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## The Economic Impact of the 2016 National Cherry Festival

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# THE ECONOMIC IMPACT OF THE 2016 NATIONAL CHERRY FESTIVAL

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Seidman Research Office  
Grand Valley State University  
10/4/2016



# THE ECONOMIC IMPACT OF THE 2016 NATIONAL CHERRY FESTIVAL



## EXECUTIVE SUMMARY

The National Cherry Festival, July 2-9, 2016, is estimated to have generated or supported economic benefits for Grand Traverse County and Suttons Bay in the following ways:

- \$19.0 million increase in economic output
- \$11.3 million increase in direct spending
- \$5.3 million increase in total earnings
- \$1.1 million in new spending by the Cherry Festival organization
- Creating 228 local jobs
- Prompting \$66.43 in average daily spending for all visitors
- Bringing \$53.00 in per-person, per-day direct spending

We find that:

- Approximately 94% of Cherry Festival visitors were from Michigan
- 190,000 visitors attended, over 600,000 visitor days
- The average age of all visitors was 41
- 42% of all survey respondents said the National Cherry Festival was the primary reason for visiting Traverse City
- All visitors stayed in Traverse City on average 3.31 days

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## PURPOSE OF THIS REPORT

The purpose of this report is to provide an analysis of the economic impact the National Cherry Festival has on the Traverse City area. We define the Traverse City area as Grand Traverse County and Suttons Bay (49682). The economic impact measures total visitors to Traverse City during the week of the festival, visitor days spent at the festival, the daily spending patterns of those visitors, and the economic activity generated by the National Cherry Festival itself. This report provides a summary of data collected during the 2016 Festival.

## SUMMARY OF METHODOLOGY

In order to assess the economic impact of the National Cherry Festival, we collected survey data to determine visitor count, visitor days and visitor spending. To collect this data, we used three different surveys focused on economic impact data, visitor origins and size of their party, and a survey to determine local resident count. The surveys were administered three times a day at random times throughout the week of the festival by The National Cherry Festival's extensive volunteer network.

The National Cherry Festival is an open festival, meaning visitors do not have to buy tickets to attend the festival. Open venues make it difficult to accurately count visitors, however the survey data collected allowed us to use alternative approaches to estimating festival attendance.

In calculating the economic impact of the National Cherry Festival, we will only count spending that is directly or indirectly caused by the festival. The economic data used will be based on survey respondents who visited Traverse City for the sole purpose of attending the festival. All substitute spending is excluded from the economic impact. This substitute spending may come in the form of local residents along with visitors who were in Traverse City for other reasons.

In addition to visitor spending, we also include the spending of the National Cherry Festival in calculating the economic impact. This spending is directly related to organizing and hosting the festival. However, due to the scope of this report, spending by vendors, media or entertainers is excluded.



*The mission of the National Cherry Festival is to celebrate and promote cherries, community involvement, and the Grand Traverse Region.<sup>1</sup>*

## BACKGROUND

The 2016 National Cherry Festival (NCF), which ran from July 2<sup>nd</sup> through July 9<sup>th</sup>, marks the 90<sup>th</sup> anniversary of the festival. The origins of the NCF started in May 1925, when local business owners and farmers joined together to promote the cherry farming industry. At the time, the NCF was named “Blessings of the Blossoms Festival”.<sup>2</sup> Within four years, the success of the NCF was apparent, thus the director extended the 1930 festival from one day to three days. The NCF gained national attention and even attracted President Herbert Hoover to the 1930 opening day ceremonies.

In 1931, Michigan legislature passed a resolution declaring the NCF a national celebration. The NCF began to take on its more modern form in 1964 when the festival committee moved the festival to the first week in July, declaring that week “National Cherry Festival Week.” In 1968, the NCF was officially extended to its current duration of a full week.<sup>3</sup>

The NCF has enjoyed numerous awards over the past 90 years, including Top Ten Events by *USA Today* in 1997, 1998, 1999 and 2014. This national recognition has provided the NCF with a strong reputation, helping it attract U.S. Presidents, astronauts, professional athletes, celebrities and even Disney characters. The main attraction for the NCF is the Blue Angels, which first participated in 1988 and

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<sup>1</sup> Welcome to the National Cherry Festival. (n.d.). Retrieved July 31, 2016, from <http://www.cherryfestival.org/>

