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The Economic Assessment of the 2022 National Cherry Festival

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SUMMARY OF ECONOMIC IMPACT

The 2022 National Cherry Festival is estimated to have generated or supported economic benefits for Grand Traverse County in the following ways:

- 323,500 total visitors, with 73% visiting from outside of Grand Traverse County. Over 30 states and ten countries were represented. The average age of all visitors was 47 years old.

- 48% of all visitors and 57% of all nonlocal visitors stated that the National Cherry Festival was their primary reason for visiting Traverse City.

- There were 155,260 total primary visitor days, with 85% coming from nonlocal visitors. These nonlocal visitors spent on average two days at the festival.

- Direct spending of all primary visitors was $22.2 million, with nonlocal primary visitors spending $19.3 million.

- The total economic impact of nonlocal primary visitors is estimated at $25.7 million in economic output supporting 258 jobs.

- The total economic impact of all primary visitor spending and the festival operational spending is estimated at $33.4 million in economic output supporting 323 jobs.

- Nonlocal primary visitors generated approximately $143,970 in additional tax revenue for Grand Traverse County. The National Cherry Festival operational spending generated an additional $5,001 in tax revenue for the county.

- Based on their experience at the National Cherry Festival, 97% of the survey respondents said they were “very likely” or “somewhat likely” to visit Traverse City again.

- 84% of survey respondents have visited the National Cherry Festival at least three times.

- 89% of survey respondents said they were “very likely” or “somewhat likely” to recommend the National Cherry Festival to a friend and 94% said they were “very likely” or “somewhat likely” to recommend visiting Traverse City to a friend.

FESTIVAL BACKGROUND

The 2022 National Cherry Festival (NCF) ran from July 2nd through July 9th and marks the 96th 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. [1] At the time, the NCF was named "Blessings of the Blossoms Festival". 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, the Michigan legislature passed a resolution declaring the NCF a national celebration. This resolution also started the participation of the US Navy, which sent seven training ships and three companies of US sailors to participate in the festival parade.

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.

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 formidable reputation, helping it attract U.S. Presidents, astronauts, professional athletes, celebrities, and even Disney characters.

The main attraction for the NCF is the U.S. Navy Blue Angels. The Blue Angels first participated in 1988 and returned in 1992. Since 1992, the Blue Angels have returned every two years, putting on a 2-day air show. In addition to the airshow, the NCF also hosts concerts, races, and parades.

These events would not be possible without the support of our volunteers and sponsors. Given the reputation and cultural impact on Traverse City, the NCF attracts both local and national brands. Some of these national brands include Pepsi, Bud Light, The Home Depot, United Airlines, Michelob Ultra, etc.[2]

An integral part of the NCF mission statement is community involvement. This mission is achieved through donations, scholarships, and a Community Share program.

[1] https://www.cherryfestival.org/p/about/festival-history
[2] Full list of sponsors can be found at: https://www.cherryfestival.org/sponsors.aspx

In the last five years, the NCF has donated over $200,000 back to the local community. In addition, the Festival volunteers its equipment, staff, and other assets for community events. Each year the NCF awards $12,000 in scholarships to the National Cherry Queen and her Court and over $2,000 in scholarships to students who compete in the National Cherry Festival Art Competition. Finally, the NCF works with high school athletic groups and nonprofits through the Community Share program. This program allows organizations to earn funds for their volunteer hours.

SCOPE OF WORK

This report focuses on the economic contribution (direct, indirect, and induced) the 2022 National Cherry Festival (NCF) provides to the Traverse City region. The economic contribution is the amount of economic activity that NCF generates within a defined region. For the purpose of this report, the local region is defined as Grand Traverse County. This study will quantify the number of visitors to the NCF, spending patterns by those visitors, and the indirect/induced values as a result of that spending. Every effort is made to exclude substitute spending. This substitute spending may come in the form of local residents along with visitors who were in Traverse City for other reasons.

This study will also include the results of a "sense of place" survey. The sense of place survey attempts to capture how local individuals living in the Grand Traverse region feel about the NCF.

METHODOLOGY

There were three surveys conducted during the research period. The first survey focused on the visitors and their spending patterns, the second survey focused on local residents, and the third survey was the sense of place survey.[3]

The first survey, known as a visitor survey, was an intercept survey administered multiple times a day at random times throughout the week of the festival. We relied on the NCF volunteer network to administer the survey. Data gathered includes zip code, length of visits, party size, spending patterns, and general demographics. The second survey, known as an orthogonal survey, was an intercept survey that occurred the week after NCF. Data gathered included zip code and if they attended the NCF. This survey was used to calculate the total number of visitors to the NCF. The third survey, sense of place, was administered via email (Qualtrics). Data

[3] More information available in Appendix A2: Survey Details

gathered included general demographic data and questions about their knowledge of NCF. Data from this survey helped supplement the orthogonal survey.

In calculating the economic impact of the NCF, we only count spending that is directly or indirectly caused by the festival. The economic data used is based on nonlocal survey respondents who visited Traverse City for the sole purpose of attending the Festival.
In addition to visitor spending, we also include the operational spending of the National Cherry Festival in calculating the economic impact. This spending is directly related to organizing and hosting the 2022 festival. However, due to the scope of this report, spending by vendors, media, or entertainers is excluded.

The economic impact is estimated using the IMPLAN model. IMPLAN is a regional economic analysis software application that is designed to estimate the impact or ripple effect (specifically backward linkages) of a given economic activity within a specific geographic area through the implementation of its Input-Output model.[4] This modeling system uses multipliers that provide a way to measure the complete economic impact that the initial change in demand has on the local economy. The results of an input-output model are broken down into three effects:[5]

Direct Effects A set of expenditures applied to the input-output multipliers. The direct effect is often referred to as direct spending or initial change in demand. This direct spending, or initial change in demand, is determined by the researcher or analyst. Applying these initial changes to the multipliers in IMPLAN will then display how a region will respond economically to them

Indirect Effects Indirect effects are the business-to-business purchases in the supply chain taking place in the economic region that stem from the initial change in demand or direct spending (direct effects). In other words, this is the increase in sales by businesses that are suppliers to restaurants, hotels, retail stores, etc.

Induced Effects: Increased economic activity from household spending of labor income, after the removal of taxes and savings. The induced effects are generated by the spending of employees within the business' supply chain.

[4] Full IMPLAN disclaimer can be found in Appendix A1: IMPLAN Disclaimer
[5] https://blog.implan.com/understanding-implan-effects

The IMPLAN model will report economic impact in four ways:[6]

Output	**Gross output** is the total economic activity, including 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 overstated if the intermediate inputs are used multiple times in the production of other goods and services.
Labor Income	The increase in wages, salaries, and proprietors' income as a result of the initial change in demand (direct effects).
Employment	The total number of jobs supported by direct spending or initial 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 tend to overstate the number of jobs created.
Value Added	The contribution to the economic region's gross domestic product (GDP).

The last economic impact report for the NCF was completed in 2016. A comparison of 2016 to 2022 is available in Appendix A10: Economic Impact Comparison: 2016 to 2022.

[6] Expanded definitions can be found in Appendix A1: IMPLAN Disclaimer

VISITOR SURVEYING AND DEMOGRAPHICS

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: the visitor survey, the orthogonal survey, and a sense of place survey.[7]

VISITOR SURVEY

The visitor survey collected the primary economic impact data. The survey was administered multiple times a day at random times throughout the festival week. We relied on the NCF volunteer network to administer the surveys. Data collected includes zip code, party size, daily spending, and general demographic information. Data from this survey was used to determine visitor origins (local vs. nonlocal), visitor days, and visitor spending.

Respondents had to be 18 years old or older to be included in the survey. During the week of the festival, there were 907 interview requests with 467 surveys completed. This equates to a total response rate of 51.5%. This response rate exceeds our targeted 383 completed surveys, with a 95% confidence level, and a 5% margin of error. [8]

The results show attendees from over 30 states and ten countries. Figures 1 and 2 show the geographic distribution of the survey respondents within the United States and Michigan. Not shown in these figures are visitors from other countries, which include Canada, Mexico, Brazil, the United Kingdom, Germany, Bosnia and Herzegovina, Saudi Arabia, India, Vietnam, and Malaysia.

[7] The visitor survey and orthogonal survey can be found in Appendix A2: Survey Details
[8] Although our overall survey count does meet our sample size requirement, after data cleaning and removing outliers, there was 380 usable surveys for the spending estimates.

Figure 1: Zip code distribution for the United States

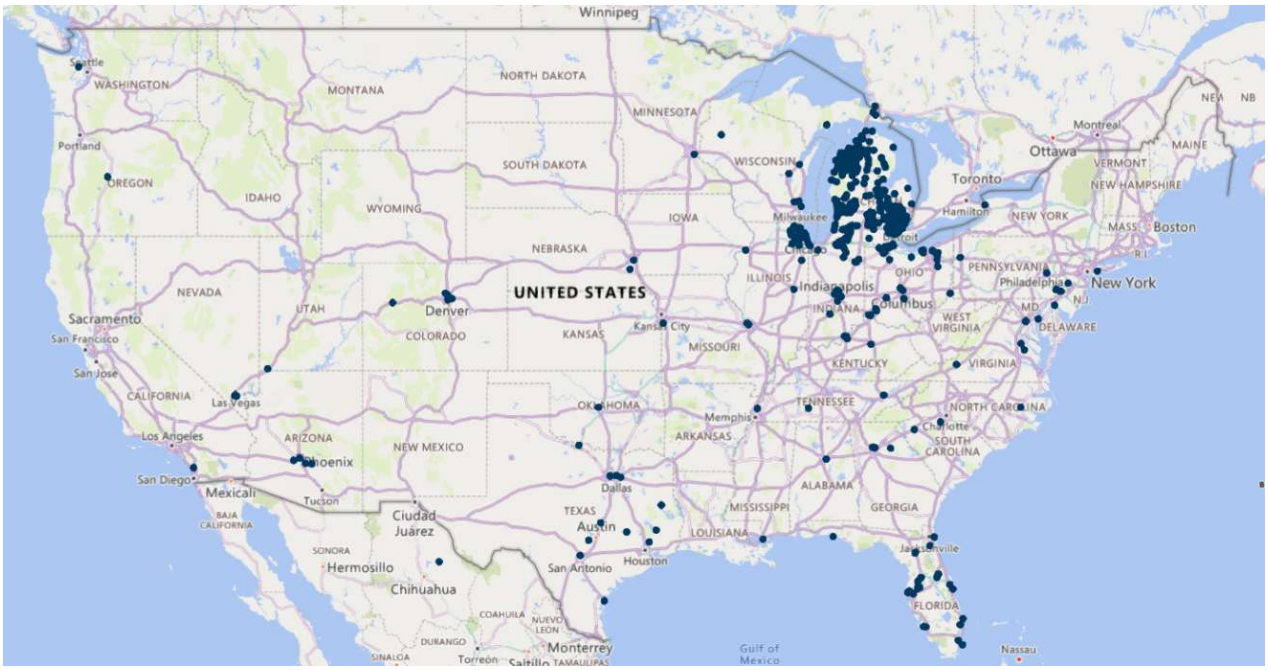
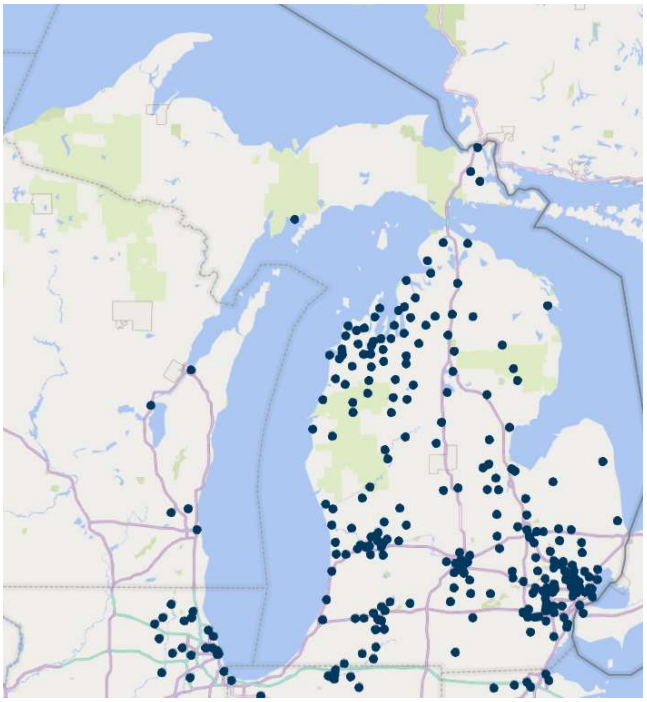


