academic studies on this kind of tourism were conducted in the past. Volleyball is one of the most popular sports in the world, and it has a lot of fans and participants. As a heritage attraction, the Volleyball Hall of Fame combines the historical preservation of the game through an exhibition and planning

exciting events, attracting leisure travelers, volleyball fans and athletic teams, as well as offering them the experience of both showing their enthusiasm for volleyball and engaging in fun activities during the travel.

Although the Volleyball Hall of Fame has existed for more than 30 years and attracted tens of thousands of visitors, no study has ever been conducted on the attraction. This study is the first attempt to analyze the Volleyball Hall of Fame primarily in the field of its economic impact and significance on the local community. Furthermore, the study also examined and referred to other related issues, including the impressions of the charitable events. The study attempted to offer the organizer and the local community a preliminary assessment of the economic impact and significance of the Volleyball Hall of Fame, to provide a reference point or benchmark measure for the organizer to assess the economic contributions over longer or repeated measures. This would also provide substantial evidence to consider how to improve and extend events to gain more economic significance and impact associated with the Volleyball Hall of Fame.

The study basically followed Stynes's (1997; 1998; 1999) and Crompton, et al.'s (2001) theories while conducting an economic impact and significance study. The locals, casuals and time-switchers were identified before the assessment. The study proposed two dimensions in assessing the economic measurements: (1) the economic significance assessment of direct expenditures including all types of visitors, and (2) the typical economic impact assessment, excluding the locals, casuals and time-switchers. Thus, the study more appropriately classified and identified "real

visitors” who brought outside or new money to the region. The study specified the average expenditures per group and per person in total and in appropriate categories to further demonstrate and identify how expenditures can and did vary by types of visitors. This also emphasized why it is important to develop attractions and events that bring in more outside visitors or new money when developing and programming tourist attractions and events.

Furthermore the overall direct economic expenditures were calculated and estimated through these refined techniques, as well as the expenditures in each category. A conservative multiplier was employed in the economic impact assessment as a preliminary measure to further provide a baseline estimate of the “potential economic impact”. It should be noted that the measures and sample sizes here were based on a small sampling framework on relatively small attendance estimates. Larger sample size and a more comprehensive participation or respondents may have provided more detail and more refined estimates and these issues should be considered limitations here. The study also examined the usual group size and the length of the stay, which are strongly related to the economic impact and significance assessment. Furthermore, the study evaluated the charitable impressions of the events by the visitors and its relationship to promoting the donation of the visitors. All of these measures would be greatly enhanced by repeated measures and larger sample size in the future and then comparative assessments through statistical analysis.

The study found that, although the Volleyball Hall of Fame is a small-scale heritage attraction with limited attendance, it does generate economic returns to the

local community. The nature of the concentrated events organized by the Volleyball Hall of Fame during the month of October 2009 were largely be described as local or regional team competition events with the exception of the enshrinement events. While these events were also considered small in scale in terms of the numbers of visitors, it should be noted that these sets of events had the overall effect in one month of attracting almost as many visitors as the physical place of the Volleyball Hall of Fame has in direct visitation throughout the whole year. Therefore, these types of events would be a critical vehicle for the Volleyball Hall of Fame in attracting visitors and supporting for the physical location and preserving the memories of the games and its athletes and contributing to the local economy by outside visitation. Such events should or could be intensified and programmed more aggressively to increase attendance and expenditures and reach a broader target market.

An additional dimension of the study indicated that the visitors had a strong awareness of the Volleyball Hall of Fame's participation in the non-profit charitable events and causes. The favorable support of these types of associations provides baseline evidence that the Volleyball Hall of Fame consider cooperative events with such charitable organizations and other associations with the game of volleyball. The impressions of the charitable participation would also promote visitors' willingness to donate to the Volleyball Hall of Fame.

Implications

There are several critical implications according to the findings of the study. First, the locals, casuals and time-switchers contributed much less in expenditures and appear to have weaker influence on the economic contributions to the local community. The visitors other than locals, casuals and time-switchers were the major sources of the economic contributions. The study did not specify which specific type of the visitors among locals, casuals and time-switchers had the strongest influence on the less expenditures, but since the locals would most likely spend less on accommodations and related local services, and it could be reasonably assumed that the locals simply spent less across nearly all areas of expenditures. Consequently, the Volleyball Hall of Fame and the local community need to pay more attention to the “real visitors” and impacts that they have in making the economic contributions to the local community and develop marketing strategies to satisfy their needs and desires. This also provides opportunities to promote local services and attractions through cooperative efforts with the Greater Springfield Convention and Visitors Bureau (GSCVB) and other tourism-based services.

The Volleyball Hall of Fame is a small-scale attraction with limited attendance. However if it organizes events, like the concentrated events in October 2009, more visitors will be attracted, including the sports tournaments that attract many athletic teams and significantly larger groups that impact and drive attendance to such events. These teams not only travel as larger groups, but also attract followers and supporters of the teams traveling to the areas to experience and support the players and their

teams. The events will be a significant vehicle for the Volleyball Hall of Fame, as well as other attractions and destinations to attract visitors and make the economic contributions to the local community.

