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Updating the Day Visitor Indicator A Report for the ODPM

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Contents

1.	Introduction	1
2.	Data Sources	2
2.1.	Data Used for Estimating the Statistical Models	2
2.2.	Data Used for Grossing Up the Statistical Models to the Population Level	6
3.	Methodology	9
3.1.	Model Selection Criterion	9
3.2.	Estimating Number of Day Trips	10
3.3.	Estimating the Number of Day Visitors	14
4.	Police and Fire Authority Day Visitors	15
5.	Results	16
5.1.	Trip Generation Models	16
5.2.	Local Trip Proportion Estimates	18
5.3.	Trip Allocation Model Estimates	19
6.	Estimated Day Visitors	22
Appendix A. Estimating Trips Based on Typical Party Composition		33
A.1.	Estimating the Proportion of Trips made by Different Party Compositions within the Same Local Authority and Those that were made to Other Local Authorities	33
A.2.	Estimation of the Total Number of Day Visits by Part Composition Type	34
A.3.	Estimating Day Visitors by Part Composition Type	34
A.4.	Multinomial Logit Models	34
A.5.	Estimated Day Visitors Based on Typical Party Size	43
Appendix B. Trip Type Compositions		54
Appendix C. Social Grade Definitions		56

1. Introduction

This report outlines NERA's approach to updating the Day Visitor Indicator used in the FSS resource allocation formulae. The current indicator is based on a methodology developed by the Centre for Urban and Regional Development Studies (CURDS) in 1993 drawing on survey data from the late 1980s and earlier census data. NERA has been asked by the Office of the Deputy Prime Minister (ODPM) to update this work, drawing on the most recently available data, replicating the previous approach where possible.

This report explains our approach, describes the statistical results and presents the resulting estimates of the number of day visitors by Local Authority for England. In addition, we were also asked to present results for the number of day visitors by Police and Fire Authorities for England and the number of day visitors by Police Authority in Wales.

As requested, we have followed the CURDS methodology, although there are areas where we have varied the approach in response to technical or data issues. For instance, advances in computing power have made it possible for us to adopt approaches that make fuller use of the available data, and some differences in the source data we were given has meant that we cannot fully replicate the CURDS approach. In general, however, our methodology is conceptually similar to the methodology adopted by CURDS.

This report is structured as follows:

- In Section 2 we discuss the sources of data we used in the analysis, including comparing the data with that used by CURDS in the original analysis.
- Section 3 discusses the steps to completing the analysis, including outlining the econometric approach, the distribution of day visitors across Local Authorities and the aggregation of results.
- Section 4 briefly describes how the Police and Fire Authority figures were calculated.
- Section 5 provides more details on the results of the individual econometric models used.
- The estimated number of day visitors for Local Authorities, Police Authorities and Fire Authorities for England and Police Authorities in Wales are reported in Section 6.

Two Appendices are also included. The first outlines the impact of an alternative approach to moving from the number of day trips to the number of day visitors. The second details how we have grouped different types of trips together in the analysis.

2. Data Sources

This section summarises the data collected and prepared by NERA for analysis and estimation of the Day Visitor Indicator. We also compare the data to that used in the previous CURDS analysis. Four pieces of information were required for the estimation of the number of day visitors:

1. characteristics of households making day trips (such as the size of the household);
2. destination characteristics (on outdoor, primary, queued and residential attractions);
3. trip characteristics (distance travelled); and,
4. population characteristics at the Local Authority level (such as proportion of households in a particular Local Authority with a child).

The first three of these were required for estimating statistical models on people's trip making behaviour, such as how important it is to have a car and how important distance is in deterring travel. The last piece of data was used to gross up these models to the population level, estimating the total number of trips made from Local Authorities and then estimating the number of these trips that are made to other, destination, Local Authorities.

2.1. Data Used for Estimating the Statistical Models

2.1.1. Great Britain Day Visits Survey 2002/2003

In the CURDS study the 1988/89 Leisure Day Visits Survey (LDVS) data were used. NERA has used the updated 2002/2003 version of this survey which is now known as the Great Britain Day Visits Survey (GBDVS).¹

The 2002/2003 GBDVS was a survey conducted by TNS Global and was commissioned by a consortium of national agencies and Government departments.² The survey sampled a number of households in England, Wales and Scotland³ spread over the course of a year. The information contained in the GBDVS data and used in this study includes the following:

- Respondent characteristics: employment, social grade, employment status, age and state of health (disability).
- Respondent's household characteristics: size, composition (number of adults and children), car ownership and location (region).

