Methods and Performance Report
Introduction

This section of the report provides details of the approaches followed in the 2017 Great Britain Tourism Survey (GBTS) and the work undertaken to develop these methods.

The survey aims to measure the volume, value and profile of overnight trips taken by GB residents to destinations in England, Scotland and Wales. Fieldwork is undertaken on a weekly basis.

GBTS is jointly sponsored by the statutory tourist boards of England and Scotland and Visit Wales (the Tourism Department of the Welsh Government).
Broad Objectives of the Study

GBTS is designed as a continuous measurement of the volume and value of overnight tourism by residents of Great Britain, in such a way as to provide absolute estimates at any point in its currency, and relative change over time.

Three separate but associated measurements are required from the survey:

- the number of trips (including child trips) taken by GB residents
- the number of bednights (including child nights) on those trips
- the value of spending on those trips.

For the purposes of this survey, overnight tourism is taken to be any journey away from home lasting one or more nights, to any destination within Great Britain, by any mode of transport, for any purpose, and staying in any type of accommodation. Those topics of destination, purpose, accommodation type, and many others, are included in the information collected by the survey, in order to provide meaningful analysis and descriptions of the volume and value estimates.

In previous methodologies, an upper limit of 60 days was applied to the number of nights away from home to qualify as a tourism trip. As respondents are now asked about trips returned from in the 4 weeks prior to interview, this upper limit is now redundant and no longer used.
Survey Method

Overview

The GBTS survey is conducted continuously throughout the year, using face-to-face CAPI interviewing, as part of the TNS in-home omnibus surveys. Weekly omnibus surveys are conducted with a representative sample of 2,000 adults aged 16 and over within GB. Respondents are asked whether they have taken trips in the UK in the previous four calendar weeks that involved at least one night away from home.

When such trips are reported, further questions are asked about a maximum of three trips – the most recent three trips – with a core set of questions for all three trips and additional questions for the most recent trip. The questionnaire is thus designed to maximise accuracy of recall, whilst minimising the task for those who have undertaken more than one trip.

The requirement is for a complete dataset for each of the three most recent trips. Therefore, some imputation is necessary and that imputation covers data not collected, or otherwise missing.

The results are reported in terms of total GB population values. Therefore the data are weighted to correct for differences between the sample distribution and that of the population and also to gross the sample values up to the population.

Reporting periods are defined in terms of groups of weeks. Results published from the data are for trips that started in each calendar month.

Each topic outlined above is covered in some detail in the sections below.
The Sample

The sample design is based on the TNS master sample frame which divides GB into 605 sample points.

The TNS omnibus operates on pairs of weeks. Each week has 208 points in GB (of which a subset of 192, 176, 150 or 131 could be used depending on the interview length). Sampling points are selected after stratification by Government Office Region and Social Grade.

Each sample point is divided into geographic halves. Selected addresses from the point are taken from one half the first time it is used, and from the other half when it is next used. This provides for de-clustering or geographical dispersion week on week.

Within each geographic half, an Output Area/group of Output Areas with a minimum of 200-250 addresses, taken from the Postcode Address File, is issued to achieve an adult sample of 10, 13, 14, 16 or 18 interviews (10, 11, 14 or 15 in London) depending on the length.
Fieldwork

Interviewer assignments are conducted over two days (one day for very short questionnaire lengths) of fieldwork and are carried out on weekdays between 2pm-8pm and/or at the weekend. Interviewers are issued with parallel adults (16+) quotas of gender, working status and presence of children. All interviewers must leave three addresses between each successful interview.

On average 2,000 interviews are conducted each week, some 100,000 interviews per year. Interviewing was not conducted during the two weeks either side of Christmas. The weighting procedures for data for November and December were amended to compensate for the missing weeks.
Respondent recall periods

Respondents report on all trips taken in the UK and Ireland in the preceding 4 weeks.