<sup>2</sup> Ibid

<sup>3</sup> Ibid

returned in 1992. In addition to the airshow, the NCF also hosts concerts, races and parades. A small sample of the 2016 festival events include:<sup>4</sup>

- The Blue Angels (3 shows in 2016)
- Billy Idol, Cheap Trick, Frankie Ballard, Color Me Bad and Vanilla Ice
- Leelanau Peninsula wine excursions
- Beach volleyball tournament
- 5k to half-marathon race
- Midway amusement park

These events would not be possible without the support of volunteers and sponsors. Given the reputation and cultural impact on Traverse City, the NCF has the ability to attract both local and national brands, including:

- The Home Depot
- Jack Daniels
- Pepsi
- United Airlines
- Miller Lite

Figure 1 on the following page shows the festival map for 2016. Please note, some events do occur outside of this map.<sup>5</sup>

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<sup>4</sup> Ibid

<sup>5</sup> Ibid



Figure 1-Festival Layout



## VISITOR SURVEYING AND DEMOGRAPHICS

To determine the economic impact of the 2016 National Cherry Festival on the region, an intercept survey was conducted. There were three different survey forms used: economic survey; days visited survey; and local resident survey. The economic and days visited surveys were conducted during the week of the NCF. The local resident survey was conducted a week after the festival. Additional information is available in Appendix A.

Respondents had to be 18-years old or older to be included in the survey. During the week of the festival, there were 1,541 interview requests with 653 surveys completed (economic survey and days visited survey). This equates to a total response rate of 42.38%.<sup>6</sup> This response rate exceeds our targeted 383 completed surveys, with a 95% confidence level, and a 5% margin of error.

The results show attendees from 24 different states, with approximately 94% coming from Michigan and 4% from Grand Traverse County and Suttons Bay (Zip code 49682). Figures 2 and 3 show the geographic distribution of the survey respondents within Michigan and the United States. Not shown in these figures are visitors from

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<sup>6</sup> The economic survey response rate is 40.36% and the days visited survey response rate was 46.23%. The local resident survey was designed for local residents; thus the response rate was not calculated.

other countries, which include Canada, France, Netherlands, Austria, Croatia, Germany, Ukraine, Chile, and Lithuania.

