

Counting your Chickens . . . or not A workshop on how to estimate tourism spending at events & festivals¹

Festival & Events Ontario 2006 Conference, Niagara Falls, ON
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2. What is this workshop about?

Tools to help festivals and events assess their tourism economic impact or decide not to do so.

3. What is else is this workshop about?

Decision-making

Is your event a candidate for a tourism economic impact assessment?

- Characteristics of the event
- Resources
- Tools

Overview of the Guidelines

- The measurement process
- The analysis process

4. Filling in the blanks

If your local newspaper were reporting *tourism economic impact*, it would print something like the following:

ABC Festival brought _____ thousands of tourists to the city. These tourists generated \$_____ thousands in economic impact, _____ hundreds of jobs for the community, and added \$_____ thousands to the local tax coffers.

The numbers used to fill in the blanks in this statement represent the results of a tourism economic impact estimation process based on *tourists* who attended ABC Festival.

5. Change in economic activity

The **tourism economic impact of an event** is an estimate of the change in economic activity that results from spending by **tourists** who come from outside the community to attend an event.² It takes into account **incremental spending** by tourists who travel from outside the community and go to the event. Incremental spending is money that is spent at or because of the event *that would not otherwise* have been spent in the community.

It does *not* include spending associated with the event by people who live in the community (*locals*).

6. Tourism Economic Impact Does Not Equal Tourism Spending

The economic impact of tourists' activities in a community is not the same as how much tourists spent in the area. In fact, *tourist spending* can be higher than *tourism economic impacts*. How is this possible? Don't economic impact models use a multiplier . . . so "impacts" would be bigger than "spending"?

¹ This text is designed to accompany a PowerPoint presentation prepared and delivered by Judy Rogers, President, Research Resolutions & Consulting Ltd. at Festival & Events Ontario 2006 Conference held in Niagara Falls, Ontario (February 25, 2006).

² Tourism economic impact is the *change* in sales, income and jobs in businesses or agencies that receive tourists' spending directly, indirectly or as a result of household expenditures, from the income earned directly or indirectly because tourists came to the community and spent money there.

7. How can tourism “spending” be higher than “impacts”?

Some of the economic impact of tourism in an area such as Niagara Falls is retained in the region and some “leaks” out, benefiting other parts of Ontario and, of course, other parts of Canada and other countries. In some parts of the province, the **amount of economic activity** *within* the region is *smaller* than **visitor spending**. Yours may be one of these communities. This situation occurs when a sizeable proportion of the economic activity required to create the goods and services consumed by tourists occurs outside the region. For example, much of the food prepared in restaurants *in* Niagara Falls is grown *outside* the area. Consequently, some of the economic activity associated with restaurant meals takes place outside the region. Similarly, materials required to build hotels, motels and other lodging establishments are created *outside* Niagara Falls and generate economic activity in communities where the materials are *produced*.

The larger and more diversified an economy is, the more of the tourism impact that it will retain. Also, the higher the value added relative to total revenues that your community businesses put on the inputs that they buy, the higher the proportion of the impacts that your region will retain.

8. What do you need to estimate tourism economic impact of your event?

A credible estimate of *tourist* spending associated with the event and that’s why we have “The Guidelines” . . . the subject of today’s presentation. You also require a tourism economic impact model that reflects the economic structure of your community.

OMT has developed just such a model for you, called the Ontario Tourism Regional Economic Impact Model (OTREIM) that allows you to enter the spending estimates you get from following the procedures described in the guidelines and *vollá*, you will have an estimate of tourism economic impact from your event. The model itself will be presented by OMT’s Min Yan, immediately following this session.

9. What are “the Guidelines”?

This is a new tool, designed to allow organizers of small and medium sized events and festivals to produce credible estimates of tourism economic impact with limited assistance from professional consultants.

A new level of consistency and professionalism will be brought to this important measurement task as event organizers adopt the guidelines as *minimum standards*.

Events that elect to measure other characteristics such as attendee satisfaction and profile information will also benefit from the application of the procedures and minimum standards described in these guidelines.

10. Why do we need the Guidelines?

There are too many inflated estimates of the tourism economic impact of festivals/events

No common measurement system

Need way to compare tourism benefits from one event to another and year-to-year.

11. Who supports the Guidelines?

- Ontario Ministry of Tourism
- Alberta Economic Development
- Canadian Tourism Commission
- Federal, Provincial, Territorial Culture/Heritage and Tourism Initiative (Managed by the Department of Canadian Heritage)
- Government of the Northwest Territories – Department of Resources, Wildlife, & Economic Development
- Government of Yukon – Department of Tourism and Culture
- Nova Scotia Department of Tourism, Culture and Heritage
- Tourism British Columbia
- Tourism Prince Edward Island
- Texas A&M University
- Canadians Association of Fairs and Events (CAFE)

12. Not for Every Event

Should every event measure its tourism economic impact?

No. Gathering appropriate information to produce credible estimates of an event's tourism economic impact takes time and effort. Every event organizer should weigh the benefits and costs of undertaking the steps required before making a decision. If, for example, your event matches one of the following descriptions, it is probably not worthwhile to invest the necessary time and effort:

- if the event draws few, if any, people from outside the community (i.e., less than 10% of total attendees are tourists); or
- if most of the tourists who go to the event are in the community for a reason ***other than attending the event*** (the economic impact associated with the event is linked to how important it was in the decision to visit the community).
- if you don't have a *tourism* economic model that takes into account the economic structure of your community although even without a model, you can still collect expenditures and determine how many dollars the event brought to the community from outside it.