The questionnaire reads:

“We would like to ask you about overnight trips you have taken in the UK and Ireland recently. We are interested in ALL overnight trips taken for whatever reason, including holidays, visits to friends and relatives, business trips and so on.”

Q.1 Have you returned from any trips in the past four weeks that involved staying away from home for one night or more at a destination within the UK or the Republic of Ireland?

In this survey, by the UK, we mean anywhere in England, Scotland, Wales, Northern Ireland, the Channel Islands, the Isle of Man or any of the other islands which are part of the United Kingdom.

The four weeks we are talking about are from Monday (day/month) through to last Sunday (day/month).

Please include any trips taken where the main destination was abroad but where you stayed away from home in the UK or Ireland as part of that trip.

To ensure only information on GB trips was collected the questionnaire was amended for 2011 to subsequently filter out those respondents who had only taken a trip to the Republic of Ireland or Northern Ireland in the previous four weeks. See revised questionnaire in Appendix A below.
Percentage of sample reporting trips

During 2017, respondents were asked to report about trips taken in the last 4 weeks. As can be seen from the table below, this typically amounted to between 7% and 19% of respondents reporting such trips – with major seasonal variations across the year, coinciding with main holiday periods, bank holidays and seasonal holidays:

<table>
<thead>
<tr>
<th>Fieldwork Wk</th>
<th>% Reporting Trips</th>
<th>Fieldwork Wk</th>
<th>% Reporting Trips</th>
<th>Fieldwork Wk</th>
<th>% Reporting Trips</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>13%</td>
<td>18</td>
<td>13%</td>
<td>35</td>
<td>16%</td>
</tr>
<tr>
<td>2</td>
<td>14%</td>
<td>19</td>
<td>15%</td>
<td>36</td>
<td>19%</td>
</tr>
<tr>
<td>3</td>
<td>11%</td>
<td>20</td>
<td>13%</td>
<td>37</td>
<td>16%</td>
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<tr>
<td>4</td>
<td>10%</td>
<td>21</td>
<td>11%</td>
<td>38</td>
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<tr>
<td>5</td>
<td>7%</td>
<td>22</td>
<td>12%</td>
<td>39</td>
<td>15%</td>
</tr>
<tr>
<td>6</td>
<td>8%</td>
<td>23</td>
<td>15%</td>
<td>40</td>
<td>13%</td>
</tr>
<tr>
<td>7</td>
<td>9%</td>
<td>24</td>
<td>13%</td>
<td>41</td>
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</tr>
<tr>
<td>8</td>
<td>8%</td>
<td>25</td>
<td>14%</td>
<td>42</td>
<td>12%</td>
</tr>
<tr>
<td>9</td>
<td>10%</td>
<td>26</td>
<td>11%</td>
<td>43</td>
<td>12%</td>
</tr>
<tr>
<td>10</td>
<td>10%</td>
<td>27</td>
<td>12%</td>
<td>44</td>
<td>15%</td>
</tr>
<tr>
<td>11</td>
<td>9%</td>
<td>28</td>
<td>12%</td>
<td>45</td>
<td>11%</td>
</tr>
<tr>
<td>12</td>
<td>9%</td>
<td>29</td>
<td>13%</td>
<td>46</td>
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<tr>
<td>13</td>
<td>10%</td>
<td>30</td>
<td>13%</td>
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</tr>
<tr>
<td>14</td>
<td>10%</td>
<td>31</td>
<td>14%</td>
<td>48</td>
<td>12%</td>
</tr>
<tr>
<td>15</td>
<td>11%</td>
<td>32</td>
<td>16%</td>
<td>49</td>
<td>11%</td>
</tr>
<tr>
<td>16</td>
<td>12%</td>
<td>33</td>
<td>14%</td>
<td>50</td>
<td>9%</td>
</tr>
<tr>
<td>17</td>
<td>14%</td>
<td>34</td>
<td>15%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The change in the method of data collection from telephone interviewing to an in-home face-to-face approach utilising TNS’s weekly RSGB Omnibus survey in May 2005, necessitated a review of the questionnaire to adapt it for CAPI use (Computer Assisted Personal Interviewing). In addition, the client group was keen to rationalise the length of the questionnaire and remove questions no longer deemed essential.