Figure 2: Zip code distribution for Michigan



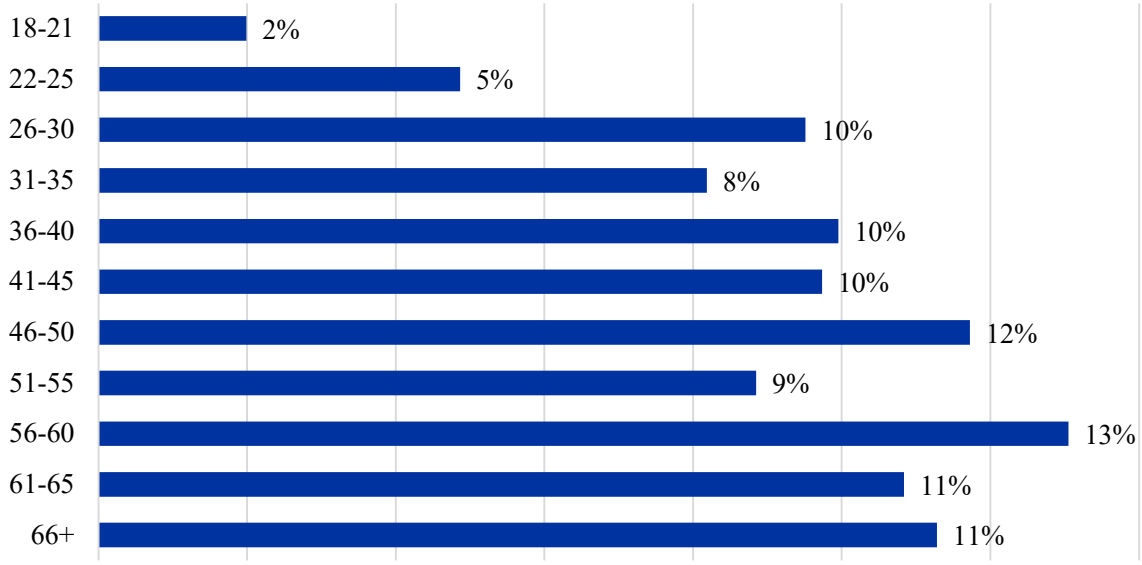
ORTHOGONAL SURVEY

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. We used data from an orthogonal survey to estimate festival attendance. The orthogonal survey occurred the week after the festival and focused on determining the percentage of local residents that attended the festival. The result was 982 usable responses, with 624 locals completing the survey.[9]

VISITOR DEMOGRAPHICS

The visitor survey asked general demographic questions. These questions included age, gender, and income. The visitors were also asked if, based on their experience at the 2022 NCF, would they consider visiting Traverse City again. The figures below present this data.

Figure 3: Visitor age distribution



[9] Includes local respondents from the sense of place survey

Figure 4: Visitor gender distribution[10]

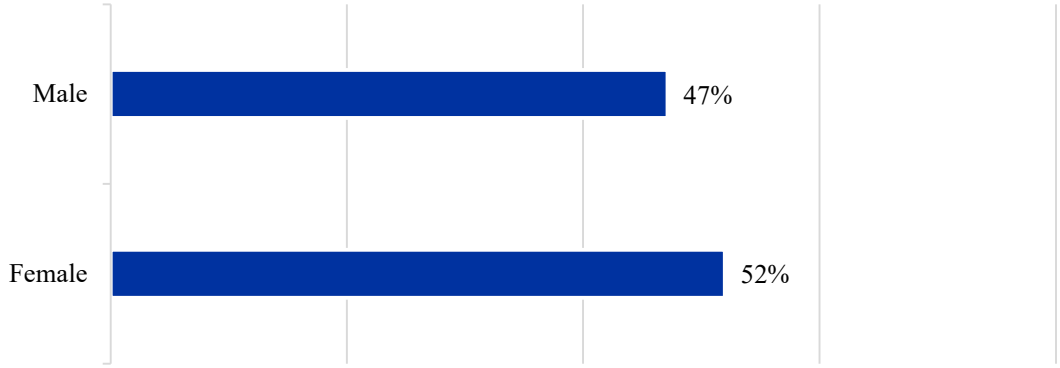
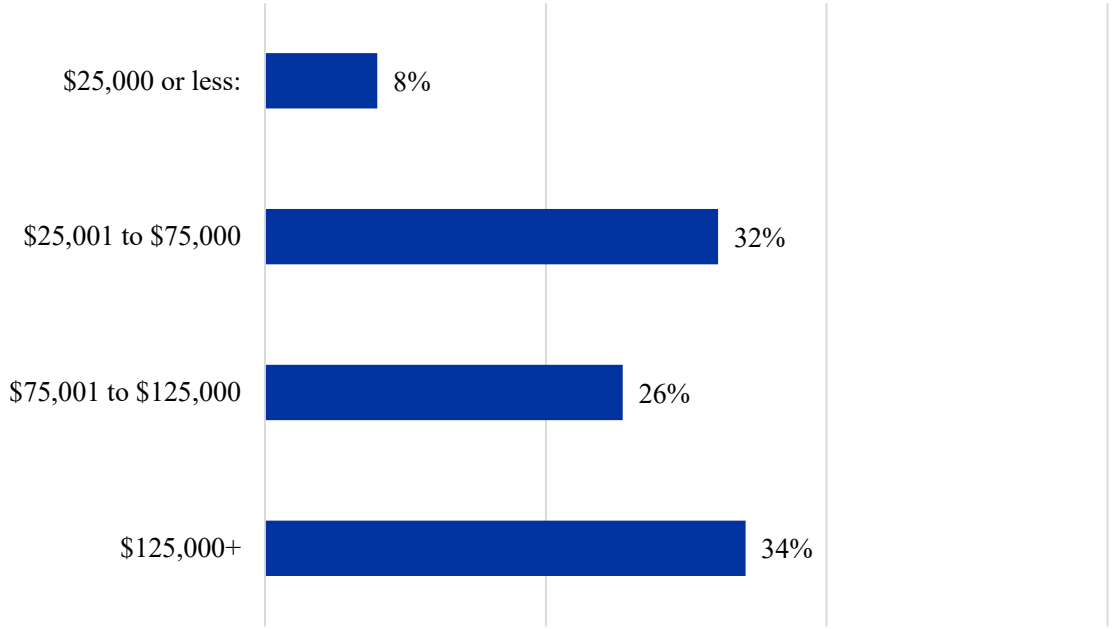
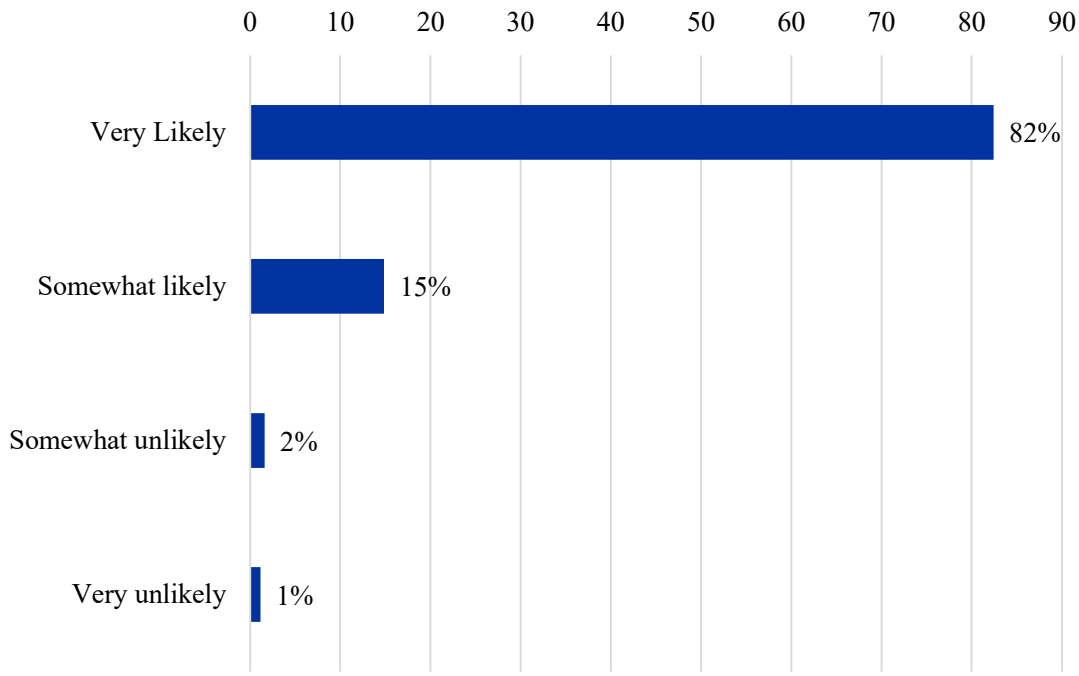


Figure 5: Visitor income distribution



[10] Transgender equated to 0.22% of the respondents and those that preferred not to answer equated to 0.66% of the respondents. These data samples were too small to fit the scale in Figure 4.

Figure 6: Based on your experience at the 2022 NCF, how likely are you to return to the Traverse City area?

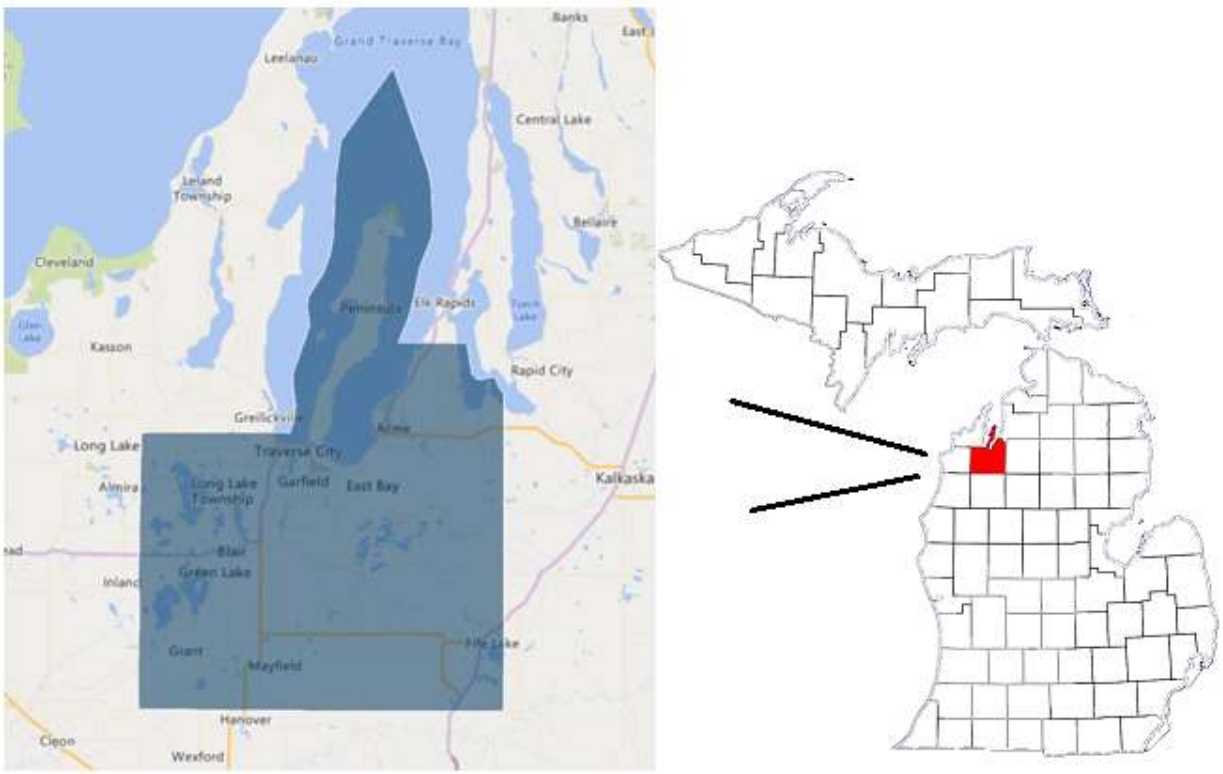


VISITORS AND ATTENDANCE

DEFINING THE ECONOMIC REGION

To properly determine who is a visitor to the festival we must first define the local region. For the purpose of this report, we define the local region as Grand Traverse County. This defined region covers 90% of a 10-mile radius around Clinch Park (the primary location of NCF). We believe this defined region represents a conservative approach to determining the economic impact of the NCF. Figure 7 display the map of the defined economic region. Demographics of this economic region are presented in Appendix A3: Defined Economic Region.