It is also important to remember that there are *other reasons* for having fairs, festivals and events. Social cohesion, fun, getting the community together, retention and celebration of ethnic and cultural traditions . . . are all other reasons that do not require an *economic* justification!

13. Key Features of the Guidelines

The Guidelines take event planners and organizers through the “process” required to generate credible inputs for an economic impact model.

This process includes:

- Procedures for simple & stratified stint samples
- Procedures for counting, tallying and surveying attendees including sample tally sheets & questionnaires

14. More Key Features

- Options for estimating universe size at ungated events

A “**gated**” event is one that takes place in a confined area with “gates” or other “controlled” points of entry/exit. Estimating total attendance is comparatively straightforward at a gated event because event organizers can count tickets or entrants as they pass through controlled entry points.

An “**ungated**” or **open access event** is one that takes place in whole or in part in an open area where access is not controlled. From a measurement perspective, this type of event poses challenges because research tools are required to estimate total attendance without the benefit of “head counts” as attendees enter or exit the site.

- Steps to weight and project tallies and surveys to tourists & locals
- Procedures for generating inputs for economic impact models

15. Who is your tourist?

One of the first things you need to do is determine who your tourist is.

Identifying the **Impact Area** or setting geographical boundaries for who is or is not a *tourist* from a measurement perspective requires that you have a clear understanding of the geographical area in which you want to assess the incremental economic impacts generated by *tourists*.

For example, if you want to estimate the tourism impact on The City of Niagara Falls of an event held here, you would consider Ontario residents who live **outside** Niagara Falls and visitors from all other Canadian, USA and overseas locations to be *tourists*. Only residents of Niagara Falls who attended the event would be “local”. Remember, however, that Ontario’s tourism economic impact model is calibrated at the *county* level, meaning that it is the economy of the Niagara Region that drives the model and especially its imports and exports. As such, the results would show you the impacts that are retained in the Region and not just in the City of Niagara Falls. In the case of Niagara Falls, we would be talking about Census Division 26, Niagara Regional Municipality.

The manner in which the World Tourism Organization’s guidelines for the *tourism* component of *travel* is operationalized for measurement purposes varies from country to country and we use the operational approach adopted by Canada.

An **overnight domestic tourist** is one who claims to have taken an *out-of-town* trip of at least one night away from home for any purpose apart from commuting to work or school, moving to a new residence, routine trips (shopping, medical, religious observance, pick-ups/deliveries, service/sales calls or other routine work-related trips). The trip must be completed within 365 days.

A **same-day domestic tourist** is defined in a manner similar to the overnight tourist but the out-of-town trip must take the traveller at least 40 kilometres (25 miles) one-way from home and be completed within less than 24 hours.

To aid interviewers and attendees, you might consider developing a simple “map” that clearly marks the “impact area” – so people can readily see if they fall within the *local* area or come from outside the area (*tourists*).

16. Steps in the process

1. Counting attendees

A systematic method to count and tally attendees as they enter or exit your event. This is a much more complicated undertaking a “ungated” events than it is if you have turnstiles or “gates” where you can station “counters” . . . but it is “doable”.

2. Tallying attendees

You don’t just need the “counts”. You also need to know how many of the people who are coming to your event are locals and how many are tourists. To do this, you generally need to “ask them” (tally survey)

3.

Attendee survey

An attendee survey to capture characteristics and spending information from your event's attendees (primary estimates of on-site and tourist spending in the community). We recommend a self-completion printed questionnaire that you distribute to selected attendees while they are on your site (*a bird in the hand*) and return either on-site or by mail at a later time. You can, of course, provide people with a website address or obtain their email address and email them an electronic tool for completing the questionnaire, or capture their phone number and/or address to call them at home or mail them a questionnaire. These other "delayed" approaches will require more effort on your part (and more time and money), and may also have a negative impact on your response rate.

Telephone or e-mail follow-up with respondents who accepted an Attendee Survey will likely be required to increase response rates for the important spending information.

4. Analysis plan

Once you know how many *tourists* came to your event, you have to identify how important your event was in their decision to visit the destination (area of geography you selected – community, region, province/state, country) or whether your event caused them to extend their stay. If they would have come to your community whether or not your event took place, their spending is treated differently than if they came *because* your event was being held.

