Economic Impact of Western New York's

Not-for-Profit Cultural Industry



Forward

The not-for-profit cultural sector in Western New York is the subject of many accolades, the producer of many accomplishments, and a key contributor to the region's resurgence. These things are well-known, yet every once in a while we need to quantify our impact, and so you have before you an economic impact report of both the organizations themselves and their audiences.

A bit of context is important with any report like this. The years focused on are 2009-2013; this was a time period during and immediately following not only a period of economic concern in the community, but also a severe cut in public funding in Erie County. With that in mind, it is easy to understand that many organizations had to cut back in staff and spending. Yet it is also important to note that artistic accomplishment – judged both in total output and quality – remained as high as always and even grew. Further, audience spending was strong. Simply put, the not-for-profit cultural sector showed its resiliency and strength, and the audiences responded.

While you will read of the impact of the 105 organizations included, it's also worth noting what's not included. The many for-profit organizations from concert venues to the creative industries are not part of this study, nor is the economic impact from touring productions (the spending of those in the productions, which is distinct from those of the venue or audience).

Finally, while quantifying the economic impact of arts and culture is certainly important, it is only one of the many impacts of the sector, including:

- Tourism;
- Education;
- National and International Recognition;
- Business and Employee Attraction;
- Health and Human Services;
- Veterans Services;
- History and Heritage; and
- Service to the Community.

No other sector offers all these impacts, and perhaps most importantly serves to inspire those who enjoy it while reflecting the culture of the people and places of our region. That's the true impact of arts and culture; but for now, the numbers...

Tod A. Kniazuk Executive Director Arts Services Initiative of Western New York, Inc.

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Economic Impact of Western New York's Not-for-Profit Cultural Industry

November, 2014

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ECONOMIC IMPACT OF WESTERN NEW YORK'S NOT-FOR-PROFIT CULTURAL INDUSTRY

November, 2014

Summary

Center for Governmental Research was engaged to estimate the impact of the not-for-profit cultural industry in Western New York.¹ CGR broke the impact out into two parts: the arts and cultural organizations and their audiences. The economic impact is summarized in the table below:

Area of Impact	Organizations	Audiences	Total
Full - Time Equivalent Jobs	2,200	700	2,900
Labor Income	\$64.2	\$23.2	\$87.4
Government Revenue	\$3.2	\$1.2	\$4.3

Note: Totals may not sum due to rounding

Organizations

The arts and cultural organizations in Western New York contribute an estimated \$87 million to local GDP. They spend it in the form of wages to employees and payments to suppliers which supports about 2,200 jobs. These workers earn about \$64.2 million in total. This income generated an estimated \$3.2 million in sales and income tax.

Audiences

Attendees to arts and cultural events generate revenue for local businesses. An average arts attendee spends \$17.77 in addition to the cost of admission. Event attendees provide an estimated \$70.2 million in revenue to the Western New York economy and support 700 jobs. Non-local attendees spend more than local attendees (\$8.92 vs \$52.10).

Acknowledgements

Thanks to Professor Deborah Tallman Curtis, the Director of the Center for Events & Management Development at Niagara University for guiding and administering a number of audience surveys, providing critical information about the culture-driven tourism sector.

Thanks are also due to the Cultural Data Project for the important work they have been doing compiling information to support analysis like this and for their very specific support of this study.

Thanks to Shelia Benson, Photographer/Graphic Designer for cover images, color design, and artistic layout.

CGR - Staff Team

Research Associate Mike Silva managed the data, developed the underlying economic impact model, conducted the analysis and drafted the report.