Figure 2: Survey Respondents Regional

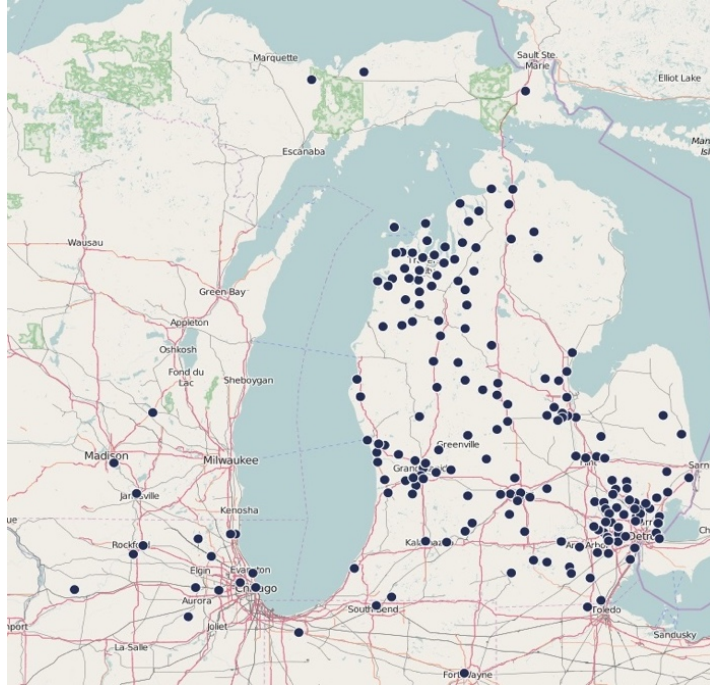
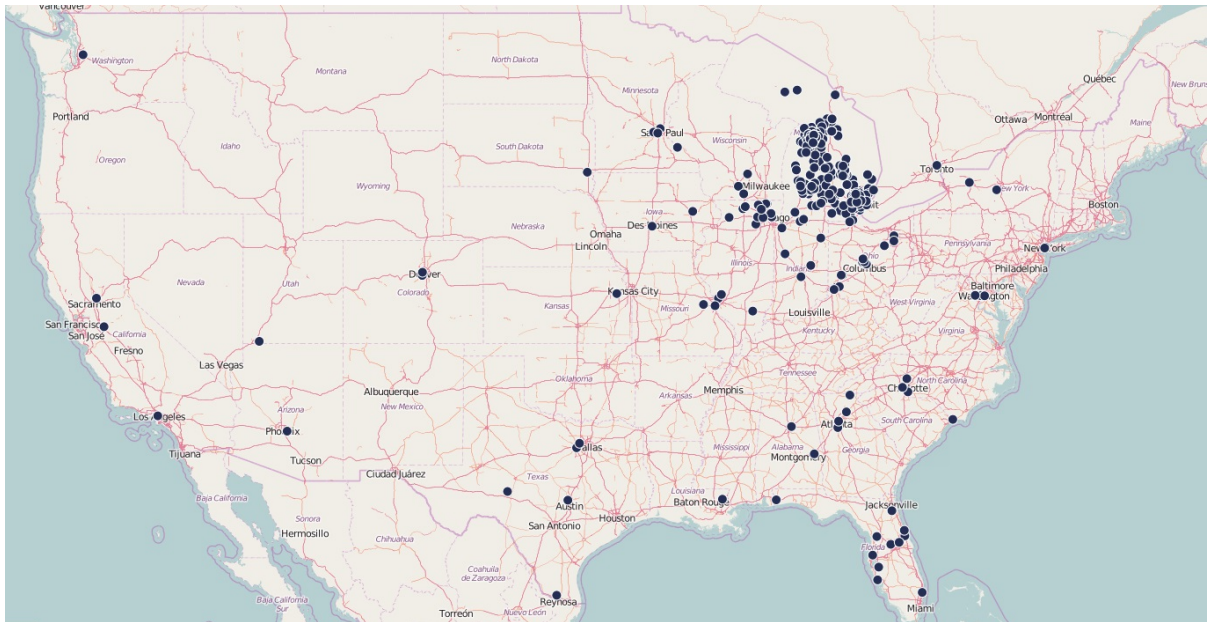


Figure 3: Survey Respondents National





## DEFINING THE ECONOMIC REGION

To properly determine who is a visitor to the festival we must first define the local region, which, for the purpose of this report, is Grand Traverse County and Suttons Bay. This defined region covers 85% of a 15-mile radius around Traverse City. The remaining 15% (49621 and 49650) was deemed too remote to be considered a part of the local region.

We believe this defined region represents a conservative approach to determining the economic impact of the NCF. Figure 4 and Figure 5 display the map of the defined economic region.<sup>7</sup> Demographics of this economic region are presented in Appendix B.

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<sup>7</sup> MapTechnica. (n.d.). Retrieved August 20, 2016, from <https://www.maptechnica.com/> and Google Maps

Figure 4: 15-Mile Radius from Traverse City

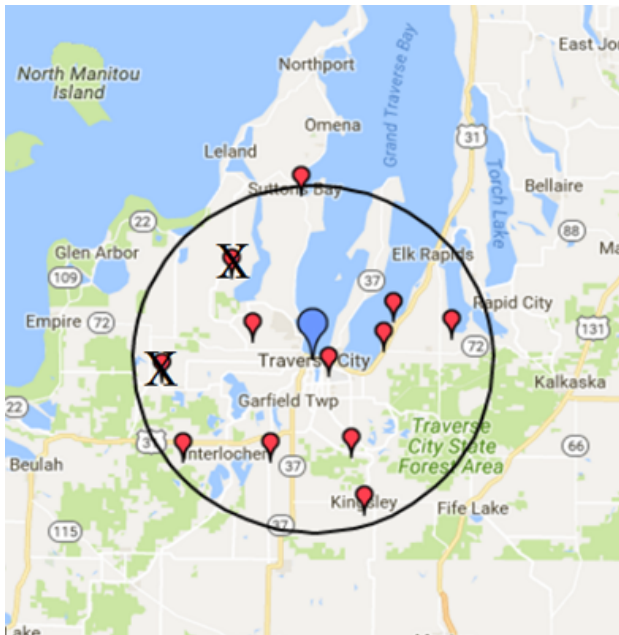
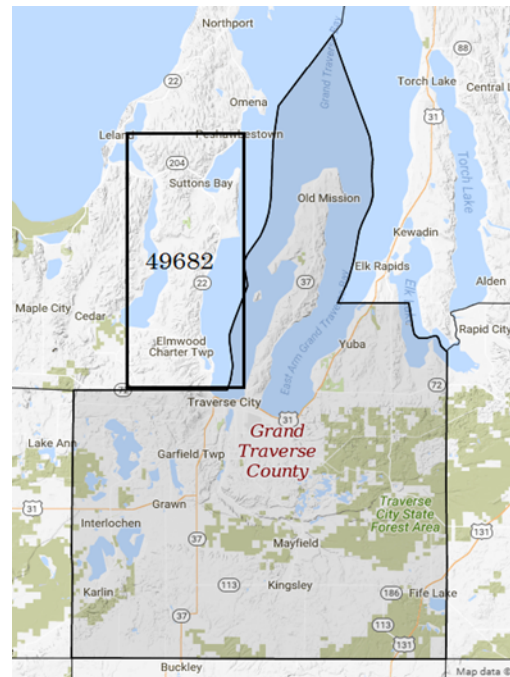


