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The Economic Impact of ArtPrize 2022

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Cover Image: Twigg the Forest Dragon, by Jennifer Dunahee. $10,000 first place winner in the 3D category for visitor favorites. Photo source: Artprize.org

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SUMMARY OF ECONOMIC IMPACT

ArtPrize 2022 is estimated to have generated or supported economic benefits for Kent County in the following ways:

- 753,601 total visitors, with 56% visiting from outside of Kent County. Over 14 states and four countries were represented. The average age of all visitors was 46 years old.

- 56% of all visitors and 73% of all nonlocal visitors stated that ArtPrize 2022 was their primary reason for visiting Grand Rapids.

- There were 858,582 total primary visitor days, with 59% coming from nonlocal visitors. These nonlocal visitors spent on average 1.67 days at ArtPrize.

- Direct spending of all primary visitors was $24.6 million, with nonlocal primary visitors spending $19.3 million.

- The total economic impact of nonlocal primary visitors is estimated at $24.9 million in economic output supporting 228 jobs.

- The total economic impact of all primary visitor spending and ArtPrize operational spending is estimated at $34.6 million in economic output supporting 318 jobs.

- Nonlocal primary visitors generated approximately $70,313 in additional tax revenue for Kent County.

- Based on their experience at ArtPrize 2022, 86% of the survey respondents said they were “very likely” or “somewhat likely” to visit Grand Rapids again.

- 46% of survey respondents have attended ArtPrize at least three times.

FESTIVAL BACKGROUND

ArtPrize 2022 ran from September 15 to October 2 and marks the 13th year of the event. The origins of ArtPrize started in 2009 with a mission of encouraging critical discourse, celebrating artists, transforming urban space, and promoting cultural understanding. The guiding principles of ArtPrize include:[1]

- ArtPrize is Open. Any artist can enter. Any space in the district can be a venue. ArtPrize is free to the public.
- ArtPrize Celebrates Artists. We celebrate the vision and courage of artists who take risks
- ArtPrize is a Catalyst. We build community through countless instances of independent participation.
- ArtPrize Transforms Urban Space. By working with independent venues and curators who create unique experiences.
- ArtPrize is an Educational Experience. ArtPrize provides programs and resources that transform Grand Rapids into an open learning laboratory.
- ArtPrize Challenges Everyone. Unpredictable by design, ArtPrize vigorously promotes the examination of opinions, values, and beliefs, encouraging all participants to step outside of their comfort zones.
- ArtPrize Generates Conversation.
- ArtPrize Promotes Social Good. ArtPrize is not just for "anyone" it's for "everyone."
- ArtPrize Embraces Technology. Technology is baked into the ArtPrize model and makes it possible.
- ArtPrize is an Evolving Experiment. Change is embraced and encouraged.

The ArtPrize organization is a non-profit supported by regional and national sponsors, foundations, partners, and individual supporters.

In October 2022, it was announced the ArtPrize organization is ceasing operations. The ArtPrize event will now be managed by Downtown Grand Rapids, Inc, the city of Grand Rapids, and Kendall College of Art and Design. On December 6, 2022, the Grand Rapids City Commission approved the framework for "ArtPrize 2.0". The exact details of this framework were not immediately available.

[1] https://experience.arcgis.com/experience/a7a6df67f0614870ab409ccb4653adac/page/ABOUT-ARTPRIZE/?draft=true

SCOPE OF WORK

This report focuses on the economic impact (direct, indirect, and induced) ArtPrize 2022 provides to the Grand Rapids area. The economic contribution is the amount of economic activity that ArtPrize generates within a defined region. For the purpose of this report, the local region is defined as Kent County. This study will quantify the number of visitors to ArtPrize, 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 the Grand Rapids area for other reasons.

METHODOLOGY

There were two surveys conducted during the research period. The first survey focused on the visitors and their spending patterns and the second survey focused on local residents.[2]

The first survey, known as a visitor survey, was an intercept survey administered multiple times a day at random times throughout the ArtPrize event. We relied on Grand Valley State University student research team 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 ArtPrize. Data gathered included zip code and if they visited an ArtPrize venue. This survey was used to calculate the total number of visitors to ArtPrize.

In calculating the economic impact of ArtPrize, we only count spending that is directly or indirectly caused by the event. The economic data used is based on nonlocal survey respondents who visited Grand Rapids for the sole purpose of attending ArtPrize. This nonlocal spending is considered 'new' money to the local economy. We will also note the spending associated with other visitor types.

In addition to visitor spending, we also include the operational spending of the ArtPrize organization in calculating the economic impact. This spending is directly related to organizing and hosting ArtPrize 2022. However, due to the scope of this report, spending by media, host venues, and artists was 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

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

implementation of its Input-Output model.[3] 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:[4]

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.

The IMPLAN model will report economic impact in four ways:[5]

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).

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

In many cases, the findings of the economic impact analysis are rounded to the nearest million to avoid giving the reader a false sense of precision about the results. Readers should keep in mind the figures presented are estimates generated by economic models and not the result of an audit. The intent is not to obscure, but to provide reliable results without misleading the readers as to the overall level of precision

VISITOR SURVEYING AND DEMOGRAPHICS

To assess the economic impact of ArtPrize, we collected survey data to determine visitor count, visitor days, and visitor spending. To collect this data, we used two different surveys: the visitor survey and the orthogonal survey.[6]

VISITOR SURVEY

The visitor survey collected the primary economic impact data. The survey was administered multiple times a day at random times throughout the event. We relied on Grand Valley State University student research team to administer the survey. Data gathered includes zip code, length of visits, party size, spending patterns, and general demographics. 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 ArtPrize event, there were 1,308 interview requests with 650 surveys completed. This equates to a total response rate of 49.7%. This response rate exceeds our targeted 383 completed surveys, with a 95% confidence level, and a 5% margin of error. [7]

The results show attendees from over 14 states and four 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 Mexico, Brazil, Saudi Arabia, and Australia.

[6] The visitor survey and orthogonal survey can be found in Appendix A2: Survey Details. The ArtPrize district map is also available in Appendix A2.
[7] Although our overall survey count does meet our sample size requirement, after data cleaning and removing outliers, there was 350 usable surveys for the spending estimates.

