Understanding Economic Impact Studies: Lessons on Data and the Outdoor Revolution

James N. Maples, PhD
Michael J. Bradley, PhD
Laurel Harkness  
Executive Director, SORP

Jordan Smith  
Secretary, SORP

SORP is the voice for advancing the outdoor recreation profession.
• James N. Maples, PhD
  • Assoc Professor of Sociology at Eastern Kentucky University; teaches research methodology.
  • My research focuses on the economic impact of outdoor recreation and what it means for rural economies and residents.

• Michael J. Bradley, PhD
  • Assoc Professor of Recreation and Park Admin at Eastern Kentucky University; teaches research methodology.
  • My research focuses on human dimensions of natural resource and wildlife management and sustainable recreation practices.
What will we do today?

1. What are the basics of an economic impact study report?

2. What are some example best practices thus far?

3. Where and how should we put these studies into practice, and why?
Economic Impact Study (EIS)

Economic impact studies explain how expenditures from a particular group, organization, or event will move through the economy over time.

Economic impact happens at three basic levels that can be quantified:
1. **Direct**: I spend $100 at a restaurant.
2. **Indirect**: The restaurant gets more supplies and pays workers.
3. **Induced**: Workers spend their paychecks on groceries.

EI also be the *absence* of those funds, such as a company closing its doors or closing an area to outdoor recreation.
What’s in an EIS report?

Economic impact studies will generally include:

1. A summary of the study area
2. Estimated or actual expenditures for a group/org/event in particular categories (lodging, retail), or as a change in the economy (new jobs, new expenditures)*
3. One to three measures of economic impact (more on that in a moment)
4. A measure of jobs created or supported
5. Basic information on tax growth

*I’m going to focus on expenditures for today’s presentation as these are common to outdoor recreation.
What’s in an EIS report?

IMPLAN (IMPacts for PLANning) is a common estimator for EIS reports. They provide three common measures of economic impact:

1. **Value added**: a measure of increased goods and services produced in the economy; akin to GDP and economy size
2. **Output**: Value added plus business revenues and costs.
3. **Labor income**: most conservative measure looking at job income (full and part time).

Labor income is a great way to approach economic impact. (Don’t add together any of the three.)
Example economic impact results

March 2016: Field study of Red River Gorge, KY climbing community demonstrated that they spend an estimate $3.8 million per year. This supports 41 jobs and over $826,000 in labor income in one of the poorest regions of the nation.

August 2017: Online study of Nantahala Pisgah National Forest in NC demonstrated that climbers spend an estimated $13.9 million per year, supporting over 170 jobs and $4 million in income.

Climber: Yasmeen Fowler
Route: Pandemic, RRG KY
Photographer: Rick Bost
Best Practices

1. Location(s)?
   - Use precise study areas as expenditures change over study areas.
   - Good study areas mean realistic, useful results
   - Great for taking to local community government and state/Federal organizations
Building Study Regions:

Northeastern: Marion, Boone, Lenoir, and Morganton.

Central: Asheville, Brevard, Hendersonville, Burnsville, Barnardsville, Spruce Pine, and Weaverville.

Southwestern: Brevard, Highlands, Cashiers, Sylva, and Franklin.

Map Courtesy of Outdoor Alliance
Best Practices

1. Location(s)?
   • Use precise study areas as expenditures change over study areas.

2. What will we measure?
   • Common expenditures
     • Most often are expenditures created by what is being studied.
     • Can also be new jobs, new businesses, or more income paid to workers.
     • Shape how funds move through economy.

Location: Shortoff Mountain, Linville Gorge, NC
Photographer: Shannon Millsaps
These are per visit average expenditures for climbers in the Nantahala Pisgah across the three study areas.