Special Thanks

Funding provided by: The New York Community Trust



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Table of Contents

FORWARD1
SUMMARY
ORGANIZATIONS
AUDIENCES
TABLE OF CONTENTS 5
ECONOMIC IMPACT OF WNY'S NOT-FOR-PROFIT CULTURAL INDUSTRY 6
INTRODUCTION6
Our Approach6
ARTS & CULTURAL ORGANIZATIONS6
Arts & Culture Audience6
ARTS & CULTURAL ORGANIZATIONS IMPACT7
ARTS & CULTURE AUDIENCE IMPACT8
Size of Audience
Local vs. Non-Local Audiences
Event Related Spending9
CONCLUSION
Appendix
Definitions
Geographic Scope
DIRECT EFFECTS
Spillover Effects
DATA SOURCES 11
Cultural Data Project11
NIAGARA UNIVERSITY ARTS & CULTURE ATTENDEE SPENDING SURVEY13
RESPONSE RATES
Reported Spending 14
IMPLAN 16
Other Sources
DERIVATION OF ESTIMATES
Direct Income
ORGANIZATION IMPACT16
Audience Impact
Employment & Labor Income 17
ORGANIZATION IMPACT17
AUDIENCE IMPACT
GOVERNMENT REVENUE

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ECONOMIC IMPACT OF THE NOT-FOR-PROFIT CULTURAL INDUSTRY IN WESTERN NEW YORK

Introduction

Arts and cultural organizations are employers, producers, consumers, and key promoters of their cities and regions. They are rooted locally: they employ people locally, purchase goods and services from within the community, and market and promote their regions. These are jobs that are immune from foreign competition in a way that manufacturing jobs are not. This study is an attempt to quantify the impact of the not-for-profit arts and cultural organizations on the Western New York economy.²

Arts and culture activities trigger complementary economic activity that generates other spending. After all, dinner and a show go hand-in-hand: The spending of non-employee participants that is separate from the purchase of a ticket is every bit as important as the spending of the organization on salaries and supplies. A vibrant arts community draws cultural tourists from outside the region.

Our Approach

We break the analysis of the combined impact of the core activity and the associated complementary spending into two components: the organizations and their audiences.³

Arts & Cultural Organizations

Arts and cultural organizations draw in money from a variety of sources, principally grants and ticket sales. With that, they pay employees and purchase goods and services in the community which supports jobs by their suppliers. The organization's employees spend their paychecks in the community, which also spurs job creation.

This study quantifies the revenue of these organizations, how many jobs they create directly, and how many jobs result from "spillover" spending in the community by the organizations and their employees. It also estimates the amount of income to the labor force, and the fiscal impact (revenue to government) in terms of income and sales tax revenue.

Arts & Culture Audience

Their audiences generate event-related spending in the community by purchasing food and beverages, transportation, souvenirs etc. As with the organizations, this study will quantify audience spending, the associated jobs and labor income, as well as the income and sales tax revenue.

² Western New York refers to the five county areas made up by Allegany, Cattaraugus, Chautauqua, Erie and Niagara counties.

³ A full discussion on how these estimates were derived is included in the appendix to this report

Arts & Cultural Organizations Impact

This study consisted of 105 not-for-profit arts and cultural organizations in Western New York. Most of them are located in Erie County. This averages 7.5 arts and culture organizations per 100,000 residents. Erie County has the highest concentration followed by Chautauqua.

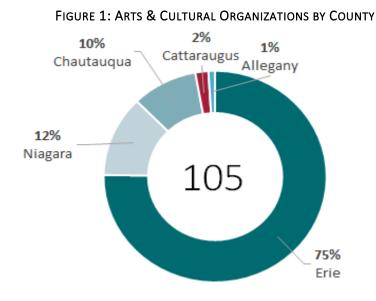


Table 2: Arts & Culture Organizations and Residents by County

County Name	Organizations	Residents ⁴	Organizations per 100,000 Residents
Erie	78	9.2	8.6
Niagara	13	2.1	6.1
Chautauqua	10	1.3	7.5
Cattaraugus	3	0.8	2.5
Allegany	1	0.5	2.1
Western New York	105	13.9	7.5

These organizations contribute an estimated \$87 million to GDP in the region, directly employing about 1,600 workers. The spillover spending supports an additional 500 jobs for a total of 2,200 full time jobs. 47% of the arts and cultural organizations' spending is in the form of paychecks to their employees. In total, \$64.2 million is paid to employees in the region as a result of the not-for-profit cultural industry. This income generates an estimate \$3.2 million in sales and income tax.