¹ The GBDVS data was provided by the Countryside Agency.

² Details of the GBDVS can be found in the material supplied with the GBDVS (Great Britain Day Visits Survey, 2002; Main Report and Technical Report).

³ Wales and Scotland are in actual fact over represented in the GBDVS sample because of a desire to have data for which estimation could be carried out for each country separately as well as when aggregated together.

- Trip characteristics: trip purpose, round trip distance travelled, composition of trip party (i.e. alone, a couple, adults and children, etc) and destination (county).

For each respondent the GBDVS contains up to seven detailed trip records, and a further seven less detailed trip records, on the trips made by the respondent in the two weeks before the interview. Each trip record contains information on a main destination and a secondary destination (if any).⁴ Restricting the number of destinations per trip record is estimated by TNS Global to have censored 1.5 per cent of destinations per trip record.⁵

There are two particular characteristics of the GBDVS data that have limited our estimation. The first regards the recording of the respondent's origin and destination per trip, which are only reported at the regional and county levels, respectively. This low level of detail on each trip origin and destination had serious implications for the accuracy of the distance data that we calculated for each trip (see Section 2.1.5).⁶

The second regards the reporting of the number of people on a day visit (i.e. were they alone or part of a larger group).⁷ Ideally the GBDVS would have recorded the total number of people on any particular day visit. The GBDVS, however, reports only a categorical variable, concealing the actual number of day visitors on trips where there were more than two people.

As for the comparability between the LDVS used by CURDS and the GBDVS used in this analysis, there are a couple of differences. The first is the recording of visits: the LDVS only recorded information on 'leisure day visits', whereas the GBDVS recorded information on 'day visits', which includes 'leisure day visits'. This means that those trips shorter than 3 hours or whose 'round trip' distance was less than 20 miles were excluded from the LDVS, but were included in the GBDVS.⁸ Since the GBDVS includes all trips that are classed as day visits, i.e. those made during the course of a day where the respondent starts and finishes the day from home, NERA has been able to carry out estimation on data that is not censored by trip distance or duration.

It was agreed with the ODPM that estimation should proceed without censoring the data, as opposed to using only data for 'leisure day visits' as was used in the CURDS analysis. There are a number of reasons for this:

⁴ There is therefore a maximum of 28 possible destinations recorded per respondent.

⁵ In the estimation stages a correcting factor is used to take account of this under recording.

⁶ The trip distances (calculated using GIS software) for each trip in the GBDVS were, as a result of the lack of origin and destination detail, measured with error. In the case of England this measurement error was significantly high. This can result in biased estimated coefficients.

⁷ This is referred to as the party composition.

⁸ Estimating the Numbers of Day Visitors to each Local Authority: Phase 1 Final Report; Section 4, paragraph 2.

- Trips less than 20 miles represent 81 per cent of the observations in the GBDVS data used by NERA.⁹ Excluding these would decrease the sample size considerably and have implications for the modelling.¹⁰
- Responses to the question regarding the total distance of the ‘round trip’ are self-reported and hence may be incorrectly reported by the respondent. Therefore eliminating trips based on this variable could selectively bias some trip types more than others.¹¹
- Excluding these trips will mean that no sensible estimation for the number of day visitors within the same Local Authority, required for the Police Day Visitor Indication, will be estimated, since these will have been excluded from the estimation process.

The second difference between the LDVS used by CURDS and the GBDVS received by NERA is that the 1988/1989 LDVS gave no indication of whether the trips that it recorded were taken from home or from holiday. This posed a significant problem for the CURDS analysis, since ‘leisure day visits’ from holiday follow a different process to those made from home.¹² The GBDVS, however, contains separate information for holiday and home-based ‘leisure day visits’. For the purpose of the analysis carried out by NERA leisure day visits made whilst on holiday are excluded from the analysis. This was agreed with the ODPM because of the significant difficulty of estimating the number of trips made from Local Authorities by people on holiday in those Local Authorities, for which there is no equivalent to the census data used to gross up the home-based trips.

2.1.2. Visit Britain Data

To proxy the attractiveness of a particular Local Authority for queued attractions the CURDS report used data on the number of ‘facilities and other attractions’ obtained from the British Tourism Authority. For this study, NERA used updated information on the number of ‘facilities and other attractions’ in the UK from Visit Britain.¹³ The data received was an almost exhaustive list of attractions, containing information on over 7,000 different attractions in the UK. Nevertheless, the data is still limited since outdoor sporting events, such as particular football matches, are not included in the data.