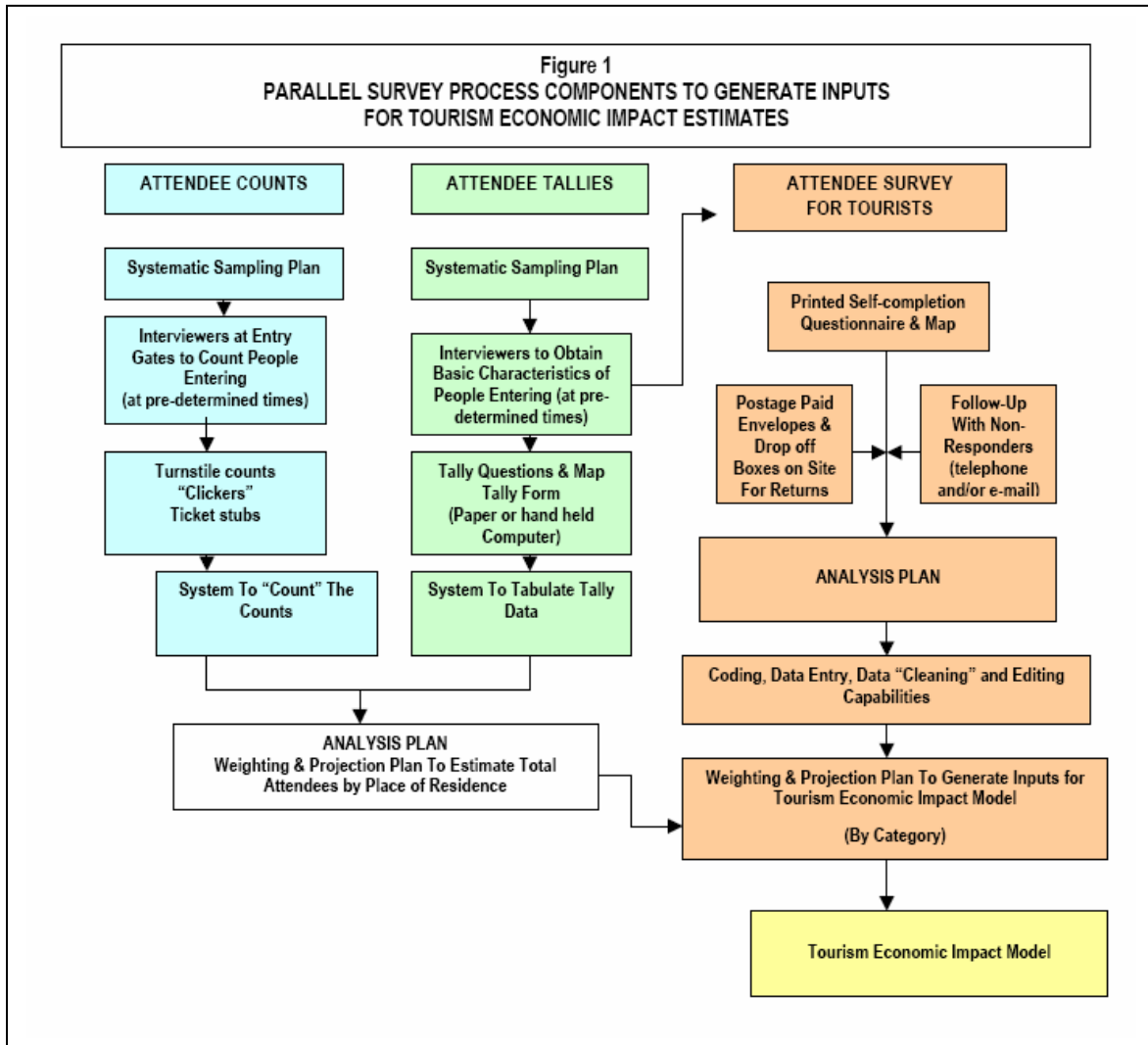
The analysis plan will help you sort out spending that took place in your community *because your event happened* (incremental spending) and spending that would have happened *anyway*. Your event can only take credit for the new spending. The analysis plan will also help you adjust the sampled population (people you interviewed) to the entire population of attendees (weighting).

17. What you need

- Commitment
- Time
- Money
 - Survey tools
 - Printed questionnaires, tally sheets, drop-off boxes, signage, envelopes/postage (if using mailback attendee questionnaires)
 - Paper & pencil; handheld computers
 - Professional assistance?
You may find that the technical aspects of sampling, weighting, data management and projection are too complex to take on without the help of research and tabulation experts, particularly if yours is a multi-venue event. If this is the case, you might use these guidelines to develop a Terms of Reference to obtain proposals from economic research suppliers and/or provide these guidelines to your supplier for implementation of the project.
- People: you can use "volunteers" for some, but probably not all the required tasks.
 - Count & tally attendees
 - Monitor & supervise counters/talliers
 - Data entry, data management, weighting and projection

18. Here's a picture of the process.

Let's start with a "gated event" and work our way through this relatively complicated diagram.



19. Elements required for attendee counts and on-site tally

Sampling Plan & Tally Targets

Weighting and Projection Plan

Tally Questionnaire

Instructions for Tally Interviewers

20. Sampling Plan & Tally Targets

Sampling: How the “part” can represent the “whole”

The basic concept behind sampling is that a portion of your attendees can “represent” themselves and other people. Survey researchers rely on samples because they require less time and money than including everyone in the survey process.

The characteristics of the attendees you interview in a sample are projected to other people *like themselves* in the total population by calculating a factor (*weight*) that brings your sample up to the total attendee population. This projection process *works* as long as your sample is truly representative of the total attendee population for key characteristics.

To count and tally attendees as they enter your event, you need a sampling plan based on the particular characteristics of your site and event. The sampling unit for this part of the study is called a “stint”. A stint corresponds to a pre-set time period (e.g., 9:00 am to 11:00 am) on a particular day of the event (e.g., Day 1) at a particular entry point (e.g., Gate 1) or other location on the site for data collection.

Attendee counts

Because different types of attendees may come to the event at different times of day, on different days of a multi-day event, and/or through different gates, you need a way of sorting out how many different types of attendees came when.