In recent years there have been further updates to the questionnaire, following the inclusion of CAPI interviewing. The most recent version of the questionnaire conducted in 2017 is appended, alongside a copy of the instructions provided to the interviewer. These documents are located on page 134.
Imputation Approach

For imputation purposes data has been analysed within imputation (fieldwork) periods. These are generally made up of four or five ‘trip-reporting’ weeks consistent with the monthly reporting periods. This allows for a viable number of interviews from which to perform the imputation and adequate control of seasonality. Figure 7 below shows the imputation periods for 2017.

The final GBTS Dataset being made available to users must be capable of analysis at the weighted individual data level. This requirement means that the applied solution should be at the individual data record level, rather than via some form of modelling or interpolation. This permits the data to be analysed by any combination of variables. Furthermore, the results produced, subject to rounding error, will be identical for all users if the analysis is carried out correctly and the database is uncorrupted.

This approach thus requires the calculation of a ‘probable’ value to replace each missing value. Imputation for the earlier period of the survey has been made more complex by the use of different detailed questions. This has necessitated different sets of calculations.

Following extensive analyses by TNS, the solutions implemented are based on common sense principles of sufficient data for reliability and replicability.

**Figure 7 – Imputation Periods**

<table>
<thead>
<tr>
<th>2017 Fieldwork Periods</th>
<th>Weeks</th>
<th>Imputation Months</th>
</tr>
</thead>
<tbody>
<tr>
<td>30 January – 26 February</td>
<td>4</td>
<td>January 2017</td>
</tr>
<tr>
<td>27 February – 3 April</td>
<td>5</td>
<td>February 2017</td>
</tr>
<tr>
<td>3 April – 30 April</td>
<td>4</td>
<td>March 2017</td>
</tr>
<tr>
<td>1 May – 28 May</td>
<td>4</td>
<td>April 2017</td>
</tr>
<tr>
<td>29 May – 2 July</td>
<td>5</td>
<td>May 2017</td>
</tr>
<tr>
<td>3 July – 30 July</td>
<td>4</td>
<td>June 2017</td>
</tr>
<tr>
<td>31 July – 3 September</td>
<td>5</td>
<td>July 2017</td>
</tr>
<tr>
<td>4 September – 1 October</td>
<td>4</td>
<td>August 2017</td>
</tr>
<tr>
<td>2 October – 29 October</td>
<td>4</td>
<td>September 2017</td>
</tr>
<tr>
<td>30 October – 3 December</td>
<td>5</td>
<td>October 2017</td>
</tr>
<tr>
<td>4 December – 17 December</td>
<td>2</td>
<td>November 2017</td>
</tr>
<tr>
<td>1 January – 28 January</td>
<td>4</td>
<td>December 2017</td>
</tr>
</tbody>
</table>

Imputation over the Christmas period was carried out on data for 6 weeks to ensure consistency over the fieldwork period covering December, which had only two weeks of fieldwork.
Imputation Approach

Expenditure Imputation – Incomplete Data

Expenditure on travel and tourism varies greatly from one person to another and from one trip to the next depending on the purpose, the duration, the participants and the time of the year to name just a few of the influences. The totality of this expenditure builds up from a wide range of specific sub-categories of expenditure e.g. travel, accommodation, entertainment, sustenance, which are not necessarily correlated with each other within any one trip.

It has been recognised through experience that the most accurate estimates that respondents can provide of their expenditure should be constructed via the systematic questioning about each of the major categories of possible expenditure type that a traveller away from home can incur. However, the complexities of trip party composition, combined with the social habits surrounding expenditure decisions and individual payment, result in respondents being either ineligible, or unable to answer accurately and reliably about the absolute sums of money spent. The scale and nature of these incomplete data are such that it is impractical economically, and inaccurate statistically, to reject records for which the data set is incomplete.