⁹ This contrasts with the 1988/1989 LDVS data, for which only 36.7 per cent of trips made were below the 20 mile ‘round trip’ distance cut off (Estimating the Numbers of Day Visitors to each Local Authority: Phase 1 Final Report; Section 4, paragraph 1). It should be noted that although data on trips of less than 20 miles were excluded from the LDVS analysis carried out by CURDS, these data were available on a confidential basis. This allowed CURDS to estimate the percentage of trips excluded as a result of the 20 mile ‘round trip’ exclusion whilst not being used in the main analysis.

¹⁰ Eliminating observations based on ‘round trip’ distance travelled would bias the results, since the elimination of observations would not be random. Essentially, if the importance of distance is a concave function, then eliminating shorter distances will bias down the estimated importance of distance.

¹¹ This refers to the bias introduced in the previous point. The issue here is that the reported distance travelled for some trips may be under or over reported systematically. Eliminating trips based on this variable may therefore lead to a greater bias on some trip types than others.

¹² Whilst on holiday people’s trip making behaviour is likely to be different to that of people not on holiday. People on holiday will have more time and desire to make day trips than those at home or at work.

¹³ ‘Visit Britain’ is the new name for the British Tourism Authority.

The data received by NERA included visitor numbers for a number of the 7,000 attractions included in the dataset.¹⁴ This meant that there was more information available in the data received by NERA than that used by CURDS, which allowed the creation of a ‘visitor number’ variable. This extra ‘visitor number’ variable, which was believed to capture better the attractiveness of an area based on its queued attractions,¹⁵ allowed NERA to augment the statistical modelling stages to produce improved parameter estimates.¹⁶

2.1.3. Labour Force Survey Data

To proxy the attractiveness of a particular Local Authority for primary services, such as going shopping or to a restaurant, the CURDS study used figures for the number of high street employees from the 1989 census of employment.¹⁷ NERA has obtained equivalent employment data for England and Wales from the Labour Force Survey Dataservice for 2003. Data for Scotland was obtained from the Scottish Executive website. The employment data obtained by NERA includes the number of employees in a Local Authority for a number of high street related categories, such as the total number of people employed in the retail sector.

2.1.4. Ordnance Survey Data

In the CURDS analysis the size of Areas of Outstanding Natural Beauty (AONBs) and National Parks was calculated using digitised Ordnance Survey data: size was then used to proxy the attractiveness of a particular Local Authority for outdoor trip attractiveness. NERA has obtained equivalent Local Authority level data on the sizes of AONB and National Parks. NERA has also obtained data on the total size and length of coast line for each Local Authority in the UK, which should provide a better proxy for outdoor attractiveness than simply Areas of Outstanding Natural Beauty and National Park sizes. The sources for this data are the ODPM and the Scottish National Heritage Annual Statistical Reports.

2.1.5. Trip Distance Data

To analyse the affect of distance as a trip deterring factor, NERA obtained centroids¹⁸ for Local Authorities in England and Wales from the Office of National Statistics. Combining these centroids with Local Authority populations allowed us to calculate centroids on a

¹⁴ Visitor numbers were available for approximately 2000 attractions in England and 150-200 in Wales and Scotland.

¹⁵ It was believed that visitor numbers captures the scale of attractions in a Local Authority, as opposed to the mere existence of attractions, which is captured by the number of attractions variable.

¹⁶ Essentially including more information in the statistical modelling stages improves the robustness of parameter estimates. There is a potential risk that including more and more variables, which has the effect of reducing the degrees of freedom, can result in a fall in significance of some other parameters, due to the problem of multi-collinearity. Given the large number of observations available and the parsimony of the models used, there were no such multi-collinearity problems created by the inclusion of a ‘visitor number’ variable in the analysis conducted by NERA.

¹⁷ The 1989 census of employment was used in phase 2 of the CURDS analysis, whereas the 1981 version was used in phase 1.

¹⁸ Population weighted centre points.

district and regional level for England and Wales. These population weighted centre points were then combined with non-population weighted centre points for districts in Scotland.¹⁹

Using GIS software²⁰ NERA produced two distance matrices. The first, used in the trip allocation modelling (Section 3.2.4), was a matrix of distances between all possible origins and destinations as reported in the GBDVS. This is a matrix of distances between regions and counties; this was the highest level of detail recorded in the GBDVS and was attached to the GBDVS to obtain a calculated distance of travel for each recorded trip.

