

**Appendix B: Converting Visits to Party Nights; The NPSCONVERT.XLS Workbook**

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NPSCONVERT.XLS is a stand-alone module for converting NPS visitation numbers to the units recommended in the MGM2 spending and economic impact estimation routine. It converts recreation visits to party nights in the area and also estimates the shares of party nights by lodging segment.

**RATIONALE FOR CONVERTING TO PARTY NIGHTS:** Visitor spending depends not only on the number of visitors, but also the kinds of visitors. Day visitors have different spending patterns than visitors staying overnight in the area. Spending also can vary considerably within lodging types (backcountry, campers, motel users, inside or outside the park). How much a visitor spends in the area depends on how long they stay in the area, not just how much time they spend in the park. MGM2 therefore uses party nights in the area as the unit of analysis for spending. Eight visitor segments are recommended to capture differences in the mix of visitors associated with spending. The eight visitor segments defined by lodging types are:

- (1) Locals: local visitors, who live in the designated region
- (2) NL-Day: non-local day visitors (not staying overnight in the local area) ,
- (3) Motel-IN : visitors staying in motel/cabin/lodge inside the park,
- (4) CAMP-IN: campers staying inside the park,
- (5) Backcountry: visitor staying in backcountry campsites,
- (6) Motel-OUT: visitor staying in motel/B&B/cabin/rented condo outside park,
- (7) Camp-OUT: visitors staying in campgrounds outside the park, and
- (8) VFR: visitors staying overnight in the area in an owned seasonal homes, with relatives, or other private home

The definition of "local area" may vary from park to park and also rests on the intended use of the spending and economic impact estimates generated with MGM2. The local area should be defined to capture places around the park where visitors will spend money associated with their park visit and should represent a meaningful economic region.

A party night is one party spending one day in the area either within the park or in the local area. The party will generally be all the people traveling in a single vehicle or staying in a single room or campsite. In most cases, this is also the spending unit. As most parks estimate visits via vehicle counts, MGM2 works best when the vehicle is the party unit. Spending averages are also designed with the assumption that the spending unit, vehicle, and group staying in a particular room or campsite represent the "party". Where these assumptions are seriously violated, ad hoc adjustments should be made to either the visit counts or spending averages so that the multiplication of visits by spending per visit yields an accurate estimate of total spending.

The NPS Public Use reports focus on entries to the park and time spent within the park, including overnight stays. NPS Visitation statistics also do not break visitors down into segments. Much of the information needed to convert park visits to party nights by segment can be gleaned from previous or new visitor surveys. This conversion routine is designed to help NPS staff in making the conversion of their visit data to segments and party nights.

**WHAT IT DOES :** Converts park visit data (recreation visits and overnight stays) to party nights in the area for each of the eight visitor segments (not all parks will require all 8 segments).

**STRUCTURE OF WORKBOOK.** The NPSCONVERT.XLS workbook has three pages:

**Main :** A simple interface for entering required inputs, adjusting parameters and inspecting results.

**Formulas:** The detailed calculations are made here, along with further explanation of them. Experienced spreadsheet users may inspect the formulas here.

**Parameters :** Additional notes and comments about the input parameters.

Note - Worksheets have been protected to guard against accidentally overwriting important formulas. Cells where inputs are requested on the Main page have a yellow background and text in red. Only these cells may be altered. Simply move to a cell to replace the current value. A copy of the initial default conversion parameter values are at bottom of the Main page. You may copy these to cells above to restore the defaults. Experienced users may unprotect pages to add their own custom features or to modify formats or formulas.

**STEPS:** To familiarize yourself with the conversion routine, we suggest converting data for your own park unit using annual visit data for a recent year. Enter data on the **Main** page as follows:

1. Enter recreation visits and overnight stay data for a given year in cells B18:B22.
2. Make your best estimate or guesstimate of the percentage of park day visitors (those not staying overnight inside park) who are a) local residents, b) day trippers to the region from outside the local area, c) visitors staying overnight in area outside park in motels, campgrounds or other lodging. (These percentages go in cells B30:B34.). You should make your best estimates of these segment shares based on judgment, visitor survey data, or maybe local tourism studies of visitors to the area. Enter five percentages here that add to 100% at the bottom. NOTE that visitors staying overnight inside the park are not included here. Their shares of overall park visitors are estimated using the park overnight stay data.
3. Enter the conversion parameters (Cells B50:I54) appropriate for your park visitors. There are five required parameters that can vary across the eight lodging segments:

Party size : number of people in party (vehicle)

Length of stay in the area : enter 1 for day trips to area, the average number of nights in the area for overnight visitors. Local tourist surveys or park visitor surveys may have these averages or you may make an intelligent guess.

Nights spent in park : This is the average length of stay for those visitors staying overnight inside the park. You may be able to estimate these averages from registration, reservation or permit data

Re-entry factors : Average number of times a visitor party enters the park during the trip/stay in the area (this would be net of any re-entries already handled by the public use reporting procedures). This may be one of the hardest parameters to estimate but it is crucial to avoid double counting of spending by visitors who enter the park multiple times during a trip to the area.

Attribution factor : the percentage of nights to be counted as resulting from the park. Adjust these to reflect multipurpose trips, as needed. For example, in some situations you may only want to take credit for one day's spending of a four night stay in the area. This can be handled by entering 25% in the attribution cell for a given segment. This situation can also be handled by entering a length of stay of 1 instead of 4 and leaving the attribution percent at 100%. Another approach applicable in some situations, is to treat some overnight visitors to the area as if they are day visitors by counting them in the day use column. The

day user spending profile would then be applied to these visits, attributing the equivalent of a days spending to these visitors.

The spreadsheet lets you adjust the estimates of segment shares and other parameters and then evaluate the results. This sensitivity analysis may help in obtaining accurate estimates. For any given set of inputs, you may inspect the detailed outputs and calculations on the **Formulas** page.

4. **Outputs:** The workbook produces estimates of party nights in the area by lodging segment. Segment shares of party nights are also calculated.

**WARNING:** We recommend transferring the party night information manually to the Visits page of the MGM2 workbook as the number and ordering of segments in MGM2 workbook may not be the same as in the NPSCONVERT routine. The number and order of segments in MGM2 depends on the spending data you choose. The results on **Main** page are formulas, which require Excel's "Paste Special/Values" procedure to be copied correctly to another workbook. In any event, be careful that visit information is matched with the corresponding segments in the MGM2 workbook and check all figures before proceeding.

In MGM2, always select the spending data first as the Visit data will be reset whenever you import a new spending dataset.