⁴ Figures in 100,000



Area of Impact	Direct	Spillover	Total
Full - Time Equivalent Jobs	1,600	500	2,200
Labor Income	\$41.1	\$23.1	\$64.2
Government Revenue	\$1.7	\$1.5	\$3.2

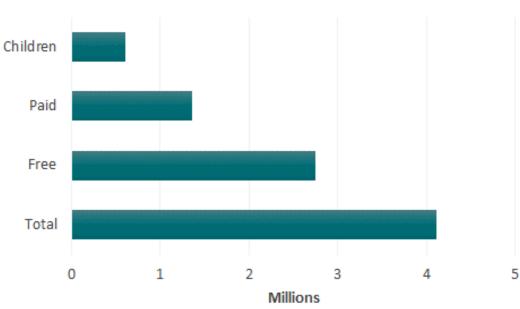
Note: Totals may not sum due to rounding

The arts and cultural events generate a significant amount of event related spending. For example a person may drive a long distance to get to an attraction, pay for parking, and eat out at a restaurant. This generates income for local businesses.

Arts & Culture Audience Impact

Size of Audience

4.1 million people attended arts and cultural events in Western New York. Two thirds of them attended for free and one third were paid attendees. 15% (0.6 million) were children.

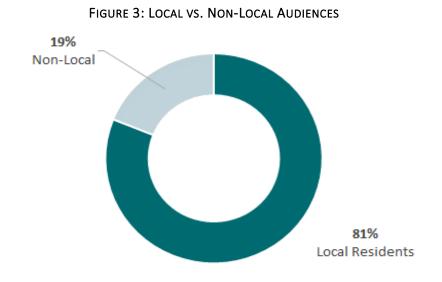




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Local vs. Non-Local Audiences

Of the 4.1 million who attended, an estimated 19% traveled from outside Western New York to attend an event.



Event Related Spending

People attending arts and cultural events spend on average \$17.77 in addition to the price of admission. Non-local attendees on average spend considerably more (\$52.10 per person) than local residents (\$8.92 per person).



Table 4. Average Event-Related Speriding pe			
Event-Related Spending	Local Residents	Non-Local	Average
Food & Beverage	\$4.85	\$10.60	\$6.29
Souvenirs	\$1.34	\$8.92	\$3.24
Accommodations	\$1.20	\$27.81	\$5.90
Transportation	\$0.88	\$4.25	\$1.73
Parking	\$0.64	\$0.52	\$0.61
Total	\$8.92	\$52.10	\$17.77

Table 4: Average Event-Related Spending per Person by Type of Attendee

In total, arts and culture attendees spend an estimated \$70.2 million in Western New York above the price of admission. This is income to local businesses. It supports about 500 jobs directly, and the spending by these businesses and employees brings the total number of jobs up to 700. In total an estimated \$23.2 million is paid to the employees in the region. This generates about \$1.2 million in revenue for New York State governments.

Table 5: Economic Impact of Arts & Culture Audiences (dollars in millions)

Area of Impact	Direct	Spillover	Total
Full - Time Equivalent Jobs	500	200	700
Labor Income	\$14.1	\$9.0	\$23.2
Government Revenue	\$0.6	\$0.5	\$1.2

Note: Totals may not sum due to rounding

Conclusion

Western New York has a vibrant not-for-profit cultural industry. These organizations and their audiences pump \$157.3 million into the economy. Their direct hiring and hiring as a result of spillover effects are responsible for supporting about 2,900 full time equivalent jobs in the region.

Table 6: Economic Impact of the Arts & Culture Industry (dollars in millions)

•	/ \	,	
Area of Impact	Organizations	Audiences	Total
Full - Time Equivalent Jobs	2,200	700	2,900
Labor Income	\$64.2	\$23.2	\$87.4
Government Revenue	\$3.2	\$1.2	\$4.3

Note: Totals may not sum due to rounding

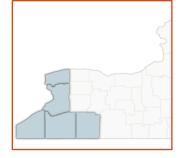
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Appendix

Definitions

In measuring the impact of the not-for-profit cultural industry we not only looked at the organizations, but also at the audience. This section clarifies terms used in the body of the report.