The second matrix, used in calculating the total number of trips to Local Authorities (Section 3.2.5), contained distances between all of the population weighted and non-population weighted centre points for Local Authorities in England, Wales and Scotland.

2.2. Data Used for Grossing Up the Statistical Models to the Population Level

The only piece of data used in the grossing stage was 2001 census data supplied by the ONS. CURDS used the 1981 census data in their phase 1 analysis and the 1991 data in their phase 2 analysis.

The census data collected and used by NERA differs from that used by CURDS in that it contains more information, which the CURDS analysis excluded. We created a census pseudo-sample using data on the number of households for each Local Authority for the following characteristics:

¹⁹ These were calculated using GIS software. Note that population weighted centre points were not available for Scotland so non-weighted centre points were used in their place. This should not be of significant consequence to the estimated effects of distance since the non-weighted centre points are plausibly good proxies for the population weighted centre points.

²⁰ Specifically TransCAD (Caliper)

Table 2.1
Characteristics Data

Characteristic	Category 1	Category 2	Category 3
Age of household head	Below 35	Between 35 and 49	50 or over
Social grade of household head ²¹	In groups A or B	In groups C1 or C2	In groups E or D
Employment status of household head	Has job	Does not have job	N/A
Car ownership of household	Has car	Does not have car	N/A
Household size	One person	Two people	Three or more people
Adult composition of household	Single adult	Multiple adult	N/A
Child composition of household	Has children	Does not have children	N/A
Ability of household head	Not disabled	Disabled	N/A
Ethnicity of household head	White	Non-white	N/A

This table contains the titles of pieces of data that were collected from the 2001 census.

These data were supplied in tables in the census in the form of two and three-way distributions, such as:

- Table A Age x Children x Social Grade
- Table B Age x Economic Activity
- Table C Economic Activity x Disability

Successively applying these distributions to each other (i.e. applying the distribution in Table A to that in Table B, and then applying this to the distribution in Table C, etc) allowed the creation of a census pseudo-sample. Given the characteristics in Table 2.1, above, there are 1728 different possible combinations of household characteristics and therefore 1728 different household types in the census pseudo-sample. Associated with each of these household types is the number of households in each Local Authority with the particular household characteristics for the specific household type.

Since the process of successive multiplications of distributions, described above, assumes that each distribution is independent of the other, the census pseudo-sample is, at best, an approximation. The census pseudo-sample is, however, much better than sacrificing all information on household characteristics available to this analysis.

²¹ See Appendix C for definitions.

To maintain the nature of a sample – and to randomise the results across local authorities – the numbers of households were converted to the nearest integer and all observations with zero households were dropped. A scaling procedure was also implemented so as to match the total number of households in each local authority in the sample with the total numbers of households reported in the census.

3. Methodology

The methodology used by NERA to estimate the total number of day visitors is described in this section. There are two stages; the first details the estimation of trips, the second details the estimation of day visits. Trips were initially split according to the reported trip purpose into four non-overlapping types:²² outdoor, primary, queued and residential. For each of these groups the following analysis was applied:

1. Estimation of the average number of trips of the relevant type made by each household type.
2. Estimation of the proportion of these trips classified as “local” (i.e. round trips of less than 20 miles and treated as being within the same Local Authority) and as “other” or non-local (i.e. trips made to other Local Authorities as destinations).
3. For “other” trips we estimated a trip allocation model, which distributes trips made from any given local authority to all reasonable potential destinations based on household and destination characteristics.
4. The outcome of the previous steps resulted in a large data file containing the average number of trips per year (of each type) made by each household type located in each Local Authority made to a “local” destination or to all possible local authority destinations. This file was then collapsed to generate the total number of trips of each type made to each Local Authority, separated by “local” and “other” trips.
5. Using the average party size by trip type we obtained the number of day visitors to each Local Authority by trip type and in total.
6. Estimating the number of day visitors to the level of each Police and Fire Authority in England and to each Police Authority in Wales.²³

Here the last two steps bring together the estimates for each of the different trip types to estimate the total number of day visitors.

3.1. Model Selection Criterion

In the proceeding analysis model selection was an important element of the statistical analysis. For the larger part of the statistical analysis (i.e. the modelling) the choice of independent variables was determined using a base model, which was then refined to produce specific models for each of the destination categories. Refinement was based on excluding variables from the base model that were not found to be significant at the 10 per cent level, except when:

- There was an intuitively good reason for a particular variable to be kept in the model. These variables were only excluded if they were not found to be significant at the 20 per cent level.