<table>
<thead>
<tr>
<th>Sector</th>
<th>Northeast</th>
<th>Central</th>
<th>Southwest</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lodging</td>
<td>$24.14</td>
<td>$45.80</td>
<td>$15.86</td>
</tr>
<tr>
<td>Food and drink (restaurants)</td>
<td>$34.67</td>
<td>$49.93</td>
<td>$28.13</td>
</tr>
<tr>
<td>Food and drink (grocery stores)</td>
<td>$20.21</td>
<td>$27.62</td>
<td>$13.98</td>
</tr>
<tr>
<td>Food and drink (gas stations)</td>
<td>$6.43</td>
<td>$5.52</td>
<td>$4.37</td>
</tr>
<tr>
<td>Gasoline</td>
<td>$25.05</td>
<td>$31.24</td>
<td>$24.42</td>
</tr>
<tr>
<td>Retail purchases, climbing gear</td>
<td>$5.76</td>
<td>$16.45</td>
<td>$1.49</td>
</tr>
<tr>
<td>Other retail (non-food)</td>
<td>$5.58</td>
<td>$10.95</td>
<td>$10.98</td>
</tr>
<tr>
<td>Rental climbing gear</td>
<td>$0</td>
<td>$1.10</td>
<td>$0</td>
</tr>
<tr>
<td>Climbing guides</td>
<td>$7.51</td>
<td>$32.38</td>
<td>$0</td>
</tr>
<tr>
<td>Personal services</td>
<td>$.65</td>
<td>$.26</td>
<td>$.61</td>
</tr>
<tr>
<td>Rental vehicles</td>
<td>$.27</td>
<td>$2.34</td>
<td>$0</td>
</tr>
<tr>
<td>Airplane tickets</td>
<td>$1.61</td>
<td>$8.41</td>
<td>$0</td>
</tr>
<tr>
<td>Taxi/transport</td>
<td>$.67</td>
<td>$0</td>
<td>$0</td>
</tr>
</tbody>
</table>

Fun fact:
Climbers stayed an average of three nights, which is longer than mountain bikers’ and paddlers’ average stays in the Nantahala-Pisgah.
Best Practices

1. Location(s)?
   - Use precise study areas as expenditures change over study areas.

2. What will we measure?
   - Common expenditures

3. How do we collect data?
   - Field, online, or mail
   - Cost vs. time
   - Convenience sampling is sometimes necessary.

Location: Shortoff Mountain, Linville Gorge, NC
Photographer: Shannon Millsaps
This is an example economic impact question series from our survey for the New River Gorge. We’re happy to work with you on survey design. Email us!

Now, please tell us about your planned household expenditures while in the New River Gorge Region.

9. For this question, please list your planned expenditures for the duration of your trip. This can include all the money you plan to spend before your trip ends. Please be as precise as possible. If you leave a category blank, we will treat this as zero expenditures.

<table>
<thead>
<tr>
<th></th>
<th>Money spent in the New River Gorge Region</th>
<th>Money spent outside the New River Gorge Region but still in West Virginia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overnight lodging in campgrounds</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>Overnight lodging in hotels/motels/lodges</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>Overnight lodging in rental cabins/Air B&amp;Bs</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>Gasoline purchases</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>Food and drink at fast-food restaurants</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>Food and drink at dine-in restaurants/bars</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>Food and drink at gas stations</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>Food and drink at grocery stores</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>Non-food retail purchases (like Walmart)</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>Climbing gear and similar sport purchases</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>Taxi/Uber/Lyft/Shuttles</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>Rental vehicles</td>
<td>$</td>
<td>$</td>
</tr>
</tbody>
</table>
Best Practices

1. Location(s)?
   • Use precise study areas as expenditures change over study areas.

2. What will we measure?
   • Common expenditures

3. How do we collect data?
   • Field, online, or mail

4. Conservative estimate?
   • Only includes intentional visitors to area. Residents are redirected funds.
   • I also remove expenditures three or more deviations above the initial mean.
Here are *resident* expenditures for Nantahala Pisgah.

These aren’t economic impact, though. Why?

I still report these even though they are not economic impact in the scientific sense.