Figure 1: Zip code distribution for the United States

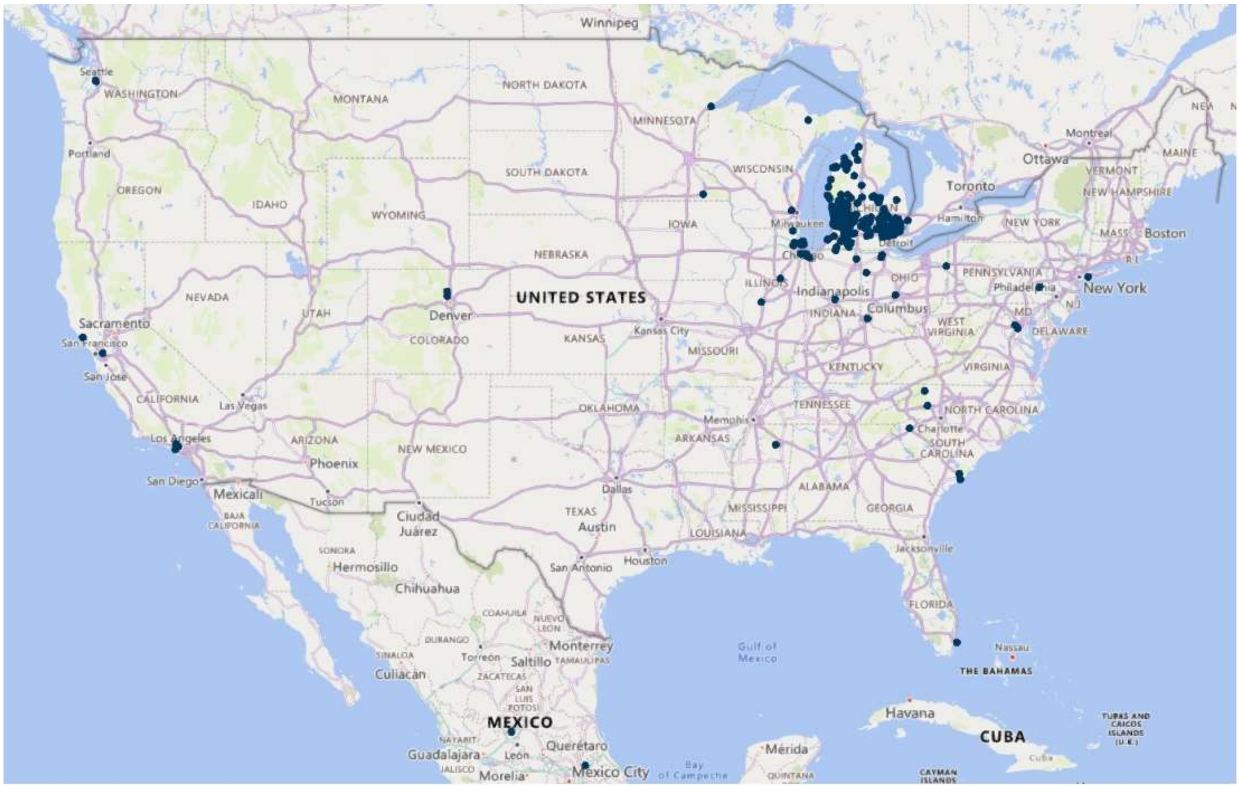
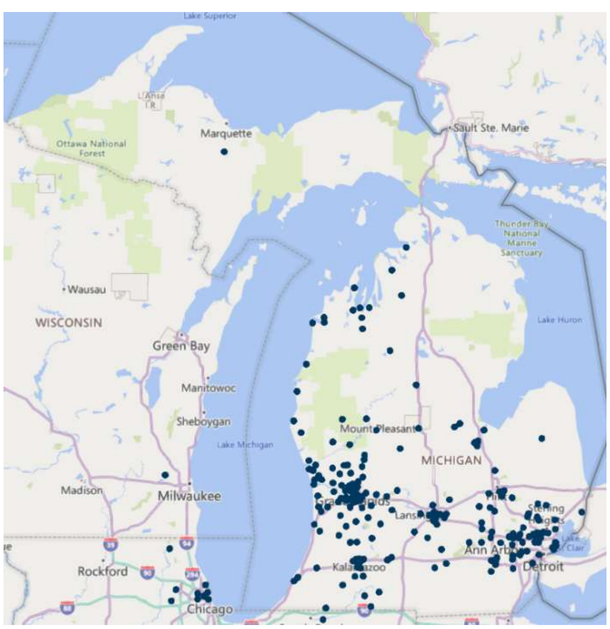


Figure 2: Zip code distribution for Michigan



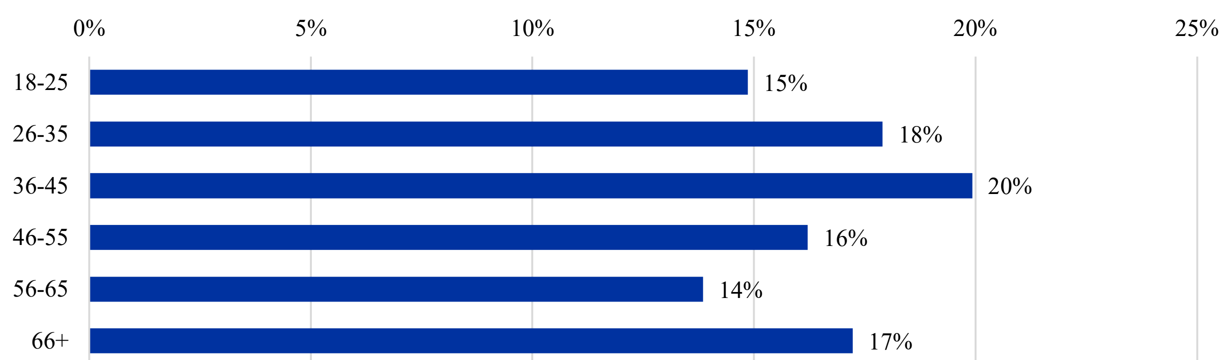
ORTHOGONAL SURVEY

ArtPrize is an open event, meaning visitors do not have to buy tickets to attend. Open venues make it difficult to accurately count visitors. We used data from an orthogonal survey to estimate attendance. The orthogonal survey occurred the week after ArtPrize and focused on determining the percentage of local residents that attended the event. The result was 350 usable responses, with 206 locals completing the survey.

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 ArtPrize 2022, would they consider visiting Grand Rapids again. The figures below present this data.[8]