²² Appendix B details the actual allocation of trip purposes to trip types.

²³ This is detailed in Section 4.

- Individual variables from a group of variables derived from a multiple category variables, such as the age dummy variables derived from the age variable, were found to be insignificant at the 10 per cent level. These were included for completeness, again subject to the proviso that no variable significant at less than the 20 per cent level was retained.

These criteria were applied to all but the Multinomial Logit model estimates (see Appendix A) for the party composition for which it is not possible to use such high level model selection criteria. The reason for this is that the Multinomial Logit model estimates a joint set of models for $(n-1)$ choices using a common set of independent variables. A variable that may be insignificant for one choice (e.g. a party composition of two adults only) may be significant for another choice (e.g. a party consisting of adults and children). There were no variables that were clearly insignificant for all choices.

3.2. Estimating Number of Day Trips

3.2.1. Estimation of a Trip Generation Model

The objective of this step was to use survey information from the GBDVS to estimate a model that relates the making of a trip to household and respondent characteristics for which there is information available in the census data. This model was then applied to the census data to estimate the total number of trips made from each Local Authority.

We have modelled the number of trips of each type taken by each household within the two week period of the GBDVS interview using a Negative Binomial model, which is a generalisation of the standard Poisson model for count data. The generalisation relaxes the assumption of the Poisson model that the variance of the distribution is equal to the mean, since this assumption was consistently rejected at a very high level of significance in our tests.²⁴

Our analysis differs from the method used in the CURDS analysis for two reasons:

- The dependent variable in the CURDS analysis was the number of visitor-trips for each type of trip (i.e. the product of the number of trips and the average party size per trip).
- CURDS used linear regression analysis to model the data. This is statistically inappropriate because of the nature of the data. In our sample, 1,403 out of 6,600 households covered in the survey reported no day trips within the period covered by the survey. The proportion of households which did not take any trips for specific purposes – especially outdoor and queued – was even larger. Hence, while negative values are not permitted, the data contains a large number of observations where the dependent variable is zero. To obtain a good fit for such data a linear regression model must imply that some types of household have a negative average number of trips. Further, the statistical assumptions underpinning linear regression analysis simply do not apply to count data. For this reason we believe that it is essential to use a model that explicitly allows for truncation at zero and for the fact that the dependent variable must be an integer, because

²⁴ Essentially the tests that we conducted were for over dispersion. This is a test that the variance of the dependent variable is greater than the mean of the dependent variable.

it is a count data variable. The Poisson and Negative Binomial models are the classic models that have been developed to analyse such data.

The variables included in the base model were those available in the GBDVS and also in the census. This was necessary to ensure that the estimated results from the survey data could be applied to census data to produce meaningful aggregate estimates. In the process of selecting the variables for the base model it was on occasion necessary to aggregate up from the level of detail on one dataset to the level of detail on the other dataset. For example, the GBDVS contained more detailed responses on the age of the respondent than the census data. The age groupings from the GBDVS were therefore grouped according to the level of detail in the census data.

Table 5.1 reports the regression results from the Negative Binomial models for each trip type.

3.2.2. Estimating the Proportion of Trips made within the Same Local Authority

For the purpose of this analysis a trip was defined as being within the same Local Authority, or “local”, if the reported distance travelled for the complete “round trip” was reported as being less than 20 miles (i.e. no further than 10 miles in any one direction) or to another Local Authority, or “non-local”, if the reported distance was reported as being greater than 20 miles. This follows from the CURDS analysis where trips with a “round trip” distance of less than 20 miles were excluded for non-local trips.

In this step, the objective was to use the survey data to estimate a model based on respondent and destination characteristics that determined the proportion of day trips that were made within the same Local Authority (based on the reported distance). To do this NERA estimated a Logit model for each type of trip, where the dependent variable was a binary variable equal to one if the trip was a local trip or zero otherwise.

Again, the choice of independent variables were determined using a base model, which was then refined as described at the beginning of this section. Table 5.2 reports the results from the Logit modelling stage for each trip type.

3.2.3. Estimating the Total Number of Trips Made From a Local Authority

This stage combines the models estimated in the previous two stages with the census pseudo-sample to estimate:

- The average number of trips of each trip type, made by each household type in the census pseudo-sample from each Local Authority.
- The proportions of these trips that are local and non-local trips.

