

SAMPLE QUESTIONNAIRE FOR ESTIMATING VISITOR SPENDING ON TRIPS

Please report all spending by **you and other members of your party** inside the park (Column A) or outside the park within **60 miles of this destination** (Column B). Include all spending for goods and services during your stay in the local area including pre-paid hotel deposits, and all other payments whether by cash, credit card, or check. Enter spending to the nearest dollar in each category below. Enter 0 (zero) if you did not spend any money in a particular category.

	Column A	Column B
	<i>Inside the PARK</i>	<i>In the Local Area</i>
Lodging		
Hotels, motels, cabins, B&B,..	_____	_____
Camping fees and charges	_____	_____
Food and Beverages		
Restaurants and bars	_____	_____
Groceries and take out food	_____	_____
Transportation		
Gas and oil (auto, RV, boat, etc)	_____	_____
Other auto expenses (repairs, parking, tolls, etc.)	_____	_____
Airfares, Rail, Bus, Taxi, Car rental, shuttles...	_____	_____
Recreation and Other Expenses		
Admissions, recreation, entertainment fees	_____	_____
Sporting goods	_____	_____
Clothing	_____	_____
Other goods (film, books, ...)	_____	_____
Other services (hair cuts, etc.)	_____	_____

Somewhat Shorter form

	Column A	Column B
	<i>Inside the PARK</i>	<i>In the Local Area</i>
Hotels, motels, cabins, B&B,..	_____	_____
Camping fees and charges	_____	_____
Restaurants and bars	_____	_____
Groceries and take out food	_____	_____
Gas and oil (auto, RV, boat, etc)	_____	_____
Other transportation expenses	_____	_____
Admissions, recreation, entertainment fees	_____	_____
All other purchases (souvenirs, film, books, sporting goods, clothing etc....)	_____	_____

Optional Trip purpose/multi-destination questions:

5. (version A) Was visiting this park
 - a. The primary purpose of your trip to this area
 - b. One of several reasons for the trip
 - c. Not an important reason for the trip

5. (Version B) Would you have made the trip to this area if this park were not open? Yes or No

5. (Version C) What was the primary reason for making the trip to this area?
 - a. To visit this park
 - b. To visit other attractions in the area
 - c. Visiting friends or relatives in the area
 - d. Business or other reasons

6. Multi-destination question : Is your stop in this area
 - a. Your only destination on this trip
 - a. Part of a longer trip involving several destinations,
 - b. A side trip while staying overnight elsewhere

Analysis of the above

The basic analysis is to form visitor segments using questions 1-4 and then estimate average spending, length of stay, party size and park entries for these subgroups. Segment shares may be estimated directly from the survey (percentages) if the sample is representative, or in some cases overnight stay data and other sources may be used to estimate the percentage of visits by each subgroup. Total visitor spending is estimated by expanding from the sample to all visitors in a given period (usually a year). One must be careful to adjust for park re-entries and any known sample biases.

The general approach is to divide total park visits by re-entries to obtain the number of person trips, then multiply by length of stay in the area to convert to person nights and divide by party size to yield total party nights. Spending must then also be estimated on a party night basis. Compute trip spending averages from the sample paying careful attention to zeros, missing data and outliers. Also compute average length of stay and then divide the trip spending averages by length of stay in nights to yield spending per party per night. This figure can be multiplied by party nights to get total spending. All of the above should be carried out segment by segment to yield nights and spending for each segment. Then sum across segments to get totals.

Segments with small N's should be combined with other segments with similar patterns of use and spending. The overall park visit total should be carefully evaluated, as it forms the basis for expanding to totals. The re-entry parameters in the survey theoretically correct for multiple counting of visitors who enter and leave the park several times during a stay in the area. However, visitors may not be fully aware of when they are entering or leaving the park and the park visit counting procedures may not fully account for all visits. Park visits may also be contaminated by commercial and commuting traffic and a host of other problems. The party size factors used in park visit counting procedures also may not coincide with those estimated in the survey.

