TRAVEL, TOURISM, AND ECONOMIC IMPACT OF THE CHILDREN’S MUSEUM OF SOUTH CAROLINA
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Abstract

Generally, museums are an integral part of the fabric of any prosperous society. Specifically, children’s museums serve to educate and entertain the youth and the young at heart. The Children’s Museum of South Carolina allows visitors of all ages to touch, explore, play, and learn. According to the Association of Children’s Museums (2013), the total economic activity of its children’s museum members was $449 million. This paper assessed direct, indirect, and induced economic impacts to determine an associated total economic impact that exceeds $4 million for the Children’s Museum of South Carolina.

Keywords: Economic Impact; Cultural Tourism; Marketing Impact; Myrtle Beach, South Non-Profits; Cultural Activities.

The purpose of this paper is to assess the economic impact of the Children’s Museum of South Carolina (CMSC) which is located in the heart of Myrtle Beach. The Children’s Museum of South Carolina is a non-profit organization that was established in 1994 and has since expanded their operations by moving to a larger location (Children’s Museum of South Carolina, 2011). It is important to have reliable information about the cost and benefits of the museum and the economic impact on the local community.

Previous studies have studied the economic impacts of the Coastal Carolina University Football Program (Christia, 2007), Michigan Museums (Stynes, VanderStoep, & Sun, 2004), The Guggenhein Museum (Plaza, 2000), sport expenditures (Siegfried & Zimbalist, 2002), professional sport franchises (Lertwachara & Cochran, 2007) and the New York City Waterfalls (City Economic Development Corporation, 2008). Economic impact studies such as the previous are important policy and planning tools (Fleming & Toepper, 1990). New alliances in US cities are being established to encourage development of cultural activities. With the battle over grants and public funding increasing, cities must stress the educational and economic benefits of their institutions (Strom, 2003).

The goals of the CMSC include entertaining and educating children by providing unique, creative learning activities. The CMSC also offers learning opportunities to educators from area schools and daycares. By providing enriching volunteer activities the CMSC also gives back to the community.
Promoting cultural tourism is yet another goal of the CMSC. Cultural tourism is defined as visits by persons from outside the host community motivated wholly or in part by interest in the historical, artistic, scientific, or lifestyle/heritage offerings of a community, region, group or institution (Silberberg, 1995). The total number of visitors to the Myrtle Beach area was estimated at 14.5 million in 2011 (Statistical Abstract, 2013). Previous literature has suggested that cultural tourists normally have a higher than average income and education (Trainer, 2010). Therefore, we would like to study the direct and indirect economic impact of the CMSC on the Myrtle Beach area. We will examine how the museum:

- Attracts visitors to the Grand Strand.
- Contributes to the local economy through museum admissions, investments in building new museum exhibits, daily operations including marketing and promotional efforts, wages to employees, concession and gift shop sales and through spending by visitors on lodging, restaurants, bars, and retail trade.
- Enriches the cultural heritage of the area by providing a cultural activity for locals and tourists.

Myrtle Beach is unlike competing vacation destinations such as Charleston, South Carolina, which is known for its culture and history. Myrtle Beach is often viewed as a low-cost, full of adventure parks, mini-Orlando, Florida vacation spot (Lacher & Oh, 2012). Educational activities reveal a cultural product which increases the likeliness of tourists and may increase their length of stay in the area. Cultural products such as the CMSC attract tourists and investors to the area because of the enhance image (Strom 2003). A study by the Travel Industry Association (TIA) estimates that 65% of people that travel at least 50 miles or more consume at least one cultural activity (Stynes, et al., 2004).

**Travel and tourism impact**

The U.S. Travel Association’s Travel Economic Impact Model (TEIM) exclusively measures the impact of travel on the U.S. economy at the national, state and local level including travel-generated spending, employment, payroll income and tax receipts annually.

TEIM is the only economic model that produces travel economic impact data that can be compared across all 50 states and the District of Columbia, thereby allowing states and localities to assess their share nationally, regionally or within the state.

The travel spending measured by TEIM includes a variety of categories including lodging, food, retail, public transportation, auto transportation, and amusement/recreation. TEIM estimates include:
• Consumer survey, conducted by the U.S. Travel Association as well as other reputable organizations;
• Travel industry data;
• Economic and business statistics from government sources; and
• Travel statistics provided by destinations.

Travel-generated employment and payroll is estimated by multiplying calculated travel expenditures by the employment/sales ratio of each travel-related industry using official governmental statistics (U.S. Departments of Commerce and Labor) at the national, state and local level. Travel-generated tax revenues for federal, state and local governments are estimated by applying tax rates and fees to appropriate travel expenditures and payroll income estimated by the TEIM.

