

GBTS overnight trips methodology review 2024

The Great Britain Tourism Survey provides monthly estimates of the volume and monetary value of domestic overnight tourism, including the number of nights spent on overnight tourism. The results are produced monthly, quarterly and annually and are split by geography; therefore, consistent trend and regional data are essential. However, smaller sample sizes at nation (Scotland and Wales) or regional level make this challenging. Additionally, occasional outlier trip records can distort reported trip numbers, impacting trend analysis.

A thorough methodological review of the GBTS approach and data processing was conducted and completed in August 2024. The core aim was to reduce the volatility that was distorting estimates, while also maintaining accuracy.

The review and subsequent methodological change consisted of 7 phases.

Phase 1: Review of data processing methodologies: Reviewing the current processing approach and examining the effectiveness of the following aspects in creating consistent and accurate data.

Phase 2: Review of date allocation: The existing approach allocated trips and visits to specific reporting periods; and although these are reported as ‘months’ they do differ to ‘actual’ calendar months (due to 4-week and 5-week reporting periods). The possibility of moving to ‘whole-month’ reporting periods (still based on trip-end dates) – where each month contains all trips that ended in that month, regardless of which days of the week they contained - was assessed.

Phase 3: Test runs and data checking: BMG and the National Tourism Authorities (NTAs) had agreed that in the first instance the weights and the number of children associated with each adult on a trip needed to be capped. Caps were also applied or adjusted for the trip correction factor, the nights per trip and per adult per night spend.

Phase 4: Recommendations: A number of recommendations were agreed and trialled, with the new approach being applied to Q4 data for 2022 and 2023. The results were very encouraging, with much of the volatility in the data being reduced.

Phase 5: Full data re-runs: Final agreement of the new methodology and running of all 24 months data (January 2022 – December 2023) with monthly and annual data files using the new rules and approaches. The new approach will be applied to all future data.

Below are the agreed methodological changes.

No.	Category	Details of change	Reasoning
1	Weighting	Age x gender and region updated to Census 2021 and 2022.	These are the most recent population statistics.
2	Weight capping	Respondent level weights capped at 4.	Some respondents previously had a much higher weight than others, even

			reaching a weight of 12 on rare occasions.
3	Seasonal Smoothing Factor (SSF)	Set to 1.	No longer required due to the change in reporting dates to calendar month.
4	Partial Reporting Factor (PRF)	Adjusted by month to 2 or 2.25 as per the revised specifications. Further PRF analysis was conducted following the final run of the data, see PRF section for details.	The Partial Reporting factor needs to remain as the fieldwork approach has not changed, only the reporting approach (changed to full calendar month reporting). The new PRFs were calculated by month and will be applied in the data processing.
5	Nights	Capped at 21 (reduced from 30).	The length of a trip in the last 4 weeks is capped to 21 days. The proportion of trips longer than 21 days is very small, but they can have a significant impact on Scotland and Wales monthly data.
6	New fieldwork dates/reference periods	Reporting on calendar month.	This helps prevent variance due to some reporting months being longer than others i.e. following the review, estimates for December 2022 and 2023 are now both based on 31 calendar days of December.
7	Cap on the CTCF (child trip correction factor; divides trip party children by trip party adults)	Set to 4 for an average trip and 6 for a trip that's part of a larger group.	Trips with large groups of children have been found to consistently and significantly impact the stability of the statistics.
8	Cap on the CSCF (Child spend correction factor)	Set to 2. (CSCF assumes a child costs 0.5 of an adult and then divides children among adults on the trip)	This is a future proofing measure as there was no significant impact in 2022 and 2023. However, there is potential for a large group spend to cause volatility in the data at the month level in Scotland and Wales.
9	Global caps for trips and spend. (Bednights calculation remains the same.)	Set for England 1% for trips and 2% spend. For Scotland and Wales 2% for trips and 4% spend.	The programme already applies global caps to the data, however, following detailed analysis and discussion it was found that the caps needed to be tightened to create more stability at the monthly data level and for Local Authority level estimates.

10	Cap on spend per trip	Added and set at £3,000 per record spend.	This ensured trip spend data was stabilised. Only a small proportion of trips in each nation each year are capped.
11	Category spend caps - per adult per night	<p>Updated to the values below:</p> <p>Package, greater than £1,500</p> <p>Accommodation, greater than £700</p> <p>Travel, greater than £550</p> <p>Services (Services or advice, e.g. travel guides, tourist information), greater than £200</p> <p>Eating and drinking out, greater than £500</p> <p>Eating and drinking in accommodation, greater than £500</p> <p>Other shopping, greater than £600</p> <p>Entertainment, greater than £500</p> <p>Anything else, greater than £300</p>	There were a number of spend caps on different spend categories that were deemed too low considering the rising cost of living since the inception of the programme.
12	Inflation adjustment	Applied above spend caps to 2022. Increased the caps in 2023 by 9.2% (annual rate of inflation in 2022 according to CPIH).	This ensures inflation is accounted for in the trend analysis and statistics.
13	Trip Correction Factor (TCF)	Set to 1, ie. removed TCF.	This factor accounted for occasions when a respondent took more than 3 trips in the reporting period. Reviewing the data, the conclusion was made that these occasions were extremely rare and random and consequently had an undesirable impact on volatility of data.

Phase 6: Calibration: Following the data re-run, the impact on the key measures (trips, nights and spend) was assessed. The changes applied helped manage the volatility of the data. However, capping the data inevitably caused a loss of reported trips/nights/spend. To account for this loss of volume, and maintain accuracy, calibration was applied.

Phase 7: Partial Reporting Factor revision: The original methodology relating to the Partial Reporting Factor (PRF) assumes that the number of weekly fieldwork interviews completed are similar. However, at certain periods there were some unusual fluctuations in weekly completed interview numbers, with some weeks being lower than average. A more detailed analysis accounting for these fluctuations enabled the calculation of revised PRFs and where they differed significantly from the originals, the revised PRFs were applied (Mar, Apr and Oct 2023).

Impact: An analysis of the data post methodological changes has demonstrated that the new approach addressed the objectives of the methodological review by improving stability, quality and trend analysis.