Figure 5: Grand Traverse County and Suttons Bay Micro View



### DETERMINING WHO IS A 'VISITOR'

To calculate the economic impact of the NCF we should consider only spending that occurred specifically because of the NCF. To accomplish this, survey respondents are categorized into three groups:<sup>8</sup>

**Non-Local Visitors:** Spending by non-local visitors is the key driver in economic impact studies. These visitors' primary residence must be outside the defined economic region and the purpose for the visit must be associated with the NCF.

**Local Residents:** Spending by local residents is not counted in the economic impact because the spending would have happened during this time in absence of the NCF. All survey forms ask for zip codes, which helps identify the local residents. For the purpose of this report, we will include local residents if they claimed their primary reason for being in Traverse City was the NCF.

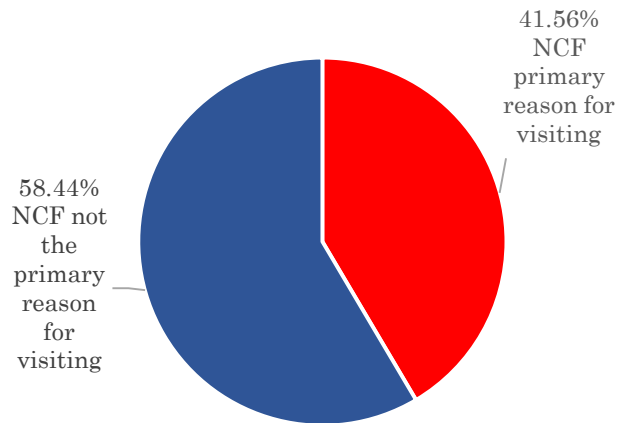
**Casual Visitors:** These visitors were already in Traverse City for other reasons (family, relatives, business, etc.). The spending of these visitors cannot be included in the economic impact because they were already in town and it is likely they would have spent the money had there been no festival. The

<sup>8</sup> Crompton, J. L., Lee, S., & Shuster, T. J. (2001). A Guide for Undertaking Economic Impact Studies: The Springfest Example. *Journal of Travel Research*, 40(1), 79-87. doi:10.1177/004728750104000110

economic survey asks the question: “Is the Cherry Festival your primary reason for visiting T.C.?” This allows us to identify the casual visitors.

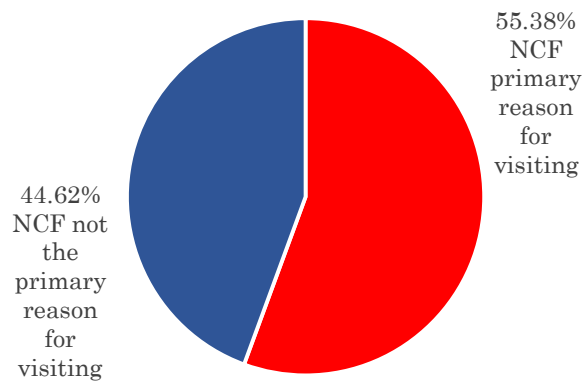
To determine the reason why the visitor was in Traverse City, we asked the survey respondent if the NCF was the primary reason for visiting. The results from this question are found in Figure 6 and Figure 7.