Figure 7: The defined economic region: Grand Traverse County



VISITOR TYPES

To calculate the economic impact of the NCF we should consider only new spending that occurred specifically because of the NCF. To accomplish this, survey respondents are categorized into three groups:[11]

Local Visitors: Spending by Grand Traverse County residents-local visitors-is not generally counted in the economic impact because the spending would have happened regardless of NCF. All survey forms ask for zip codes, which identify the local residents.

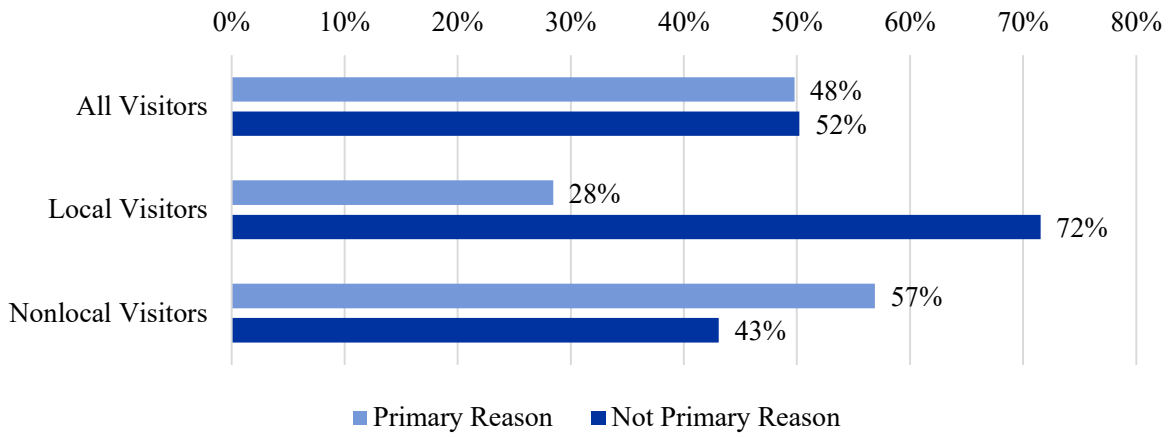
Non-Local Visitors: Spending by non-local visitors is the key driver in economic impact studies. These visitors' primary residence must be outside the defined economic region (Grand Traverse) and the primary reason for their visit must be attending NCF.

Casual Visitors: These visitors were already in Grand Traverse County for other reasons (family outings, relatives, business, etc). Generally, the spending of these visitors cannot be included in the economic impact because they were already in town, and they would likely have spent the money regardless of the NCF. This method does have a drawback, as it will cause us to miss some spending by individuals who, while not visiting specifically for the NCF, ended up spending more than they would have because of the NCF. Therefore, these visitors will be included in the economic impact *supported* by the NCF.

To determine the reason the visitor was in Traverse City, we asked the survey respondent if the NCF was their primary reason for visiting. The results from this question are found in Figure 8.

[11] 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

Figure 8: Was the NCF your primary reason for visiting Traverse City?



ESTIMATING THE 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 the 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 used an orthogonal survey to estimate local and nonlocal visitors.[12] Based on this data, we estimate 323,500 total visitors with 73% of the visitors originating outside Grand Traverse County. Approximately 27% of all the local visitors and 57% of all the nonlocal visitors stated the NCF was their primary reason for visiting. Table 1 presents this information.

Table 1: Total visitors based on visitor type

	All visitors	Primary visitors	Casual visitors
Local visitors	88,553	23,926	64,600
Nonlocal visitors	234,949	131,334	103,597
Total visitors	323,502	155,260	168,197

[12] Detailed methodology can be found in Appendix A4: Estimating the Number of Visitors and Visitor Days

The party size was consistent among all visitor types. All visitors had an average party size of 3.69 people, local visitors averaged 3.47 people and nonlocal visitors averaged 3.76 people.

The intercept survey asked the respondent for the number of days they plan to visit Traverse City. The local primary visitors stayed on average 2.97 days and the nonlocal primary visitor stayed on average 2.07 days. Table 2 presents the party size and number of days visited based on visitor type. Using the data in Table 1 and Table 2, we can estimate the total number of visitor days. Table 3 presents this information.[13]

Table 2: Party size and days visited based on visitor type

	All Primary visitors	Nonlocal primary visitors	Local primary visitors
Party size	3.84	3.88	3.61
Days visited	2.2	2.07	2.97

Table 3: Total visitor days based on visitor type

	All visitors	Primary visitors	Casual visitors
Local visitor days	284,431	71,060	213,826
Nonlocal visitor days	478,004	271,861	206,158
Total visitor days	762,435	342,921	419,984

[13] Detailed methodology can be found in Appendix A4: Estimating the Number of Visitors and Visitor Days

ECONOMIC EFFECTS

This section will estimate the economic impact of the visitors to NCF. The estimated impacts will be based on data collected from surveys and data provided by NCF. The economic impact will be broken into three components: Primary visitors, casual visitors, and operations of NCF. This section will also include hospitality rates and the fiscal (tax revenue) impact.

ESTIMATING VISITOR SPENDING

Survey respondents were asked how much their party expected to spend on Meals-Restaurant, Meals-Other, Lodging, Entertainment, Transportation, and Retail Shopping/Other Shopping. Two methods were used to clean the survey spending data. The first method was the traditional conservative approach, and the second method was a less conservative approach. The final spending estimates used an average of these two methods.[14]

The initial spending by visitors is referred to as 'direct effect' or '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 'Retail Shopping/Other Shopping' 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. The IMPLAN economic modeling will adjust for retail margins, which in Grand Traverse County are estimated at 39.25% for retail spending and 11.44% for transportation spending.

ECONOMIC IMPACT OF PRIMARY VISITORS

To determine the economic impact of the NCF we should only consider nonlocal spending that occurred specifically because of the NCF. This will not include local visitor or casual visitor spending because it is assumed that spending would have happened during this period in the absence of the NCF. This method is the most conservative estimate of new spending in the economy.

[14] Detailed methodology can be found in Appendix A5: Estimating Visitor Spending

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 but ended up spending more as a result of the NCF. On the other hand, if some locals and nonlocals avoid the city during the festival, this method does not capture their reduced spending.

Our preferred method in calculating economic impact is to focus solely on those who claimed the NCF was their primary reason for visiting Traverse City. These visitors will include locals and nonlocals. With local spending included, there is concern this impact figure will be inflated due to substitute spending. Therefore we will also break out local and nonlocal data to provide some context to the overall economic impact.

Based on the survey data, all primary visitors spent on average $67.05 per person, per day, with nonlocal primary visitors spending $70.99 per person, per day (see Figure 9 below). These spending figures result in $22.2 million in direct spending by all primary visitors, with approximately 87% coming from nonlocal visitors (see Table 4 below).

Figure 9: Average per person, per day spending for primary visitors

Table 4: Total direct spending by primary visitors

	Primary visitors
Local visitor	$2.9M
Nonlocal visitor	$19.3M
All visitors	$22.2M

This direct spending by visitors leads to indirect and induced spending. For example, a visitor to the area purchases from local retail stores (direct spending). These retail stores must then purchase more supplies from local distributors (indirect spending). Retail store owners and employees receive more income from the spending of visitors, and they spend some of that greater income in the local area (induced spending). The dollar amount and effect on employment of indirect and induced spending can be estimated using the IMPLAN economic modeling software.

A true measure of new spending focuses on primary nonlocal visitors. Using the IMPLAN model, we estimate their economic impact at $25.7 million in output, $8.5 million in earnings, $14.2 million in value-added (GDP), and support for 258 jobs (see Table 5).[15]

Table 5: Total economic impact of nonlocal primary visitors

Nonlocal Primary Visitors	Output	Earnings	Jobs	Value-Added (GDP)
Direct Impact (Spending)	$16.0M[16]	$5.6M	192	$9.5M
Indirect Impact	$5.2M	$1.4M	34	$2.2M
Induced Impact	$4.5M	$1.5M	31	$2.5M
Total Impact	$25.7M	$8.5M	258	$14.2M

Using the IMPLAN model, we estimate the total economic impact of **ALL** (local and nonlocal) primary visitors at $30 million in output, $9.9 million in earnings, $16.3 million in value-added (GDP), and support for 306 jobs (See Table 6).[17]

[15] Detailed methodology can be found in Appendix A6: Primary Visitor Economic Impact
[16] This is the $19.3M from Table 4 with retail margins applied.
[17] Detailed methodology can be found in Appendix A6: Primary Visitor Economic Impact

Table 6: Total economic impact of all (local and nonlocal) primary visitors

All Primary Visitors	Output	Earnings	Jobs	Value-Added (GDP)
Direct Impact (Spending)	$18.5M[18]	$6.5M	229	$10.7M
Indirect Impact	$6.2M	$1.7M	41	$2.7M
Induced Impact	$5.3M	$1.7M	36	$2.9M
Total Impact	$30.0M	$9.9M	306	$16.3M

As noted, these impact figures include substitute spending from local visitors because it is assumed their spending would have occurred during this period in the absence of the NCF. As mentioned earlier, this assumption does have a drawback, as some locals may have ended up spending more than they would have because of the NCF.

The local primary visitors contributed $4.2 million in economic output, $1.4 million in earnings, $2.1 million in value-added, and support for 48 jobs. These figures are included in Table 5 above, however, it is unknown how much of this spending would have occurred regardless of the NCF, therefore these figures should be used with caution.

HOTEL OCCUPANCY RATES

The Traverse City Tourism organization provided us with occupancy rates and average daily rates for the week before the festival, the week of the festival, and the week after the festival. This data is presented in Figure 10 and Figure 11. It should be noted that the increase in average daily rates is consistent with inflation rates.[19]

[18] This is the $22.2M from Table 4 with retail margins applied.
[19] 2021 rates were not adjusted for inflation. For more information on inflation rates see Appendix A9: Impact of Economic Conditions

