Quantifying the Economic Impacts of Community Events

Steven R. Miller, Ph.D. Director: Center for Economic Analysis

Michigan Association of Fairs and Exhibitions 133nd Annual Convention

January 11-13, 2018 Grand Rapids, MI

MICHIGAN STATE UNIVERSITY Food • Ag • Bio Supported by: AgBioResearch Supported by: AgBioResearch

What are Community Events

Conferences/Conventions	Trade/Specialty Shows
Arts Fairs	Carnivals and Festivals
Concerts	Home and Garden Shows
County Fairs	Sporting Events/Tournaments
Runs/Marathons	Charity Events

Any non-continuous event that may draw in outside visitors to the community, or entice local residents to remain in the area that would otherwise visit other communities.

How Events Impact Communities

- Builds social cohesion
- Placemaking
- Enhances tourism visibility and outside visitation
- Generates economic activity

All such impacts can be measured, but we will focus on the nature and requirements for undertaking economic impact measurements.

Public Budget Concerns

- Increasing pressure to justify public investments
- NGOs and sponsors want to know their investments are impactful
- Sound evaluation can be instrumental in getting public buy-in
- Is it worth the effort and the costs?

Economic impact evaluations of community events are commonly found today

- The expenditures arising from events give rise to measurable economic impacts
 - Revenues do not equal expenditures
 - Patron expenditures count only if they capture new expenditures that would not have taken place in the absence of the event
 - The costs (expenditures) in hosting the event should not be overlooked



Impactful Expenditures

Total Expenditures

Expenditures that increase total economic activities

Expenditures that supplant existing expenditure

- Expenditures that lead to economic impacts are smaller than total event expenditures
 - Total Expenditures include expenditures that do not enhance total economic activity in the community
 - Expenditures that increase total economic activities are infusions into and remain in the local economy to be re-spent

- Basis for measuring impacts...
 - Local expenditures from funding, coming from outside the community, to host event
 - Local expenditures from non-local visitors because of the event
 - Local expenditures of local residents who would have otherwise left for other recreational opportunities in the absence of the event

The Golden Rule of Measuring Impacts!

- Hence...
- ...economic impacts arise from new expenditures that take place in the local economy and stays in the local economy and would not take place in the absence of the event

- Host expenditures in preparation and in hosting the event
 - Facilities rentals, advertisement...
- Patron expenditures while at event and/or within the event's host community
 - Food purchases, lodging, more food purchases...
- Vendor expenditures while at event or within the event's host community
 - Food purchases, lodging, space rental...

Host Expenditures

- Renting fees for equipment
- Location fees if appropriate
- Local bands or entertainment
 - Public/sponsored expenditures for hosting the event should be captured if purchased from a local provider
 - Source of funding may moderate expenditure estimates
- Record expenditures by category



Patron Expenditures

- Requires two parts
 - 1. Expenditure profiles of average visitor or party
 - 2. Number of parties
- Do this for both local and outside visitors
 - Total expenditures is estimated as average party expenditure times number of parties

- Patron Expenditure Profiles
 - On-site Intercepts
 - Randomly select visitors/parties to interview
 - Ask
 - Where from (if local, whether they stayed because of event)?
 - Number of visitors in party
 - How much spent (expected to spend) on various categories?
 - Type of overnight stay (and count of nights if the event spans multiple days)
 - How much spent outside venue

Patron Party Counts

- Gated event Ticket Sales
- Open event Triangulate
 - Parking spots used
 - Random count estimates at different times of the day
 - Jacobs Method to measuring crowd size (area times density)



Don't be like Trump



- Vendor Expenditures
 - Requires two parts
 - 1. Expenditure profiles of average visitor or party
 - 2. Number of parties
 - Total expenditures is estimated as average party expenditure times number of parties
 - Vendor counts do not need to be estimated, but spending does
 - Use a similar survey to get expenditures by category and night stays
 - Use receipts to determine whether they are local or not

- Vendor Expenditure Profiles
 - Similar approach to patron expenditure profiles
 - How much spent by category and number of overnight stays

Vendor Counts

- Vendor counts do not need to be estimated
 - Use receipts to determine whether they are local or not