Even if you know how many people *in total* came to your event because you sold tickets, you will not be talking to all these attendees to find out their particular characteristics (origin, spending, etc.). For this reason, you need to “sample” the various times/gates and days a visitor could arrive and **count the attendees** who enter at these sampled times/gates and days.

You can assign a person to each “gate” or entrance on your site to “count” entrants, you can rely on turnstiles that have built-in counters, or drop a ticket into a box for every person who enters the event (even if you do not sell tickets to the event).

No matter which approach you take to counting people who enter your event, you need to make sure you can separate people who entered at different times/locations (stints) because you will need this information in order to adjust the *people you tallied* to the *total entrants* on a stint-by-stint basis.

21. Tallies . . . essential

Attendee tallies (the tally interview)

You probably can’t talk to all the people who come to your event about their place of residence, their household party size, and how much they spent at your event and in your community. At the same time, you need a way to estimate this type of information for *all* your attendees.

As with the *attendee counts*, you need to “sample” the various times/gates and days a visitor could arrive and conduct a brief **Tally Interview** with a sample of household parties who enter at these sampled times/gates and days.

The tally will provide critical information on where your attendees live and provide a tool for excluding from your estimates groups you do *not* want in your analysis. These groups might include merchants, media, staff, volunteers, participants, etc.

Recruitment for the attendee survey

We recommend that you “recruit” respondents for the Attendee Survey as part of the Tally Interview process. Because *tourists* are likely to be relatively scarce, particularly when compared to local residents, you might recruit every *n*th local resident to complete the survey (e.g., every 10th) but would ask *every* out-of-town attendee you tally to complete the survey.

You can conduct the Attendee Survey personally on-site, use a self-completion questionnaire for drop-off on site or to be mailed back, or call/e-mail the attendee at home once the trip is over (for *tourists*).

22. How to estimate tally targets

Determining how many completed tally interviews you require will depend on how many completed Attendee Surveys you hope to obtain, assuming you will be recruiting household parties to complete the Attendee Survey as part of the tally process. Here are some key questions you need to ask to determine how many tally interviews you should attempt to complete.

- **What proportion of your total attendees is likely to live outside the local area?** Unless you have conducted visitor studies at the same event in the past and have information on the proportion of attendees from different origins who come, you will have to “guestimate” the proportion you expect to be from outside the local area.
- **What if you expect few non-local attendees to attend your event?** Each event will have to determine how much effort it wants to devote to obtaining results from tourists, recognizing that to estimate the economic impact of tourists, you require a minimum of **200 completed Attendee Surveys** with tourists.
- **How many different tourist segments do you expect to analyze separately?** If you wish to report that of the total tourism economic impact of the event, X% was generated by in-province or non-locals, Y% was generated by people from other provinces, and Z% was generated by attendees from outside the country, you will require enough Attendee Surveys from each of these groups to produce reliable estimates for *each*.

The more “granularity” you have in “tourist” segments, the more reliable your information and estimates will be because you will have more “cases” of people who have different spending and activity patterns based on things like how far they have travelled to reach your destination (long haul vs. short haul tourists), whether they are staying with friends and family or in a paid lodging, how many people are travelling with them (couples, families, singles, etc.). And of course, the more “segments” you focus on, the more effort you will have to expend in doing your studies.

Throughout the guidelines, we base our estimates on two sets of expectations: If you recruit people for the Attendee Survey as part of the Tally Process, about 85% of the ones you ask will say “yes”. This does not mean that they will all follow through. In fact, we assume that only half of those who accept the Attendee Survey will complete it.

What does all this mean for you? Let’s look at an example. Let’s say you want to look at three “tourist” flows and you also want some information from local residents who attend your event.

And let’s say you think that “foreigners” (USA/Overseas) will represent about 5% of all your attendees, Canadians from outside Ontario will represent 10%, Ontarians from other parts of the province will represent 15% and people in Niagara Falls – or your local community – will represent the rest (70%).

Now remember, you are aiming to get at least 200 completed Attendee Surveys from each group.

23. How did we get to 9,412 tallies?

Here's what happens: In order to obtain 200 Attendee Survey completions with residents of **foreign countries** (the *lowest incidence* group), you would have to tally approximately 9,400 household parties, assuming that 85% of those you tally agree to complete the Attendee Survey and that 50% of those who agree to do so actually complete the Attendee Survey.

Of the 9,400 tallied household parties, about 470 would be from foreign countries ($9,400 * 5\% = 470$) and you would attempt to recruit *all* of them to complete the Attendee Survey. **At the same time** that you are tallying the 9,400 household parties to find the 5% of foreign tourists, you will *automatically* tally enough household parties from the other origin groups of interest to you to obtain 200 completed attendee surveys with each group. In fact, you would likely find more than you need.

	Expected Percentage	Tally	Recruited for Attendee Survey @ 85% Acceptance Rate	Completed Attendee Survey @ 50% Response Rate
Foreign Countries	5%	471	400	200
Other Domestic	10%	941	800	400
Same Province (non-local)	15%	1,412	1,200	600
Local	70%	6,588	5,600	2,800
Total		9,412		4,000

Acceptance and response rates may vary from event to event. Those shown here are examples only.