Although the Volleyball Hall of Fame is a small-scale attraction, unlike other regional attractions, it attracted visitors from much further distances and from a wider geographic dispersion of the United States. Because volleyball is a national and international sport that has a number of participants dispersed in every state, many volleyball fans, athletes and enthusiasts in other states, even faraway, would like to visit the historic exhibitions and attractions associated within its birthplace and attend related events. Opportunities to identify, attract and increase the number of these types of visitors could be explored further.

The average group size of the Volleyball Hall of Fame was probably larger than other tourism attractions and events. Because most of the events during October 2009 were team-based, and although there were smaller groups of families and friends in attendance, the impact of creating sporting events with associated larger number of team players and followers also suggests that such events have a significantly larger economic significance and potential impact when attending these types of volleyball tournaments as might be expected by simply providing more passive activities and events.

The participation in charitable events should not only fulfill the social responsibility, it can also enhance the organization's image, market its events, increase its reputation, and promote visitors' interests. The charitable impressions can attract

more visitors and they are more willing to donate to the events, the preservation of the game – its history and memories, and ultimately created related expenditures in the local areas when such events are staged locally.

Finally, this is the first attempt and largely an exploratory study to assess the economic significance and related economic impact of the Volleyball Hall of Fame. These measures will provide a benchmark for potential future studies of the attraction and its events and the related impacts on the region and local community.

Recommendations

There are a few recommendations that can be inferred from the study. First, as has been mentioned, events when staged, programmed and planned do have an impact that can be measured. It is recommended for the Volleyball Hall of Fame that they might emphasize planning more events or tournaments rather than just relying upon the visitation to the historical exhibitions. Attendance estimates and the related economic measures showed the value of such events as measured here even if only in a preliminary nature and for a short concentrated period. Although there were a number of events during October 2009, it might be beneficial if they could organize more events in other months or more frequently especially associated with interscholastic, intercollegiate and national touring of professional team play and competition.

Since the visitors had a great awareness of the charitable participation of the Volleyball Hall of Fame, and they supported the participation, the Volleyball Hall of

Fame could be more involved in non-profit charitable events and causes, and developing partnerships with more non-profit and charitable organizations. These involvements will greatly promote its charitable impressions and further attract more visitors and make the economic contributions to the local community. The association of the Volleyball Hall of Fame with these organizations in other venues and areas outside of Holyoke may bring more attention to the Volleyball Hall of Fame and its efforts to preserve the game and the memories of important players and competitions from around the world.

Besides the non-profit and charitable organizations, the Volleyball Hall of Fame could also develop partnerships with other volleyball organizations. Currently the USA Volleyball and 20 other regional volleyball associations are the sustaining organization sponsors, and retaining partnerships with these organizations would be critical to support event planning and programming. Such events as Tip Off Classics similar to the Basketball Hall of Fame events in Springfield might be a typical approach or model to emulate.

Moreover, from the study perspective, the study had 380 usable cases, and 102 of them were from the visitors of the Volleyball Hall of Fame. It is recommended that more cases would provide an improved opportunity to better examine the visitor expenditures and assess the economic impact and significance, as well as evaluate some other related issues.

Study Limitations

There are a few limitations of the study. First, since there were more than forty questions in the survey questionnaire, it took the respondents sustain amount of time to answer them. Some respondents might selectively answer the questions, and left some of the questions unanswered. It may have influenced the accuracy of the survey results. It was clear from this study that supporters of volleyball existed in the sample and did not necessarily attend any of the events in October 2009. They did answer more of the questions about their interests in volleyball and charitable associations, but because they did not actually attend any events in this timeframe and did not contribute information about expenditures. Therefore these circumstances need to be noted as limitations.

The estimate of the attendance was based on the Volleyball Hall of Fame's records and estimation. This also included game and tournament estimates of attendees. Since they might miss some records of the participation and attendance, the estimate of attendance may have varied and it is also a limitation. Thus the projections and estimates are based on the overall levels and accuracy of these estimations and the respective sample sizes. It would be an important recommendation that better estimates, registrations and involvement of visitors at the Volleyball Hall of Fame and its related events be considered to reduce the level of estimation and improve the accuracy of the economic estimates in these types of studies.

Also, this study used a "shopping definition" to identify the local visitors to the event. Those who were within a 15 miles radius of the event area were considered

to be within the local areas definition. Most larger scale events would have used a larger radius and some use a measure similar to the definition of a tourist – 50 mile or 100 mile driving distance. Therefore, the definition of the local areas would likely result in different findings but it was felt the 15-mile measure was keeping with the nature of these local/regional events and the profile of the types of visitors attending. It was found that this definition of the local areas was also more readily accepted as a “typical shopping areas” definition that the administrators and board could easily understand and accept when “new money” came into the areas from outside the typical shopping areas.

