What is economic impact analysis?

Economic impact analysis measures the impacts of one or more economic events on a region’s economy. Examples of events include: opening of a new manufacturing plant, a decrease in tourism, or an increase in pay for restaurant workers. An economic impact analysis is unique because it measures the direct increase or loss in jobs/wages/production caused by an event as well as the indirect and induced effects caused by such an event. Indirect effects are caused by increased business-to-business spending due to increases in production. Induced effects are calculated by economic multipliers that estimate the “ripple” effect one event has on the economy. A multiplier shows how a given change in a specific industry impacts the entire economy. The basic equation below shows how it is calculated.

Economic Impact of Visitor Spending:

\[
\text{Economic Impact} = \text{Number of Visitors} \times \text{Average Spending per Visitor (\$)} \times \text{Multiplier}
\]

Four Steps:
1. Define who counts as a visitor
2. Estimate the number of visitors attracted to the community by the activity
3. Estimate the average level of spending of visitors in the local area
4. Determine the ripple effects of this new money for the community by applying appropriate multipliers

How does economic impact analysis apply to Nature Economy?

In the Nature Economy, natural spaces for recreation, tourism, and quality of life constitute a significant asset to the region’s economy. Visitor spending is often used to estimate the economic impacts of a natural area. New visitor spending represents how much new money the natural area pulls into the local economy through tourism. Depending on the scope of the analysis, this can be analyzed on different scales. Some spending can be considered by “visitors” if it is coming from outside of a region within a state or across state boundaries.

How do communities use economic impact analysis in decision making?

Economic impact analysis can be used to decide between multiple policy options and evaluate current or past policy. An economic impact analysis breaks down the findings into categories such as jobs created, increases in spending, and increases in earnings. These categories allow communities to see how a policy impacts separate areas of the economy. Economic impact analysis can also be used to determine the effects on specific industries as well.
Case Study: Economic Impact of Vermont Trails

In 2016, the Vermont Trails and Greenways Council analyzed the economic impact of four trail systems in Vermont on the state’s economy. To gain insight into trail use, the researchers asked trail users where they had traveled from to use the trail, how much time they had spent using the trail, what kinds of activities they did on the trail, and what their spending habits were like during their visit to the trails.

The economic impact analysis conducted used the data collected about the number of out-of-state visitors and average visitor spending to estimate that the trails stimulated:

- $22.4 million in sales
- $9 million in earnings
- The creation of an additional 365 jobs that would not be supported without the trails

Caveats –While economic analysis can be a useful tool, it should not be used in isolation and the following caveats should be considered:

- An economic impact analysis is meant to only quantify “new” spending in the region. In the context of the Nature Economy, this can mean that enjoyment and spending by residents of the area is not accounted for, only visitors from outside the region represent new spending in the economy. The spending of residents in the region is assumed to stay in the region with or without the event, so their spending on the event does not represent new income for the region.

- Economic multipliers that estimate the indirect and induced effects should be explored and explained during decision making. (IMPLAN provides a nice explanation of how multipliers are calculated: https://implanhelp.zendesk.com/hc/en-us/articles/115009505707-Understanding-Multipliers)

- Costs of an event, such as trail upkeep or increased need for infrastructure, are not considered in an economic impact analysis. The opportunity costs of taking one course of action instead of another are also not accounted for in a single economic impact analysis.

- Non-monetary benefits to residents, such as increases in standard of living, are not measured in economic impact analysis. They can be measured by other means of estimating economic “value”, though, and this is something communities should consider in addition to economic impact analysis.

Resources

https://extension.umn.edu/research-communities/economic-impact-analysis
https://www.camoinassociates.com/what-economic-impact-analysis
https://implanhelp.zendesk.com/hc/en-us/articles/115009505707-Understanding-Multipliers

For more information on our programming and technical assistance in this area, please contact Shannon Rogers, Nature Based Economic Development Specialist, shannon.rogers@unh.edu