National tourism

With stable growth in the U.S. and the world economies in 2011, the U.S. travel industry continued to grow following the increase in 2010. In 2011, domestic and international travelers’ spending in the U.S. increased 8.8% over 2010. Of the $813 billion total, $696.7 billion was spent by domestic travelers (8.2% increase from 2010) and $116.3 billion was spent by international travelers to the U.S. (12.3% increase from 2010). The U.S. travel and tourism industry generated a $42.8 billion trade surplus in 2011, $11.1 billion more than 2010 (US Travel Association, 2012).

National Tourism is one of the world’s largest industries, employing millions worldwide. The United States Travel Association estimates domestic and international travelers spent $758.7 billion in the U.S. in 2010 and created more than 14 million jobs (US Travel Association, 2012).

State tourism

The most impressive contribution that travel and tourism makes to the South Carolina economy is the number of businesses and jobs it supports. A study prepared for the South Carolina Parks Recreation and Tourism (2010) agency by the United States Travel Association revealed that domestic travel accounted for a direct economic impact of nearly $10 billion annually and created 107,900 jobs.

Spending on travel or on behalf of tourism in South Carolina totaled $15 billion in 2010. Tourism supported 1 in 10 South Carolina jobs. Arts, Entertainment, and Recreation account for $430 million - $391m direct, $11m indirect, $28m induced (US Travel Association, 2012).

In-State Leisure Travel in South Carolina
Travel by South Carolina residents inside the state for leisure purposes is the definition of In-state leisure travel. In-state leisure travel parties generate 14% of all domestic trips in South Carolina annually. This is 15% of all domestic visitors and 10% of all domestic visitor-days in South Carolina annually. They stay an average of 1.6 nights, and their median party size is 2 people. Their average party expenditure is $410 per trip, and children are present on 29% of these trips. Among travel parties on in-state leisure trips in South Carolina 95% of them drive. None report traveling by air on their trip (US Travel Association, 2012).

- In-state leisure travel parties on day trips account for 48% of in-state leisure trips in South Carolina annually. They represent 46% of all in-state leisure visitors and 17% of all in-state leisure visitor-days in South Carolina annually. Their median party size is 2 people. Their average party expenditure is $180 per trip. Children accompany adults on 23% of these trips.

- In-state leisure travel parties on overnight trips account for 52% of in-state leisure trips in South Carolina annually. They represent 54% of all in-state leisure visitors and 83% of in-state leisure visitor-days in South Carolina annually. They stay an average of 3.2 nights with a median party size of 2 people. Their average party expenditure is $618 per trip. Of these trips, 34% include children (SCPRT, 2010).

**Domestic Leisure Travel to South Carolina from Out-of-State**

Domestic leisure travel parties traveling to South Carolina from out-of-state account for 30% of all domestic trips in South Carolina annually. This is 34% of domestic visitors and 44% of domestic visitor-days in South Carolina annually. Their median party size is 2 people, and they stay an average of 3.8 nights. Their average party expenditure is $1,105 per trip, and children are present on 35% of these trips. Among domestic leisure travel parties from out-of-state, 87% drive to South Carolina, while 7% travel to South Carolina by air (SCPRT, 2010).

- Domestic leisure travel parties from out-of-state on day trips account for 14% of out-of-state domestic leisure travel to South Carolina annually. They represent 11% of out-of-state domestic leisure visitors and 2% of out-of-state domestic leisure visitor-days. They have a median party size of 2 people. Their average party expenditure is $216 per trip. Children accompany adults on 23% of these trips (SCPRT, 2010).

- Domestic leisure travel parties from out-of-state on overnight trips account for 86% of out-of-state domestic leisure travel to South Carolina annually. They represent 89% of out-of-state domestic leisure visitors and over 98% of out-of-state domestic leisure visitor-days. They stay an average of 4.4 nights with a median party size of 2 people. Their average party expenditure is $1,206 per trip. Children accompany adults on 37% of these trips (SCPRT, 2010).
Local tourism

Coastal Carolina University estimates tourism accounts for a $6.3 billion economic impact and another $1.8 billion in indirect economic impact and 73,500 jobs throughout the local community. The tourism industry is made of various industries that benefit directly from traveler spending in South Carolina (USTA, 2012). Accommodations, food services, and amusement are 3 of the top outputs for tourism. Tourism generates $1.2 billion in State and Local taxes.