It is necessary to provide some form of numeric substitution for these ‘missing values’ to overcome the consequent difficulties that arise at the detailed analysis stage. Survey practitioners have developed a wide range of different approaches to this common problem. Imputation was necessary for missing values where a question has been asked but the respondent could not answer. In addition, values were changed from ‘zero’ expenditure to ‘missing’ where trip details indicate that some expenditure would have been incurred. The methodology used is outlined below.
Imputation Approach

Partner Correction Factor

Firstly, prior to any expenditure imputation, a ‘partner corrected’ expenditure calculation was applied to some of the data. This was applied to expenditures for which the respondent and a spouse/partner were both present. This correction divides expenditure on all items other than “buying clothes” and “other shopping” by two. The rationale for this is that experience on a number of surveys indicates that both of the persons present at the time of that expenditure, if subsequently interviewed, would report it. The exception would be ‘shopping’, irrespective of which one actually made the purchase. This correction has therefore been applied to all partnered purchasing apart from ‘shopping’.

Zero Values

Secondly, some categories of expenditure were recoded to missing value status from zero value, where trip details indicated that some expenditure must have been incurred. A complete list of these categories is given below. This allowed these records to have values imputed and thus be included. The following expenditure categories are not permitted zero values.

Initially re-coded as ‘missing’ values and later imputed.

1. Within “the accommodation bill” spend
   - Hotel
   - Motel
   - Guesthouse
   - Farmhouse
   - Bed & Breakfast
   - Self – Catering
   - Hostel
   - Holiday Camp/ Village
   - Caravan-static not owned

2. Travel costs

Missing values for most recent trips

The last stage for the most recent trips was to impute the missing values. Extensive analysis of the expenditure distributions within various variables concluded that the median value for the category was the most reliable proxy for those missing values. Not all travellers will have expenditure in every possible expenditure category. Hence, so that the correct proportion of valid zero category expenditure was reflected in the imputed records, the missing values were proportionally imputed as non-zero spend and zero spend. Within type of trip, the median partner corrected value was used to impute the non-zero spend.
Calculation Methodology

Weighting and Reporting Periods

The methodology used for weighting and calculations was devised around trip end dates and also the reporting periods of complete calendar weeks designated as reporting months. Details of end date reporting periods and their corresponding fieldwork dates are shown in Figure 8.

The National Tourist Boards requested that results should be for calendar months and based on trip start dates. A complete change to a system based on start dates would have created problems. Long trips can span several months. Hence, a methodology based on start dates would either entail changes of weights whenever a long trip was reported, or delays in reporting results to allow for the collection of data on a small number of long trips. Therefore, it was agreed that weighting would be determined by end date reporting periods and the weights thus calculated would be applied to the start dates of those trips.

### Figure 8 – End Date Reporting Periods

<table>
<thead>
<tr>
<th>Reporting Month</th>
<th>Reporting Period</th>
<th>Fieldwork Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>January ’17</td>
<td>2 January – 29 January</td>
<td>4 January – 26 February</td>
</tr>
<tr>
<td>February ’17</td>
<td>30 January – 26 February</td>
<td>8 February – 26 March</td>
</tr>
<tr>
<td>March ’17</td>
<td>27 February – 3 April</td>
<td>8 March – 30 April</td>
</tr>
<tr>
<td>April ’17</td>
<td>3 April – 30 April</td>
<td>12 April – 29 May</td>
</tr>
<tr>
<td>May ’17</td>
<td>1 May – 28 May</td>
<td>10 May – 25 June</td>
</tr>
<tr>
<td>June ’17</td>
<td>29 May – 2 July</td>
<td>7 June – 30 July</td>
</tr>
<tr>
<td>July ’17</td>
<td>3 July – 30 July</td>
<td>12 July – 28 August</td>
</tr>
<tr>
<td>August ’17</td>
<td>31 July – 3 September</td>
<td>9 August – 1 October</td>
</tr>
<tr>
<td>September ’17</td>
<td>4 September – 1 October</td>
<td>13 September – 29 October</td>
</tr>
<tr>
<td>October ’17</td>
<td>2 October – 29 October</td>
<td>11 October – 26 November</td>
</tr>
<tr>
<td>November ’17</td>
<td>30 October – 3 December</td>
<td>8 November – 17 December</td>
</tr>
<tr>
<td>December ’17</td>
<td>4 December – 31 December</td>
<td>13 December – 28 January</td>
</tr>
</tbody>
</table>
**Calculation Methodology**