Figure 6: Primary Reason for Visiting Traverse City:  
All Survey Respondents



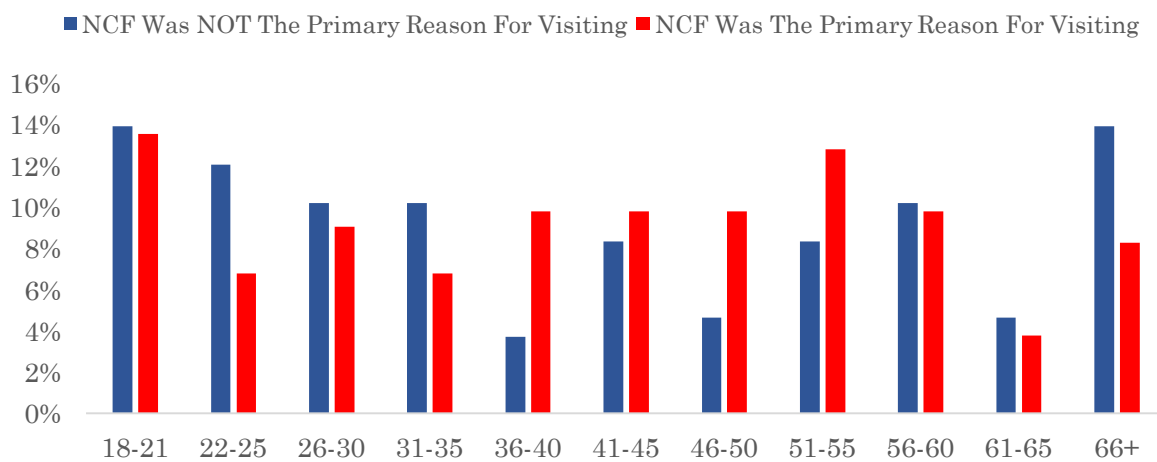
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Figure 7: Primary Reason for Visiting Traverse City:  
Non-Local Survey Respondents



The age of all the surveyed respondents ranged from 18 years old to 84 years old, with an average age of 41 years old. Those that stated the Cherry Festival was their primary reason for visiting Traverse City had an average age of 43 years old. Those that stated the Cherry Festival was not their primary reason for visiting Traverse City had an average age of 39 years old. Figure 8 presents the age distribution of respondents separately for those who claimed NCF was the primary reason for the visit and for those who claimed NCF was not the primary reason for the visit.

Figure 8: Age Distribution of All Survey Respondents



### ESTIMATING NUMBER OF VISITORS AND VISITOR DAYS

To measure the economic impact of an event like NCF it is necessary to have an accurate count of visitors over the week of the event. The open and geographically spread-out format of the event creates challenges for estimation of attendance. Visitors could enjoy the festival atmosphere without paying an admission price. Hence, it is not possible to verify the total attendance by admission tickets or a turnstile count.

Instead, we focused on the survey respondent’s home zip code as a means to estimating local and non-local visitors. Table 1 presents summary calculations for total local visitors and visitor days. Detailed information is available in Appendix C.

Table 1: Total Local Visitors During the NCF

Local Visitors	71,494
Average Number of Days Spent at NCF by Locals <sup>9</sup>	3.92
<b>Estimated Number of Local Visitor Days</b>	<b>280,255</b>

The intercept surveys asked the respondent for their home zip code. Using the results from the survey and the results from Table 2, we are able to estimate the number of visitors from outside Grand Traverse County and Suttons Bay (Table 3). Additional information is available in Appendix C.

Table 2: Total Non-Local Visitors During the NCF

Estimated Number of Non-Local Adult Visitors	91,539
Non-Local Visitors Children Per-Adult <sup>10</sup>	0.30
<b>Non-Local Visitors Total</b>	<b>119,000</b>

The survey results estimate 71,494 local residents and 119,000 non-local residents visited Traverse City during the NCF. This equates to 190,494 visitors to Traverse City during the week of NCF (Table 3).

Table 3: Total Estimate of Visitors to Traverse City During NCF

Local Visitors	71,494
Non-Local Visitors	119,000
<b>Estimated Total NCF Visitors</b>	<b>190,494</b>

To properly calculate the economic impact of these visitors, we must first determine their primary reason for visiting Traverse City and how many days those visitors plan to spend in Traverse City during the NCF.