In this stage the negative Binomial and binary Logit models, estimated as described above, were used to predict the number of trips made by the households in the census pseudo-sample for each Local Authority in Great Britain (excluding the Isles of Scilly, Orkney, Shetland and the Western Isles on grounds of size and remoteness). Summing the weighted values over the different household types resulted in an estimate of the total number of trips of each type made by the residents of each Local Authority.

3.2.4. Estimation of a Trip Allocation Model

This stage is concerned only with non-local trips, since these need to be allocated to Local Authorities other than the one where they originated. The objective of this stage was to model trip making behaviour in terms of the distance of travel and the characteristics of the destination, the respondent and the respondent's household. The data used for this stage was the GBDVS combined with the distance data created using GIS software.²⁵

For this stage of the analysis, CURDS used a two stage approach in what they call a singly constrained gravity model. In effect, their method relies upon aggregate data on the number of trips from each Local Authority to estimate:

- an exponential distance deterrence function; and,
- a destination attractiveness functions for each type of trip.

Because the method used by CURDS relies upon aggregate trip flows it discards all information on the destination choices made by households. Furthermore, separate estimation of the distance deterrence and attractiveness functions suppresses any interactions between destination characteristics and the distance that visitors are willing to travel.

Mathematically, by converting the attractiveness functions to an exponential specification it is easy to combine the two stages of the CURDS analysis within a single model that can be estimated using the individual trip data. This generalised specification corresponds to a Conditional Logit model, of which the simple Logit is a special case, in which the probability of making a trip from origin 'a' to destination 'b' is a function of:

- Household characteristics – $H[i]$.
- The distance from 'a' to 'b' – $D[a,b]$.
- The attractiveness characteristics of 'b' – $A[b]$.
- Interactions between attractiveness characteristics and distance – $A[b]*D[a,b]$.
- And interactions between household characteristics and distance – $H[i]*D[a,b]$.

In principle, it would also be possible to include interactions between household characteristics and the $A[b]$ plus destination specific effects for different household characteristics. This has not been done in this analysis because this results in a substantial increase in the number of coefficients to be estimated, making estimation cumbersome while adding minimal intuitive value.

As we have noted, our model is a straightforward and standard generalisation of the method adopted by CURDS designed to make much fuller use of the data available. However, it is computationally demanding and we assume that CURDS were unable to examine the

²⁵ As has already been mentioned, the GBDVS only provides trip origin information down to the regional level and destination information down to the county level as opposed to Local Authority level. This resulted in trip distances being measured with error. Given the data provided there is very little that can be done to correct this measurement error, which in the case of England is potentially vary large.

generalised model because of limits on computational resources at the time of their analysis. The particular problem is that it is necessary to create a dataset in which every trip is matched to all possible destinations that could have been chosen. In our analysis, we have 66 possible destinations.²⁶ Therefore the analysis of 2,000 actual trips involves the creation and analysis of a dataset with approximately 130,000 potential trips, subject to exclusions on grounds of the travel distance involved.²⁷ In the past this would have been regarded as a difficult task for the software available, but it is routine today using the current generation of personal computers and advanced statistical software. Even for modern resources there was a restriction on the way in which we were able to use the estimated Conditional Logit model, is discussed below.

Our results are shown in more detail in Table 5.3 which reports the results from Conditional Logit models used in this analysis.

3.2.5. Estimation of Total Trips

This stage is concerned with allocating the total trips estimated above to other Local Authorities based on the results from the preceding step. Because the Conditional Logit model is a non-linear model this step should be done using the full census pseudo-sample, which contains information on each possible household type for each Local Authority, merged with information on all of the possible destinations for each possible trip. However, even after placing restrictions on the possible trips that could be taken, such as ruling out day trips between locations of more than 250 miles apart (Glasgow to North Cornwall for a day trip for example), this would still require a data file of at least 129 million observations. This was simply too large to handle given the time constraints of this project and the limitations of the available software.

To overcome this problem, the census pseudo-sample containing information on each household type was collapsed to the Local Authority level, with mean values of the household characteristics being created for each Local Authority. The results from the Conditional Logit modelling were then applied to this data to calculate the proportion of trips made to each Local Authority from other Local Authorities by trip type. Because of the non-linearity of the Conditional Logit model, this is not completely theoretically correct, although the effect is likely to be of only second-order importance and therefore of insignificant consequence to the estimated results.