Horry County, which includes the resort area of Myrtle Beach, led all counties in travel expenditures, payroll income and jobs directly generated by domestic traveler spending in 2010. Domestic travel expenditures in Horry County reached nearly $3.1 billion, accounting for 31.8 percent of the state total. These expenditures generated $612.1 million in payroll income and 36.6 thousand jobs for area residents (USTA, 2012).

Economic impact

Economic impact analysis (EIA) examines the effect of a policy, program, project, activity or event on the economy of a given area. The area can range from a neighborhood to the entire globe. Economic impact is usually measured in terms of changes in economic growth (output or value added) and associated changes in jobs (employment) and income (wages). The analysis typically measures or estimates the level of economic activity occurring at a given time with the project or policy and calculating the difference from what would otherwise be expected if the project or policy did not occur (EMSI, 2013).

Travelers produce “multiplier” impacts on the U.S. economy. In addition to the goods and services that are purchased directly by travelers, the inputs used to produce these goods and services are also purchased through travel industry business operators — indirect travel spending. Furthermore, as a result of spending in the areas by the employees of travel businesses and their suppliers, additional sales are generated - induce output. Total travel related output was $1.9 trillion in 2011 (EMSI, 2013).

Total travel-related employment was 14.4 million in 2011. This indicates that one in 9 U.S. non-farm jobs directly and indirectly relies on the travel and tourism industry. Total travel related employment includes 7.5 million direct tourism jobs — jobs where workers produce goods and services sold directly to visitors — and 6.9 million indirect and induced travel related jobs — jobs where workers produce goods and services used to produce what visitors buy and jobs supported by induced sales (EMSI, 2013).
Total economic impact is equal to the summation of direct, indirect, and induced effects. In terms of the Children’s Museum of South Carolina, direct effects include: expenditures by museums for day-to-day operations, expenditures by museums for annual capital improvements, and spending by tourists. Direct effects initiate additional economic activity to occur, therefore setting off a ripple in the local economy. These ripples fall into two categories, indirect effects, created by business-to-business transactions, and induced effects, created by business-to-consumer transactions. In an economic impact analysis, researchers quantify the direct effects. An input-output model then measures the indirect and induced effects (Tuck & Schwartau, 2012). In this study, researchers reviewed survey data collected by CMSC.

Direct Impact – This study defines direct impact as the initial spending as an increased income into an economy (Lee 2001). Specifically, they are the expenditures injected into the Myrtle Beach area by CMSC.

Indirect Impact – This study defines indirect impact as the effects from other industries and visitor spending due to the existence of CMSC. Local industry sectors benefitting from CMSC are: restaurants, lodging, retail stores, and other recreation and entertainment activities.

Induced Effect – This study defines induced impact as additional rounds of spending and the impacts of household expenditures from wages and salaries. This results as the employees of businesses and their suppliers spend part or all of their earnings in the area. The spending itself generates sales additional to the indirect impact. An economic multiplier is utilized to account for this “ripple effect”. Since, the process of money “cycling” through the local economy is the multiplier effect, the multiplier effect represents the overall economic impact of an event (Lee 2001). Further ripple effects are caused by employees of impacted businesses spending some of their salaries and wages in other business in the host community. According to IMPLAN, the average multiplier score for a museum the size of CMSC is 1.409648. In essence, each employee represents the re-circulation of every dollar they receive .409648 times.

Total Impact – the sum of direct, indirect, and induced effects.

Employment

Employment represents the number of jobs generated by traveler spending, both full and part-time (SC DOT 2003). Total personnel expense at the Children’s Museum of South Carolina is $158,130. There is a general manager and eight staff members employed at the Children’s Museum. In addition, there are several part time workers that assist the programs, seasonally. “After two years of declines, travel-generated employment increased 1.9% to 7.5 million in 2011” (USTA, 2012).
In 2011, travel expenditures directly generated $195.6 billion in payroll income for Americans, as well as $124.1 billion tax revenue for federal, state and local governments. After five years of consecutive declines, business travel started to grow in 2010 and continued to increase in 2011 (USTA, 2012).

Visitors/Ticket Sales

Ticket sales can be grouped into four categories: General Admission, Membership, Birthday Party, and Museum Rental. Visitors traveled from 46 states and the District of Columbia. In addition, travelers came from 18 different countries.

The total ticket sales for the Children’s Museum of South Carolina in 2012 were $158,918 (Table 2). CMSC enjoyed a 25.6% increase in attendance and a 35.6% increase in field trip attendance over the previous year. The museum connected with 42,420 patrons, 17,616 adults and 24,804 children. There were 1654 adults and 6449 children who experienced the museum through community outreach efforts. There were 34,317 visitors to the museum.