Figure 3: Visitor age distribution



[8] Additional information is available in Appendix A3: Visitor Demographics

Figure 4: Visitor gender distribution

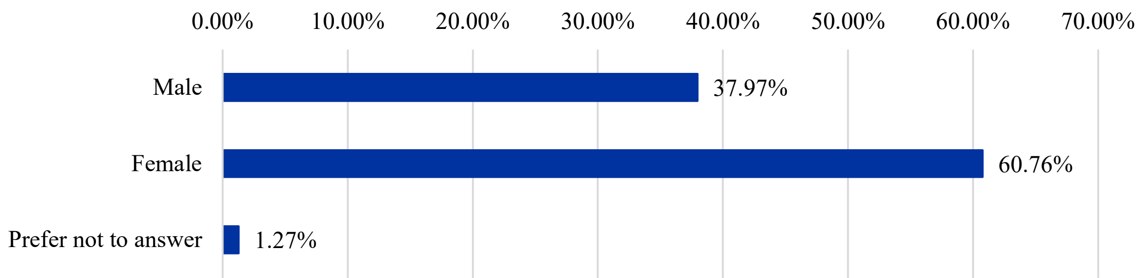


Figure 5: Visitor income distribution

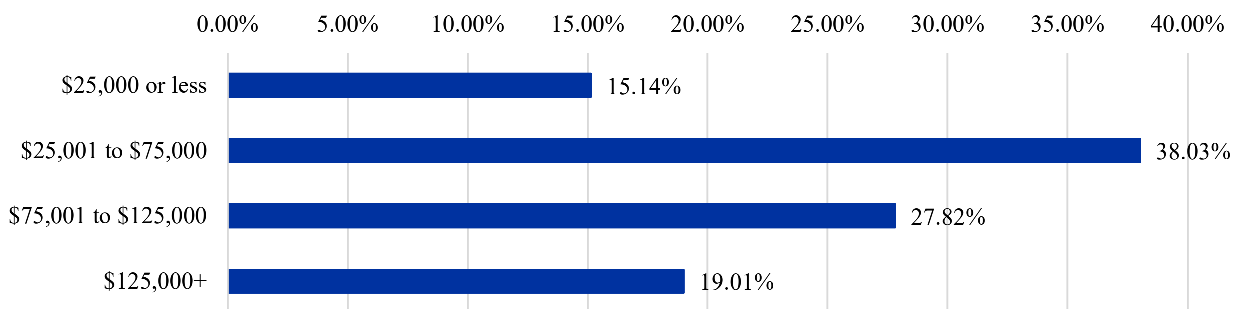
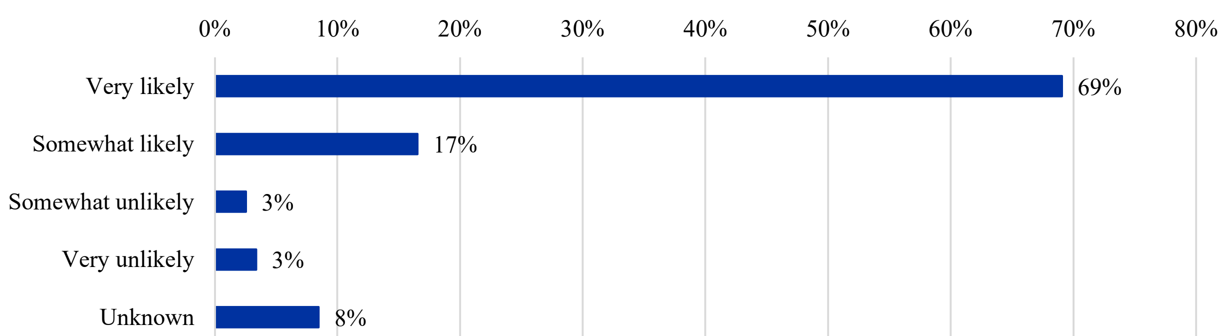


Figure 6: Based on your experience at ArtPrize 2022, how likely are you to return to the Grand Rapids area?

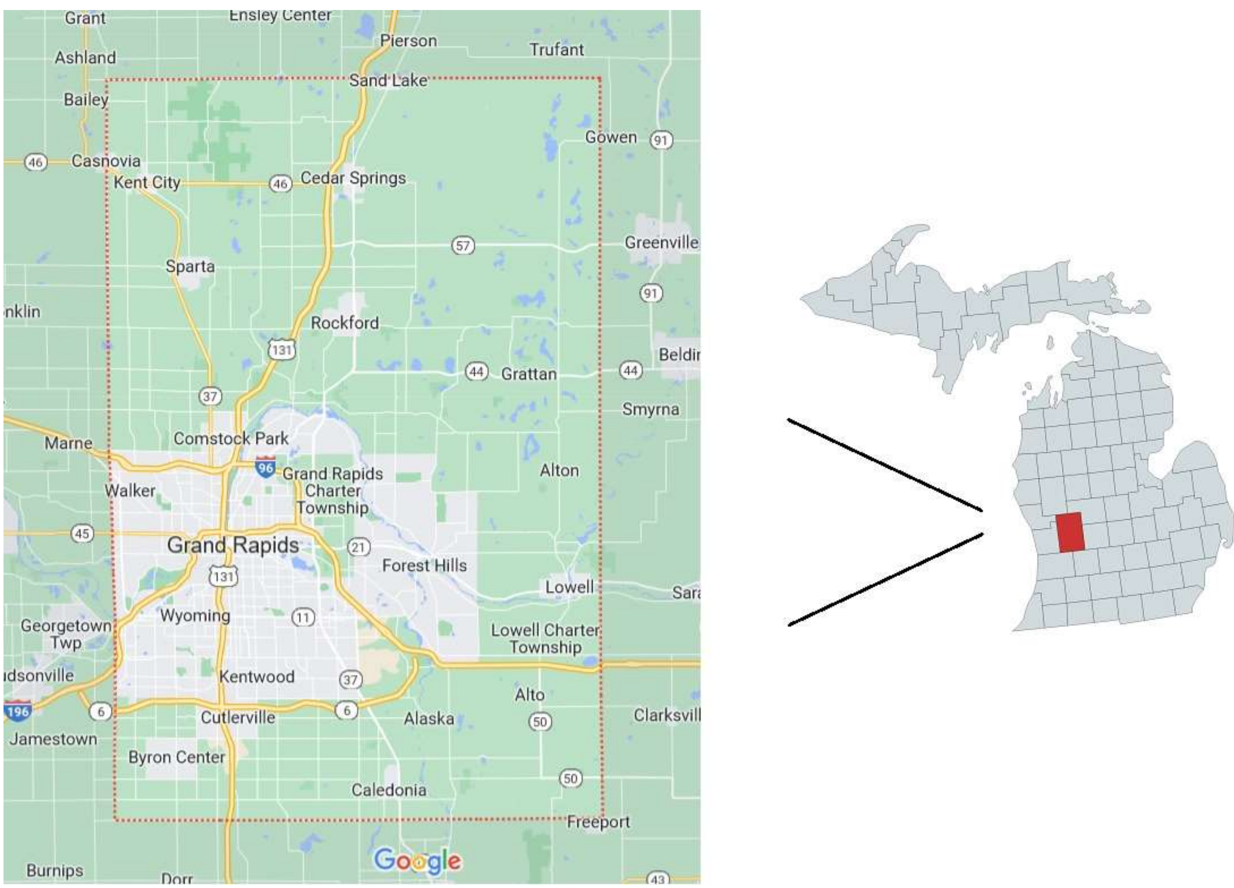


VISITORS AND ATTENDANCE

DEFINING THE ECONOMIC REGION

To properly determine who is a visitor to ArtPrize we must first define the local region. For the purpose of this report, we define the local region as Kent County. We believe this defined region represents a conservative approach to determining the economic impact of ArtPrize. Figure 7 display the map of the defined economic region.[9] Demographics of this economic region are presented in Appendix A3: Visitor Demographics

Figure 7: The defined economic region: Kent County



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[9] https://www.mapchart.net/usa-counties.html and Google Maps

VISITOR TYPES

To calculate the economic impact of ArtPrize we should consider only new spending that occurred specifically because of ArtPrize.   To accomplish this, survey respondents are categorized into three groups:[10]

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

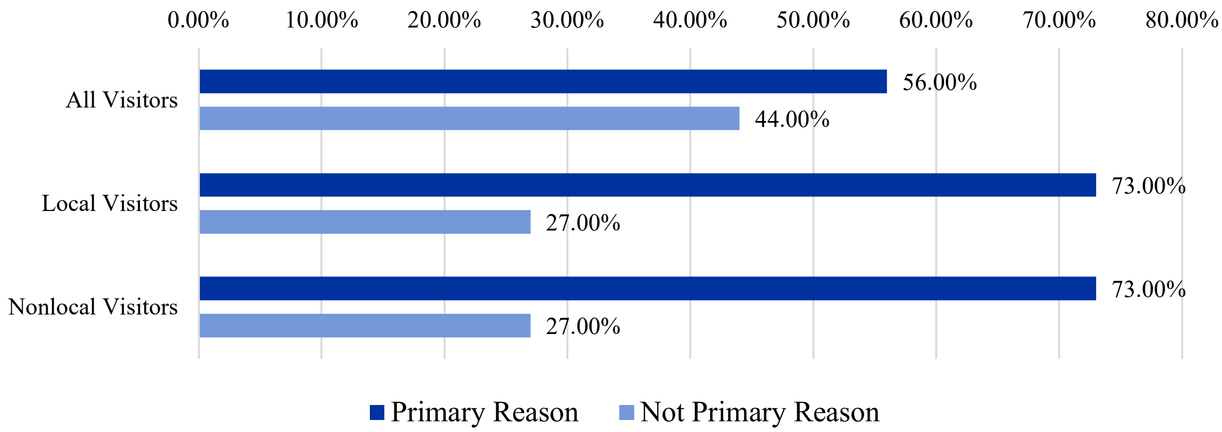
Non-Local Visitors: Spending by non-local visitors is the key driver in economic impact studies. These visitors' primary residence must be outside the defined economic region (Kent County) and the primary reason for their visit must be attending ArtPrize 2022.

