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MEASURING TOURISM’S ECONOMIC EFFECTS: A COMPARISON OF METHODOLOGIES AND THEIR APPLICATIONS
Master of the Obvious

- Tourism is an important domestic industry.

- Interested parties are highly motivated to substantiate claims of economic benefits of tourism and tourism attractions.

- Claims of economic benefits often met with healthy dose of skepticism
Ok, here we go.

- Nationwide travel expenditures of $700 billion in 2006.
- The ND State Tourism Department reports $2 billion in travel expenditures in 2006.
- What counts as an expenditure?
- Heritage and cultural tourism visitors spent $623 per trip compared to $457 per trip for other travelers.
- What is considered a trip?
Here we go continued.

- Travel and tourism industry supported 7.5 million jobs in 2006. How was that estimated?

- Visitor spending contributed $3.7 billion to NDs economic base. What’s the economic base? What is visitor spending?

- The economic impact of heritage and cultural tourism in ND is $22.4 million, the economic contribution is $38.1 million. What’s the difference between an economic impact and an economic contribution?
What exactly did those last two slides mean?

- Different methodologies are difficult to compare, contrast estimates
- What exactly is being measured not apparent
- Many impediments to transparency
  - Proprietary interests
  - Model assumptions
  - Poorly defined terms
  - Lacking definitions
  - Incomplete explanation of methodologies
Objectives: Examine some frequently used methodologies

- If have a basic understanding we can fill in the blanks:
  - Identify key assumptions and definitions
  - Examine exactly what is being measured
  - How are the estimates made

- Specifically look at:
  - Tourism Satellite Accounts
  - Economic Base Estimates
  - Economic Impact Assessments
Tourism Satellite Accounts (TSAs). What is it?

- Model was created because there is no “tourism” sector in standard economic accounts. Tourism sector made up of many different industries.
- Tourism sector made up of many different industries.
- Travel Industry Association’s TEIM (Travel Economic Impact Model) is one of the more recognizable tourism satellite tourism accounting models.
- TIA’s model is proprietary
Tip of the iceberg metaphor

lodging
food
retail
entertainment
transportation

printing
furnishing suppliers
beverage supply
textiles resort
development
How does it work?

- TIA uses 16 travel categories including lodging, food, retail, public transportation, auto transportation, and amusement/recreation. They identify business that fall into those categories by NAICS code.

- The model assumes business receipts for the various business types in the 16 travel categories, less sales and excise tax, equals travel spending.

- Estimate employment and wages by estimating the ratio of employment to business receipts and applying that ratio to the volume of business receipt generated by travelers.

- Use similar methods for estimating wages and salaries and tax revenues.
Key assumptions.

- **Travel/trip:** Activities associated with all activities related to overnight and day trips to destinations 50 miles away one way and all trips associated with paid accommodations.
- **Travel Expenditures:** Payments for *any* activity while on a trip.
- **Economic Impact:** Spending, employment, payroll, business receipts and tax receipts generated by traveler spending.
What does it include?

- Includes expenditures related to all business and leisure travel with no consideration for motivation for travel.

- Includes nearly all travel. Anything over 50 miles and anything associated with paid accommodations.
What does it exclude?

- Doesn’t include purchases made prior to the trip in preparation for the trip.
- Doesn’t include purchase of consumer durables related to the trip (e.g. boat, campers, golf clubs, etc.)
- Consultants never omit what the model excludes!!??!!?
What do we have?

- Very broad based estimate of expenditures related to travel.

- State tourism offices often contract with consultants to estimate tourism number using Tourism Satellite Accounts. ND contracts with Global Insight.

- TIA reports require subscription.
Also, not all TSAs are exactly the same.

- TIA reports domestic travel expenditures in 2005 in North Dakota to be $1.4 billion.
- Global Insight reports tourism expenditures in ND in 2006 to be $2.23 billion.

- There is likely something in the models that account for the differences, but precisely what is difficult to determine. Often the “methods” section of reports from consultant firms are a little thin.
Economic Base Estimates

What is it?

- Base sector activities are those that bring money into the state through the export of a good or service – “new money”.
- Examples: agriculture commodities, manufactured goods, tourism.
- Purchases by out of state residents for a good or service consumed in North Dakota are considered exports.

Wheat harvest
How is it estimated?