Merchandise

The merchandise consists of refreshments, tie dye t-shirts, Children’s Museum of South Carolina souvenir and gift items. Also, that is revenue from several exhibits: hurricane simulation, gem mining, and fossil dig. The museum sold $19,979 of merchandise in 2012. This is an average of $2.70 per person.

Business to Business Expenditures

The Children’s Museum of South Carolina utilizes local vendors, financial and insurance services, transportation services, food, and equipment services and suppliers. In 2012, the museum spent $5,494 on in-house exhibits and $30,790 on traveling exhibits. Expenditures include $37,502 on facilities which include utilities, supplies, supplies, building restoration and maintenance. There are several sources of marketing related expenditures. General advertising, public relations, printing and reproduction cost $23,124. Total fundraising expense was $12,777. (Children’s Museum of South Carolina, 2013).

Lodging
For CMSC, there were 17,550 individuals who patronized the museum with overnight stays. These individuals comprised 4806 families, averaging 3.6 individuals per family. The average daily rate for hotels in 2012 was $99.26 (Smith Travel Research, 2011). There were 26,430 total room nights (Table 1). Visitors associated with CMSC spent an average of $2,643,000 on lodging.

Table 1: Total Room Nights (Children’s Museum of South Carolina 2013)

<table>
<thead>
<tr>
<th>Number of Hotel Nights</th>
<th>Number of Families</th>
<th>Room nights</th>
<th>Total room nights $</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>113</td>
<td>113</td>
<td>$11,300.00</td>
</tr>
<tr>
<td>2</td>
<td>309</td>
<td>618</td>
<td>$61,800.00</td>
</tr>
<tr>
<td>3</td>
<td>509</td>
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<tr>
<td>4</td>
<td>604</td>
<td>2416</td>
<td>$241,600.00</td>
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<tr>
<td>5</td>
<td>528</td>
<td>2640</td>
<td>$264,000.00</td>
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<tr>
<td>6</td>
<td>673</td>
<td>4038</td>
<td>$403,800.00</td>
</tr>
<tr>
<td>7</td>
<td>1482</td>
<td>10374</td>
<td>$1,037,400.00</td>
</tr>
<tr>
<td>8+</td>
<td>588</td>
<td>4704</td>
<td>$470,400.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td>26430</td>
<td>$2,643,000.00</td>
</tr>
</tbody>
</table>

Entertainment, Food, and Shopping

Nearly a third of food and beverage business comes from tourism (USTA, 2012). Entertainment and recreation impact is defined as visitor spending on user fees, admissions at amusement parks and attractions, attendance at nightclubs, movies, shows, other sports events, and all other forms of entertainment and recreation (U.S. Travel Data Center, 2006) while traveling. The food service sector, which includes restaurants and other eating and drinking places, provided more jobs than any other industry sector. During 2010, domestic traveler spending in this sector supported 54.2 thousand jobs, accounting for over half (50.3%) of the state total jobs generated by domestic travel. The labor-intensiveness of these businesses and the large proportion of travel expenditures spent on food service together contribute to the importance of this sector (USTA, 2012).

Food expenditures are defined as spending in commercial eating facilities and grocery stores or carry-outs (U.S. Travel Data Center 2006). Grand Strand leisure travelers spent an average of $121 per person per day. Furthermore, visitors typically use their own car as their primary
transportation (88%). Most Grand Strand visitors (49%) stayed in hotels, while 29% stayed in condos and villas (Statistical Abstract., 2013).

Since the average family size is 3.65, the average family expenditure is $442. Subtracting the ADR of $100, the group spends an average of $342 per day on non-lodging expenditures. This amount equals $94 per person in non-lodging expenditures. There were a total of 97,522 heads in beds (individuals multiplied by the total number of days visited). We are able to estimate the food, entertainment, shopping value at $913,868.

Additional Impacts

There are several intangible benefits generated by the Children’s Museum of South Carolina. Among the intangible benefits are word of mouth communication and social media exposure, which enhance national and international recognition. Furthermore, there are social benefits enhance the reputation of the local area. Across the United States, museums are considered an integral part of the community fabric and an important factor in the quality of life. “Arts and culture helps foster creativity, bridges class divides, retains college graduates, recruits companies, and raises the quality of life” (Trainer, 2010). In general, the presence of CMSC increases its host city’s overall marketability. Other benefits include an increase in community visibility, positive psychic income, and an enhancement in community image (Lee, 2001). Prestige means more visitors (McCartha, 2002). A successful children’s museum is a valuable recruiting tool to attract existing and future families.