- A great deal of importance rests on the data collection
 - Plan well ahead of time
 - Schedule times for intercepting such that they are representative (mix of days and times)
 - Train enumerators before hand
 - May also want to record rejections
 - Vet the survey form before hand consult outside expertise

- Intercept surveys are a flexible means toward understanding
 - visitor spending
 - characteristics
 - experience
 - perceptions



 Add relevant questions of interest, but balance the desire of the survey takers' to not be burdened with a survey with your desire to gain information

- Two vital questions must be addressed for patron surveys
 - Where do you live? (*Zipcode, Distance traveled*)
 - How much did/will you spend on X while in the community? Where X is
 - Gasoline
 - Sporting goods
 - Groceries
 - Restaurants
 - Lodging
 - Etc.

Never assume a blank is no response on expenditures. Assume it is zero.

- Other questions worth considering
 - If you are a resident of XXX would you have traveled outside the community if this event did not take place today(This week)?
 - Besides the event, did you take in any other activities?
 - Did you shop at non-event venues?
 - Please rate your experience.
- We can get creative, but remember, people do not like taking surveys – *keep it short!*

- Vendor surveys may also include questions about sales
 - Sales revenues earned by out-of-town vendors leave the community but those of local vendors stay
 - These represent earnings that will be recirculated in the local economy

Administering and Writing Surveys

- There exists several resources for writing survey
 questions
 - Julie Leones, A Guide To Designing and Conducting Visitor Surveys
 - <u>http://ag.arizona.edu/pubs/marketing/az1056/az1056.html</u>
 - Daniel J. Stynes, Guidelines for Measuring Visitor Spending
 - https://msu.edu/course/prr/840/econimpact/pdf/ecimpvol3.pdf

Adding up the expenditures

- Now we have expenditures and impactgenerating expenditures:
 - Host Expenditures
 - Patron Expenditures
 - Vendor Expenditures
- Impact expenditures (sub-set of total expenditures) are what we are after, though it may be useful to record and report total expenditures

Calculating Direct Impacts of Host Expenditures

- Total expenditures are reportable and represents the sum of all receipts
- Impact expenditures are limited to those expenditures that are new to the local economy and occur because of the event, fair or exhibition

Calculating Direct Impacts of Patron Expenditures



Calculating Direct Impacts of Vendor Expenditures

vendor

- Vendor impacts are two-part
 - For out-of-town vendors:

Direct impact of vendor purchases	=	Total vendor purchases
Direct impact of vendor sales	=	0

- For local vendors:

Direct impact of vendor purchases	=	0
Direct impact of	=	Total ven
vendor sales		sales

The Resulting Outcomes

• Should have expenditures by category

	Hosting Exp.	Patron Exp.	Vender Exp.	Vendor Sales	Totals
Hosting Svc.	Х				XX
Entertainment	Х				XX
Gas		Х	Х		XX
Groceries		Х	Х		XX
Lodging		Х	Х		XX
Restaurants		Х	Х		XX
On-venue spending		Х	Х		XX
Earnings				Х	XX
Totals	XX	XX	XX	XX	XX

Nature of Economic Impact Estimates

- Three components make up a standard economic impact estimate
- Minimum requirement for estimating economic impacts Direct Expenditures Direct Infusion into local economy

Advanced methods requiring modeling from an economist

 Indirect Expenditures – B2B transactions to support direct infusion

- Induced Expenditures – Household expenditures from changes in earnings

Modeling the indirect and induced expenditures

Mostly undertaken by a third party (consultant or higher education)

Some Background on Economic Impact Modeling

- Economic impact models are standardized
 - Mainstream tools of economists for decades
 - Well established and rigorously studied
 - Traces related expenditures through their conclusions as dollars are recirculated throughout the economy



Event Expenditures

Total Impact

Is simply the sum of the three component impacts

Total _	Direct	Indirect	Induced
Impact [—]	Impact ⁺	Impact ⁺	Impact

 In practice, the total impact is calculated as a multiple of the direct impact

$$\begin{pmatrix} Total \\ Impact \end{pmatrix} = (multiplier) \times \begin{pmatrix} Direct \\ Impact \end{pmatrix}$$

 $multiplier = \frac{Total \ Impact}{Direct \ Impact}$



Questions?

• The Center for Economic Analysis

- www.cea.msu.edu/