24. But do you really need 9,412 tallies & 4,000 completed surveys? NO

Remember, we recommend a minimum of 200 surveys per group . . . so you can reduce the amount of field effort you invest in the study if you do one of two things:

- Distribute attendee surveys at different rates. I'll show you an example in a minute. This solution reduces the number of Attendee Surveys you will have to process . . . but it does not change the number of people you will have to tally.
- You can combine some of the low incidence tourist groups. For example, you could look at *all* tourists as one group and *all* locals as another. This would save you effort, but it would cost you in terms of the reliability of your estimates.

25. Different recruitment rates

You would still need to recruit *as many* foreign tourists as possible, but to get to 200 completions with "other Canadians", for example, you could distribute Attendee Surveys to every 2nd tallied respondent, every 3rd Ontarian, and every 14th local.

26. Combine all tourists

If you combine "all tourists", you go from an incidence of 5% to 30% . . . meaning you need to tally a lot fewer people (942) in order to get to your target of 200 completed Attendee Surveys. As I said before, however, the reliability of your estimates will decline but the study might actually be manageable!

27. If you don't know many tourists to expect

If this is the first year for an event, or it is a once-off event, you may not be able to even guesstimate how many tourists to expect. If you cannot estimate total attendance or how many tourists you expect in advance, you might talk to colleagues or explore the internet to see the tourism flows to similar types of events in similar types of communities.

You may need to assign enough interviewer tally stints to optimize the chances of obtaining sufficient completed Attendee Surveys with groups of interest to you. And what, you ask, is an

"interviewer tally 'stint'"? Remember, a stint is a *Unique observation and/or measurement time period at a specific location at your event*. The stint will form the basis for sampling attendees who come to your event (e.g., 9:00 am to 11:00 am) and an Interviewer Stint is a unique observation and/or measurement time period at a specific location at your event to which one interviewer is assigned to collect information (tally and/or count attendees at your event).

As a general rule, assume that each interviewer can tally and recruit approximately ten household parties per hour, completing 50 tallies in a five-hour stint (assuming an even flow of entrants over the five hours).

To obtain 400 completed Attendee Surveys with a cross section of attendees (all places of origin, as they fall in your event's total attendance), you would require approximately 19 interviewer stints of five hours each, as follows:

Hours per Interviewer Stint	Tallies/ Recruits Per Hour	Tallies/ Recruits Per Interviewer Stint	Accepted Attendee Surveys per Interviewer Stint *	Completed Attendee Surveys per Interviewer Stint **	Number of Interviewer Stints Required to Reach 400 Completed Attendee Surveys
5	10	50	42.5	21.25	$(400 \div 21.25) = 18.8$
<p>*Assuming 85% acceptance rate. **Assuming 50% completion rate among acceptors. Note: Acceptance and response rates may vary from event to event. Those shown here are examples only.</p>					

There are no guarantees. At a sample size of 400 attendees representing tourists and locals "as they fall in the population" (cross section), you may or may not be in a position to estimate the economic impact of your event among tourists. There may be too few tourists in your sample of 400 on which to base spending estimates with a minimum level of precision.

28. Interviewer Stints & Sampling Plan

The number of "count" and "tally" stints you require will depend on the complexity of your event, the flow of traffic into your event and the number of target tallies you hope to achieve. When developing your sample, consider the following factors:

- duration of the event;
- the number of tally zones you require;
- whether people tend to "flood in" all at once at certain times of day or in certain zones (e.g., an event that offers a performance or other "timed events" that will entice many attendees to enter at about the same time, such as a rodeo or a concert) or "trickle in" at a slow but steady rate over many hours (e.g., an art show where people arrive, browse and leave throughout the duration of the event);
- the number of people you can assign to each "stint" for the tally process, recognizing that, as a rule of thumb, one "tallier" can obtain the necessary information from about ten "parties" per hour.

Once you have determined how many stints you will need to reach your targets (the Guidelines will help you in figuring this out), you would develop a "stint sampling plan". This plan has 3 steps.

29. Three basic steps for stint sampling plan

Once you have estimated how many stints you require to count and/or tally attendees, you will create a stint sampling plan and select the time periods and locations at which you will assign interviewers.

There are three basic steps to build a sampling frame and to select your count/tally stint sample:

- List all possible time/location periods over the full duration of the event (*all days*);
- Pick a random start point and select an interval (every n^{th} where n = total possible stints \div number of stints you require to achieve the target number of counting

locations or completed attendee surveys you hope to achieve, to the nearest whole number);

- Starting at your random start point, count every n^{th} (your interval). Keep counting until you have been through the entire list of possible stint times. The rows that correspond to every n^{th} represent your stint sample for counting and/or tallying.

30. Example: stint listing

This is what your “list” might look like.

Stint #	Day of week	Date	Time	Count/Tally Gate or Zone	Selected Stints
					Count continued from endpoint
1	Monday	May 1	10:00 – 2:30	A	1
2	Monday	May 1	2:30 – 7:00	A	2
3	Monday	May 1	10:00 – 2:30	B	3 Selected
4	Monday	May 1	2:30 – 7:00	B	1
5	Tuesday*	May 2	10:00 – 2:30	A	1 Random Start Point
6	Tuesday	May 2	2:30 – 7:00	A	2
7	Tuesday	May 2	10:00 – 2:30	B	3 Selected
8	Tuesday	May 2	2:30 – 7:00	B	1
9	Wednesday	May 3	10:00 – 2:30	A	2
10	Wednesday	May 3	2:30 – 7:00	A	3 Selected
11	Wednesday	May 3	10:00 – 2:30	B	1
12	Wednesday	May 3	2:30 – 7:00	B	2
13	Thursday	May 4	10:00 – 2:30	A	3 Selected
14	Thursday	May 4	2:30 – 7:00	A	1
15	Thursday	May 4	10:00 – 2:30	B	2
16	Thursday	May 4	2:30 – 7:00	B	3 Selected

31. Two types of random sampling plans

You can elect to use a “Simple Random Sampling Plan” in which each location/time period is given an equal chance of being selected for your stint sample or you can use a “Stratified Random Sampling Plan” in which you adjust the rate at which you randomly select locations/time periods.