Total Impact

The economic impact of the Children’s Museum of South Carolina is affected by the following activities (Children’s Museum of South Carolina, 2013):

<table>
<thead>
<tr>
<th>Activity</th>
<th>Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment</td>
<td>$158,130</td>
</tr>
<tr>
<td>Ticket Sales</td>
<td>$147,767</td>
</tr>
<tr>
<td>Merchandise</td>
<td>$19,979</td>
</tr>
<tr>
<td>Marketing/PR</td>
<td>$23,124</td>
</tr>
<tr>
<td>Educational programs/events</td>
<td>$7,957</td>
</tr>
<tr>
<td>Exhibits</td>
<td>$5,494</td>
</tr>
<tr>
<td>Entertainment/meals/shopping</td>
<td>$913,868</td>
</tr>
</tbody>
</table>
We calculate the total economic impact as the sum of direct, indirect, and induced spending associated with the Children’s Museum of South Carolina (Table 2). This study proposes that staff employment is a direct expenditure. The direct impact is $158,130. In addition, indirect spending is generated with ticket sales, merchandise, advertising, sponsorships, concessions, entertainment, meals, shopping, lodging, and other museum related activities. The indirect impact is $3,867,924. Finally, induced expenditures result from the ripple effect that occurs from salaries of wages of museum staff, and spending their households. The economic multiplier representing this effect is 1.40965. The induced impact is $222,908. Combining direct, indirect, and induced expenditures, we report that the total economic impact from CMSC is $4,248,962.
Implications

Children’s museums can be found in 22 countries. This paper has marketing and segmentation implications, by emphasizing the relevance of a children’s museum and the possibilities of pinpointing specific travelers for future patronage. In calendar year 2010, according to I-94 data at least 71,393 overseas travelers, excluding Canadians and Mexicans, indicated South Carolina was the first or primary destination on their US trip. Historical data indicates that two of South Carolina’s largest overseas visitor origin-countries are Germany and the UK. In calendar year 2010, according to I-94 data, at least 15,472 UK residents and 14,776 German residents visited South Carolina (SCPRT, 2010). Understanding the geographic origin of visitors to the local area is critical in customizing specific marketing collateral for each group.

The findings of this paper influence destination managers to be aware of their target market’s need for memorable experiences. These experiences do not require large amusement parks which are often the focus of advertising in tourist driven areas. The CMSC can partner with destination managers to design these experiences for young children, which will increase tourism and the economic impact. Visitors are willing to stay at a destination longer and spend more money when they have more to see and do. In a collaborative effort, the museum has the ability to promote family-friendly places to play, shop, eat, and stay while visiting. In return, CMSC is able to benefit from partnering entities in cooperative marketing efforts to day-trippers and overnight visitors.

Politically, CMSC is able to present a strong case to the local government in seeking financial and moral support. In addition, the potential political impact of CMSC can result from the ability to influence city government’s policies and priorities. CMSC is an integral part of the community, with strong ties with individuals, families, and area businesses. A successful children’s museum has the ability to persuade local residents from going elsewhere for an excursion. The museum’s associated total economic impact of $4,248,962 is a significant contribution, not only to the local economy, but to the entire region.

Conclusion

This study was made possible with the cooperation and support of the CMSC General Manager. Conducting an economic impact study is important because it is a quantitative evaluation of the presence and effect of a new or changing event on a particular geographic area. This study was designed to examine the effects of the contribution of Children’s Museum of South Carolina on the Myrtle Beach economy. Generally, economic impact is represented by measures of spending, employment, payroll, business receipts, and tax revenues (TIAA, 2002).

In Myrtle Beach, influential leaders have created strong initiatives to address staggering tourism in the area due to the recent recession. These same leaders have supported cultural...
tourism and lower price family-fun options such as the CMSC. Attracting more tourists and improving the city’s image has become the vision of Myrtle Beach. This vision is a win-win for the city and for the CMSC. The CMSC’s ability to maintain operations can be seen by continuous contributor support, developing new exhibits, and continuing to increase ticket sales. According to the Association of Children’s Museum (2013), 30 million children and families visit children’s museums annually. The economic impact of the CMSC mutually benefits the city, county, and state in their vision of a strong tourism focus.

This study set the parameters for direct, indirect, and induced economic impacts. The total impact incorporated assessments of spending generated by employment, tickets, general merchandise, marketing, food and drink, recreation, hotels, and other support services. This paper has provided evidence that a children’s museum has had a monumental financial impact on travel, tourism, and the economy of Myrtle Beach area of South Carolina.

References


The Economic Impact of Travel on South Carolina Counties (2011). A study prepared for the South Carolina Department of Parks, Recreation & Tourism by the U.S. Travel Association Washington, D.C. August 2012.


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