Based on the survey results, we estimate that there were 79,246 visitors who claimed to be in Traverse City primarily for the NCF. These visitors stayed in Traverse City for an average 3.55 days, resulting in 281,322 visitor days. This data is presented in Table 4.

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<sup>9</sup> Based on responses to the economic survey and days visited survey

<sup>10</sup> Based on responses to the economic survey

Table 4: Total Visitor Days Based On the Reason in Traverse City

<b>Estimated Total NCF Visitors</b>		<b>190,494</b>	
		<b>NCF</b>	<b>Other</b>
Reason for Being in Traverse City		41.60%	58.40%
Estimated Number of Visitors		79,246	111,249
Average Number of Days Spent in Traverse City <sup>11</sup>		3.55	3.42
Estimated Number of Visitor Days		281,322	380,470
Total Number of Visitor Days		661,792	

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<sup>11</sup> Based on responses to the economic and days visited surveys

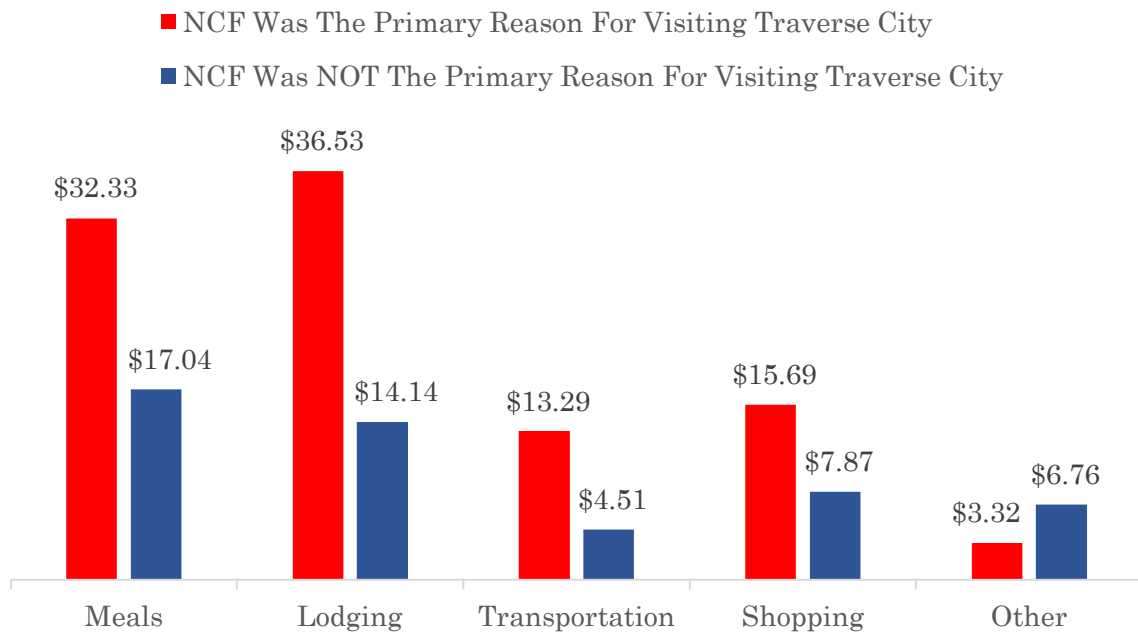


# ECONOMIC ANALYSIS

## VISITOR SPENDING

An important measure of economic impact is the amount of money visitors to a region spend while attending the event. Survey respondents were asked how much their party expected to spend on Meals, Lodging, Transportation, Shopping and “Other” activities. Figure 9 shows the average spending per person for each category.

Figure 9: Average Spending Per-Person/Per-Category for All Visitors



The average per-day spending for visitors who claimed the NCF was their primary reason for visiting Traverse City was \$86.05. The average per-day spending for visitors who were in Traverse City for other reasons was \$53.35. The average daily spending for all survey respondents was \$66.43.

### Average Daily Spending, July 2-9, 2016

Visitors primarily attending NCF	\$86.05
Visitors in Traverse City July for other reasons	\$53.35
Average daily spending during NCF Festival week	\$66.43

To determine the economic impact of the NCF we should consider only spending that occurred specifically because of the NCF. That is, some spending by local residents would have happened during this time period in the absence of the NCF. Also, some visitors from outside the area might have traveled to Traverse City for reasons other than the NCF.