Figure 10: Occupancy rates

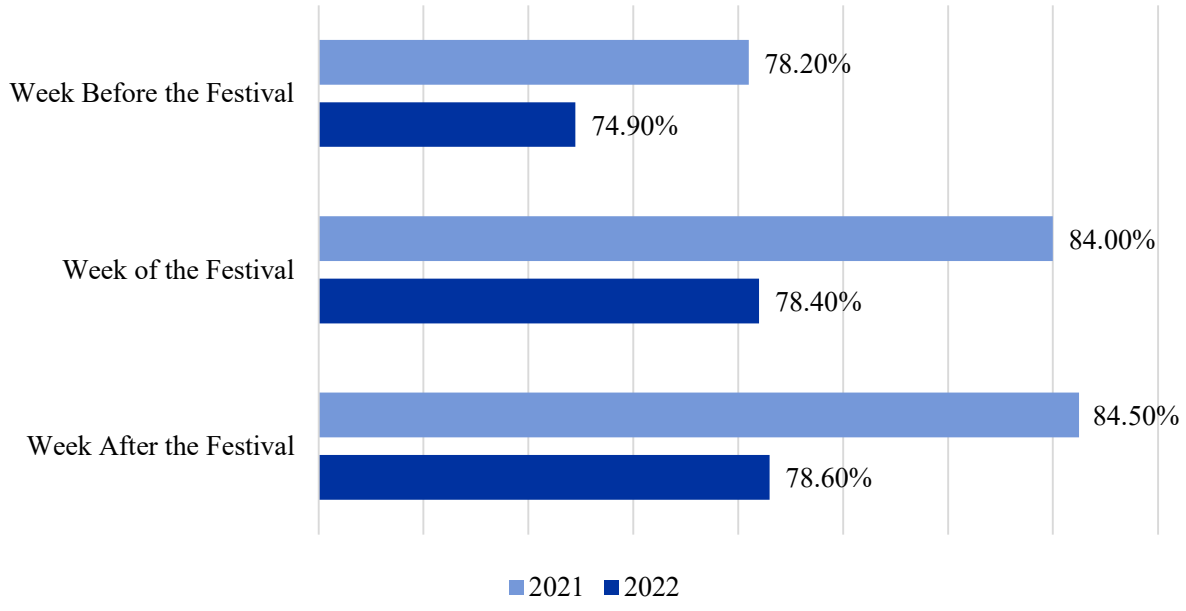
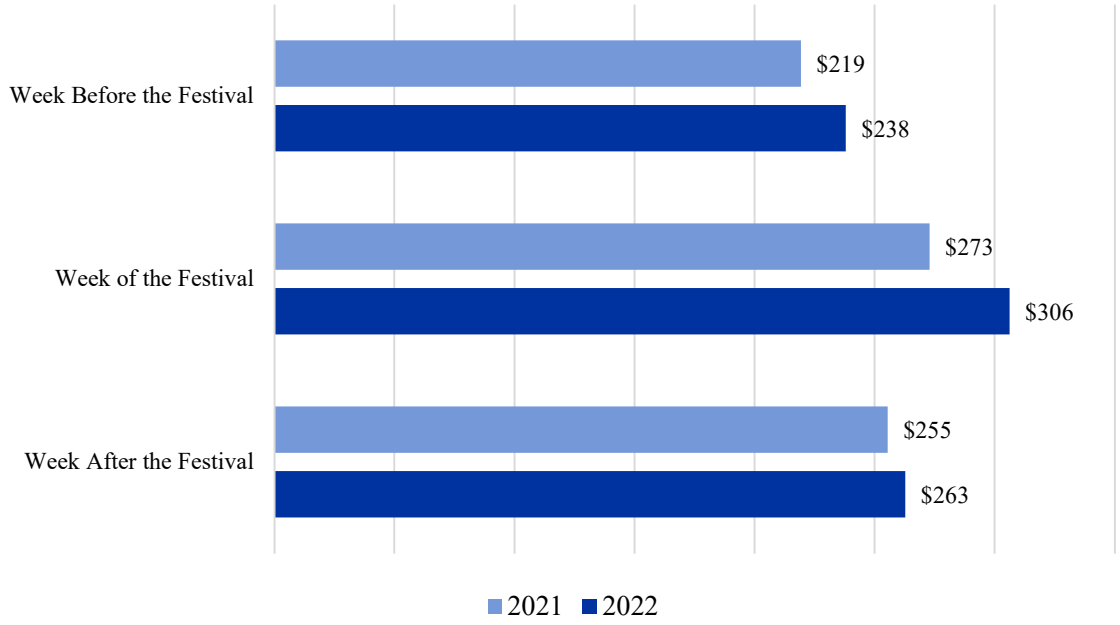


Figure 11: Average daily rate



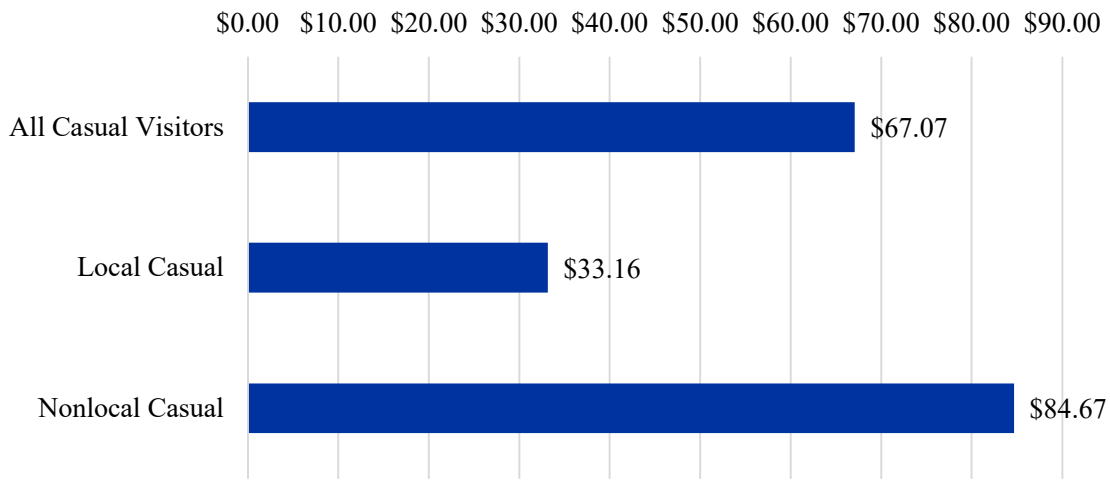
ECONOMIC IMPACT OF CASUAL VISITORS

The economic impact supported by the NCF focuses on spending by those who stated the NCF was *not* their primary reason for visiting the area. These are referred to as casual visitors. Per Table 2, there were 168,197 casual visitors to the NCF, with 62% of those visitors coming from outside Grand Traverse County.

The impact of casual visitors is not included in the overall economic impact because they were in Traverse City for reasons other than the NCF. Thus, their spending would have occurred in the absence of NCF. What is unknown is if these visitors stayed more days or spent more than they normally would because of the NCF. The data for casual visitors are presented here for informational purposes only.

Based on the survey data, all casual visitors spent on average $67.07 per person, per day, with nonlocal primary visitors spending $84.67 per person, per day (see Figure 12 below). These spending figures result in $24.5 million in direct spending by all casual visitors, with approximately 71% coming from nonlocal visitors (see Table 7 below).[20]

Figure 12: Average per person, per day spending for casual visitors



[20] Detailed methodology can be found in Appendix A7: Casual Visitor Economic Impact

Table 7: Total direct spending by casual visitors

	Casual visitor
Local visitor	$7.1M
Nonlocal visitor	$17.5M
All visitors	$24.6M

To consider only new spending, we should focus on nonlocal spending. Using the IMPLAN model, we estimate their economic impact at $24.5 million in output, $8.0 million in earnings, $13.4 million in value-added (GDP), and support for 247 jobs (see Table 8).[21]

Table 8: Total economic impact of nonlocal casual visitors

Nonlocal Casual Visitors	Output	Earnings	Jobs	Value-Added (GDP)
Direct Impact (Spending)	$15.1M[22]	$5.2M	184	$8.9M
Indirect Impact	$5.1M	$1.4M	33	$2.2M
Induced Impact	$4.3M	$1.4M	30	$2.3M
Total Impact	$24.5M	$8.0M	247	$13.4M

The estimated total economic impact of **all** (local and nonlocal) casual visitors at $35 million in output, $11.5 million in earnings, $18.7 million in value-added (GDP), and support for 368 jobs (See Table 9).[23]

[21] Detailed methodology can be found in Appendix A7: Casual Visitor Economic Impact
[22] This is the $17.5M from Table 7 with retail margins applied.
[23] Detailed methodology can be found in Appendix A7: Casual Visitor Economic Impact

Table 9: Total economic impact of all casual visitors

All Casual Visitors	Output	Earnings	Jobs	Value-Added (GDP)
Direct Impact (Spending)	$21.3M[24]	$7.5M	275	$12.1M
Indirect Impact	$7.6M	$2.0M	50	$3.2M
Induced Impact	$6.1M	$2.0M	42	$3.4M
Total Impact	$35M	$11.5M	368	$18.7M

As mentioned previously, these impact figures include substitute spending from local visitors therefore these figures should be used with caution. The local casual visitors contributed $10.5 million in economic output, $3.5 million in earnings, $5.3 million in value-added, and support for 120 jobs.

ECONOMIC IMPACT OF NCF ORGANIZATIONAL SPENDING

The NCF spent $2.9 million organizing and hosting the festival. Approximately 59% ($1.7 million) of this money was spent within Grand Traverse County. The NCF's primary sources of revenue come from sponsorships, corporate memberships, airshows, 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.

As shown in Table 10, the local spending by NCF generates $1.7 million in indirect and induced economic activity, supports 18 jobs, and contributes $1 million to the local GDP.

[24] This is the $24.6M from Table 7 with retail margins applied.

Table 10: Annual economic impact of NCF operational spending

Operational spending	Output	Earnings	Jobs	Value-Added (GDP)
Direct Impact (Spending)	$1.7M	$292,000	7	$292,000
Indirect Impact	$1.3M	$314,000	8	$528,000
Induced Impact	$398,000	$128,000	3	$215,000
Total Impact	$3.4M	$734,000	18	$1.0M

FISCAL IMPACT

The increase in economic activity also produces additional tax revenue at the local, state, and federal levels. The IMPLAN economic model estimates these fiscal impacts. The tax on production and imports (TOPI) at the county and sub-county level consists of property taxes. At the state level, the majority of TOPI is sales tax. As shown in Table 11 below, direct spending from primary nonlocal visitors generated $143,970 for Grand Traverse County[25]. This table is the best representation of "new" tax revenue caused by the NCF.

Table 11: Fiscal impact of nonlocal primary visitors

	Employee Compensation	TOPI	Households	Corp.	Proprietor Income	Total
Grand Traverse County	$0	$143,154.25	$816	$0		$143,970
Sub-County: Municipalities	$0	$126,053	$695	$0		$126,748
Sub-County: Special Districts[26]	$0	$472,092	$2,749	$0		$474,841
State	$404	$1,132,832	$136,946	$24,550	$0	$1,294,732
Federal	$997,237	$121,777	$511,497	$108,857	$19,374	$1,758,742

[25] Fiscal impact from all primary visitors and casual visitors can be found in Appendix A8: Fiscal Impact
[26] This can include school districts, fire districts, etc.

Operational spending by NCF added $5,001 in tax revenue for Grand Traverse County, $4,401 to local municipalities, and $16,497 to special districts.[27]

The casual nonlocal visitor spending added $138,665 in tax revenue for Grand Traverse County, $122,077 for local municipalities, and $457,342 for special districts. As mentioned earlier, the impact of casual visitors is not included in the overall economic impact because they were in Traverse City for reasons other than the NCF. The data for casual visitors are presented here for informational purposes only.

[27] See Appendix A8: Fiscal Impact for more details.

SENSE OF PLACE SURVEY

A sense of place email survey was administered in July (2022). A sense of place focuses on the human-place interaction and can be viewed in different contexts: attachment, dependence, identity, satisfaction, aesthetics, and social/cultural.[28] The NCF sense of place survey focused on the social/cultural impact of the festival. The survey also collected information on events attended and general demographics. There were 1,001 completed surveys with 624 coming from the Grand Traverse Area. Approximately 73% of all respondents (78% of the locals) attended the NCF in 2022. The results of the survey are presented in the tables below.

Each year the NCF awards over $12,000 in scholarships to the National Cherry Queen and her Court and over $2,000 in scholarships to students that compete in the National Cherry Festival Art Competition.

Are you aware that the National Cherry Festival provided over $14,000 in scholarships (2021)?

	All Respondents	Local Respondents	Nonlocal Respondents
Yes	39%	44%	29%
No	61%	56%	71%

The NCF works with other high school athletic groups and nonprofits through the Community Share Program. This program allows an organization to earn funds for their volunteer hours.

Are you familiar with the National Cherry Festival Community Share Program?

	All Respondents	Local Respondents	Nonlocal Respondents
Yes	35%	42%	22%
No	65%	58%	78%

[28] Deutsch, Kate & Goulias, Konstadinos. (2009). Exploring Sense of Place Attitudes as Indicators of Travel Behavior. University of California Transportation Center, University of California Transportation Center, Working Papers. 2157.

Over the last five years, the NCF has donated over $200,000 back to the local community. In addition, the festival volunteers its equipment, staff, and other assets to assist with community events.