Following the above steps it was then possible to calculate the number of trips to each Local Authority by trip type. These were then scaled up to account for both the censoring on the

²⁶ These are the recorded counties in the GBDVS. In actual fact there are 73, these have, however, been reduced by excluding the Isles of Scilly, Isle of Man and the separate Channel Islands.

²⁷ We decided to exclude all trips of over 250 miles one way on the grounds that few, if any, leisure day trips would involve a total journey distance in excess of 500 miles. The number of actual trips excluded from our GBDVS sample on this criterion was less than 20 and on inspection we were doubtful about the reliability of the reported data – e.g. day trips from the Scottish Highlands to the South of England. It is likely that, if correct, this data reflected the inaccuracy of the way in which the geographical locations were recorded in the GBDVS.

number of destinations recorded per trip and to make the results representative of trips per year as opposed to the number of trips made over a two week period.²⁸

3.3. Estimating the Number of Day Visitors

The estimated number of trips made to each Local Authority from the previous sub-section was converted into the total number of day visitors to each Local Authority using the average party size. The average party size is reported in the GBDVS Final Report by main trip purpose, which has then been expanded to the give trip sizes for the each of the broad trip categories defined in the analysis. Using these figures the total number of day visitors was calculated. The party sizes used for this calculation are summarised in Table 3.1.

Table 3.1
Average Group Sizes by Trip Type

Trip purpose	Average party size
Outdoor	2.1
Primary	3.0
Queued	2.8
Residential	2.8

These figures were estimated from those reported in the GBDVS Final report

This led an estimate of the total number of day visitors to each Local Authority. These results are supplied in Section 6.

Appendix A illustrates the impact of an alternative approach to estimating the number of day visitors. Rather than using average group size by type of trip, this alternative converts the estimated number of day trips to the number of day visitors using information in the GBVDS on ‘party composition’ (i.e. whether 1 adult, a couple, a group, etc, made the trip). In practice, the difference between the two approaches is small.

²⁸ The scaling figure was 26×1.015 . This translates the results from the two week sample to the year and also accounts for the censored observations created by only recording two destinations per day trip. The 1.015 is essentially the correcting factor estimated by TNS Global for the under recording of destinations.

4. Police and Fire Authority Day Visitors

Following estimation of the number of day visitors, both those local and non-local trips terminating within a particular Local Authority, it was relatively simple to calculate the number of day visitors to Police and Fire Authorities. These were calculated by aggregating Local Authority estimates. Since Police and Fire Authorities are coterminous combinations of Local Authorities the aggregation process is a simple summing process. A key difference in the count of visitors to that described earlier is that these estimates include visitors travelling within the same Police or Fire Authority.

For these estimates the ODPM requested that three figures be reported:

- Local day visitors: visitors whose trips originate and terminate within the same Local Authority for all Local Authorities in the Police or Fire Authority.
- Non-Local visitors (excluding residential visits): non-residential visitors whose trips terminate in the Local Authority, but whose trips originated in different Local Authorities, for all Local Authorities in the Police or Fire Authority.
- Non-Local visitors (including residential visits): all visitors whose trips terminate in the Local Authority, but whose trips originated in different Local Authorities, for all Local Authorities in the Police or Fire Authority.

The actual detail of the calculation of the currently used Police and Fire Authority day visitor numbers is unknown. Therefore, the figures reported from this analysis may be revised in light of further information received on the methodology used to calculate these figures.

Day visitors for each of the above are reported in Table 6.2 to 6.3 for Police Authorities in England and Wales and Fire Authorities in England, respectively.

5. Results

5.1. Trip Generation Models

The results from negative Binomial modelling described in Section 3.2.1 are reported in Table 5.1 below.

In the base model, following the above discussion, the respondent or respondent's household was assumed to have the following characteristics:

- white;
- aged 50 or above;
- not disabled;
- either in social grades D or E;
- does not have a job;
- a household containing at least two adults;
- a household with no children;
- a household consisting of less than 3 people;²⁹ and,
- a household with no car.

²⁹ This and the above imply that the base household consists of 2 adults only.