**Demographic Weights**

The eligible sample for a reporting period is defined as all respondents that provided information for one or more weeks in that period. A rim weighting procedure is applied to each eligible respondent. The rims used are age by sex, Government Office Region, Social Grade, Presence of Children, and Car Ownership. The target values used in the weighting were expressed in terms of the adult population. This enables trip estimates to be produced as absolute population values. Full details of the rims are given overleaf.

The values to the right were derived from:

a. Census 2011  
b. Broadcasters’ Audience Research Board Establishment Survey  
c. Office for National Statistics Population Projections for 2017

### Figure 9 – Demographic Weighting (000s)

<table>
<thead>
<tr>
<th>Rim by Sex</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male 16-24</td>
<td>3525</td>
</tr>
<tr>
<td>Male 25-34</td>
<td>4335</td>
</tr>
<tr>
<td>Male 35-44</td>
<td>3936</td>
</tr>
<tr>
<td>Male 45-54</td>
<td>4328</td>
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<tr>
<td>Male 55-64</td>
<td>3643</td>
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<tr>
<td>Male 65-74</td>
<td>3034</td>
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<tr>
<td>Male 75-84</td>
<td>1649</td>
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<tr>
<td>Male 85+</td>
<td>557</td>
</tr>
<tr>
<td>Female 16-24</td>
<td>3348</td>
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<tr>
<td>Female 25-34</td>
<td>4282</td>
</tr>
<tr>
<td>Female 35-44</td>
<td>3992</td>
</tr>
<tr>
<td>Female 45-54</td>
<td>4463</td>
</tr>
<tr>
<td>Female 55-64</td>
<td>3767</td>
</tr>
<tr>
<td>Female 65-74</td>
<td>3265</td>
</tr>
<tr>
<td>Female 75-84</td>
<td>2015</td>
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<tr>
<td>Female 85+</td>
<td>991</td>
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<tr>
<td>Total</td>
<td>51128</td>
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<table>
<thead>
<tr>
<th>Rim by Social Grade</th>
<th>Population</th>
</tr>
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<tbody>
<tr>
<td>AB</td>
<td>12988</td>
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<tr>
<td>C1</td>
<td>14319</td>
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<tr>
<td>C2</td>
<td>10765</td>
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<td>D</td>
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<tr>
<td>E</td>
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<tr>
<td>Total</td>
<td>51128</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Rim by Presence of Children</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>36625</td>
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<tr>
<td>No</td>
<td>14503</td>
</tr>
<tr>
<td>Total</td>
<td>51128</td>
</tr>
</tbody>
</table>
Calculation Methodology

**Trip Correction Factor**
Trip data are only available for the three reported trips. Therefore, a trip correction factor is needed to report results in terms of total trips. This factor is calculated for each respondent as the ratio of their ‘eligible trips’ to their ‘eligible reported trips’.

‘Eligible trips’ are those completed in the report month, as defined by the return dates captured for the trips. These values are the ‘total eligible trips’ for each respondent.

‘Reported trips’ are the trips for which data is held in addition to return dates and ‘eligible reported trips’ are any reported trips with a return date in the report month.

