

RiverRocks 2013:
An investigation into the economic impacts associated with select events.



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Executive Summary

This study was conducted on specific events associated with RiverRocks 2013. Given the dispersed nature of the festival, both chronologically and geographically, it is difficult to conduct an assessment of the entire festival. What follows is an assessment of key events that lent themselves to spectatorship and/or researcher accessibility. This study provides a foundation upon which to build a reliable set of data for planning and marketing. This report includes only the direct economic impacts associated with the Stump Jump, 3 Sister's Music festival, Over the Edge, Head Race, and the Finale. Indirect impacts, vendor spending and expenditures related to event organization were not included.

Key Findings:

- These 5 events involved an estimated 20,263 participants/spectators in the Chattanooga area over the course of 2 weeks, including 8,736 visitors.
- Participants and spectators generated an estimated 12,720 paid hotel room nights*.
- Visitors stayed an average of 2.21 days and 1.8 nights, traveling with an average party size of 3.36.
- Visitors spent an average of \$428.68 while in the area, with a total direct impact of \$4,132,368. Including indirect and induced estimates, the total impact on the local economy was \$5,496,049.
- Visitors reported a mild preference for shopping local as opposed to shopping at chain restaurants. This preference ensures that expenditures remain in the local economy and do not "leak" out to corporate headquarters.

**This estimate includes spectators for the head race, but not participants. See below regarding a lack of reliable data regarding race participants.*

Implications & Discussion:

- The River Rocks festival has a significant direct economic impact on the local area. Future events could maximize outputs with design modifications.
- Visitors fit the typical Adventure Tourist profile: Relatively young (Avg.= 42), well-educated, primarily white, with higher than average household incomes (Lamoureaux et al., 2010).
- The events mostly drew visitors from TN and adjacent states (GA, NC, AL).
- The dispersed nature of these events certainly impedes the spectatorship that similar festivals draw. The Stump Jump, for example, draws 1000 participants, but is remote and inaccessible to spectators, as is the Triple Crown Bouldering event. Incorporating a few high profile events that would draw people to the Downtown/Northshore vicinity would likely induce spending as well as bring in tourists.
- Clear communication regarding events and scheduling (e.g. website calendar) would also aid in attracting tourists. Even the researchers, who have experience with the events and the local area, struggled to understand the nature of each event, rendering it difficult to determine the best method of study.
- Economic impact is one factor, but social and environmental impacts on the region can be just as important. Future research needs to address the full impact of this festival, and the adventure tourism market, on the Chattanooga region (reports forthcoming).

Table 1. Summary of Economic Impacts for Five Events

Event	Stump Jump	Head Race	Over the Edge	Finale	3 Sisters	All Events
<i>Participants</i>	1000	1500	N/A	5000	N/A	7500
<i>Spectators</i>	N/A	523	240	N/A	12000	12763
<i>% Tourists</i>	64%	79%	4%	58%	30%	47%
<i>Days</i>	2.62	1.59	2.25	1.79	2.78	2.21
<i>Nights</i>	2.04	0.93	2.75	1.18	2.11	1.80
<i># in party</i>	3.01	5.60	2.75	2.13	3.33	3.36
<i>Food</i>	\$134.91	\$120.00	\$96.72	\$112.00	\$198.75	\$132.48
<i>Lodging</i>	\$217.89	\$66.67	\$116.72	\$93.67	\$232.50	\$145.49
<i>Entertainment</i>	\$46.72	\$33.33	\$22.38	\$40.00	\$96.25	\$47.74
<i>Shopping</i>	\$57.50	\$27.28	\$16.67	\$44.00	\$44.38	\$37.97
<i>Transportation</i>	\$61.09	\$37.09	\$16.67	\$27.33	\$132.63	\$54.96
<i>Other</i>	\$7.34	\$3.92	\$6.67	\$7.33	\$25.00	\$10.05
Total Spending	\$525.45	\$288.29	\$275.83	\$324.33	\$729.51	\$428.68
<i>Direct Impact</i>	\$337,229	\$230,633	\$2702	\$935,567	\$2,626,236	\$4,132,368

Table 2. Demographic Information for Five Events

Event	Stump Jump	Head Race	Over the Edge	Finale	3 Sisters	All Events
% Female	36%	57%	67%	53%	56%	48%
Age	37	46	36	42	48	42
Children	1.08	1.57	0.25	0.5	1	1.23
Education*	4.07	3.99	4.5	3.93	4.22	4.04
Household Income	\$105,366	\$119,439	\$65,000	\$108,889	\$81,250	\$95,988
Region**	2.13	1.80	2.00	1.60	1.67	1.93
Shop local***	3.87	4.13	2.00	3.80	4.75	3.98