Furthermore, the economic impact or significance study is never an exact process, and there is no absolutely perfect or accurate result in the economic impact study. The results of the economic impact study usually serve as a “best guess” or a refined estimation process (Crompton, Lee, & Shuster, 2001). This study attempted to assess the economic impact and significance of the Volleyball Hall of Fame, to reach a more educated estimation.

Finally, the economic impact assessment usually includes direct, indirect and induced impacts, while the economic significance only assesses the direct expenditures. The study primarily assessed the direct economic expenditures, while utilizing an estimated conservative multiplier to provide some estimates of the potential economic impact. Improved measures are needed here including such measures of those local visitors who may act more like visitors when family and friends from away from the local areas visit locals for the sole purposes of attending

and participating in the Volleyball Hall of Fame and its related events. Moreover, Crompton (2006) also recommended that the economic costs of providing these attractions and events be considered as well in the calculations. This is less of a concern in smaller venues and events; but, when such activities reach a larger scale, other public services and costs come into play (e.g., police and emergency services, transportation improvements and routing issues, etc.).

Future Research

As a permanent attraction, the Volleyball Hall of Fame is attracting visitors all the time, and it has the induction ceremony every year, as well as some other events, so it contributes to the local economy continuously. It will be beneficial if tracking the economic contributions and assessing the economic significance and economic impact occurred periodically in the future.

Since this study is the first attempt to assess the economic measures of the Volleyball Hall of Fame, it primarily captured the economic expenditures including the economic significance and a conservative estimate of the economic impact and related direct and indirect impacts over a short specific time period. In future research, it is recommended that the indirect and induced impact might be considered to evaluate the full economic impact to the local community along with the overall economic costs of providing such events over multiple time periods or an extended time frame. An Input-Output Model might be applied to assess the changes of sales, personal income and employment due to the Volleyball Hall of Fame and its related

events when longer periods of time and magnitude of events are considered. Furthermore, the staff of Volleyball Hall of Fame may wish to further refine the shopping and local areas definition. The results here were a starting point, but can and could be adjusted to further refine these measures.

There were a number of other dimensions were studied and included in the survey, but not focused on in this study, such as the measures of interests and participation in the game over time, sports involvement, the visitor satisfaction, the motivations for visitation, etc. These aspects might provide additional perspectives to fully assess the impact of other dimensions of interest to the Volleyball Hall of Fame.

Although the heritage attractions are becoming increasingly popular for tourists, including the Volleyball Hall of Fame and its related events, relatively few research studies have been completed on these types of attractions and their related events. The economic impact and significance measures studied here is just one of the most important dimensions, whereas more studies from other angles and refinements of these measures would be beneficial for the Volleyball Hall of Fame's future development and measuring its impacts to the local community.

APPENDIX

TOWNS AND CITIES WITHIN 15 MILES FROM

HOLYOKE

Zip Code	City or Town	Distance (mi.)
01001	Agawam	9.14
01004	Amherst	13.89
01003	Amherst	14.87
01002	Amherst	13.38
01007	Belchertown	12.53
01009	Bondsville	14.63
01021	Chicopee	3.54
01022	Chicopee	3.65
01020	Chicopee	3.61
01013	Chicopee	3.05
01014	Chicopee	3.47
01028	East Longmeadow	11.29
01027	Easthampton	5.9
01030	Feeding Hills	9.31
01062	Florence	9.37
01033	Granby	6.91
01035	Hadley	11.18
01036	Hampden	14.03
01038	Hatfield	12.55
01039	Haydenville	12.64
01040	Holyoke	0
01041	Holyoke	1.07
01050	Huntington	12.81
01151	Indian Orchard	7.31
01053	Leeds	11.1
01106	Longmeadow	10.93
01116	Longmeadow	11.22
01056	Ludlow	8.46
01066	North Hatfield	14.27
01061	Northampton	8.88
01060	Northampton	8.68
01063	Northampton	8.06
01071	Russell	12.08
01075	South Hadley	3.35

Continued

Zip Code	City or Town	Distance (mi.)
01073	South Hadley	4.94
01077	Southwick	12.51
01114	Springfield	7.06
01115	Springfield	7.16
01144	Springfield	7.19
01108	Springfield	9.21
01109	Springfield	7.13
01111	Springfield	7.22
01118	Springfield	9.22
01129	Springfield	9.25
01133	Springfield	6.97
01138	Springfield	8.6
01139	Springfield	7.43
01119	Springfield	8.25
01128	Springfield	10.16
01101	Springfield	7.36
01102	Springfield	7.58
01199	Springfield	5.83
01152	Springfield	7.07
01103	Springfield	7.13
01107	Springfield	5.67
01105	Springfield	7.55
01104	Springfield	5.85
01080	Three Rivers	13.29
01088	West Hatfield	12.79
01089	West Springfield	6.03
01090	West Springfield	5.7
01086	Westfield	7.69
01085	Westfield	7.8
01095	Wilbraham	11.16
01096	Williamsburg	14.73
01097	Woronoco	10.94
01098	Worthington	14.58

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