The ratio of ‘eligible trips’ to ‘eligible reported trips’ is 1 for all but the few respondents that claimed four or more trips in their reporting period and whose fourth or later trip is in the report month.

**Partial Reporting Factor**
Respondents report on their trips in the four weeks prior to their interview. Hence, they provide data on a varying number of weeks of the report period. On average four sevenths of the eligible sample provide data in a week for a month consisting of four weeks and half \([4/8]\) for a month consisting of five weeks. The sum of the weights of the respondents in each week is increased to the total population to correct for this partial reporting. The partial reporting factors to do this are the reciprocals of the values above, 1.75 \([7/4]\) for a four weeks’ month and 2.0 \([8/4]\) for a five weeks’ month.

**Child Trip Correction Factor**
The child trip correction factor is the ratio of the number of children on a trip to the number of adults on that trip. This ‘shares out’ the children present among the adults on the trip and thereby gives child trips an equal probability of inclusion in the data. This is zero if children were not present on the trip.

It should be noted that this only makes allowance for children that take trips with adults. It does not make any allowance for child trips unaccompanied by an adult.

**Overall Weight**
The overall weight for each respondent is the product of their rim weight, trip correction factor, and partial reporting factor.

The overall weights are used in the calculation of published trip related values for the report period. For example, the number of adult trips in the month is the sum of the products of the number of ‘eligible reported trips’ and the overall weight. Similarly, the number of adult nights away is the sum of the products of the nights away on each trip and the overall weight. The distribution of trip purposes is obtained by summing the products of each trip purpose and the overall weight.
Changes to data processing

Trips with missing travel and accommodation detail

As mentioned above, some missing data has to be imputed (estimated) for affected trips using other information from the survey. However if that information is also not provided by the respondent then these estimates will be less accurate. Therefore in 2016 a change was made to the process for dealing with trips where respondents did not provide certain information:

- The type of accommodation they stayed in
- Whether they were travelling with other people
- What form of transport they used
- If they were on a package trip

The previous data processing approach allowed these respondents’ data to remain in the database and any missing spend data were imputed using a nominal average spend amount. However, when designing the data processing approach for 2016 onwards a new rule was introduced, to remove respondents where at least three of these four pieces of information was not provided. This was felt to be more accurate, since having respondents in the database where all of their spend data was just the survey average added little to the validity of the data.

Trips with large claimed spend amounts

The previous data processing approach set limits on how large the claimed spend on particular types of expenditure was allowed to be. This was to prevent mistakes by respondents or interviewers from overinflating the reported expenditure amounts. These spend limits were set in 2005 and had not been increased to account for inflation. If a claimed amount of spend exceeded the limit it was automatically reduced to that limit. Two changes were made for 2016 onwards. The limits for each spend type were re-evaluated in the context of 2016 trip costs and revised. Now, if claimed spend exceeds these limits the data for the entire trip is examined and a decision taken about what the appropriate levels of spend for the trip are. This is felt to be more accurate, as simply reducing large spend amounts to the upper limit for the relevant spend type creates an arbitrary peak in the data at these particular spend amounts.
Changes to data processing

**Trips with large claimed party sizes**

In the previous data processing approach, trips with a party size of ten or more were automatically reduced to a value of nine or lower. This was changed with the new processes to allow a party size of ten or more within the data. In the new process, trips with a party size of ten or more are manually examined on a range of criteria to determine if the stated party size appears realistic. If not it is edited to a more credible party size. On average around 2.5% of trips have a claimed party size of 10 or more. After being examined, around 90% of these are reduced to a party size of less than 10.