The Stratified Random Sampling Plan approach is recommended if you anticipate considerable variation in the flow of attendees. It is a more complex approach and requires additional effort when you transform your “sample” into estimates for the full attendance at your event than simple random sampling, but it has the advantage of increasing the *yield* of completed tallies and attendee surveys for each hour your interviewers are working on the site.

Possible options for stratification include gate or zone, weekday versus weekend days, high volume versus low volume times or days, or other significant anticipated differences in attendee volumes. Knowledge of the event will help you determine the optimal variables for stratification of your stint sample.

32. Now what?

You have examined your site and determined when and where you are going to count and tally attendees.

You have identified how many interviewers you need and where you will assign them to count, tally and distribute the Attendee Survey.

You still need:

- To train those interviewers so they know what to do
- Provide them with a tally form (either paper and pencil or on a hand-held computer)
- Create an Attendee Survey that meets your needs and the requirements for generating inputs for an economic impact model
- An analysis plan to put all the information together.

33. Okay, let's start with interviewer training.

It is mandatory – whether you are using volunteers or professionals.
Two basic *types* of interviewer training are required:

Type I: general understanding of the survey process, the objectives of the study, general department, the importance of administering the questionnaire exactly as it is written, and how to handle “difficult respondents” and unforeseen circumstances.

Type II: familiarity with the survey instruments, including practice interviews to ensure that interviewers are conversant with the language and flow of the questions, skip patterns, and response categories, respondent selection guidelines, etc.

You also need to have someone “in charge”. Supervision is critical to help interviewers and to ensure that people are where they are supposed to be situated when they are supposed to be there.

34. Unit of analysis

A “household travel party” is the “primary sampling unit”. This is a group of people who enter the event at the same time and live in the same permanent residence.

Even though the interviewer will approach a *person*, the unit for collecting tally information is the *household party*. Thus, once the interviewer has secured the attention of the *person*, he or she will ask that this person and others in the immediate group step out of the flow of traffic for the interview. The tally questionnaire will aid the interviewer in determining how many *different* people are in the respondent's household party. Each tally interview should represent *all* people in the household party.

In the Attendee Survey, we recommend that the person who completes the questionnaire be the adult in the household travel party who is best able to report on *trip spending* for everyone in the household party.

35. What is asked in the Tally interview?

This is a list of key questions asked in the tally interview. You can use a “paper form” to record responses on a stint-by-stint basis, or you can use hand-held computers to record this information, also on a stint-by-stint basis. More details about the exact wording are included in the guidelines.

Already Tallied Today (IF YES, ENTER ON TALLY & TERMINATE)

Local/Non-Local

Place of Residence (Non-Local only)

Out-of Town Trip

Nights Away

Total in Household Party

Under XX Years

in HH Party in Each Excluded Category (e.g., merchants, staff, volunteers)

Type of Ticket

of days attended/ will attend

Recruitment for Attendee Survey

Telephone #

First Name

person or household spends but on what they spent in your community that they would not *otherwise* have spent. And so if they would have spent the same money on a *different* recreational activity in your community, you will discount their spending. If this trip simply replaces a trip that would have happened later (*time switchers*), you will discount their spending. And depending on how important your event was in the decision to visit your area, you will adjust the spending. For example, if it was not important at all (code 0), none of the household's spending would be included in the inputs for an economic impact model. If it was the main reason for visiting your area (code 10), all their spending would be included.

And of course, in order to know how much was spent, you have to ask them!

39. Spending

You will ask people to give you their best estimate of spending – by category – for the full duration of their stay in your community. We recommend that you ask “if” they spent any money on an item (*incidence*) and if so, how much. The incidence responses will help you adjust spending estimates for people who know they spent “something” but can’t or don’t report “how much”.

40. Category spending at the event

Here are the “detailed spending categories” we recommend for “on-site” spending.

Admission	F/B at lounges, bars, clubs
Other on-site tickets/admissions	Souvenirs
Food & Beverages (F/B) at restaurants, concessions	Other shopping/retail
	Parking

A slightly different list captures other spending in the community (see next slide).

41. Other spending in the “impact area”

Plane, train, bus tickets	F/B at restaurants
Vehicle operation	F/B at lounges, bars, clubs
Vehicle rental	Lodging
Parking	Other recreation
Taxis, local buses	Clothing
Groceries	Other shopping

It is important to keep the categories separate because dollars spent on different commodities and services “burble through” your local economy differently. The OTREIM model, and many others, requires these types of category-by-category inputs in order to estimate the impacts on GDP, jobs, wages and taxes.