Are you aware that over the last five years, the National Cherry Festival donated $200,000 to the local community (2021)?

	All Respondents	Local Respondents	Nonlocal Respondents
Yes	27%	30%	22%
No	73%	70%	79%

Do you follow the National Cherry Festival on social media?

	All Respondents	Local Respondents	Nonlocal Respondents
Yes	63%	62%	66%
No	37%	38%	34%

In the past five years, how many times have you visited the National Cherry Festival?

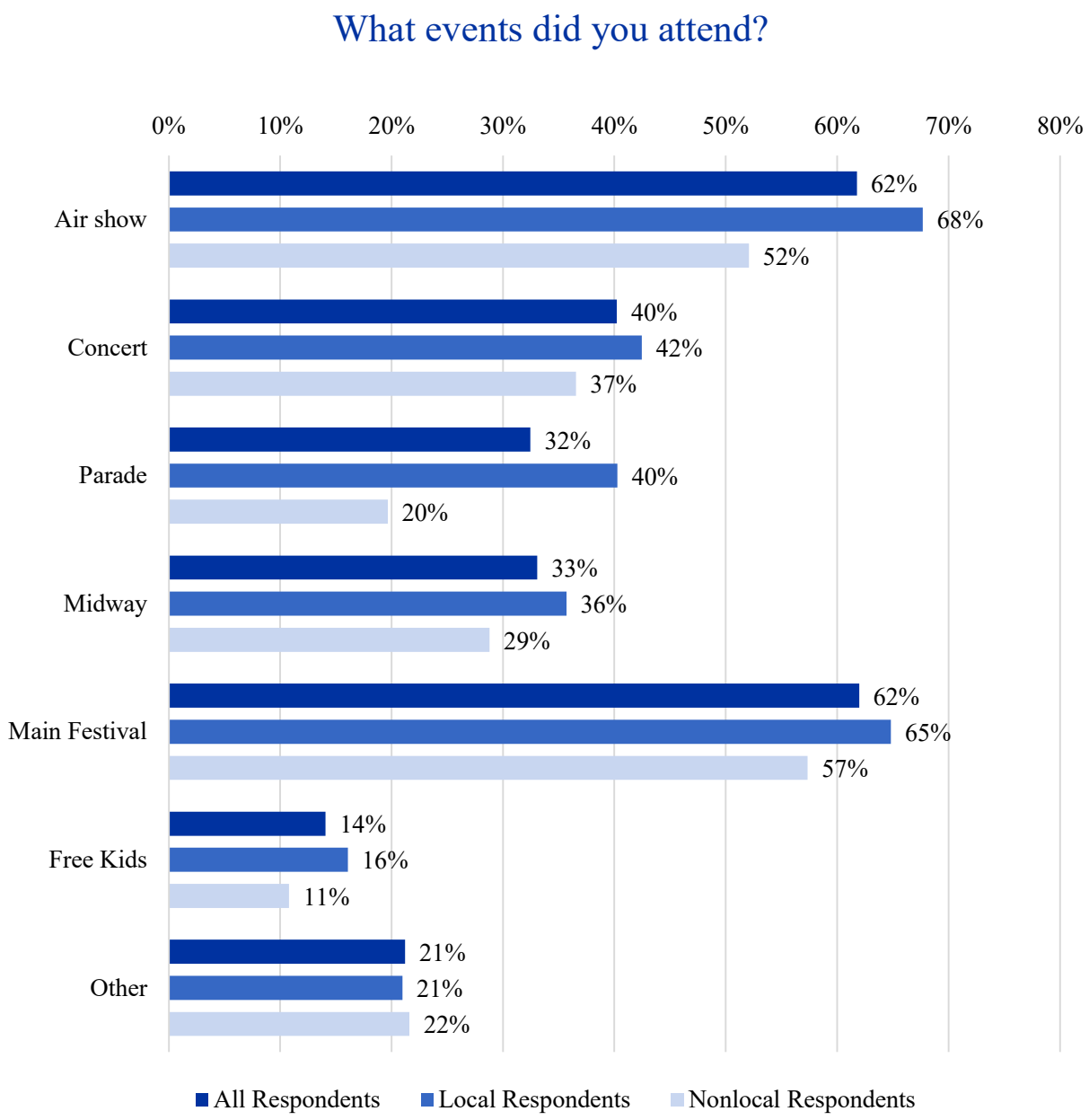
	All Respondents	Local Respondents	Nonlocal Respondents
This was our first visit	3%	1%	6%
One other visit	4%	3%	6%
Two visits	8%	5%	13%
Three visits	15%	12%	19%
4-5 visits	69%	79%	54%
We've never visited	2%	1%	3%

Based on your experience, how likely are you to recommend the National Cherry Festival to a friend?

	All Respondents	Local Respondents	Nonlocal Respondents
Very likely	63%	63%	67%
Somewhat likely	26%	26%	25%
Somewhat NOT likely	4%	4%	3%
Not likely at all	5%	5%	4%
Not sure	1%	1%	1%
Did not attend	1%	1%	1%

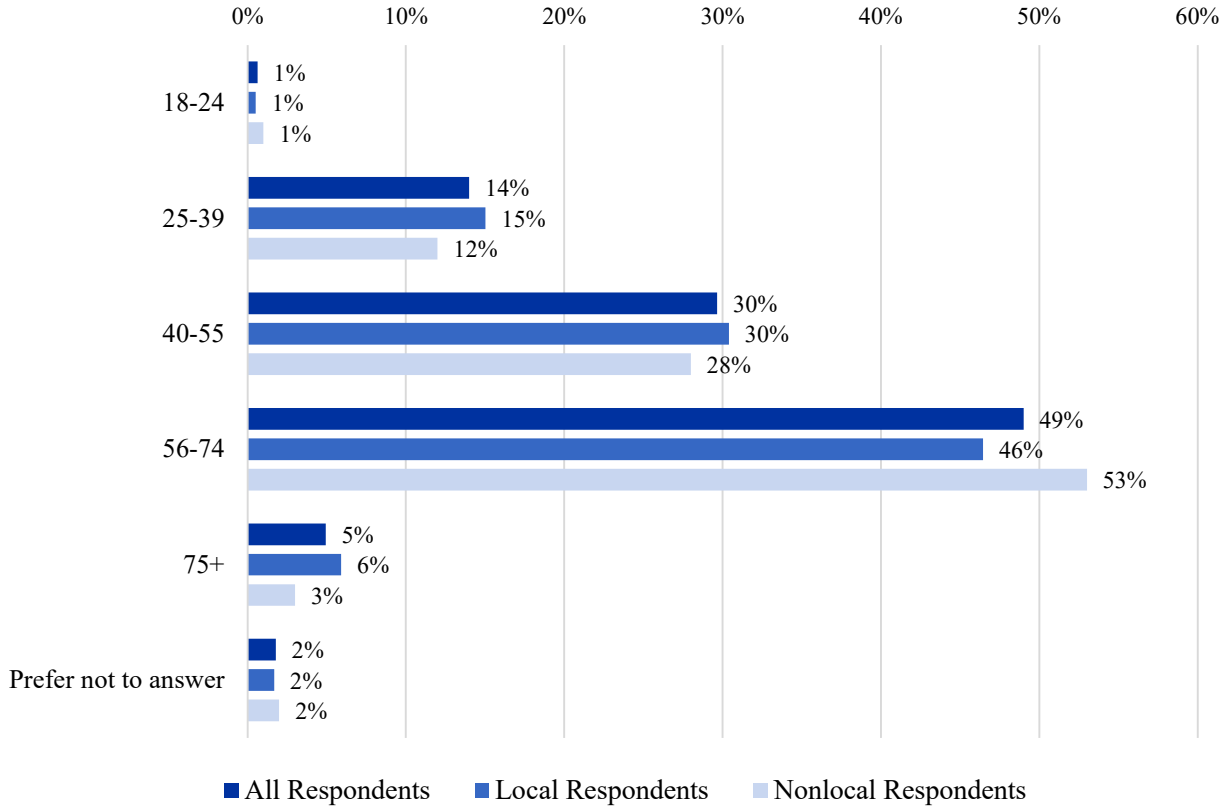
Based on your experience, how likely are you to recommend visiting Traverse City to a friend?

	All Respondents	Local Respondents	Nonlocal Respondents
Very likely	77%	77%	76%
Somewhat likely	17%	17%	18%
Somewhat NOT likely	2%	2%	2%
Not likely at all	3%	3%	2%
Not sure	1%	1%	1%
Did not attend	1%	1%	1%

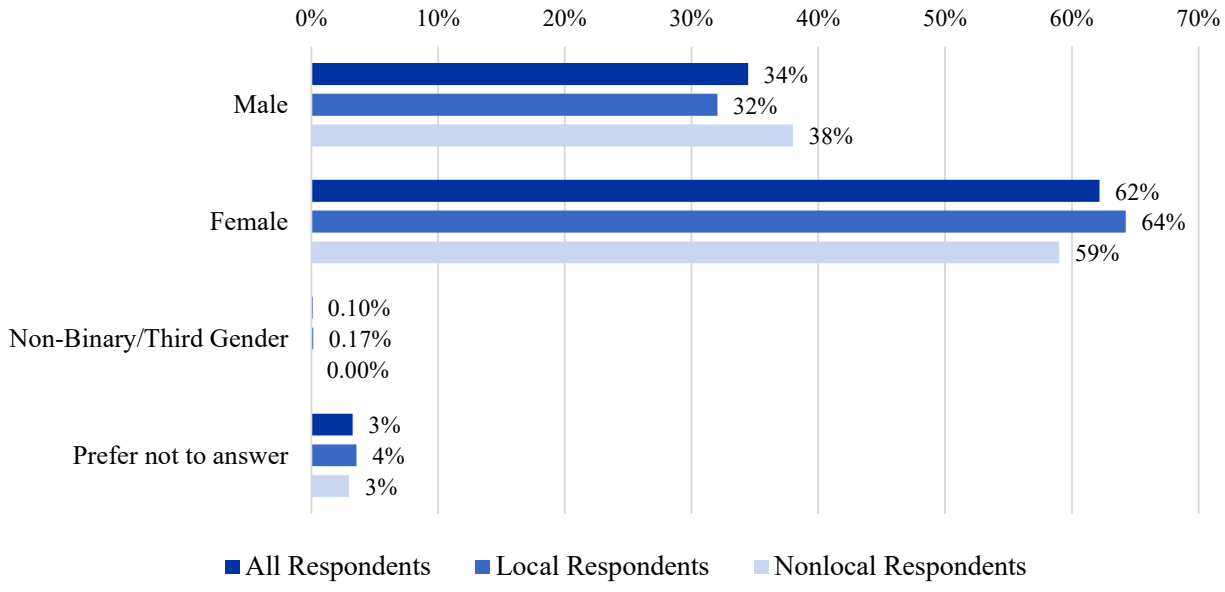


The top events for those that chose "Other" include the beer tent (3%), craft show (3%), racing events (3%), and Air Dogs (2%).