Geographic Scope



This study focuses on a five county area referred to as Western New York throughout the report. This region includes Allegany, Cattaraugus, Chautauqua, Erie and Niagara counties which are highlighted in the figure to the left.

When we refer to audience members as being non-local we mean that they reside outside this five county region.

Direct Effects

The direct economic impact consists of the expenditures of the not-for-profit cultural industry/audience in the community - i.e., the industry is directly involved with the transaction. For example a theatre might purchase paint from a hardware store to paint sets. Any of these types of transactions are known as direct effects in economic impact studies.

Spillover Effects

Spillover expenditures result from the subsequent spending of the recipients of the direct expenditures. In some studies this is subdivided for analysis into "indirect" and "induced" impact. Indirect expenditures are the result of the arts and culture organizations supplier spending. For example, the hardware store referenced in the preceding section would have to purchase paint from a factory to replace what was purchased. These types of expenditures are indirect. The employees will also spend their paychecks to purchase goods and services. This type of spending is the induced impact.

Data Sources

Cultural Data Project

CGR used Cultural Data Project (henceforth CDP) data to estimate the impact of the not-forprofit cultural industry. The CDP provides reliable, longitudinal data on arts and cultural organizations. There are 105⁵ participating organizations spread across the five county area.

CGR used the latest year available for each organization. These data spanned from 2009 to 2013. CGR inflation adjusted the figures to ensure a consistent unit for analysis, and all dollars in the report are 2013 dollars. The CDP data was used to inform the amount of revenue for the organizations and the size of the audience.



⁵ The Lucille Ball-Desi Arnaz Center was not included in the CDP data however CGR added it using information pulled from their most recent (2011) IRS Form 990.

The following Arts & Cultural Organizations were included in this report:

Alleganv County: The Institute for Electronic Arts Cattaraugus County: Cattaraugus County Arts Council (CCAC) Chamber Music Society of Olean, Inc. The Regina A. Quick Center for the Arts Chautauqua County: 1891 Fredonia Opera House Arts Council for Chautauqua County Chautauqua Opera Chautauqua Opera Company Historical Society of Dunkirk Infinity Visual & Performing Arts, Inc. Jamestown Concert Association Lucille Ball-Desi Arnaz Center Roger Tory Peterson Institute of Natural History Western New York Chamber Orchestra, Inc. Erie County: African Cultural Center of Buffalo, Inc. Alleyway Theatre Inc. Alt Performance Group American Legion Band of the Tonawandas, Inc. American Repertory Theater of WNY, Inc. Amherst Symphony Orchestra Association Inc. Ars Nova Musicians Chamber Orchestra, Inc. Art Park & Company, Inc. Arts Services Initiative of Western New York, Inc. (ASI) Ballet Artists of WNY, Inc. **Big Orbit Gallery** Buffalo & Erie County Botanical Gardens **Buffalo Arts Studio Buffalo Chamber Music Society Buffalo Chamber Players Buffalo Fine Arts Academy** Buffalo International Film Festival, Inc. Buffalo Naval Park Committee Inc. Buffalo Opera Unlimited **Buffalo Philharmonic Chorus** Buffalo Philharmonic Orchestra (BPO) **Buffalo Society of Natural Sciences** Buffalo United Artists, Inc. (BUA) **Burchfield Pennev Art Center** Camerata di Sant' Antonio Center for Exploratory and Perceptual Arts, Inc. (CEPA) Community Music School of Buffalo **Configuration Dance Theatre** El Museo Francisco Oller Y Diego Rivera Explore and More Children's Museum Frederick Chopin Singing Society of Buffalo, Inc. Graycliff Conservancy, Inc. Greater Allentown First Fridays Gallery Walk Hallwalls, Inc. Hamburg Natural History Society, Inc. Hispanic Heritage Council of WNY Inc. Impact Artists Gallery Inc.