42. What do we know now?

- We have counts to estimate total attendance
- We have tallies to provide us with a way to estimate how many of the people who came are *tourists* versus *locals*
- We know how much money, by category, people spent on-site and in the community on the trip.
- There are still some adjustments to be made – for example, if people only report “total spending” on the trip, you will have to find ways to *assign* this spending to categories because when you put the spending into the OTREIM model, it has to be on a per-category basis. Procedures for these tasks are included in the Guidelines.

43. What do you still need to know?

Now comes the painful part . . . removing the spending that did *not* occur *because* of your event. Remember these?

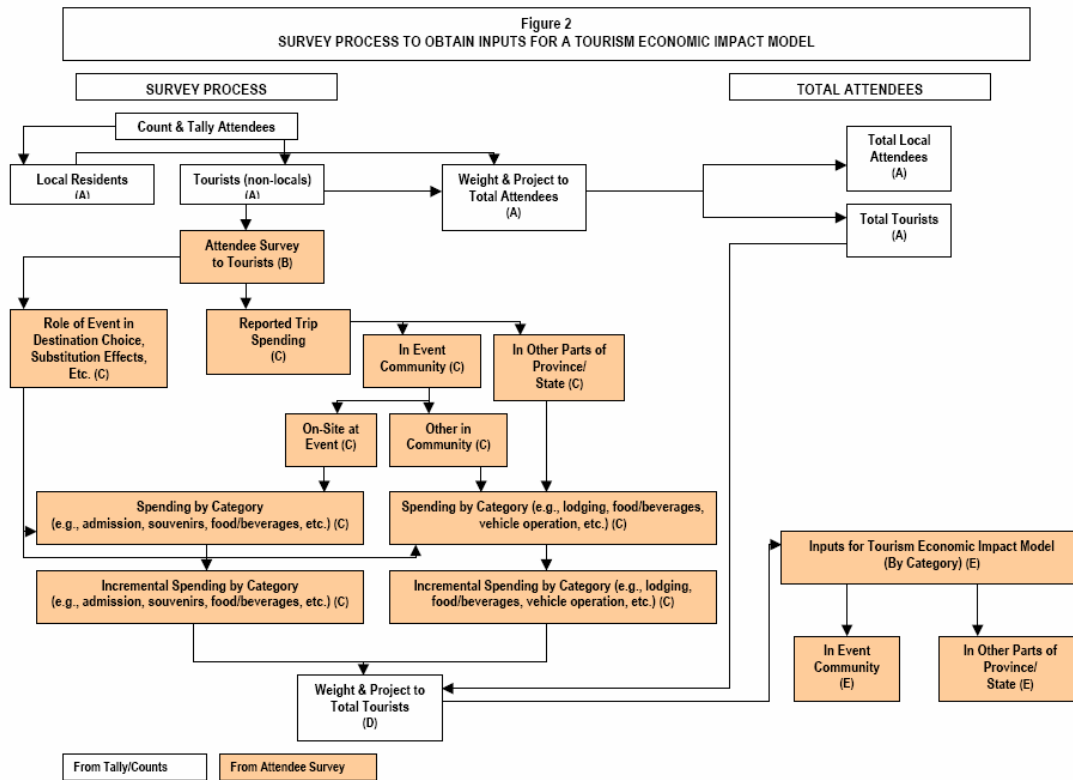
- Incremental spending
 - Substitution - done something else
 - Trip replacement - come at another time
 - Role - importance of event in destination choice

Once you have adjusted the spending for these occurrences, you need to project the people who completed the attendee survey to the entire group they are supposed to represent (the whole population or that portion that you included in your “universe”).

To accomplish these tasks, will need to create a “data base”, meaning that someone needs to take all the information in each survey and “key” it into a computer, code and “clean” the information. We do not recommend that you rely on excel spreadsheets for this type of analysis. You need more sophisticated tabulation software . . . and we highly recommend that you consider getting professional advice – from a community college, university or economic development office – or from the market or economic research community to help you with the “data management” and weighting/projection tasks.

44. Putting it all together

Here’s what the “process” looks like. The Guidelines contain a discussion about each of the boxes displayed here.



45. Input spending

And when you have moved your survey results through all the boxes on the previous chart, you will end up with the spending estimates required for Ontario's tourism regional economic impact model. In turn, you will be able to fill in the blanks in our newspaper article:

ABC Festival brought _____ thousands of tourists to the city. These tourists generated \$_____ thousands in economic impact, _____ hundreds of jobs for the community, and added \$_____ thousands to the local tax coffers.

And now, for something even more complex – ungated events

46. Ungated Events

Almost all of the steps we have discussed so far for “gated” events also apply to events in which part or all of the area is “open access” or ungated.

Because people can come and go at different times and places and because it can be difficult to distinguish event *attendees* from *passers-by*, particularly at urban outdoor events and parades, identifying the number of *tourists* and *locals* who came to an ungated event requires special and often complex procedures.

Even *randomly* selecting people to interview at various sites does not provide you with a *representative* sample of attendees unless you have built a system to estimate the total size of your attendance. Despite the difficulties involved, estimating the total numbers of tourists and locals at your event as accurately as you can is central to producing a credible, reliable estimate of spending associated with the event.

Generating *unduplicated* counts of attendees and their characteristics involves complex counting, tallying and adjustment procedures. In turn, most accepted procedures require large numbers of interviewers on the site.

Regardless of the particulars of your ungated event, you will need the following knowledge and procedures to produce an acceptable estimate of total attendees using the methods suggested in the Guidelines.