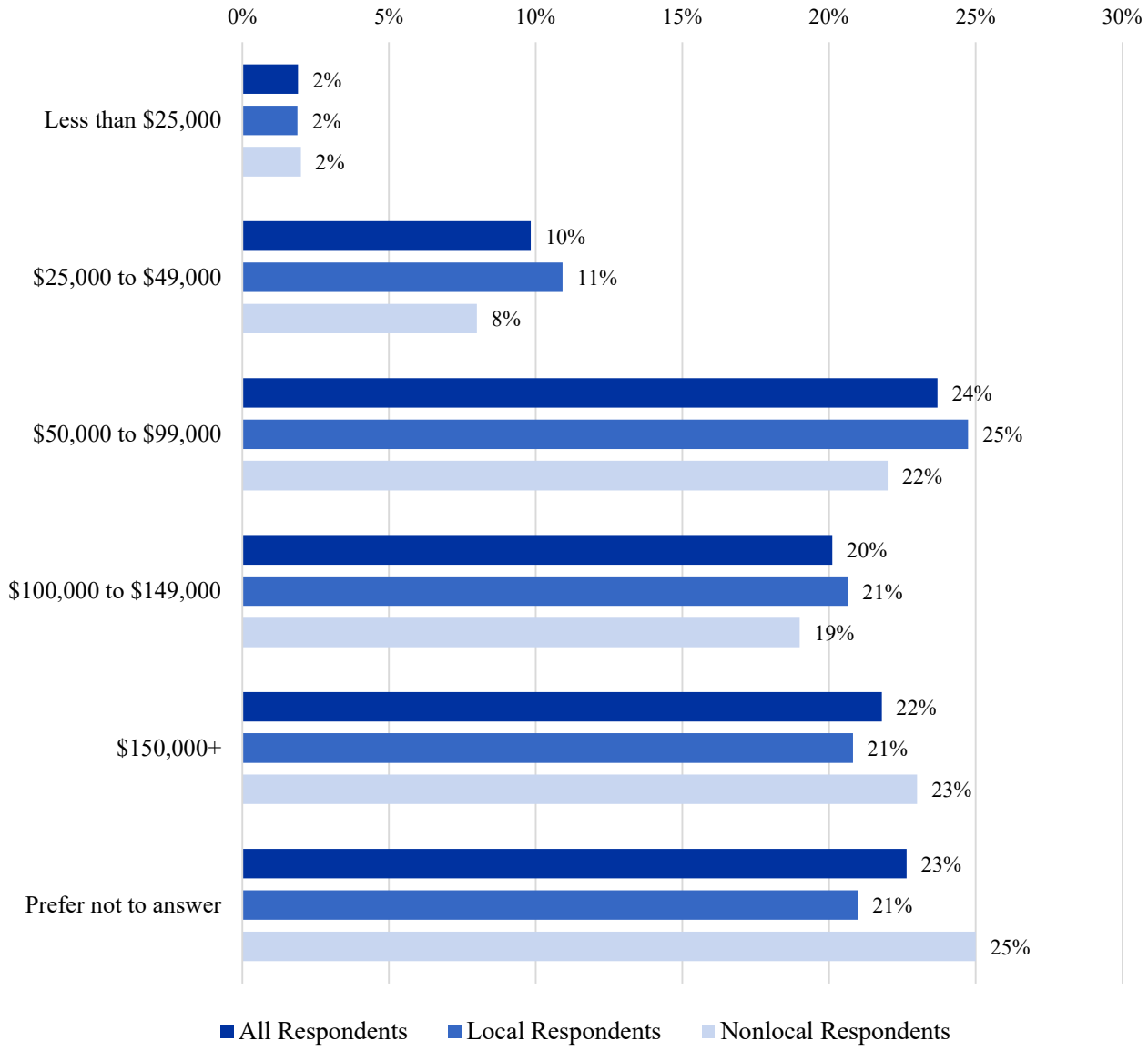
Age of Survey Respondents



Gender of Survey Respondents



Income of Survey Respondents



CONCLUSION

The National Cherry Festival occurred during the weeks of July 1 to July 9, 2022. During that week we estimated 323,500 total visitors, with 155,000 of these visitors stating the festival was their primary reason for visiting Traverse City. Approximately 85% of these primary visitors were from outside Grand Traverse County (nonlocal visitors).

These primary visitors spent approximately $22.2 million at the festival, resulting in total economic output of $30 million, supporting 306 jobs. Approximately 86% of this economic activity is attributed to nonlocal primary visitors. The NCF operational spending of $1.7 million added $3.4 million in economic output and support for 18 jobs. See Table 12 for a summary of the economic impact.

Table 12: Summary of the annual economic impact of primary visitors and National Cherry Festival operational spending

Summary	Direct Spending	Output	Earnings	Jobs	Value-Added (GDP)
Primary visitors	$22.2M	$30M	$9.9M	306	$16.3M
NCF Operations	$1.7M	$3.4M	$734,000	18	$1.0M
Total Impact	$23.9M	$33.4M	$10.6M	323	$17.3M

The impact of casual visitors is not included in the overall economic impact because they were in Traverse City for reasons other than the NCF. Thus, their spending would have occurred in the absence of NCF. What is unknown is if these visitors spent more than they normally would because of the NCF.

There were 168,200 casual visitors to the NCF, with 62% of those visitors coming from outside Grand Traverse County. These casual visitors spent $24.5 million during the week of the festival, with 71% coming from nonlocal visitors. This spending generated $35 million in economic output and support for 368 jobs.

The increase in economic activity also produces additional tax revenue at the local, state, and federal levels. The direct spending by primary visitors generated $163,263 in tax revenue for Grand Traverse County. Approximately 88% of this revenue was generated by nonlocal primary visitors. The festival operational spending generated an additional $5,000 for the county. See Table 13 for a summary of the fiscal impact.

Table 13: Summary of the annual fiscal impact

Summary	County tax revenue	Sub-county: Municipalities	Sub-county: Special Districts	State
All primary visitors	$163,263	$143,732	$538,474	$1.5M
NCF operations	$5,001	$4,401	$16,497	$53,008

Casual visitors generated $183,921 in tax revenue for the county and $161,918 for local municipalities. Approximately 75% of this revenue was generated by nonlocal visitors.[29]

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. Ω

[29] For more details see Appendix A8: Fiscal Impact

APPENDIX

A1: IMPLAN DISCLAIMER AND DEFINITIONS

IMPLAN is a regional economic analysis software application that is designed to estimate the impact or ripple effect (specifically backward linkages) of a given economic activity within a specific geographic area through the implementation of its Input-Output model. Studies, results, and reports that rely on IMPLAN data or applications are limited by the researcher's assumptions concerning the subject or event being modeled. Studies such as this one are in no way endorsed or verified by IMPLAN Group, LLC unless otherwise stated by a representative of IMPLAN.

IMPLAN provides the estimated Indirect and Induced Effects of the given economic activity as defined by the user's inputs. Some Direct Effects may be estimated by IMPLAN when such information is not specified by the user. While IMPLAN is an excellent tool for its designed purposes, it is the responsibility of analysts using IMPLAN to be sure inputs are defined appropriately and to be aware of the following assumptions within any I-O Model:

- Constant returns to scale
- No supply constraints
- Fixed input structure
- Industry technology assumption
- Constant byproducts coefficients
- The model is static

By design, the following key limitations apply to Input-Output Models such as IMPLAN and should be considered by analysts using the tool:

- **Feasibility:** The assumption that there are no supply constraints and there is a fixed input structure means that even if input resources required are scarce, IMPLAN will assume it will still only require the same portion of production value to acquire that input unless otherwise specified by the user. The assumption of no supply constraints also applies to human resources, so there is assumed to be no constraint on the talent pool from which a business or organization can draw. Analysts should evaluate the logistical feasibility of a business outside of IMPLAN. Similarly, IMPLAN cannot determine whether a given business venture being analyzed will be financially successful.

- **Backward-linked and Static model:** I-O models do not account for forward linkages, nor do I-O models account for offsetting effects such as cannibalization of other existing businesses, diverting funds used for the project from other potential or existing projects, etc. It falls upon the analyst to take such possible countervailing or offsetting effects into account or to note the omission of such possible effects from the analysis.

- **Like the model, prices are also static:** Price changes cannot be modeled in IMPLAN directly; instead, the final demand effects of a price change must be estimated by the analyst before modeling them in IMPLAN to estimate the additional economic impacts of such changes.

The IMPLAN model will report economic impact in four ways:

Output

Gross output is the total economic activity, including 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 overstated if the intermediate inputs are used multiple times in the production of other goods and services.

Direct output is the same as the direct effect (direct spending). **The indirect output** represents the value of economic activity generated because of direct business-to-business spending. **Induced output** is the total value that all industries take in as a result of household spending.

Labor Income

The increase in wages, salaries, and proprietors' income as a result of the initial change in demand (direct effects).

Direct labor income is the total wages, benefits, and payroll taxes associated with the business or organization responsible for the direct effects. **Indirect labor income** represents the amount of compensation that is supported by the business to business transactions. **Induced labor income** is the value of employee compensation and proprietor income that comes from the household spending of the employees connected to the business/organization and supply chain.

Employment

The total number of jobs supported by direct spending or initial 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 tend to overstate the number of jobs created.

Direct employment is the jobs supported at the business or organization responsible for the direct effects. **Indirect employment** represents the number of jobs that are supported by the business to business transactions. **Induced employmen**t is the number of jobs supported by the household spending generated by the business activity.

Value Added

The contribution to the economic region's gross domestic product (GDP).

Direct value added is associated with the business or organization responsible for the direct effects**. Indirect value added** is the specific value generated by the business-to-business transaction as a result of the direct effects. **Induced value added** is the specific value associated with household spending as a result of the direct effects.

A2: SURVEY DETAILS

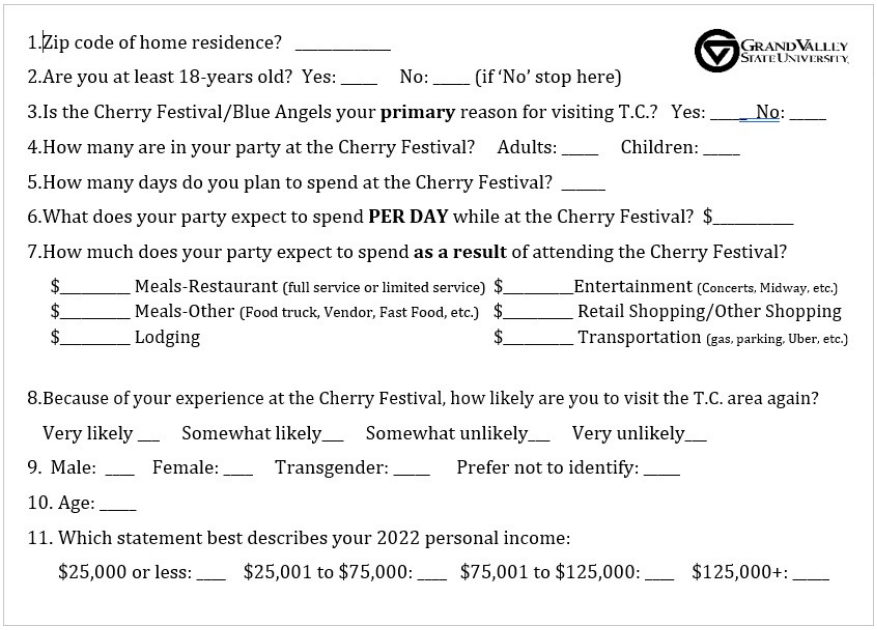
To assess the economic impact of the National Cherry Festival, we collected survey data to determine visitor count, visitor days, and visitor spending. To collect this data, we used three different surveys: the visitor survey, the orthogonal survey, and a sense of place survey.

VISITOR SURVEY

The visitor survey collected the primary economic impact data. The survey was administered multiple times a day at random times throughout the festival week. We relied on the NCF volunteer network to administer the surveys. Respondents had to be 18 years old or older to be included in the survey.

During the week of the festival, there were 907 interview requests with 467 surveys completed. This equates to a total response rate of 51.5%. This response rate exceeds our targeted 383 completed surveys, with a 95% confidence level, and a 5% margin of error. Approximately 23% of the surveys were collected on July 2 and 28% of the surveys were collected on July 3. The other survey dates collected 5% to 11% of the data. Figure A2-1 presents the visitor's survey and Figure A2-3 presents the survey locations.

Figure A2-1: Visitor survey



1. Zip code of home residence? _____

GRAND VALLEY STATE UNIVERSITY

2. Are you at least 18-years old? Yes: ____ No: ____ (if 'No' stop here)

3. Is the Cherry Festival/Blue Angels your **primary** reason for visiting T.C.? Yes: ____ No: ____

4. How many are in your party at the Cherry Festival? Adults: ____ Children: ____

5. How many days do you plan to spend at the Cherry Festival? ____

6. What does your party expect to spend **PER DAY** while at the Cherry Festival? $_____

7. How much does your party expect to spend **as a result** of attending the Cherry Festival?

$_____ Meals-Restaurant (full service or limited service) $_____Entertainment (Concerts, Midway, etc.)
$_____ Meals-Other (Food truck, Vendor, Fast Food, etc.) $_____ Retail Shopping/Other Shopping
$_____ Lodging $_____ Transportation (gas, parking, Uber, etc.)