Casual Visitors: These visitors were already in Kent 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 ArtPrize. This method does have a drawback, as it will cause us to miss some spending by individuals who, while not visiting specifically for ArtPrize, ended up spending more than they would have because of ArtPrize. Therefore, these visitors will be included in the economic impact *supported* by ArtPrize.

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

[10] 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 ArtPrize 2022 your primary reason for visiting Grand Rapids?



ESTIMATING THE NUMBER OF VISITORS AND VISITOR DAYS

To measure the economic impact of an event like ArtPrize 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 event 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.[11] Based on this data, we estimate 753,601 total visitors with 56% of the visitors originating outside Kent County. Approximately 35% of all the local visitors and 73% of all the nonlocal visitors stated ArtPrize 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	333,226	115,184	218,042
Nonlocal visitors	420,246	304,976	115,270
Total visitors	753,472	420,160	333,312

[11] 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. Local visitors averaged 2.93 people and nonlocal visitors averaged 2.92 people.

The intercept survey asked the respondent for the number of days they plan to visit ArtPrize. The local primary visitors stayed on average 3.02 days and the nonlocal primary visitor stayed on average 1.67 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.[12]

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

	Nonlocal primary visitors	Local primary visitors
Party size	2.92	2.93
Days visited	1.67	3.02

Table 3: Total visitor days based on visitor type

	All visitors	Primary visitors	Casual visitors
Local visitor days	982,084	348,235	633,849
Nonlocal visitor days	699,805	510,347	189,457
Total visitor days	1,681,889	858,582	823,306

[12] 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 ArtPrize. The estimated impacts will be based on data collected from surveys and data provided by ArtPrize. The economic impact will be broken into three components: Primary visitors, casual visitors, and operations of the ArtPrize organization. This section will also the fiscal (tax revenue) impact.

ESTIMATING VISITOR SPENDING

Survey respondents were asked how much their party expected to spend on Meals-Restaurant, Meals-Other, Retail Shopping/Other Shopping, Lodging, Transportation, and Art Purchases.[13] 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 categories that include retail pricing 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 Kent County are estimated at 37.86% for retail spending, 6.18% for transportation spending, and 44.29% for art purchases (retail-nonstore).

ECONOMIC IMPACT OF PRIMARY VISITORS

To determine the economic impact of ArtPrize we should only consider nonlocal spending that occurred specifically because of ArtPrize. 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 ArtPrize. This method is the most conservative estimate of new spending in the economy.

This method does have a drawback, as it will cause us to miss some spending by individuals who, while not visiting Grand Rapids primarily for ArtPrize, ended up spending more than they would have because of ArtPrize. This includes local residents who would have spent money in absence of ArtPrize but ended up spending more as a result of ArtPrize. On the other hand, if

[13] Detailed methodology on the data cleaning can be found in Appendix A5: Estimating Visitor Spending

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 ArtPrize was their primary reason for visiting Grand Rapids. 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 $32.05 per person, per day, with nonlocal primary visitors spending $37.72 per person, per day (see Figure 9 below). These spending figures result in $24.6 million in direct spending by all primary visitors, with approximately 78.3% coming from nonlocal visitors (see Table 4 below).

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

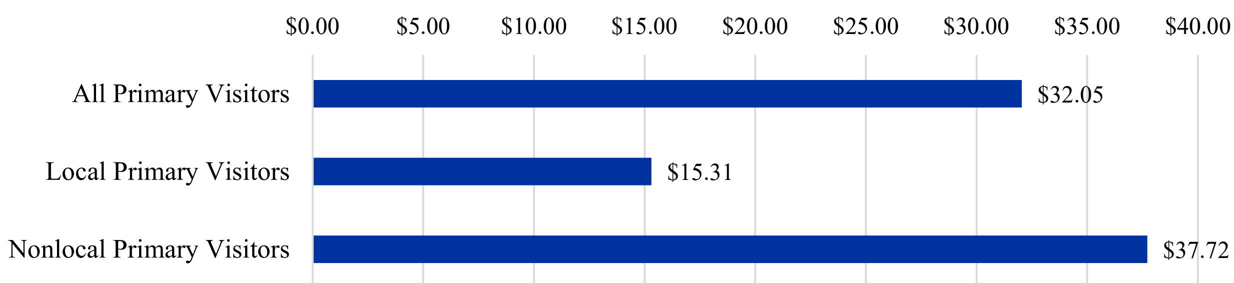


Table 4: Total direct spending by primary visitors

	Primary visitors
Local visitor	$5.3M
Nonlocal visitor	$19.3M
All visitors	$24.6M

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 $24.9 million in output, $8.7 million in earnings, $13.8 million in value-added (GDP), and support for 228 jobs (see Table 5).[14]

Table 5: Total economic impact of nonlocal primary visitors

Nonlocal Primary Visitors	Output	Earnings	Jobs	Value-Added (GDP)
Direct Impact (Spending)	$15.1M[15]	$5.4M	174	$8.5M
Indirect Impact	$5.4M	$1.9M	29	$2.8M
Induced Impact	$4.4M	$1.4M	25	$2.5M
Total Impact	$24.9M	$8.7M	228	$13.8M

Using the IMPLAN model, we estimate the total economic impact of **ALL** (local and nonlocal) primary visitors at $32.4 million in output, $11.3 million in earnings, $17.8 million in value-added (GDP), and support for 299 jobs (See Table 6).[16]

[14] Detailed methodology can be found in Appendix A6: Primary Visitor Economic Impact
[15] This is the $19.3M from Table 4 with retail margins applied.
[16] 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)	$19.6M[17]	$7.0M	229	$10.9M
Indirect Impact	$7.1M	$2.5M	38	$3.6M
Induced Impact	$5.7M	$1.9M	32	$3.3M
Total Impact	$32.4M	$11.4M	299	$17.8M

As noted, the impact figures in Table 6 include substitute spending from local visitors because it is assumed their spending would have occurred during this period in the absence of ArtPrize. As mentioned earlier, this assumption does have a drawback, as some locals may have ended up spending more than they would have because of ArtPrize.

The local primary visitors contributed $7.4 million in economic output, $2.6 million in earnings, $4.0 million in value-added, and support for 71 jobs. These figures are included in Table 6 above, however, it is unknown how much of this spending would have occurred regardless of ArtPrize, therefore these figures should be used with caution.

ECONOMIC IMPACT OF CASUAL VISITORS

The economic impact supported by ArtPrize focuses on spending by those who stated ArtPrize was *not* their primary reason for visiting the area. These are referred to as casual visitors. Per Table 3, there were 333,312 casual visitors to ArtPrize, with 35% of those visitors coming from outside Kent County.

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

[17] This is the $24.6M from Table 4 with retail margins applied.

Based on the survey data, all casual visitors spent on average $31.19 per person, per day, with nonlocal primary visitors spending $49.06 per person, per day (see Figure 10 below). These spending figures result in $22.8 million in direct spending by all casual visitors, with approximately 41% coming from nonlocal visitors (see Table 7 below).