Our preferred method in calculating added spending is to focus solely on those who claimed the NCF was their primary reason for visiting Traverse City. These visitors will include locals and non-locals.

This method does have a drawback, as it will cause us to miss some spending by individuals who, while not visiting Traverse City primarily for the NCF, ended up spending more than they would have because of the NCF. This includes local residents who would have spent money in absence of the NCF, however ended up spending more as a result of the NCF. On the other hand, if there are locals and non-locals who avoid the city during the festival, this method does not capture their reduced spending.

The initial spending by visitors is referred to as 'direct spending'. The direct spending is calculated as the product of the visitor per-person/per-day spending and total visitor days. It should be noted that the 'Shopping' and 'Other' category does include retail pricing, thus must be adjusted for retail margins. That is, retail prices will include the cost of manufacturing, the majority of which occurs outside the defined economic region. The estimated economic impact of visitor spending should not include these manufacturing costs. We assume a 30% retail margin when calculating these two categories.

The average daily spending and estimates of total direct spending are presented in Table 5. Per this table, the visitors who claimed the NCF was the primary reason for visiting increased demand for goods and services by approximately \$11.3 million.

Table 5: Direct Spending Estimates Where NCF was the Primary Reason for Visit

Estimated Number of Visitor Days	281,322	
Spending Category: <sup>12</sup>	Average Spending Per Person - Per Day	Direct Spending <sup>13</sup>
Meals	\$17.65	\$4,965,326
Lodging	\$14.51	\$4,081,976
Transportation	\$5.59	\$1,572,587
Shopping (30% margin)	\$6.53	\$551,109
Other (30% margin)	\$1.35	\$113,935
<b>Direct Spending Totals</b>	<b>\$52.92</b>	<b>\$11,284,934</b>

### NATIONAL CHERRY FESTIVAL ORGANIZATIONAL SPENDING

In addition to non-local visitor spending, the NCF spent \$1.9 million organizing and hosting the festival. This money was spent within Grand Traverse County.<sup>14</sup> The NCF primary sources of revenue come from beer sponsorships, corporate memberships, airshow, ticket sales and vendors. A portion of this revenue represents “crowd-out spending,” meaning NCF is receiving funds that would have been spent on other activities within the economic region. That is, for example, some corporate sponsorships would have been given to other local organizations in the absence of the NCF event. Table 6 presents the spending by the NCF and the estimated net-new spending. Additional information is available in Appendix D.

Table 6: National Cherry Festival Organizational Spending

	Spending	Net-New Spending
<b>Total Organizational Spending</b>	<b>\$1,866,155</b>	<b>\$1,063,708</b>

### INDIRECT AND INDUCED ECONOMIC IMPACT

Visitor direct spending (Table 5) and organizational spending of the NCF (Table 6) does not account for the total economic impact of the NCF. The direct spending will have a secondary effect, which is presented in the form of a multiplier. These multipliers provide a way to measure the complete economic impact that the initial

<sup>12</sup> Based on responses to the economic survey

<sup>13</sup> Due to rounding, calculations may be slightly off

<sup>14</sup> The data was provided by NCF. A complete breakdown of spending is available in Appendix C.

change in demand has on the local economy. These secondary effects come in two forms:

**Indirect Effects:** Increase in sales by businesses that are suppliers to restaurants, hotels, retail stores, etc.

**Induced Effects:** Increased economic activity by individuals in the area who received extra income due to the increase in direct spending.

The multiplier captures both indirect and induced effects and are estimated with regional input-output multipliers (commonly known as RIMS II) developed by the Bureau of Economic Analysis<sup>15</sup>. The RIMS II multipliers measure total economic activity in four ways<sup>16</sup>:

**Gross Output:** The sum of intermediate inputs and the value they add to the final good or service. The intermediate inputs are the resources used in the production of final goods and services. It should be noted that gross output can be over stated if the intermediate inputs are used multiple times in the production of other goods and services.

**Value Added:** This is best described as the change in local GDP as a result of the initial change in spending. This is equal to gross output less intermediate inputs.