8. Because of your experience at the Cherry Festival, how likely are you to visit the T.C. area again?

Very likely ___ Somewhat likely___ Somewhat unlikely___ Very unlikely___

9. Male: ___ Female: ___ Transgender: ____ Prefer not to identify: ____

10. Age: ____

11. Which statement best describes your 2022 personal income:

$25,000 or less: ___ $25,001 to $75,000: ___ $75,001 to $125,000: ___ $125,000+: ____

Figure A2-2: Survey locations

ORTHOGONAL SURVEY

The orthogonal survey occurred the week after the festival and focused on determining the percentage of local residents that attended the festival. The face-to-face intercept survey had a low turnout, therefore was supplemented with the email (Qualtrics) sense of place survey. The result was 982 usable responses, with 624 locals completing the survey. Figure A2-3 presents the orthogonal survey.

Figure A2-3: Orthogonal survey

GRAND VALLEY STATE UNIVERSITY

Zip code of home residence? _____

Did you attend the 2022 National Cherry Festival? Yes ___ No ___

SENSE OF PLACE SURVEY

The sense of place survey occurred after the NCF. This survey was administered via email (Qualtrics) and remained open for the entire month of July resulting in over 1000 recorded responses. Figure A2-4 presents the survey.

Figure A2-4: Sense of place survey

1. Zip code of home residence? _____
2. Did you attend the 2022 National Cherry Festival? Yes ____ No _____
3. Are you at least 18-years old? Yes ____ No _____
4. Which of the following events did you attend [check all that apply]:
   ___Air Show ___Concert ___Parade ___ Midway ___Main Festival ___Free kids event ___Other: _____ ___Did not attend
5. Are you part of an organization that financially benefits from the National Cherry Festival? Yes ____ No ____
6. Are you aware that the National Cherry Festival provided over $14,000 in scholarships (2021)? Yes ____ No ____
7. Are you familiar with the National Cherry Festival Community Share program? Yes ____ No ____
8. Are you aware that over the last five years, the National Cherry Festival donated $200,000 to the local community (2021)? Yes ____ No ____
9. Do you follow the National Cherry Festival on social media? Yes ____ No ____
10. In the past five years, how many times have you visited the National Cherry Festival?
    ___ First time ____ 1 other time ____ 2-3 other times ____ 4-5 other times ____ 6 or more other times
11. Based on your experience, how likely are you to recommend the National Cherry Festival to a friend?
    _____ Very likely _____ Somewhat likely _____ Somewhat NOT likely _____ Not likely at all _____ Not sure
12. Based on your experience, how likely are you to recommend visiting Traverse City to a friend?
    _____ Very likely _____ Somewhat likely _____ Somewhat NOT likely _____ Not likely at all _____ Not sure
13. Male: ___ Female: ___ Transgender: ____ Prefer not to identify: ____
14. Age: ____
15. Which statement best describes your 2022 personal income:

$25,000 or less: ___ $25,001 to $75,000: ___ $75,001 to $125,000: ___ $125,000+: ____

A3: DEFINED ECONOMIC REGION[30]

Demographics of Grand Traverse County			
Population	95,860	Education	
Employed population	47,221	High school graduate or higher	95.4%
Median age	43	Bachelor's degree or higher	38.4%
Households	37,939	Income and Poverty	
Persons per household	2.39	Median household income	$66,457
Persons under 18	19.7%	Per capita income	$35,705
Persons 65 years and older	21.3%	Poverty rate	10.20%
Female persons	50.5%	Top 5 Employment by industry	
Race		Health Care and Social Assistance	17.5%
White	92.3%	Retail Trade	13.3%
Black or African American	0.9%	Manufacturing	10.1%
American Indian and Alaska Native	1.3%	Accommodation and Food Service	9.5%
Asian	0.8%	Construction	7.9%
Two or more races	2.0%	Top 5 Employment by Occupation	
Hispanic or Latino	3.2%	Sales and Related Occupations	13.2%
Housing		Management Occupations	9.9%
Median house value	225,400	Office & Administrative Support	8.9%
Homeownership rate	76.50%	Health Diagnosing & Treating Practitioners	7.1%
		Food Preparation Services	6.9%

[30] Sources include https://datausa.io/profile/geo/grand-traverse-county-mi#housing and https://www.census.gov/quickfacts/fact/table/grandtraversecountymichigan/HSG860220#HSG860220

A4: ESTIMATING THE NUMBER OF VISITORS AND VISITOR DAYS

We used the orthogonal survey and sense of place survey to estimate local and nonlocal visitors. Table A4-1 shows the results of these two surveys. Tables A4-2 and A4-3 walk you through the methodology to estimate the number of visitors and visitor days (for local and nonlocals). Data from these tables were used for Table 1, Table 2, and Table 3 in the main report.

Table A4-1: Orthogonal and sense of place survey results

	Number	% of all zip codes
Total zip codes collected	982	100%
Local zip codes	624	64%
Nonlocal zip codes	358	36%
Zip codes that attended NCF	723	74%
Local zip codes that attended NCF	488	49%

Table A4-2: Local visitors and visitor days

		Primary visitors	Casual visitors
The population of Grand Traverse County[31]	76,976		
% of the local population that attended NCF[32]	78.21%		
% Primary and casual visitors[33]		28.45%	71.55%
Estimated number of local adult visitors	60,199	17,127	43,072
Local visitors' children per adult[34]	0.471	0.397	0.4998
Total local visitor party size	**88,553**	**23,926**	**64,600**
Avg. number of days spent at NCF[35]	3.212	2.97	3.31
Total local visitor days	**284,431**	**71,060**	**213,826**

[31] Population over the age of 18. Per the Census, 19.7% of the population is under 18. https://www.census.gov/quickfacts/grandtraversecountymichigan
[32] Per the survey results, approximately 78.21% of the local zips collected attended the NCF. This percentage was used to estimate the total number of local visitors.
[33] Data taken from visitor survey
[34] Ibid
[35] Ibid

Table A4-3: Nonlocal visitors and visitor days

		Primary visitors	Casual visitors
Total zip codes collected	467		
Total number of local zip codes	118		
Total number of nonlocal zip codes	349		
The ratio of nonlocal zip codes to local zip codes	2.96		
Estimated number of nonlocal visitors[36]	178,046		
% Primary and casual visitors[37]		56.90%	43.10%
Estimated adult visitors by visitor type	178,046	101,308	76,738
Nonlocal visitors' children per adult[38]	0.3196	0.2964	0.3500
Total nonlocal visitor party size	234,949	131,334	103,594
Avg. number of days spent at NCF[39]	2.035	2.0700	1.9900
Total local visitor days	**478,004**	**271,861**	**206,158**

A5: ESTIMATING VISITOR SPENDING

Two methods were used to clean the survey spending data. The first method was the traditional conservative approach, and the second method was a less conservative approach. The final spending estimates used an average of these two methods. Both data cleaning methods address the issue of blank or incomplete visitor survey questions #6 and #7 (spending questions, see Figure A2-1).

[36] Calculated as: Ratio * Estimated number of local adult visitors (see Table A4-2)
[37] Data taken from visitor survey
[38] Ibid
[39] Ibid

Data Cleaning: Method 1 Assumptions

This method is the more traditional approach to data cleaning and is considered the most conservative method. The data cleaning assumptions include:

- If the survey respondent answered at least one spending category question but left the others blank, $0 was put into those blanks.
- If the survey respondent answered question #6 (spending per day) with $0 but left all the categories blank (question #7), then $0 was put into each category.
- To remove outliers, the top and lowest spending in question #6 and for each category in question #7 were removed (seven highest spenders and seven lowest spenders).

Data Cleaning: Method 2 Assumptions

This method is considered less conservative as it may increase average spending figures. The data cleaning assumptions include:

- If question #6 was blank (spending per day) but category spending was completed, per day spending was estimated by summing the categories and dividing by the number of days they stayed (question #5).
- If the survey respondent answered question #6 (spending per day) with $0 but left all the categories blank (question #7), then $0 was put into each category.
- If spending per day multiplied by the number of days was lower than the sum of each spending category, a $0 was put into any blank spending categories.
- If spending per day multiplied by the number of days was equal to the sum of each spending category, a $0 was put into any blank spending categories.
- All over blank spending categories were left blank.
- To remove outliers, the top and lowest spending in question #6 and for each category in question #7 were removed (seven highest spenders and seven lowest spenders).

ESTIMATED SPENDING: PRIMARY VISITORS

Table A5-1 shows the average spending per person, per day for each data cleaning method, based on all primary visitors (local and nonlocal). Table A5-2 shows a breakdown of local spending for each method and Table A5-3 shows a breakdown of nonlocal spending. Data from these tables were used in Figure 9 in the main report to estimate total direct spending.

Table A5-1: Estimated average spending per person, per day (PPPD) for ALL primary visitors

	Method 1	Method 2	Average
Meals Restaurant	$14.34	$15.65	$15.00
Meals Other	$5.78	$6.51	$6.15
Lodging	$20.49	$24.54	$22.52
Entertainment	$7.01	$8.00	$7.50
Retail	$9.43	$10.76	$10.09
Transportation	$5.31	$6.28	$5.79
Total Average Spending PPPD	$62.36	$71.74	$67.05

Table A5-2: Estimated average spending per person, per day for local visitors

	Method 1	Method 2	Average
Meals Restaurant	$9.25	$11.48	$10.37
Meals Other	$2.87	$3.83	$3.35
Lodging	$3.57	$5.88	$4.73
Entertainment	$11.69	$16.36	$14.03
Retail	$3.96	$5.83	$4.90
Transportation	$2.61	$3.48	$3.05
Total Average Spending PPPD	$33.95	$46.86	$40.41

Table A5-3: Estimated average spending per person, per day for nonlocal visitors

	Method 1	Method 2	Average
Meals Restaurant	$15.19	$16.27	$15.73
Meals Other	$6.26	$6.89	$6.58
Lodging	$23.35	$26.73	$25.04
Entertainment	$6.22	$6.88	$6.55
Retail	$10.35	$11.38	$10.87
Transportation	$5.76	$6.69	$6.23
Total Average Spending PPPD	$67.13	$74.84	$70.99

Using the average category spending for each visitor type and the number of visitor days, we can estimate total direct spending. Table A5-4 presents the total direct spending (direct effects or direct output) for each category and each type of visitor. These spending figures are based on the average of the two data cleaning methods. Data from this table was used in Table 4 in the main report.

Table A5-4: Estimated total direct spending for each category and each primary visitor type

	All visitors[40]	Local visitors	Nonlocal visitors
Meals Restaurant	$5,012,907	$736,534	$4,276,373
Meals Other	$2,025,536	$238,050	$1,787,486
Lodging	$7,143,156	$335,757	$6,807,399
Entertainment	$2,777,302	$996,612	$1,780,689
Retail	$3,301,607	$347,837	$2,953,770
Transportation	$1,987,011	$216,377	$1,692,335
Total Direct Spending	$22,247,519	$2,871,167	$19,298,052

[40] This was treated as the sum of local and nonlocal visitor spending.

ESTIMATED SPENDING: CASUAL VISITORS

The tables below follow the same format as that of the primary visitors (see section above). Data from these tables were used in Figure 10 in the main report to estimate total direct spending.

Table A5-1: Estimated average spending per person, per day for ALL casual visitors

	Method 1	Method 2	Average
Meals Restaurant	$14.35	$15.54	$14.95
Meals Other	$5.55	$6.54	$6.05
Lodging	$19.37	$24.68	$22.03
Entertainment	$10.35	$12.16	$11.26
Retail	$7.90	$9.62	$8.76
Transportation	$3.57	$4.51	$4.04
Total Average Spending PPPD	$61.09	$73.05	$67.07

Table A5-2: Estimated average spending per person, per day for local visitors

	Method 1	Method 2	Average
Meals Restaurant	$8.80	$9.90	$9.35
Meals Other	$4.38	$5.54	$4.96
Lodging	$2.35	$3.28	$2.82
Entertainment	$9.38	$10.84	$10.11
Retail	$3.32	$4.54	$3.93
Transportation	$1.68	$2.29	$1.99
Total Average Spending PPPD	$29.92	$36.40	$33.16

Table A5-3: Estimated average spending per person, per day for nonlocal visitors

	Method 1	Method 2	Average
Meals Restaurant	$17.48	$18.46	$17.97
Meals Other	$6.21	$7.03	$6.62
Lodging	$28.95	$34.85	$31.90
Entertainment	$10.90	$12.89	$11.89
Retail	$10.48	$11.90	$11.19
Transportation	$4.63	$5.56	$5.10
Total Average Spending PPPD	$78.65	$90.70	$84.67

Using the average category spending for each visitor type and the number of visitor days, we can estimate total direct spending. These spending figures are based on the average of the two data cleaning methods. Data from this table was used in Table 7 in the main report.