Figure 10: Average per person, per day spending for casual visitors

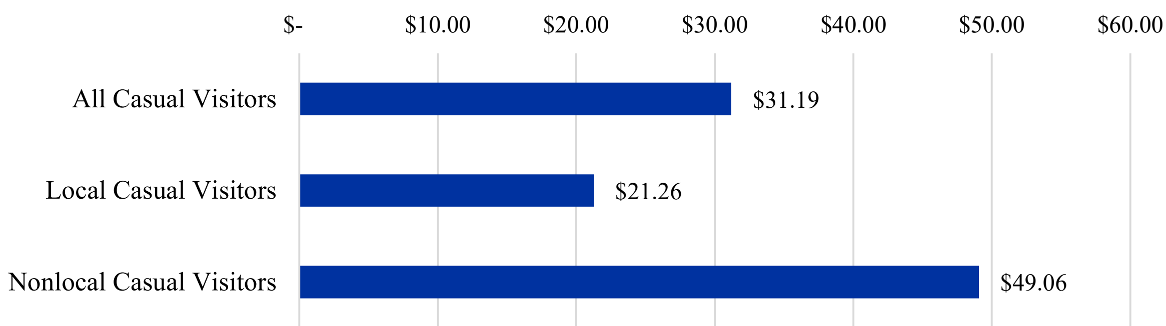


Table 7: Total direct spending by casual visitors

	Casual visitor
Local visitor	$13.5M
Nonlocal visitor	$9.3M
All visitors	$22.8M

To consider only new spending, we should focus on nonlocal spending. Using the IMPLAN model, we estimate their economic impact at $13.0 million in output, $4.6 million in earnings, $7.4 million in value-added (GDP), and support for 114 jobs (see Table 8).

Table 8: Total economic impact of nonlocal casual visitors

Nonlocal Casual Visitors	Output	Earnings	Jobs	Value-Added (GDP)
Direct Impact (Spending)	$8.0M[18]	$2.8M	86	$4.7M
Indirect Impact	$2.7M	$1.0M	15	$1.4M
Induced Impact	$2.3M	$754,000	13	$1.3M
Total Impact	$13.0M	$4.6M	114	$7.4M

The estimated total economic impact of **all** (local and nonlocal) casual visitors at $30.1 million in output, $10.6 million in earnings, $16.7 million in value-added (GDP), and support for 272 jobs (See Table 9).

Table 9: Total economic impact of all casual visitors

All Casual Visitors	Output	Earnings	Jobs	Value-Added (GDP)
Direct Impact (Spending)	$18.2M[19]	$6.5M	207	$10.3M
Indirect Impact	$6.5M	$2.3M	35	$3.3M
Induced Impact	$5.4M	$1.8M	30	$3.1M
Total Impact	$30.1M	$10.6M	272	$16.7M

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 $17.0 million in economic output, $6.0 million in earnings, $9.3 million in value-added, and support for 158 jobs.

[18] This is the $9.3M from Table 7 with retail margins applied.
[19] This is the $22.8M from Table 7 with retail margins applied.

ECONOMIC IMPACT OF ARTPRIZE ORGANIZATIONAL SPENDING

ArtPrize spent $1.7 million organizing and hosting ArtPrize 2022. Approximately 75% ($1.7 million) of this money was spent within Kent County.[20] ArtPrize's primary sources of revenue come from regional and national sponsors, foundations, partners, and individual supporters. It should be noted, a portion of this revenue represents "crowd-out spending", meaning ArtPrize 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 ArtPrize event.

As shown in Table 10, the local spending by ArtPrize generates $2.2 million in economic activity, supports 19 jobs, and contributes $1 million to the local GDP.

Table 10: Annual economic impact of ArtPrize operational spending

Operational spending	Output	Earnings	Jobs	Value-Added (GDP)
Direct Impact (Spending)	$1.3M	$239,000	13	$576,000
Indirect Impact	$618,000	$209,000	5	$311,000
Induced Impact	$271,000	$88,000	2	$154,000
Total Impact	$2.2M	$536,000	19	$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 at the county and sub-county levels consists of property taxes. At the state level, the majority of the tax is sales tax. As shown in Table 11 below, direct spending from primary nonlocal visitors

[20] Per ArtPrize leadership

generated $70,313 for Kent County[21]. This table is the best representation of "new" tax revenue caused by ArtPrize.

Table 11: Fiscal impact of nonlocal primary visitors

	Kent County	Sub-County: Municipalities	Sub-County: Special Districts	Michigan
Direct Impact	$45,333	$69,711	$148,995	$560,299
Indirect Impact	$10,773	$18,341	$35,419	$144,801
Induced Impact	$14,207	$21,310	$46,691	$173,075
Total Impact	$70,313	$109,362	$231,105	$878,175

The casual nonlocal visitor spending added $57,363 in tax revenue for Kent County, $82,589 for local municipalities, and $188,499 for special districts. As mentioned earlier, the impact of casual visitors is not included in the overall economic impact because they were in Grand Rapids for reasons other than ArtPrize. The data for casual visitors are presented here for informational purposes only.

CONCLUSION

The ArtPrize 2022 occurred from September 15 to October 2. During that time we estimated 753,472 total visitors, with 420,160 of these visitors stating ArtPrize was their primary reason for visiting Grand Rapids. Approximately 73% of these primary visitors were from outside Kent County (nonlocal visitors).

These primary visitors spent approximately $24.6 million at ArtPrize, resulting in total economic output of $32.4 million, supporting 299 jobs. Approximately 77% of this economic activity is attributed to nonlocal primary visitors. ArtPrize operational spending of $1.7 million added $2.2 million in economic output and support for 19 jobs. See Table 12 for a summary of the economic impact.

[21] Fiscal impact from all primary visitors can be found in Appendix A7: Fiscal Impact

Table 12: Summary of the annual economic impact of primary visitors and ArtPrize operational spending

Summary	Direct Spending	Output	Earnings	Jobs	Value-Added (GDP)
Primary visitors	$24.6M	$32.4M	$11.3M	299	$17.8M
ArtPrize Operations	$1.3M	$2.2M	$536,000	19	$1.0M
Total Impact	$25.9M	$34.6M	$11.8M	318	$18.8M

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

There were 333,312 casual visitors to ArtPrize, with 35% of those visitors coming from outside Kent County. These casual visitors spent $22.8 million at ArtPrize, with 41% coming from nonlocal visitors. This spending generated $30.1 million in economic output and support for 272 jobs.

The increase in economic activity also produces additional tax revenue. The direct spending by primary visitors generated $90,506 in tax revenue for Kent County. Approximately 78% of this revenue was generated by nonlocal primary visitors. Casual visitors generated $94,118 in tax revenue for the county with approximately 61% being generated by nonlocal visitors.

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 artists, vendors, and venues. Moreover, a measure of the economic impact of the festival excludes long-run economic and cultural impacts. Namely, new visitors to the Grand Rapids area may return in the future given their positive experience during ArtPrize 2022. Ω

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 ArtPrize 2022, 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 ArtPrize event. We relied on a Grand Valley State University student research team to administer the survey. Respondents had to be 18 years old or older to be included in the survey.

During the week of the festival, there were 1,308 interview requests with 650 surveys completed. This equates to a total response rate of 49.7%. This response rate exceeds our targeted 383 completed surveys, with a 95% confidence level, and a 5% margin of error. Figure A2-1 presents the visitor's survey and Figure A2-3 presents the survey locations.