- Detailed knowledge of the physical layout of the site;
- Detailed knowledge of the flow and concentration of attendees;
- A “grid map” of the site (a map with evenly sized and/or landmark-based areas clearly marked in a grid pattern);
- Interviewers on the site to count and/or tally attendees in a systematic manner, using grid maps to identify locations for these procedures;
- A tally questionnaire that captures information required to adjust for potential multiple counting of the same attendee and other variables, depending on the approach to estimating total attendance you select; and
- A processing plan to generate basic counts, adjusted to produce an *unduplicated* count of attendees and the proportions that are tourists and locals.

There is no perfect solution for arriving at an estimate of total attendance but the Guidelines provides advice on four techniques that hold considerable promise . . . but add a considerable level of complexity to the research tasks.

47. Four (4) Methods

- Aerial photography
- Parking lot counts
- Parade counts
- Tag and recapture

48. Aerial photography

High quality **aerial photographs** of the event site, ideally at “peak” periods and “peak” venues (those with largest concentrations of visitors) combined with other research activities can be a cost effective technique for estimating attendance at certain types of events. The photographs must be augmented with the following procedures:

- “count zones” using landmarks to mark off grids for counting attendees;
- on-the-ground counts of **covered areas** coinciding with the timing of the aerial photos (e.g., restaurants, covered pavilions, etc.);
- analysis of the photo(s) to estimate attendance, using a grid system;
- on-site surveys to determine the proportion of visitors on site at each “photo session” (to adjust for multiple counting the same people).

Despite rental fees for a helicopter, blimp or small plane and for camera equipment, aerial photography may offer cost advantages over more labour intensive methods to estimate attendance such as parking lot or parade counts.

At the same time, aerial photography requires a good understanding of how crowds are likely to concentrate at an event, high quality site maps and on-the-ground recognizance prior to and after the event, can be negatively impacted by weather conditions (quality of photos, crowds with umbrellas, etc.) and is unsuitable for indoor or nighttime events. The methodology also poses challenges for “one-time” events in which the crowd concentrations and movements are difficult to anticipate in advance.

49. Parking lot counts

If people must use an automobile to reach your site and must park in identifiable and limited areas while attending the event, you can estimate total attendees by counting the number of vehicles in the parking area(s). This approach requires a systematic sampling plan to generate vehicle counts by type of vehicle at different lots and during different time periods. It also must be augmented by tally information to adjust for the number of people per vehicle and for multiple visits to the event by the same people (for multi-day and/or multi-venue events).

50. Parade counts

At some events with a *parade*, organizers may know that the parade represents “peak” attendance. If this were the case, spectators along the parade route could be used to estimate total attendance. To undertake parade counts, you would divide the parade route into segments and assign counters for each segment in a systematic manner. Knowledge of the parade route and locations where spectators are likely to cluster is required.

This approach is only appropriate for events in which you anticipate that the parade will attract “cross section peak” attendance. If, for example, your event has a children’s parade but also offers many adult-oriented activities, a parade count would likely over-estimate the number of attendees with children and under-estimate the number of adult-only attendee parties at your event. When considering this option, you should think about whether the parade is likely to attract a particular type of attendee or if it would include a *cross section* of attendees (all types of attendees in their correct proportions for the event as a whole). If the parade is unlikely to represent a cross section of attendees, a parade count is not a good tool for estimating total attendance.

51. Tag and recapture

The tag and recapture method involves marking (*tagging*) a random sample of individuals (with a brightly coloured button, lanyard, etc.) so they can be “recaptured” at a later point in time. Once the initial “tagged” sample has completely dispersed, a second sample is taken. In this second sample, tagged and untagged attendees are counted at the same time/location. The ratio of tagged (“recaptured”) and untagged respondents is used to estimate the total size of the crowd. A relatively simple calculation allows you to estimate total attendance by comparing “tagged” versus “untagged” attendees in the second sample.

Tag and recapture is most appropriate for events in which the crowd disperses in such a way that all locations are equally likely to “absorb” attendees what have been tagged. If various

types of attendees are siphoned to specific areas only, the methodology will not work very well. Tag and recaptures is also *not* recommended for multi-day events because it is both very labour intensive and because adjusting for duplication at multi-day events is very complex.

52. More details in the Guidelines

The guidelines are a new tool to help you understand the steps that are required to produce credible estimates of your event's tourism economic impact. They contain sample forms, wording for key questions, and examples of the steps involved in generating final estimates.

53. Counting your chickens or not

Some of you will read the Guidelines and be in a position to "implement" the various procedures it describes. Others may read them and conclude that the services of professionals are required so you might use the Guidelines as a Terms of Reference for professionals. You may conclude that you would benefit from training workshops, which address the specifics of your event and exactly how "you" would implement the guidelines.

And remember, that's what they are: Guidelines. Every event has its unique features that may require some modifications to the descriptions in the Guidelines. You will need to modify and customize them to meet your needs.

Please fill out our little questionnaire and contact OMT at the email address provided on this slide with comments!

54. Where to get The Guidelines

This is the first presentation of these guidelines to industry and only you can inform their sponsors about how well the materials "work" for you. Your feedback is essential because, like all other tools, the Guidelines can be enhanced and improved to make them serve you better.

They are available at the OMT's website, in pdf versions.

<http://www.tourism.gov.on.ca/english/tourdiv/research/resources.htm>

Click on: *How to Manuals*