Table A5-4: Estimated total direct spending for each category and each casual visitor type

	All visitors[41]	Local visitors	Nonlocal visitors
Meals Restaurant	$5,704,241	$1,999,169	$3,705,071
Meals Other	$2,426,470	$1,061,379	$1,365,091
Lodging	$7,178,968	$602,133	$6,576,835
Entertainment	$4,613,817	$2,161,961	$2,451,856
Retail	$3,147,672	$841,214	$2,306,457
Transportation	$1,475,241	$424,568	$1,050,673
Total Direct Spending	$24,546,409	$7,090,426	$17,455,983

[41] This was treated as the sum of local and nonlocal visitor spending.

A6: ECONOMIC IMPACT OF PRIMARY VISITORS

IMPLAN was used to estimate the economic impact of visitor spending and was summarized in Table 5 and Table 6 in the main report. Table A6-1 presents a more detailed breakdown of the economic impact of primary nonlocal visitor spending. This table is the best representation of 'new' economic activity.

Table A6-1: A breakdown of the economic impact of all primary nonlocal visitors

Category	Impact Type	Jobs	Earnings	Value Added	Output
Meals Full Service	Direct	65	$1,762,016	$2,406,841	$4,276,373
Meals Full Service	Indirect	8	$342,222	$557,535	$1,288,335
Meals Full Service	Induced	9	$428,309	$721,190	$1,327,167
Meals Limited Service	Direct	24	$619,622	$905,590	$1,787,486
Meals Limited Service	Indirect	4	$168,812	$272,667	$648,952
Meals Limited Service	Induced	3	$161,191	$271,407	$499,458
Lodging	Direct	59	$2,126,429	$4,540,029	$6,807,399
Lodging	Indirect	12	$516,065	$792,035	$1,769,235
Lodging	Induced	12	$567,584	$955,353	$1,758,195
Entertainment	Direct	31	$580,915	$786,762	$1,780,689
Entertainment	Indirect	7	$248,003	$406,181	$988,386
Entertainment	Induced	4	$172,808	$290,963	$535,447
Retail Shopping/Other	Direct	12	$449,896	$698,674	$1,159,281
Retail Shopping/Other	Indirect	3	$111,763	$175,343	$415,599
Retail Shopping/Other	Induced	3	$117,982	$198,643	$365,557
Transportation	Direct	2	$67,824	$109,895	$193,522
Transportation	Indirect	1	$21,346	$33,342	$78,529
Transportation	Induced	0	$18,657	$31,411	$57,805
Total Economic Impact		306	$9,856,893	$16,270,963	$29,945,305

Per the IMPLAN model, the top five industries impacted by primary visitor spending are presented in tables A6-3 (output) and A6-4 (employment). These tables are based on all primary visitors. There is no significant change when focused solely on nonlocal spenders.

Table A6-3: Top five industries impacted by visitor spending stated as a percentage of indirect/induced output and total output.

Category	% of Indirect/Induced Output	% of Total Output
Hotels and motels, including casino hotels and Other Accommodations	0.00%	23.9%
Full-service restaurants	1.7%	17.4%
Entertainment Industries	1.0%	9.7%
Limited-service restaurants	4.5%	8.5%
Retail shopping	6.0%	6.6%

Table A6-4: Top 10 industries impacted by visitor spending stated as a percentage of indirect/induced employment and total employment.

Category	% of Indirect/Induced Employment	% of Total Employment
Full-service restaurants	3.89%	25.72%
Hotels and motels, including casino hotels and Other Accommodations	0.00%	20.14%
Entertainment Industries	2.65%	16.52%
Limited-service restaurants	8.86%	11.01%
Retail shopping	9.38%	6.83%

A-7: ECONOMIC IMPACT OF CASUAL VISITORS

IMPLAN was used to estimate the economic impact of visitor spending. Table A7-1 presents a more detailed breakdown of the economic impact of all casual visitor spending. A summary of this data can be found in Table 9 in the main report.

Table A7-1: A breakdown of the economic impact of casual nonlocal visitors

Category	Impact Type	Jobs	Earnings	Value Added	Output
Meals Full Service	Direct	56	$1,526,620	$2,085,299	$3,705,071
Meals Full Service	Indirect	7	$296,503	$483,051	$1,116,220
Meals Full Service	Induced	8	$371,089	$624,842	$1,149,864
Meals Limited Service	Direct	18	$473,201	$691,593	$1,365,091
Meals Limited Service	Indirect	3	$128,921	$208,234	$495,600
Meals Limited Service	Induced	3	$123,101	$207,272	$381,433
Lodging	Direct	57	$2,054,407	$4,386,260	$6,576,835
Lodging	Indirect	12	$498,586	$765,209	$1,709,312
Lodging	Induced	12	$548,360	$922,995	$1,698,645
Entertainment	Direct	43	$799,870	$1,083,304	$2,451,856
Entertainment	Indirect	10	$341,478	$559,276	$1,360,923
Entertainment	Induced	5	$237,942	$400,631	$737,265
Retail Shopping/Other	Direct	10	$351,302	$545,561	$905,227
Retail Shopping/Other	Indirect	2	$87,270	$136,917	$324,522
Retail Shopping/Other	Induced	2	$92,126	$155,111	$285,446
Transportation	Direct	1	$42,108	$68,227	$120,147
Transportation	Indirect	0	$13,253	$20,700	$48,754
Transportation	Induced	0	$11,583	$19,501	$35,888
Total Economic Impact		247	$7,997,720	$13,363,984	$24,468,099

A8: Fiscal Impact

Detail breakdown of tax revenue generated by all primary visitors is provided in Table A8-1 (tax revenue generated by nonlocal primary visitors was provided in the main report). A detailed breakdown of casual visitor tax revenue is provided in Table A8-2 (all casual visitors) and Table A8-3 (nonlocal casual visitors). As the reader will recall, casual visitors were in the region for reasons other than the NCF. Therefore, it is assumed this tax revenue generation would have occurred in the absence of the NCF.

Table A8-1: Fiscal impact of all primary visitors

Fiscal Impact	Municipalities	Sub-County Special Districts	GT County	State	Federal
Direct Impact	$111,362	$417,183	$126,491	$1,114,355	$1,361,152
Indirect Impact	$14,439	$54,106	$16,403	$162,984	$328,301
Induced Impact	$17,931	$67,186	$20,369	$194,566	$347,043
Total Fiscal Impact	$143,732	$538,474	$163,263	$1,471,905	$2,036,496

Table A8-2: Fiscal impact of all casual visitors

Fiscal Impact	Municipalities	Sub-County Special Districts	GT County	State	Federal
Direct Impact	$123,272	$461,803	$140,019	$1,237,429	$1,558,706
Indirect Impact	$17,810	$66,738	$20,233	$200,193	$395,610
Induced Impact	$20,836	$78,070	$23,669	$226,083	$403,233
Total Fiscal Impact	$161,918	$606,611	$183,921	$1,663,705	$2,357,549

Table A8-3: Fiscal impact of nonlocal casual visitors

Fiscal Impact	Municipalities	Sub-County Special Districts	GT County	State	Federal
Direct Impact	$95,641	$358,282	$108,633	$952,028	$1,110,204
Indirect Impact	$11,861	$44,448	$13,475	$133,720	$268,550
Induced Impact	$14,575	$54,612	$16,557	$158,155	$282,116
Total Fiscal Impact	$122,077	$457,342	$138,665	$1,243,903	$1,660,869

A9: SUMMARY OF CURRENT ECONOMIC CONDITIONS

During the past few years, local, national, and global economies have faced unique challenges as a result of the COVID-19 pandemic and the Russia/Ukraine conflict. We feel it is important to summarize these challenges, as they may have affected the travel and spending behavior of visitors to the NCF.

GAS PRICES

Table A9-1: Average price per gallon of gas

	Michigan Average Price Per Gallon	In 2022 Dollars
June 2022	$5.01	$5.01
June 2021	$3.20	$4.78
June 2020	$2.17	$4.49
June 2016[42]	$2.20	$4.66

[42] The year of the last economic impact study

INFLATION RATES

Table A9-2: Inflation rates from June 2021 to June 2022. [43]

	National Inflation Rate	Midwest Inflation Rate
Food away from home	7.70%	8.1%
Full service	8.90%	NA
Limited service	7.40%	NA
Vending or mobile vendors	7.60%	NA
Hotel and Motel Lodging	11.50%	NA

A survey by the Michigan Restaurant and Lodging Association dated May 2022 found the following:[44]

Table A9-3: Survey Results

	% of survey respondents
Respondents who raised menu prices	87.69%
Respondents who raised menu prices twice	47.83%
Respondents who raised menu prices three times	15.65%
Respondents who raised hotel room prices	74%

[43] https://www.bls.gov/news.release/archives/cpi_07132022.htm and https://www.bls.gov/regions/mountain-plains/news-release/2022/consumerpriceindex_midwest_20220713.htm
[44] https://www.mrla.org/uploads/1/2/1/3/121332115/data_all_220505.pdf

Table A9-4: Survey Results: Menu prices and hotel room inflation rates

% Increase in menu prices	Menu Price Increase: % of survey respondents	Hotel Price Increase: % of survey respondents
0-3%	4.80%	2.08%
3.1%-5%	12.80%	0.00%
5.1% to 10%	34.40%	22.92%
10.1% to 15%	19.20%	18.75%
15.1% to 20%	16.00%	13.00%
Over 20%	5.60%	18.75%

COVID Rates

Table A9-5: Percent change in monthly COVID rates

Month	Michigan % Change in monthly cases	Grand Traverse County: % Change in monthly cases
January	13%	9%
February	19%	19%
March	2%	4%
April	1%	2%
May	2%	2%
June	4%	4%
July	2%	2%

A10: COMPARISON OF 2016 AND 2022

Below is a comparison with the 2016 economic impact report. All 2016 financial figures were adjusted for inflation and reported in 2022 dollars.[45]

Category	2022	2016	% Change
Total visitors	323,502	190,494	69.8%
Total local visitors	88,553	71,494	23.9%
Total nonlocal visitors	234,949	119,000	97.4%
% of all visitors that claimed NCF was their primary reason for visiting	49.78%	41.6%	N/A
Primary visitors	155,260	79,249	95.9%
Avg. number of days spent at NCF – all primary visitors	2.33	3.55	-34.4%
Primary visitor days	342,921	281,322	21.9%
Primary visitor's average daily per-person spending[46]	$67.05	$65.33	2.6%
Primary visitor's total direct spending[45]	$22.2M	$13.9M	59.7%
Primary visitor's total economic output[47]	$30.0M	$20.5M	46%
Primary visitor's total earnings	$9.9M	$5.7M	72%
Primary visitor's total jobs supported	306	212	44%
Primary visitor's contribution to GDP	$16.3M	$9.9M	64.6%
Total economic output (Primary visitors and NCF operations)[48]	$33.4M	$28.5M	17.4%
Total contribution to GDP (Primary visitors and NCF operations)[48]	$17.3M	$13.8M	25.2%
Total employment (Primary visitors and NCF operations)	323	283	14.3%

[45] IMPLAN was used to adjust 2016 figures.
[46] The actual 2016 figure was $52.92 and $11.5 million (Table 5 in 2016 report)
[47] The actual 2016 figure was $17.3 million (output), $4.8 million (earnings), and $9.8 million (GDP). See Table 7 in the 2016 report.
[48] The actual 2016 figure was $24 million (output) and $13.7 million (GDP). See Table 8 in the 2016 report.