Figure A2-1: Visitor survey

Grand Valley State University

Form: 3

1. Zip code: ________
2. Are you 18? Yes_____ No_____ (If 'No' stop here)
3. Is ArtPrize the primary reason for visiting Grand Rapids? Yes____ No____
4. How many in your party at ArtPrize? Adults: _____ Children: _____
5. How many days do you plan to spend at ArtPrize? ____
6. How much, on average are you spending **each day** in the following categories (GR area)? *(Total amount spent. Please put $0 if you spent nothing)*
   - $_______ Meals-Restaurant (full service)
   - $_______ Meals-Other (Limited service, Fast Food, Food truck, etc.)
   - $_______ Retail Shopping/Other Shopping
   - $_______ Lodging (Hotel, Airbnb, etc.)
   - $_______ Transportation (gas, parking, Uber, etc.)
   - $_______Art Purchases
7. What type of accommodations are you using for ArtPrize:
   ___Commuting from home ___ Hotel/Motel/AirBnb ___ Home of family/friend ___ Other
8. What method of transportation did you use to get to ArtPrize (check all that apply):
   ___Personal vehicle/car pool ___Public transportation
   ___Walk or bike ____ Lime scooter or bike (or other micro mobility) ___ Other
9. Are you using the Artprize digital map? Yes ___ No___
10. Have you created an Artprize account? Yes ___ No___
11. Have you 'favorited' an artist today? Yes ___ No___
12. How many time have you visited ArtPrize in the past?
    My first visit ___ 1 other time___ 2 other times___ 3-4 other times___ 5+ other times___
13. Because of your experience at the ArtPrize, how likely are you to visit the Grand Rapids area again?
    Very likely ___ Somewhat likely___ Somewhat unlikely___ Very unlikely___
14. How did you hear of ArtPrize? ___ TV/Radio ___Social Media ___ Family/Friend ___ Billboard ___Brochure ___ Print Media
15. How would you like to hear about ArtPrize in the future? ________________
16. Gender: Male: ___ Female: ___ Transgender: ___ Prefer not to identify: ___
17. Age: _____
18. Which statement best describes your 2022 personal income:
    $25,000 or less: ___ $25,001 to $75,000: ___ $75,001 to $125,000: ___ $125,000+: ___
19. Race: ___Asian ___ Mixed race ___ Native American ___ White or Caucasian ___ Black or African American ___Hispanic or Latino ___ Pacific Islander ___ Other

Figure A2-2: Survey locations

Location	# of times surveyed
Brew City area	1
Bridge/Broadway area	2
Calder Plaza	5
Ford Museum	2
Market and Ionia Area	1
Makers Market	2
Rosa Parks and GRAM	4
Studio Park	3
The BOB area	1

Orthogonal Survey

The orthogonal survey occurred the week after ArtPrize and focused on determining the percentage of local residents that attended ArtPrize. The result was 350 usable responses, with 206 locals completing the survey. Figure A2-3 presents the orthogonal survey.

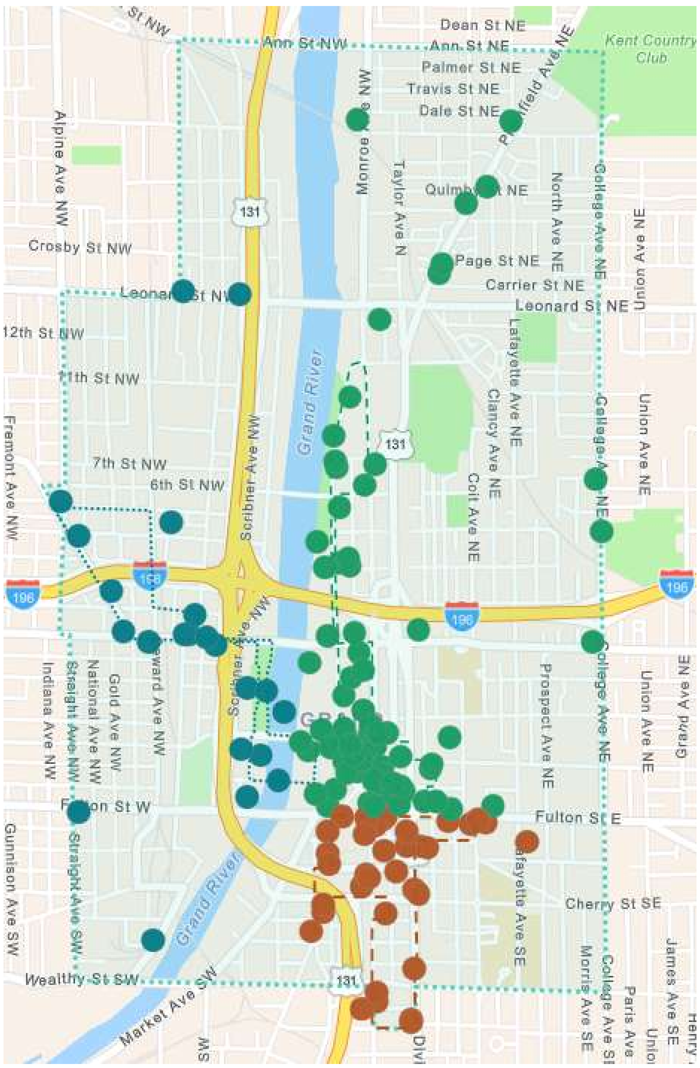
Figure A2-3: Orthogonal survey

1. Zip code: __________

2. Did you attend ArtPrize 2022? Yes _____ No_____

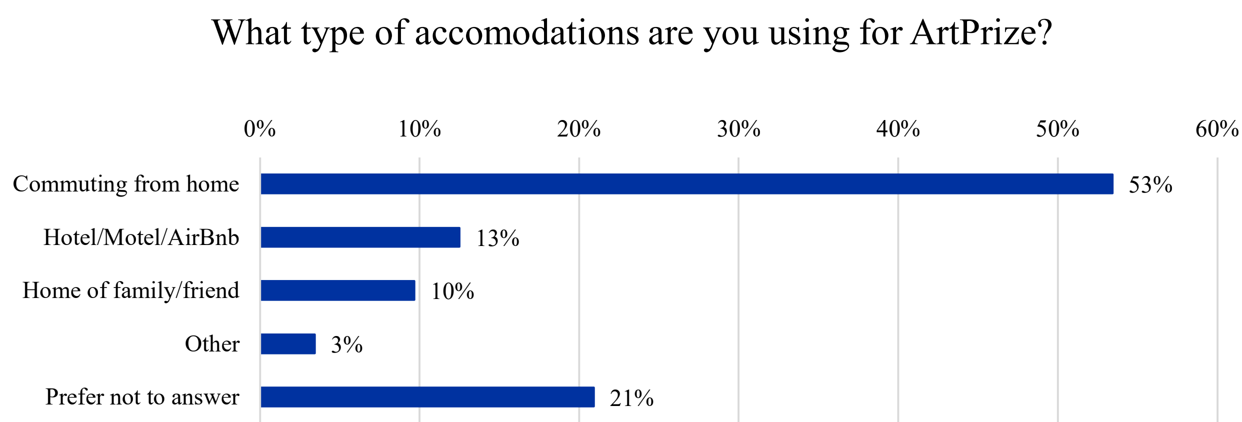
The ArtPrize district spans three-square miles of downtown Grand Rapids, MI. The majority of ArtPrize venues are located within the district. There are special venues outside this district that include Meijer Gardens, Ford International Airport, and John Ball Zoo. The ArtPrize district is shown in Figure A2-4 below.