Erie County (con't): Irish Classical Theatre Company Jewish Repertory Theatre Juneteenth Festival Inc. Just Buffalo Literary Center Kavinoky Theatre Lancaster NY Opera House, Inc. LhererDance. Locust Street Neighborhood Art Classes Martin House Restoration Corporation Museum of Disability History Music is Art Musicians United for Superior Education, Inc. New Phoenix Theatre **OPERA SACRA**, Inc. Orchard Park Chorale Playhouse of American Classics Road Less Traveled Productions Ltd. **Roycroft Campus Corporation** Shakespeare in Delaware Park Springville Center for the Arts Squeaky Wheel Subversive Theatre Collective The Buffalo History Museum The Buffalo Transportation Pierce Arrow Museum The Coalition of Arts Providers for Children, Inc. The Friends of Vienna The Hull House Foundation The Western New York Artists Group, Inc. Theatre Alliance of Buffalo Theatre for Change Inc. Theatre of Youth Company, Inc. Theodore Roosevelt Inaugural Site Foundation Torn Space Theater Ujima Company, Inc. Urban Canvas Project of Buffalo Western New York Book Arts Center White Pine Press Young Audiences WNY Zoological Society of Buffalo Niagara County: Carousel Society of the Niagara Frontier Castellani Art Museum of Niagara University German-American Musicians Association Historical Association of Lewiston Kenan Center, Inc. Lewiston Council on the Arts Niagara County Historical Society Neto Hatinakwe Onkwehowe Old Fort Niagara Rivershore, Inc. Sanborn Area Historical Society The Niagara Arts & Cultural Center, Inc. (NACC) Tonawandas' Council on the Arts Tonawandas Gateway Harbor, Inc.

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Niagara University Arts & Culture Attendee Spending Survey

To estimate the impact of audience spending we used data from a survey administered by Niagara University's College of Hospitality & Tourism Management.

Attendees of 13 venues were asked questions relating to the size and makeup of their party, their spending in six categories and their zip code. This enabled CGR to classify them as local or non-local respondents. This survey was used to determine the share of local vs. non-local attendees by the type of organization and their spending patterns.

Response Rates

In total 970 people were interviewed. To be considered valid, the respondent had to provide a valid postal code. All except three respondents were valid. The following table summarizes the number of respondents by venue:

Table A-1:	Respondents	by Venue
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Venue	Respondents	Valid Responses
Buffalo & Erie County Botanical Gardens	21	21
Buffalo Museum of Science	37	37
Explore & More Children's Museum	61	61
Gladys Knight at Art Park	59	58
Graycliff Conservatory, Inc.	23	23
Lucille Ball Desi Arnaz Museum & Center for Comedy	77	77
MusicalFare Theatre	82	82
Penn Dixie Paleontological & Outdoor Education Ctr.	24	24
Shakespeare in Delaware Park	91	91
Shea's Performing Art Center	186	185
The Buffalo Zoo	204	204
The Darwin D. Martin House Complex	76	76
The Kenan Center	29	28
Total	970	967

13

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Using the postal codes, CGR was able to categorize the respondent as from Western New York, another part of New York State, another state, or another country. The table below summarizes this breakout along with if they reported a spending amount.

Table A-2: Respondents by Type

						Outside
		Western	Other Part	Other		Western
	Total	New York	of NYS	State	International	New York
Total respondents	967	718	80	135	34	249
Reported accommodations						
spending	108	9	21	67	11	99
Reported food & beverage						
spending	513	368	46	74	25	145
Reported admission/tickets						
spending	583	406	54	98	25	177
Reported souvenir spending	200	95	27	64	14	105
Reported parking spending	250	197	23	19	11	53
Reported transportation						
spending	229	161	24	34	10	68

Reported Spending

We totaled the spending by category and by type of respondent. The table below summarizes these totals:

	Total	Western New York	Other Part of NYS	Other State	International	Outside Western New York
Accommodations	\$11,165	\$801	\$2,199	\$6,860	\$1,305	\$10,364
Food & beverage	\$17,768	\$10,262	\$2,456	\$4,012	\$1,038	\$7,506
Admission/tickets	\$34,028	\$23,254	\$3,998	\$5,709	\$1,067	\$10,774
Souvenir	\$9,154	\$2,839	\$1,990	\$3,720	\$605	\$6,315
Parking	\$1,730	\$1,365	\$168	\$149	\$48	\$365
Transportation	\$4,883	\$1,873	\$1,243	\$1,482	\$285	\$3,010

Based on the reported number in their party we were able to calculate per person spending rates summarized in the table below:

Table A-4: Spending per Person by Type	
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		Western	Other Part	Other	Internationa	Outside Western
	Total	New York	of NYS	State	I	New York
Total people in party	2,825	2,117	250	360	98	2,825
Food & beverage	\$6.29	\$4.85	\$9.82	\$11.14	\$10.59	\$2.66
Admission/tickets	\$12.05	\$10.98	\$15.99	\$15.86	\$10.89	\$3.81
Souvenir	\$3.24	\$1.34	\$7.96	\$10.33	\$6.17	\$2.24
Parking	\$0.61	\$0.64	\$0.67	\$0.41	\$0.49	\$0.13
Transportation	\$1.73	\$0.88	\$4.97	\$4.12	\$2.91	\$1.07
Total spending per person (excluding accommodations)	\$23.92	\$18.70	\$39.42	\$41.87	\$31.05	\$9.90
Total spending (excluding accommodations & admission)	\$11.87	\$7.72	\$23.43	\$26.01	\$20.16	\$6.09

Accommodation spending was calculated on a per party basis. Hotel rates ranged from \$122 to \$145 per night. Outliers were removed from the accommodation spending prior to calculating the spending rates.

Table A-5: Accommodatior	Spending	per Party	[,] by Type
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			Other			Outside
		Western	Part of	Other		Western
	Total	New York	NYS	State	International	New York
Reported accommodations						
spending	108	9	21	67	11	99
Reported accommodations	86	6	18	53	9	80
spending (outliers removed)	80	0	10	22	5	80
Total accommodations						
spending	\$11,165	\$801	\$2,199	\$6,860	\$1,305	\$10,364
Average accommodations						
spending	\$130	\$134	\$122	\$129	\$145	\$130
Total people in party	236	27	55	130	24	209
Average people in a party	3	4.5	3	2	3	2.6

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IMPLAN

CGR used IMPLAN, a regional input-output modeling system, for estimating the economic impact. IMPLAN is widely acknowledged as one of the best models of economic activity available. The IMPLAN database, created by MIG, Inc., consists of two major parts: 1) a national-level technology matrix and 2) estimates of sectorial activity for final demand, final payments, industry output and employment for each county in the U.S. along with state and national totals. Data are updated annually. IMPLAN estimates the direct, indirect and induced impacts of economic change through the use of multipliers, and estimates the impact of an increase in demand in a particular sector on 440 different industries/sectors of the local economy.

Other Sources

Others data sources were consulted to inform assumptions used by the model (i.e. New York State Department of Taxation, U.S. Bureau of Labor Statistics, U.S. Bureau of Economic Analysis).

Derivation of Estimates Direct Income

Organization Impact

As previously mentioned, the income drawn in by the organizations was taken from the CDP data.

Audience Impact

The direct income as a result of audience spending was modeled. The CDP data indicate that there were a little more than 4.1 million attendees. These attendees were broken into local and non-local groups using the Niagara University visitor spending survey.

CGR grouped the organizations into categories. Their total attendees found in the CDP data was broken out between local and non-local using the percentages summarized in the table below.