Claimed party sizes of greater than ten typically occur when the respondent is part of a larger trip, such as a hen/stag party, business trip with colleagues, extended family trip, several families travelling together, organised coach trip or school/children’s trip. When they are asked about party size, the wording of the question tries to make clear that respondents should only include other people who they paid for, who paid for them, or they were responsible for. However a few respondents misunderstand this and include everyone they travelled with. It is relatively straightforward to identify and correct these manually, which is the revised process. Since reported trips are “person trips”, rather than physical trips this produces some differences between the volume estimates from the previous and current processes for trips and nights.
Survey Analysis

The following types of analysis are provided by Kantar TNS in relation to the 2017 GBTS data:
- Monthly data tables
- Monthly reports (including 3-month, year to date, and rolling 12 month data)
- 3-Year Average Local Authority and other regional analyses
- Survey Reporter databases
- Special analyses provided to the ONS for transmission to Eurostat.
- GBTS online data viewers
- Quarterly regional reports
- Adhoc reporting as required throughout the year
- GB Tourist, 2017 annual report

Eurostat Analysis

The Eurostat analysis is provided directly by Kantar TNS to the Office for National Statistics. It consists of:
- Monthly estimates of the number of trips and arrivals of residents to certain, strictly defined, types of tourism accommodation
- Annual estimates of trips and arrivals to certain types of tourism accommodation split by UK NUTS regions, degree of urbanisation and coastal locations.
- Annual trip taking behaviour from a single survey in January asking about the full preceding calendar year.

Since these topics do not form part of the core survey of direct interest to the sponsoring national tourist boards, these parts of the contract are not reported in this volume.

Online Data Viewer

In addition to the reports and data tables, Kantar TNS also provide an online data analysis package which allows the client group to access the latest results and undertake pre-defined analysis in a straightforward and user-friendly fashion via the data viewer.

Management Meetings

During 2017, regular meetings of the survey management group and the contractors were held.
The estimates of the number of trips, nights away, and the expenditure on those trips are subject to sampling variation as the data is from a survey. Those sampling variations are quantifiable in terms of confidence limits. For the 2017 GBTS data those values are given in the following table.

### Calculation of GBTS Confidence Limits

The estimates of the number of trips, nights away, and the expenditure on those trips are subject to sampling variation as the data is from a survey. Those sampling variations are quantifiable in terms of confidence limits. For the 2017 GBTS data those values are given in the following table.

<table>
<thead>
<tr>
<th></th>
<th>Trips %</th>
<th>Nights %</th>
<th>Spend %</th>
</tr>
</thead>
<tbody>
<tr>
<td>GB</td>
<td>2.6</td>
<td>3.1</td>
<td>3.5</td>
</tr>
<tr>
<td>England</td>
<td>2.8</td>
<td>3.3</td>
<td>3.8</td>
</tr>
<tr>
<td>Scotland</td>
<td>6.5</td>
<td>7.8</td>
<td>8.7</td>
</tr>
<tr>
<td>Wales</td>
<td>5.9</td>
<td>9.9</td>
<td>9.5</td>
</tr>
</tbody>
</table>

It must be emphasised that sampling variation is not the only possible source of error. Others include bias through non response and measurement errors caused by memory distortion and/or lack of knowledge of the respondent. These are not quantifiable and can affect the survey results. In particular it is often difficult for respondents to recall expenditure on trips with high levels of accuracy. Nevertheless, it is possible to state, for example, that assuming no bias, the true value of the number of GB trips in 2017 will lie in the range of plus or minus 2.6% of the estimate on 95% of occasions.
To open the file(s) mentioned above, please download the report from your web browser and open the report with Adobe Reader. When you have done so, navigate to the left hand side of the page to the attachments area, symbolised by a paperclip icon, and click on the relevant file to open the attachment.
Definitions of Regions

The regions of England, Scotland, Wales and Northern Ireland by which destination of trip is analyses in United Kingdom Tourism Survey reports are as follows:

**England**

*Cumbria: County of Cumbria*

*Northumbria: Northumberland, Durham, Tyne & Wear, Tees Valley*

*North West: Lancashire, Merseyside, Greater Manchester, Cheshire*

*Yorkshire: North Yorkshire, West Yorkshire, South Yorkshire, East Riding of Yorkshire, Kingston upon Hull, North Lincolnshire, North East Lincolnshire*