- Different methods are used to estimate sales for final demand for different sectors.
  - Agriculture: NASS
  - Households: Federal Transfer Payments
  - Coal Mining: Office of ND State Tax Commissioner

- Retail Trade
  - Tourism expenditures used to estimate sales for final demand.
  - Estimates provided by ND Dept. of Tourism until 1988, a consultant group until 1998
  - In ND Larry and Randy have developed a model indexes last published estimates
  - Model used hotel occupancy rates, park attendance figure, airport boarding figures, restaurant taxes, lodging taxes, etc.
What does it include?

- Base sector estimates for retail trade included all expenditures for any good or service by non-residents.
  - Visitor expenditures for lodging, food, entertainment, transportation, etc. while traveling in North Dakota
  - Also includes retail purchase for household products made by residents in border communities.
What does it exclude?

- Does not include expenditures made by residents that make trips to other parts of the state for either business or leisure that represent “new money” to host community.

- This spending clearly does not represent “new money” to the state, but it is “new money” to the local economy of the attraction.
What do we have?

- Important measure of the state’s economy.
- These figures are also used in North Dakota to estimate gross business volume (ND I/O Model)
- These figures can help track and quantify the growth of the state’s economy and its major components, e.g. tourism, agriculture, manufacturing.
Economic Impact Assessments
What is it?

- An estimate of the change in economic activity as result of some economic disruption
  - New agriculture processing facility
  - New entertainment venue
  - Change in public policy
  - Visitor expenditures

- Can quantify economic activity either with or without economic disruption
  - Closure of a processing facility
  - Lack of an entertainment event or attraction
How is it estimated?

- Primary or secondary data on economic disruption, e.g. visitor expenditure related to their trip, an event or attraction.
- Determine visitors motivation for visiting the area.
- Multiply per person expenditures by the total number visitor that indicated the attraction was the primary motivation for visiting.
- Use input-output model to estimate total economic impacts, direct and secondary impacts.
Key Concepts

- **Visitor motivation.** Was the event the primary reason for visiting?

- **Direct Economic Impact.** Estimate of total expenditures made in the local area by those that indicated attraction was primary motivation.

- **Secondary Economic Impact.** Input direct impacts into I-O model, estimates “multiplier effect”.

- **Total Economic Impact.** Direct plus secondary impacts.
What does it include?

- Visitor expenditures that are specifically attributable to an event or attraction.
  - Takes into consideration substitution factors by eliminating “casuals”, “time-switchers”
  - Often a very conservative estimate, but sometimes conservative can mollify distractors

- Depending on what is being assessed, may include operating expenditures, such as the case of an event venue.
  (FARGODOME)

- Direct impacts and direct and secondary impacts---multiplier effect.

- Can estimate secondary employment
What doesn’t it include?

- Visitor expenditures when the event or attraction was not the primary reason for visiting.

- While these expenditures do not meet the definition of a “direct economic impact”, they are still important to local economies, especially in small rural communities.
What do we have?

- A very specific estimate of economic impacts on defined local.
- If using an input-output model have an estimate of secondary impacts. Those can be a small area as a county (RIMMS II), statewide (ND I-O Model), or even a multi-state area.
Examples and more detailed discussion of economic impact assessments


Let’s go back to where we started.

- Nationwide travel expenditures of $700 billion in 2006. *TIA TEIM Tourism Satellite Account*

- The ND State Tourism Department reports $2 billion in travel expenditures in 2006. *Global Insight Tourism Satellite Account*

- Heritage and cultural tourism visitors spent $623 per trip compared to $457 per trip for other travelers. *TIA definition of a trip?*
Where we started, continued

- Travel and tourism industry supported 7.5 million jobs in 2006. How was that estimated?

- Tourism contributed $3.7 billion to NDs economic base. What do economic base estimates represent?

- The economic impact of heritage and cultural tourism in ND is $22.4 million, the economic contribution is $38.1 million.

- What is the difference between an economic impact and an economic contribution?
Disclaimer

- This is far from a comprehensive examination of methodologies used to estimate tourism’s economic effects.

- There is no good or bad measurement, just different.

- Each method measures different things.
How is this useful to extension professionals

- Often discussion of economic impacts can get quite heated.
- Don’t need to be a methodological geek to interpret numbers.
- By correctly interpreting number you can provide information and educational support to your constituent groups.
- Perhaps even thwart a few heated discussions?
Questions to ask

- What is being measured?
- What is included in the estimate?
- What are the key assumptions and definitions?
- Is this the appropriate method for measuring what I want to measure?
- Who did the assessment?
Questions?

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- Reports from NDSU Dept. of Agribusiness and Applied Economics are available on the Internet at http://agecon.lib.umn.edu/