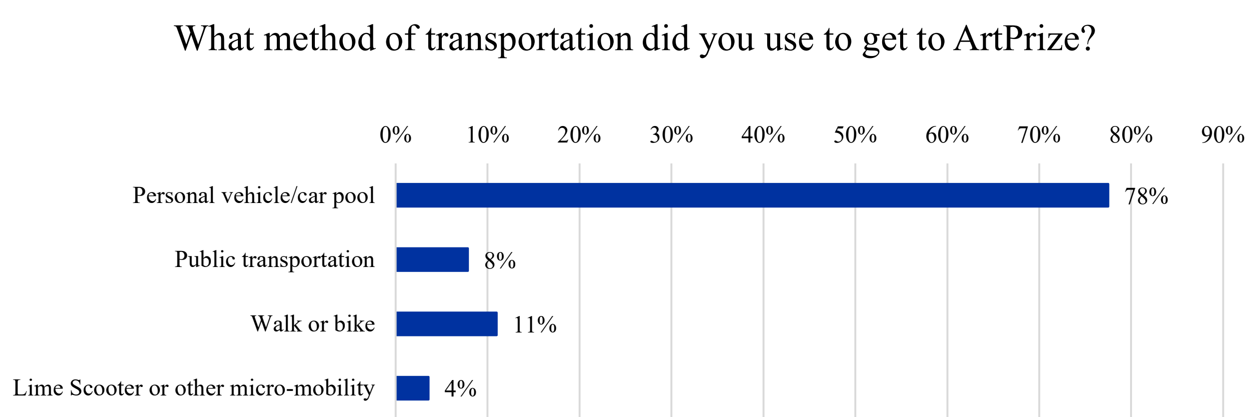
Figure A2-4: ArtPrize District

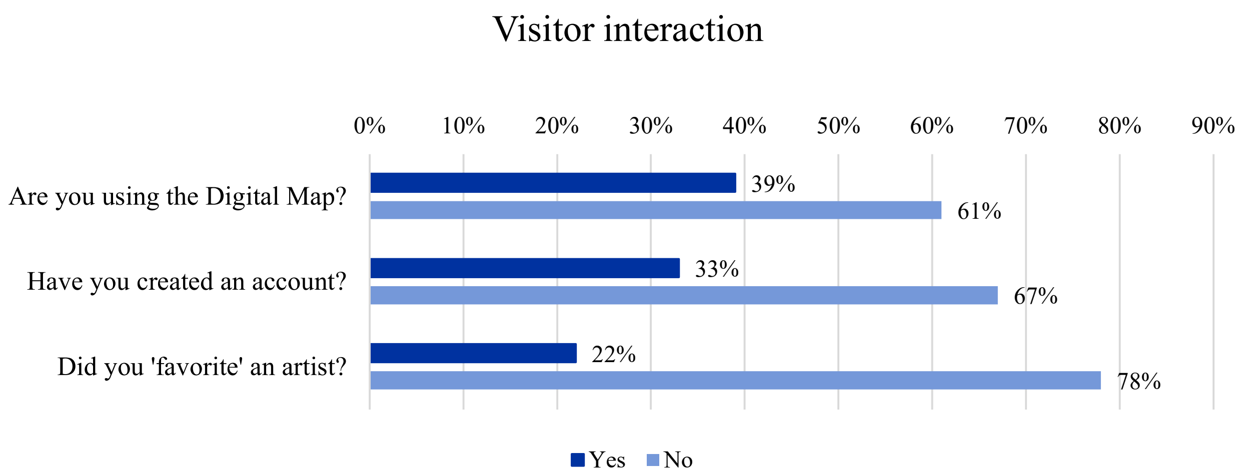


A3: VISITOR DEMOGRAPHICS

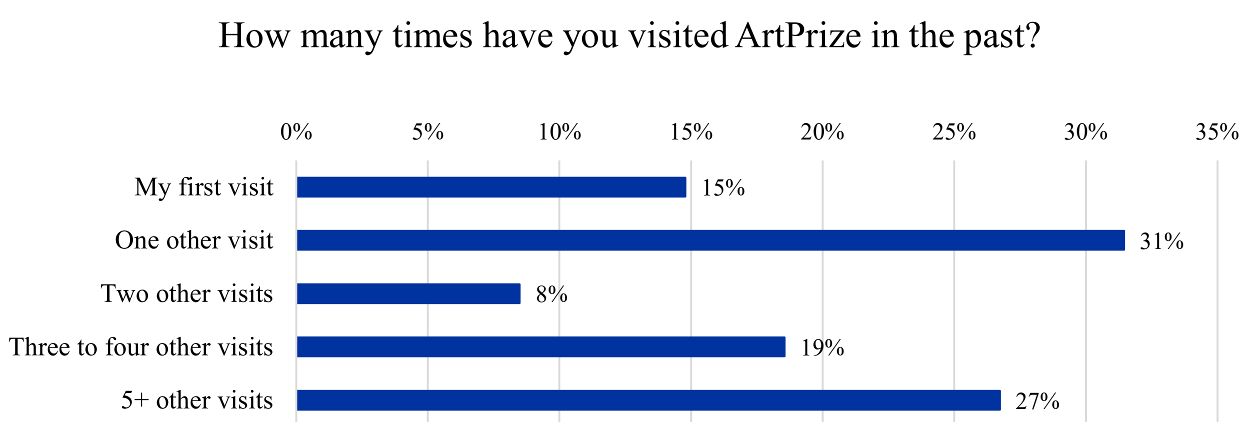
As shown in figure A2-2, the survey asked additional questions about their visit to Grand Rapids. The tables below summarize the response from all primary visitors.



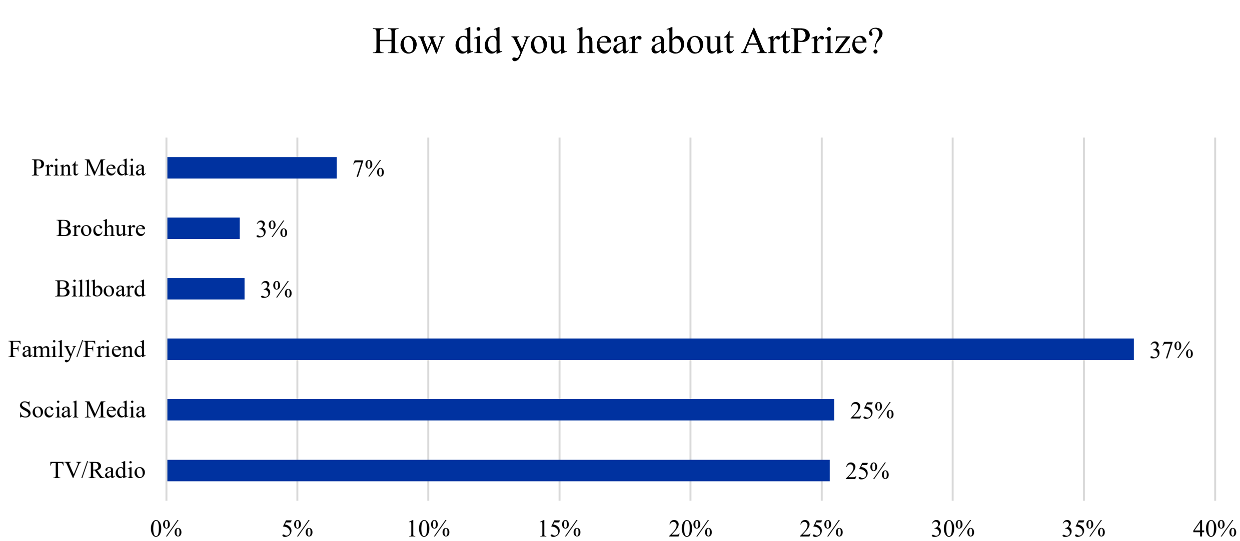




Visitor interaction
0%
10%
20%
30%
40%
50%
60%
70%
80%
90%
Are you using the Digital Map?
39%
61%
Have you created an account?
33%
67%
Did you 'favorite' an artist?
22%
78%
Yes
No



How many times have you visited ArtPrize in the past?
0%
5%
10%
15%
20%
25%
30%
35%
My first visit
15%
One other visit
31%
Two other visits
8%
Three to four other visits
19%
5+ other visits
27%