*Heart of England: Staffordshire, Shropshire, West Midlands, Warwickshire, Herefordshire, Worcestershire, Gloucestershire (except South Gloucestershire), Derbyshire, Leicestershire, Northamptonshire, Nottinghamshire, Rutland, Lincolnshire*

...cont’d

*East of England: Norfolk, Suffolk, Cambridgeshire, Essex, Bedfordshire, Hertfordshire*

*London: Greater London*

*South West: Cornwall, Devon, Somerset, Wiltshire, Western Dorset, South Gloucestershire*

*Southern: Hampshire, Isle of Wight, Eastern Dorset, Berkshire, Buckinghamshire, and Oxfordshire*

*South East: Kent, Surrey, East Sussex, West Sussex*

In most of the English level analysis, the above regional destinations are also combined, where appropriate, to allow analysis in each of the regions:

West Midlands

East of England

East Midlands

London

North West

North East

South East

South West

Yorkshire
Definitions of Regions

Scotland

Highlands & Islands: Highland, Western Isles, Orkney, Shetland

Aberdeen & Grampian: Aberdeen City, Aberdeenshire, Moray

Angus & Dundee: Angus, City of Dundee

Perthshire: Perth & Kinross

Argyll, the Isles, Loch Lomond, Stirling & Trossachs: Argyll & Bute, Clackmannanshire, Dumbarton and Clydebank, Falkirk, Stirling

Kingdom of Fife: Fife

Greater Glasgow and Clyde Valley: City of Glasgow, East Dunbartonshire, East Renfrewshire, Inverclyde, North Lanarkshire, Renfrewshire, South Lanarkshire

Argyll & Arran: East Ayrshire, North Ayrshire and South Ayrshire

Edinburgh & Lothians: City of Edinburgh, East Lothian, Midlothian, West Lothian

Dumfries & Galloway: Dumfries & Galloway

Scottish Borders: Scottish Borders

HIE Area Highland and 3 Island Councils of Scotland plus Argyll and Moray

From 2009 onwards, the primary Scottish levels analysis has been at the newly defined macro-tourism areas:

Scotland – North – (Highlands & Islands, Aberdeen & Grampian, Western and Northern Isles)

Scotland – West – (AILLST, Glasgow & Clyde Valley, Ayrshire & Arran)

Scotland – East – (Perthshire, Angus & Dundee, Kingdom of Fife, Edinburgh & Lothians)

Scotland – South (Dumfries & Galloway, Scottish Borders),

Edinburgh

Glasgow
Definitions of Regions

Wales

North Wales: Anglesey, Conwy, Denbighshire, Flintshire, Wrexham, Gwynedd

Mid Wales: Ceredigion and Powys

South West Wales: Neath/Port Talbot, Carmarthenshire, Swansea, Pembrokeshire

South East Wales: Bridgend, Rhondda Cynon Taff, Merthyr Tydfil, Caerphilly, Blaenau Gwent, Torfaen, Vale of Glamorgan, Cardiff, Newport, Monmouthshire
Application of updated boundary changes on GBTS datasets

In 2013, VisitEngland and TNS agreed to make changes to the data to reflect the latest local authority (LA) boundary changes (i.e. towns moving from one LA to another).

The GBTS place name gazetteers were changed so that LAs and counties were in line with the latest recognised boundaries. At the same time, the gazetteers were also updated to reflect the new LEP (local enterprise partnership), Parliamentary Constituency and Eurostat locality type definitions (proximity to the sea and degree of urbanisation).

Some towns had not only moved at the LA and county level, but had also moved from one region to another and even from England to Wales. Further changes were made to the GBTS database so that not only were the LA and counties amended, but the regions and nations were also followed through (i.e. sum of LAs matched county, sum of counties matched region, sum of regions matched national figures).
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The statutory tourist boards and Visit Wales (the Tourism Department of the Welsh Government) jointly sponsor the GBTS.