Finally, in computing economic impacts, one must decide which spending and visitors to include. Local visitors are often excluded and one must also address how to handle visitors whose primary trip purpose was not to visit the park. These visitors may also be excluded or one may attribute only a portion of their trip spending to the park visit. For example, one may count only a half day's spending or a single night's spending for visitors in the area on extended stays for multiple purposes.

Other analysis Notes

1. Question 1 and 4 can be used to identify the eight lodging-based segments

- Local visitors - identify by zipcode area
- Non-local Day users (not overnight in the area)
- Motel - IN
- Motel - OUT
- Camp - IN
- CAMP- OUT
- Backcountry -IN
- Other

For subjects that report multiple lodging categories, one can either assign them to a primary lodging type, set up a separate “multiple lodging category”, or omit these cases in the spending analyses, but smear them across lodging types in determining segment shares (e.g. someone checking two categories is counted half to each. If nights are asked by lodging type, can distribute in proportion to nights spent in each type).

2. Question 4 can be used to separate local visitors from those traveling from outside the local area. The question may also be asked more directly - Is your permanent residence in insert area designation or Do you live within X miles of this area? Local residents may be excluded or identified as a distinct segment using the residence variable.
3. Averages for spending variables may be computed for each segment. Spending questions distinguish spending inside park (so it may be included or excluded as desired) versus local area. Categories obtain all spending in local area and clearly separate restaurant from groceries, gas and oil from other transportation, and amusements (services) from souvenirs (goods). These distinctions are critical to properly apply multipliers.
4. Number of nights in the area (question 1a), re-entries (question 2) and party size (question 3) can be used to convert spending information between different units. These are also critical to convert park visit and overnight stay data to the number of party nights in the area. Generally, one gathers spending on a party trip basis (covering expenses of all members of the party (vehicle) in the designated region). These expenses may then be divided by nights in the local area to put them on a party night basis or by party size to convert to a per person basis. We generally treat day users as equivalent to one night when converting to a per night basis. Or equivalently, we assume for the purposes of spending that one night equates to one day and put the figures on a per day basis.
5. We prefer to estimate spending on a per party night basis. These figures generalize more readily across areas with different lengths of stay and are more readily face validated, i.e. an average per night expense for a motel room should correspond to typical room rates in the area.
6. Optional trip purpose and multi-destination questions can be useful in attributing spending to particular attractions and marketing activities. Some trips may be for purposes other than the ones being evaluated. Question 6 is also a simple approach to identify visits that are part of longer trips.
7. Sampling and Weighting issues. The appropriate analysis also depends on the sampling design. If population parameters like average length of stay and spending are to be estimated from the sample, the sample must be representative of the intended population. The following examples illustrate the primary issues:

If sampling visitors upon park entry or exit, one has a sample of park entries. Parties that enter the park several times during a stay in the area will have greater chance of being selected. Adjust for this bias by weighting cases inversely to the number of park entries during their stay in the area (1/park entries).

If sampling visitors at random locations inside the park, then visitors spending more days/time in the park have a greater chance of selection. Adjust for this bias by weighting inversely to your best “sampling exposure” variable. This might be days or hours spent inside the park. The exposure variable for backcountry visitors will likely need to be adjusted if sampling only in developed areas. If sampling at

roads and parking areas, “drive-through” visitors may be over-represented relative to visitors taking long hikes.

If sampling at visitor centers or campgrounds, be aware of the biases that these sites may introduce. For example, local visitors, day visitors and backcountry visitors may be less likely to be found at these sites and campers and other segments may be more likely to be sampled. The resulting samples usually significantly bias the estimates of visitor segment shares. If spending is estimated within segments, the segment spending averages may not be biased.

Time periods for sampling can also bias results. If sampling only during a few days during a peak season, the sample will not represent off-season visitors. Off-season visitors often are smaller parties, with shorter stays, and more local visitors and day trips. One can adjust for these biases if off-season visitor patterns are known or can be roughly estimated. For example, if a summer survey estimated average party size to be 3.0 and we assume off-season parties average 2.3 people, then compute a weighted average to get an unbiased annual average. If 70% of park use is during the summer, the corrected party size estimate for the year is $.70*3.0 + .30*2.3 = 2.8$. The same approach may be applied to compute average length of stay and spending.