Table A-6: Local vs Non-Local Assumptions

Type of Organization	Local Residents	Non-Local
Local History	100%	0%
Museum or Gallery	45%	55%
Nature Related	80%	20%
Performing Arts	91%	9%
School or Education Program	100%	0%

Once we had broken the audience into their local and non-local groups we applied per person spending amounts derived from the Niagara University visitor spending survey.

Accommodation spending required more modeling. Since the Niagara University visitor spending survey had average spending per party, we needed to determine the number of parties staying overnight. Three percent of local respondents indicated they stayed overnight in hotel in the region as a result of the event. This percentage was higher (61%) for non-local respondents. By applying this percentage to our attendees estimate we were able to estimate the number of attendees staying overnight in a hotel.

We assume that all members of a party are staying in the same room. We divided the number of attendees staying overnight by the number of people per room to estimate the number of rooms needed.

Respondents indicated that the average hotel stay costs around \$130 per night. Local residents indicated spent a little more per night than non-local residents. Total accommodation spending was determined by multiplying these average nightly rates by the number of rooms needed.

Assumption	Local Residents	Non-Local	Average
Share of attendees staying overnight in a hotel	3%	61%	17%
Average number of people per room	4.50	2.61	2.73
Average spending per night	\$134	\$130	\$130

Table A-7: Accommodation Assumptions

Employment & Labor Income

Employment and labor income estimates were derived using IMPLAN multipliers. The following section explains which multipliers were selected.

Organization Impact

Organizations are classified into one of the seven IMPLAN industries. These industries were selected based on the NAICS codes that are mapped into the IMPLAN industries. The following table summarizes the breakout of revenue amount these IMPLAN industries:

17

Type of Organization	Total
Museums, historical sites, zoos, and parks	\$44.7
Performing arts companies	\$27.4
Independent artists, writers, and performers	\$0.2
Motion picture and video industries	\$0.0
Promoters of performing arts and sports and agents for public figures	\$3.2
Private junior colleges, colleges, universities, and professional schools	\$1.0
Other private educational services	\$10.6
Total	\$87.1

Audience Impact

Audience spending was broken out into five categories:

- Food & Beverage
- Souvenirs
- Transportation
- Parking
- Accommodations

These categories classified into the IMPLAN industries as summarized in the following table:

Table A-9: Total Audience Revenue by Type of Business (dollars in millions)

	Total
Retail Stores - Food and beverage	\$24.2
Retail Stores - General merchandise	\$11.4
Retail Stores - Gasoline stations	\$6.3
Other state and local government enterprises	\$2.6
Hotels and motels, including casino hotels	\$25.6
Total	\$70.2

Government Revenue

Government revenue is the combination of income and sales tax revenue. A region wide effective tax rate was calculated by aggregating up New York State Department of Taxation county level data. The effective tax rate was applied to the labor income.

The New York State Department of Taxation indicates that sales taxable purchases in Western New York totaled over \$19 million. Over the same time period the Bureau of Economic Analysis estimates that Personal Income in the region totaled about \$53 million.

	•	•	
	Personal Income	Sales Taxable Purchases	% Personal Income
Erie	\$37.1	\$13.6	37%
Niagara	\$7.5	\$2.7	36%
Chautauqua	\$4.2	\$1.4	32%
Cattaraugus	\$2.8	\$0.9	34%
Allegany	\$1.4	\$0.4	28%
Western New York	\$53.0	\$19.1	36%

Table A-10: Personal Income and Sales Tax Purchases (dollars in millions)

Source: BEA, NYS Department of Taxation, and author's calculation

CGR assumed that 36% of the labor income would be subject to sales tax. CGR weighted the sales tax rates by the amount of sales taxable purchases to come up with a weighted average sales tax rate of 8.51% for Western New York, which CGR used in estimating the sales tax revenue

Sales Tax Rate Erie 8.75% Niagara 8.00% Chautauqua 7.50% Cattaraugus 8.00% Allegany 8.50% Western New York⁶ 8.51%

Table A-11: Sales Tax Rates

Source: NYS Department of Taxation, and author's calculation

⁶ Figure is a weighted average