### Fun fact:
95% of climber residents responding to our NC survey say the states’ outdoor recreation opportunities factored into their decision to relocate there.

<table>
<thead>
<tr>
<th>Sector</th>
<th>Northeast</th>
<th>Central</th>
<th>Southwest</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lodging</td>
<td>$8.93</td>
<td>$4.12</td>
<td>$20.45</td>
</tr>
<tr>
<td>Food and drink (restaurants)</td>
<td>$24.08</td>
<td>$24.36</td>
<td>$17.95</td>
</tr>
<tr>
<td>Food and drink (grocery stores)</td>
<td>$18.00</td>
<td>$25.80</td>
<td>$20.41</td>
</tr>
<tr>
<td>Food and drink (gas stations)</td>
<td>$4.76</td>
<td>$3.62</td>
<td>$3.18</td>
</tr>
<tr>
<td>Gasoline</td>
<td>$26.16</td>
<td>$25.96</td>
<td>$21.55</td>
</tr>
<tr>
<td>Retail purchases, climbing gear</td>
<td>$9.08</td>
<td>$11.31</td>
<td>$4.55</td>
</tr>
<tr>
<td>Other retail (non-food)</td>
<td>$4.99</td>
<td>$7.19</td>
<td>$6.36</td>
</tr>
<tr>
<td>Rental climbing gear</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Climbing guides</td>
<td>$11.99</td>
<td>$5.15</td>
<td>$0</td>
</tr>
<tr>
<td>Personal services</td>
<td>$1.52</td>
<td>$.88</td>
<td>$0</td>
</tr>
<tr>
<td>Rental vehicles</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Airplane tickets</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Taxi/transports</td>
<td>$.51</td>
<td>$.29</td>
<td>$0</td>
</tr>
</tbody>
</table>
Best Practices

1. Location(s)?
   - Use precise study areas as expenditures change over study areas.

2. What will we measure?
   - Common expenditures

3. How do we collect data?
   - Field, online, or mail

4. Conservative estimate?
   - Remove visitor points of influence

5. Did we put it to use?
   - Present, share, and lobby!

Location: Shortoff Mountain, Linville Gorge, NC
Photographer: Shannon Millsaps
The Big Picture

- Outdoor recreation is an important part of the American economy.

- Outdoor Industry Association’s broad categories include camping, fishing, hunting, motorcycling/off-roading, snow sports, trail sports, water sports, wheel sports, and wildlife viewing.

- Outdoor recreation users spent an estimated $646 billion in 2012 despite Great Recession.

- In 2017, expenditures increased to $818 billion.

- This latest figure includes support for $7.6 million jobs.
Data supports the Outdoor Revolution

- As outdoor recreationists, we understand that our natural areas matter to us.

- That said, there are those who need the quantitative side. Economic impact studies can provide that piece of data.

- Our studies in Kentucky and North Carolina changed local perceptions of climbers, informed Forest Service planning, and led to several new businesses aimed at supporting climbing.
What do we do with this information?

Together, let’s frame a story about outdoor recreation’s value to the region.

- Using **data**, we can make the case that outdoor recreation activities are a viable source of economic growth.
  - Quash the myths with data
  - Supports strategic, locally-owned development
  - Protect public lands to promote economic growth.
- Outdoor recreation is one important part of the economic puzzle!
What do we do with this information?

Or... We could always do nothing.

• Let others use data to show their passions matter more than yours.

• Let others show they create economic impact, albeit quietly requiring far more trail development and infrastructure.

• Hope for the best? Nope.

• Let’s commit to using data protect public land access in our backyards and beyond.

Climber: Mike Reardon
@:Looking Glass Rock, Pisgah, NC
Photographer: Ground Up Publishing
Data will win the outdoor revolution.

Wanna help?
THANK YOU!

2019 National Outdoor Recreation Conference
Rapid City, South Dakota – May 6-9

SORP is the voice for advancing the outdoor recreation profession.

WWW.RECPRO.ORG