

Measuring Economic Impacts of Tourism

Sustainable Tourism and Environment Program – UNI
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What Questions Does an Economic Impact Study Answer?

- How much do tourists spend in the area?
- What portion of sales by local businesses is due to tourism?
- How much income does tourism generate for households and businesses in the area?
- How many jobs in the area does tourism support?
- How much tax revenue is generated from tourism?

How are Economic Impacts Measured?

The economic impacts of tourism are typically estimated by some variation of the following simple formula:

$$\textit{Economic Impact of Tourism} = \textit{Number of Tourists} * \textit{Average Spending per Visitor or Travel Party} * \textit{Multiplier}$$

Table 1. Approaches to Tourism Economic Impact Assessment

Level	Tourism Activity	Spending	Multipliers
1 Judgment	Expert judgment to estimate tourism activity	Expert judgment or an “engineering approach” 3	Expert judgment to estimate multipliers
2 Secondary data	Existing tourism counts for the area or total estimates from a similar area or facility	Use or adjust spending averages from studies of a similar area/market	Use or adjust aggregate tourism spending multipliers from a similar region/study
3 Secondary data	Estimate tourism activity by segment or revise estimates by segment from another area	Adjust spending that is disaggregated within particular spending categories & segments	Use sector-specific multipliers from published sources
4 Primary Data	Visitor survey to estimate number of tourists by segment or a demand model	Survey random sample of visitors to estimate average spending by segment & spending category	Use an input-output model of the region’s economy

Cautions and Concerns

- Many studies rely on estimates of visitor expenditures and visitor data – not primary data collected on site
- Economic impact studies should be customized for a specific area, and not rely on averages
- Increases the likelihood of overemphasizing the impacts generated by sectors, and may misrepresent the level of impacts

Cautions and Concerns

- Random samples – controlled data collection
- Accurate survey questions
- Proper data analysis and close review of means/medians
- Spending based on number of people covered by the person reporting not travel party size

Measuring Impacts

- Define who is a visitor – out of county, 50 miles away etc. – Surveys – Zip codes work well
- Purpose of visit – time switchers or casuals or main purpose of visit - surveys
- Estimate number of visitors – surveys, registrations etc.
- Estimate average / median spending - surveys
- Determine ripple effects – calculations/IMPLAN

Data Collection Considerations

- Estimating Users
 - Determine the density of people within each area of the park
 - Must know dimensions of area being used
 - Determine what high, medium, low density looks like
 - Estimate density levels every hour while collecting surveys
- Sample
 - Approach variety of people (young/old, male/female)
 - Survey all areas of the festival

Direct, Indirect and Induced Effects

- Formally, regional economists distinguish direct, indirect, and induced economic effects
- Indirect and induced effects are sometimes collectively called secondary effects
- The total economic impact of tourism is the sum of direct, indirect, and induced effects within a region. Any of these impacts may be measured as gross output or sales, income, employment, or value added.

Direct Effects

- Production changes associated with the immediate effects of changes in tourism expenditures
- Example: An increase in the number of tourists staying overnight in hotels would directly yield increased sales in the hotel sector. The additional hotel sales and associated changes in hotel payments for wages and salaries, taxes, and supplies and services are direct effects of the tourist spending.

Indirect Effects

- Production changes resulting from various rounds of re-spending of the hotel industry's receipts in other backward-linked industries (i.e., industries supplying products and services to hotels)
- Example: Changes in sales, jobs, and income in the linen supply industry represent indirect effects of changes in hotel sales. Businesses supplying products and services to the linen supply industry represent another round of indirect effects, eventually linking hotels to varying degrees to many other economic sectors in the region.

Induced Effects

- Changes in economic activity resulting from household spending of income earned directly or indirectly as a result of tourism spending
- Example: Hotel and linen supply employees, supported directly or indirectly by tourism, spend their income in the local region for housing, food, transportation, and the usual array of household product and service needs.

Multiplier Effect

- The multiplier effect refers to the number of times a dollar “changes hands” within the community before it leaks out of the community
 - For example, the bike rider pays the local merchant, the local merchant spends money at the grocery store, the grocery store pays its cashier, and so on
- For ease of interpretation, this number of times a dollar “changes hands” within the community is quantified as one number by which all expenditures are multiplied
- Remember that a multiplier represents an estimate, and should be interpreted respectively

Types of Multipliers

- Output Multipliers (sales income)
- Income multipliers (indirect spending)
- Employment multipliers (jobs created)

Economic Impact Studies

Industry	RAGBRAI	Bicycling study/ commuters	Iowa Wine Trail	Place-based food festivals	Sturgis Falls
Total economic impact (\$ sales/ output)	\$24,726,856	\$51,965,317	\$2,645,627	\$2,638,811	\$1,770,375
Total economic impact (\$ value added/ income)	\$14,893,662	\$32,375,511	\$1,347,771	\$1,413,309	\$904,244
Total economic impact (employment/ jobs)	468	862	53	51	27

Economic Impact Studies

Industry	RAGBRAI	Bicycling study/ commuters	Iowa Wine Trail	Place-based food festivals	SSNHA	Sturgis Falls
Total economic impact (\$ sales/ output)	1.5	2.2	1.45	1.61	1.66	1.47
Total economic impact (\$ value added/ income)	1.43	2.07	1.46	1.64	1.72	1.53
Total economic impact (employment/ jobs)	1.21	1.51	1.23	1.29	1.34	1.24

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Thank you!

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319-273-6840