How did you hear about ArtPrize?
Print Media
7%
Brochure
3%
Billboard
3%
Family/Friend
37%
Social Media
25%
TV/Radio
25%
0%
5%
10%
15%
20%
25%
30%
35%
40%

Demographics of Kent County

Population	658,046
Employed population	336,145
Median age	35.4
Households	244,795
Persons per household	2.62
Persons under 18	23.7%
Persons 65 years and older	14.6%
Female persons	50.4%
Race	
White	81.8%
Black or African American	10.7%
American Indian and Alaska Native	0.7%
Asian	3.4%
Two or more races	3.2%
Hispanic or Latino	11.3%
Housing	
Median house value	$188,500
Homeownership rate	70.4%

Education	
High school graduate or higher	91.4%
Bachelor's degree or higher	36.8%
Income and Poverty	
Median household income	$65,722
Per capita income	$33,629
Poverty rate	12.6%
Top 5 Employment by industry	
Health Care and Social Assistance	17.5%
Retail Trade	13.3%
Manufacturing	10.1%
Accommodation and Food Service	9.5%
Construction	7.9%
Top 5 Employment by Occupation	
Sales and Related Occupations	13.2%
Management Occupations	9.9%
Office & Administrative Support	8.9%
Health Diagnosing & Treating Practitioners	7.1%
Food Preparation Services	6.9%

A4: ESTIMATING THE NUMBER OF VISITORS AND VISITOR DAYS

We used the orthogonal 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 survey results

	Number	% of all zip codes
Total zip codes collected	350	100.00%
Local zip codes	206	58.86%
Nonlocal zip codes	144	41.14%
Zip codes that attended ArtPrize	146	41.71%
Local zip codes that attended ArtPrize[22]	117	56.80%

Table A4-2: Local visitors and visitor days

		Primary visitors	Casual visitors
The population of Kent County[23]	502,089		
% of the local population that attended ArtPrize[24]	56.80%		
% Primary and casual visitors[25]		32.09%	67.91%
Estimated number of local adult visitors	285,167	91,510	193,657
Local visitors' children per adult[26]	.1685	.2587	.1259
Total local visitor party size	**333,226**	**115,184**	**218,042**
Avg. number of days spent at ArtPrize[27]	2.946	3.023	2.907
Total local visitor days	**981,598**	**348,235**	**633,849**

[22] Stated as a percentage of total local zips codes, not all zip codes.
[23] Population over the age of 18. Per the Census, 23.7% of the population is under 18. https://www.census.gov/quickfacts/
[24] Per the survey results, approximately 56.80% of the local zips collected attended ArtPrize. This percentage was used to estimate the total number of local visitors.
[25] Data taken from visitor survey
[26] Ibid
[27] Ibid

Table A4-3: Nonlocal visitors and visitor days

		Primary visitors	Casual visitors
Total zip codes collected	616		
Total number of local zip codes	268		
Total number of nonlocal zip codes	348		
The ratio of nonlocal zip codes to local zip codes	1.30		
Estimated number of nonlocal visitors[28]	370,292		
% Primary and casual visitors[29]		71.23%	28.74%
Estimated adult visitors by visitor type	370,292	263,759	106,422
Nonlocal visitors' children per adult[30]	0.1353	0.1563	0.08314
Total nonlocal visitor party size	420,374	304,976	115,270
Avg. number of days spent at ArtPrize[31]	1.665	1.6734	1.6436
Total nonlocal visitor days	**699,923**	**510,347**	**189,457**

A5: ESTIMATING VISITOR SPENDING

Survey results require data cleaning. The method used 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.
- To remove outliers, the top and lowest spending for each category in question #6 were removed (six highest spenders and six lowest spenders).
- Survey results with no zip code and no indication if ArtPrize was their primary reason for visiting were removed.

[28] Calculated as: Ratio * Estimated number of local adult visitors (see Table A4-2)
[29] Data taken from visitor survey
[30] Ibid
[31] Ibid

Estimated spending: Primary Visitors

Table A5-1 shows the average spending per person, per day for all primary visitors (local and nonlocal). Data from this table was 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

	All Primary	Local Primary	Nonlocal Primary
Meals Restaurant	$14.62	$8.76	$16.60
Meals Other	$2.16	$1.90	$2.25
Retail	$3.04	$1.16	$3.67
Lodging	$6.44	$1.41	$8.15
Transportation	$4.18	$1.71	$5.02
Art Spending	$1.61	$0.37	$2.03
Total Average Spending PPPD	$32.05	$15.31	$37.72

Using the average category spending for each visitor type and the number of visitor days, we can estimate total direct spending. Table A5-2 presents the total direct spending (direct effects or direct output) for each category and each type of visitor. Data from this table was used in Table 4 in the main report.

Table A5-2: Estimated total direct spending for each category and each primary visitor type

	All visitors[32]	Local visitors	Nonlocal visitors
Meals Restaurant	$11,522,306	$3,050,540	$8,471,766
Meals Other	$1,809,928	$661,647	$1,148,281
Retail	$2,276,928	$403,953	$1,872,975
Lodging	$4,650,342	$491,012	$4,159,331
Transportation	$3,157,426	$595,482	$2,561,944
Art Spending	$1,164,852	$128,847	$1,036,005
Total Direct Spending	$24,581,782	$5,331,480	$19,250,301

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 A5-3: Estimated average spending per person, per day for ALL casual visitors

	All Primary	Local Primary	Nonlocal Primary
Meals Restaurant	$11.92	$9.36	$16.54
Meals Other	$2.31	$2.34	$2.25
Retail	$4.64	$4.79	$4.37
Lodging	$8.70	$2.08	$20.61
Transportation	$2.30	$1.67	$3.43
Art Spending	$1.32	$1.02	$1.86
Total Average Spending PPPD	$31.19	$21.26	$49.06

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

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[33]	Local visitors	Nonlocal visitors
Meals Restaurant	$9,066,449	$5,932,826	$3,133,624
Meals Other	$1,909,485	$1,483,206	$426,279
Retail	$3,864,065	$3,036,136	$827,928
Lodging	$5,223,121	$1,318,406	$3,904,715
Transportation	$1,708,366	$1,058,528	$649,839
Art Spending	$998,916	$646,526	$352,391
Total Direct Spending	$22,770,403	$13,475,627	$9,294,776

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. Per the IMPLAN model, the top five industries impacted by primary visitor spending are presented in tables A6-1 (output) and A6-2 (employment). These tables are based on all primary visitors. There is no significant change when focused solely on nonlocal spenders.

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

Table A6-1: 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
Full-service restaurants	1.5%	36.2%
Lodging	0.0%	14.4%
Meals Other	3.4%	6.9%
Retail Shopping	4.3%	4.4%
Other real estate	9.2%	3.7%

Table A6-2: Top five 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	3.6%	52.3%
Lodging	0.0%	14.0%
Meals Other	7.1%	8.6%
Retail Shopping	7.7%	4.6%
Other real estate	1.0%	1.0%

A7: Fiscal Impact

Detail breakdown of tax revenue generated by all primary visitors is provided in Table A7-1 (tax revenue generated by nonlocal primary visitors was provided in the main report).

Table A7-1: Fiscal impact of all primary visitors

Fiscal Impact	Municipalities	Sub-County Special Districts	GT County	State	Federal
Direct Impact	$88,116	$184,245	$56,054	$706,872	$1,266,760
Indirect Impact	$25,342	$48,922	$14,880	$200,072	$447,970
Induced Impact	$29,357	$64,322	$19,572	$238,431	$334,692
Total Fiscal Impact	$142,815	$297,489	$90,506	$1,145,375	$2,049,422