**Earnings:** This measures the increases in wages, salaries and proprietors' income as a result of the initial change in demand. This can also be stated as an increase in household income for every \$1 change in demand.

**Employment:** The increase in jobs (full-time and part-time) for every \$1 million change in demand. This measurement does not distinguish between a full-time or part-time employee. It also does not account for employees who moved from one job to another within the defined economic region. Thus it does have a tendency to over-state the number of jobs created.

The projected total economic impact is estimated at \$19 million, which increases household earnings by \$5.3 million, supports 228 jobs, and increases the local GDP by \$10.8 million. Table 7 presents the total economic impact for visitors who claimed the

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<sup>15</sup> Although the indirect and induced effects are presented in the report, due to the proprietary nature of the multipliers, the exact number is not included.

<sup>16</sup> Bess, Rebecca. "Input-Output Models for Impact Analysis: Suggestions for ..." *Bureau of Economic Analysis*. N.p., 23 Mar. 2011. Web. 26 Aug. 2016.

NCF was their primary reason for visiting Traverse City and NCF organizational spending. Additional detail is available in Appendix E.

Table 7: Estimated Total Economic Impact When the NCF was the Primary Reason for Visiting Traverse City

	Total Output	Earnings	Employment	Value Added
Impact of Visitor Spending	\$17.3 M	\$4,783,691	212	\$9.8 M
Impact of NCF Organizational Spending	\$1.7 M	\$498,512	16	\$1.0 M
<b>Total Economic Impact of the NCF</b>	<b>\$19 M</b>	<b>\$5,282,203</b>	<b>228</b>	<b>\$10.8 M</b>

As noted earlier, this method does have a drawback, as it will cause us to miss some spending by individuals who, while not visiting Traverse City primarily for the NCF, ended up spending more than they would have because of the NCF. This includes local residents who would have spent money in absence of the NCF, however ended up spending more as a result of the NCF. With this in mind, an alternative approach is to treat all non-local visitor spending as ‘new’ spending, regardless of their reason for visiting Traverse City. A non-local visitor is classified as a person outside of Grand Traverse County and Suttons Bay.

Using the same multipliers as the previous method, Table 8 presents the total economic impact for both non-local visitors and NCF organizational spending. The alternative method projects the total economic impact at \$24 million, which increases household earnings by \$6.6 million, supports 283 jobs, and increases the local GDP by \$13.7 million.

Additional detail is available in Appendix E.

Table 8: Estimated Total Economic Impact of Non-Local Visitor Spending During the NCF

	Total Output	Earnings	Employment	Value Added
Impact of Non-Local Visitor Spending	\$22.3 M	\$6,101,977	267	\$12.7 M
Impact of NCF Organizational Spending	\$1.7 M	\$498,512	16	\$1.0 M
<b>Total Economic Impact of the NCF</b>	<b>\$24 M</b>	<b>\$6,600,489</b>	<b>283</b>	<b>\$13.7 M</b>

## LOCAL VISITOR SPENDING

As mentioned earlier, spending by local residents is not counted in the economic impact because the spending would have happened during this time in absence of the NCF. However, it is possible that local residents spent more money as a result of attending the NCF. The total economic impact shown in Table 3 includes local residents who claimed the NCF was their primary reason for being in Traverse City. These local residents equate to 18% of the total local population that visited Traverse City during the NCF<sup>17</sup>. Table 9 presents the economic impact based on the remaining 82% of local residents that visited Traverse City during the NCF. Additional information is available in Appendix E.

Table 9: Estimated Economic Impact of Local Visitor Spending During the NCF

Spending Category:	Total Output	Earnings	Employment	Value Added
Totals	\$2.68 M	\$762,823	18	\$1.48 M

<sup>17</sup> Based on survey respondent's answers to the economic survey

## CONCLUSION

We estimate the total economic impact of the National Cherry Festival on the local economy at \$19 million, which increases household income by \$5.3 million, supports 228 jobs and increases the local GDP by \$11 million. Our estimated total economic impact likely underestimates the actual impact as the estimate was derived using relatively conservative assumptions and methods. Also, this estimate ignores the impact of spending by vendors, entertainers and the media. Moreover, a measure of the economic impact of the festival excludes long-run economic and cultural impacts. Namely, new visitors to Traverse City may return in the future given their positive experience during the National Cherry Festival.

[all appendices were omitted]