* 4= B.S/B.A., 5= Master's or equivalent

** 1= TN, 2= Regional (AL, GA, NC), 3= Non-adjacent states

*** Always Shop Local=1, Always Prefer Chains=10

Background and Purpose:

This study was designed to provide preliminary data regarding the direct economic impact of events during the River Rocks festival. This information will help to guide decisions about marketing, event planning, and tourism promotion in the Chattanooga area. While state and national estimates for adventure tourism impacts can provide a ballpark figure, regional data are more relevant and practical for planning purposes. Given the unique character of this festival, this study was delimited to a few manageable events. Future studies may be conducted on other events to estimate the entire impact of the weeks-long festival.

Method & Analyses:

These events present unique difficulties in that: they are not gated, thus requiring the use of a variety of spectator counting methodologies; visitors move in and out of survey collection areas and it may be unclear whether they are a spectator or a passerby; they are spread out over time and geographical space, making comprehensive data collection difficult. Given these obstacles, the researchers used a variety of data collection methods, depending on the context of each event.

Consistent across all events was the use of a randomized, time-stint survey method (Smith, 2010). Random sampling reduces bias associated with self-selected response (common in email data collection), incentivized survey completion, and location dependent distribution. Trained data collectors were given a geographic boundary, a time limit of 3 hours and a scripted introduction.

Data were entered into Excel and SPSS to analyze descriptive statistics for tourists at each event. Averages and totals include only completed responses for each question. The only question lacking a large percentage of responses (25.4%) was the inquiry about household income. This is a common phenomenon with voluntary surveys and there is no reason to assume that this introduces significant bias. Indirect and induced impacts were estimated using the IMPLAN multiplier for Hamilton County, TN. This utility accounts for local industry, import-export balance, and economic “leakages” associated with the purchase of goods from non-regional suppliers.

Responses:

Researchers collected 402 surveys with a response rate of 67%. Participant gender was evenly split, with 48% being female and an average age of 42. Forty-seven percent of all survey participants were visitors to the Chattanooga area.

Over The Edge:

This event was well contained and had the fewest spectators. Attendance at this event was estimated using actual head counts at 3-hour intervals over the 2-day duration. This method provides a realistic lower bound for attendance, given that the average spectator remained there for less than an hour. Only 4% of attendees were visitors, and they reported being there primarily for other River Rocks events.

Stump Jump:

Survey responses for this event included participants only. Participant numbers were provided by the race coordinators. Surveys were collected during the vendor fair on the eve of the race. Researchers were stationed at the tent where all racers were required to pick up their pre-race packets. Participants completed the survey while in line for, or immediately after receiving, their packets.

3 Sisters Music Festival:

While not officially a part of the River Rocks festival, it was assumed that there was enough cross-pollination with this event to include it in the analyses. However, this event received the fewest of all survey responses, and results should be considered tentative. Random-sampling provides a measure of rigor, and the economic figures are consistent with other reports, but a reliable study would require a larger response. Researchers collected data on Friday night only, even though the festival continued through the weekend. Surveys were collected during the entire 4-hour show, until sunset prevented any more surveys from being completed. Attendance estimates for this festival were provided by the Visitor's Bureau and confirmed using the "Jacobs" method for crowd estimation (Seidler & Meyer, 1976). Researchers attending the event estimated the square footage occupied by each attendee. This figure was then multiplied by the total square footage for the venue using an area calculator on Google Maps. This method provided a total of 7342 participants for Friday night alone. Thus, the estimate of 12,000 attendees for the entire weekend seems tenable.

Head Race:

This event proved the most difficult to assess, given the age of the participants (high school), the fact that teams bring large mess tents for meals, and teams either attend for one day only or find the most economical ways to stay overnight (e.g. many students per hotel room and/or camping in school or church gyms). While there were 1500 student participants, actual head counts (utilizing high definition video cameras during the height of the event) identified 523 spectators. Researchers used only the spectator surveys to estimate a lower bound total direct impact. A higher bound was provided by including the participants in the survey count. The final number was an average of the two. A complete analysis would need to include expenditure estimates for each team of rowers.

Finale:

Attendance at this event was assessed using the same method described for the 3 Sisters event. Estimates from the visitor's bureau were confirmed using the "Jacobs" method. It is possible that this event would have some spillover with the head race, since it commenced as the race was concluding. However, Researcher observations regarding attendees and differences shown in the data render this unlikely.

References Cited:

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