Table 5.1
Negative Binomial Model Estimates

	Outdoor Trips	Primary Trips	Queued Trips	Residential Trips
More than three people in household	-0.246 (2.34)*			
Respondent disability	-0.191 (-1.33)	-0.206 (2.43)*	-0.273 (-1.58)	
Non-white	-0.316 (-1.35)	-0.296 (2.04)*	-0.545 (2.13)*	
Car ownership	0.485 (3.61)**	0.171 (2.47)*		0.383 (3.67)**
Respondent aged between 16 and 34		0.589 (8.23)**	0.362 (2.69)**	
Respondent aged between 35 and 49		0.339 (4.16)**	0.432 (3.13)**	-0.307 (3.57)**
Respondent in either social grades A or B		0.541 (6.79)**	0.556 (3.48)**	0.384 (3.68)**
Respondent in either social grades C1 or C2		0.351 (4.85)**	0.393 (2.56)*	0.223 (2.35)*
Single adult household		0.210 (3.67)**		0.367 (4.36)**
Children present in household		-0.173 (2.70)**		0.117 (-1.49)

*Notes: Data used are from the 2002/2003 GBDVS. Estimation was carried out over 6,600 observations using negative Binomial models with the inclusion of monthly dummy variables (not reported here for ease of exposition). Independent variables are dummy variable indicators for the group indicated on the left-hand side of the table. Figures in the parenthesis are the reported z-statistics. * indicates significance at the 5 per cent level; ** represents significance at the 1 per cent level.*

One of the key results in the above table is that having a car has a positive effect on making Outdoor, Primary and Residential trips. The other coefficients in the above table should also be interpreted in this way, with reference to the base respondent.

5.2. Local Trip Proportion Estimates

The results from Logit modelling described in Section 3.2.2 are reported in Table 5.2 below:

Table 5.2
Logit Model Estimates

	Outdoor Trips	Primary Trips	Queued Trips	Residential Trips
More than three people in household		0.414 (3.17)**	0.610 (2.53)*	0.421 (3.53)**
Non-white	1.065 (2.70)**	1.711 (6.09)**		0.513 (-1.88)
Car ownership	-0.332 (-1.94)	-0.545 (4.21)**	-0.667 (-1.70)	-0.868 (5.06)**
Respondent aged between 16 and 34	-0.284 (-1.82)	0.244 (-1.91)		
Respondent aged between 35 and 49	-0.661 (4.45)**	0.399 (2.64)**		
Respondent in either social grades A or B		-0.212 (2.38)*	0.421 (-1.18)	-0.417 (3.76)**
Respondent in either social grades C1 or C2			0.988 (2.92)**	
Single adult household		0.227 (2.07)*		0.269 (-1.94)
Children present in household		-0.404 (2.99)**		
Respondent has a job		-0.254 (2.18)*	-0.442 (-1.67)	-0.235 (-1.80)
Observations	5,240	11,104	810	5,616

*Notes: Data used are from the 2002/2003 GBDVS. Estimation was carried out using Binomial Logit models with the inclusion of monthly dummy variables (not reported here for ease of exposition). The number of observations used for each model is indicated at the bottom of the table. Independent variables are dummy variable indicators for the group indicated on the left-hand side of the table. Figures in the parenthesis are the reported z-statistics. * indicates significance at the 5 per cent level; ** represents significance at the 1 per cent level.*

Again the results from this table can be interpreted with reference to the base respondent detailed in Section 5.1 above. In this case the effect of having a job has a negative effect on the probability of making a local trip as opposed to making a non-local trip.

5.3. Trip Allocation Model Estimates

This section details the results from the Conditional Logit modelling described in Section 3.2.4. The choice of variables to include in the Conditional Logit model was based on an intuitive understanding of what drives the choice of destination for a particular type of trip. We started by including distance plus the destination attractiveness variables.

As expected, distance has a negative coefficient that is always highly significant. We dropped attractiveness variables that were not significant at the 10 per cent level, but that left us with some counter-intuitive results that are, nonetheless, strongly supported in statistical terms. In particular the sizes of Areas of Outstanding Natural Beauty or National Scenic Areas in Scotland and of National Parks in each destination were found to have negative and highly significant coefficients in the destination choice model for outdoor trips.

We have investigated a variety of alternative specifications without success³⁰ and believe that the results may reflect some interaction between these variables and the measure of the number of attractions and resources supplied by Visit Britain, which has a highly significant positive coefficient. Intuitively, we thought that visitors may be willing to travel further to visit specific attractions such as the sea or national parks. Hence, we have introduced interactions between distance and dummy variables that take the value 1 if these features are present in a destination and 0 otherwise. In addition, the product of distance and the number of Visit Britain attractions was also included. Moreover, to try and better capture the effect of having large, popular, attractions within a Local Authority a visitor variable was included along with its interaction with distance. The coefficients on these distance interactions are mostly significant and correspond to our initial assumptions, so we retained these variables in the final specification.

Finally, we investigated the hypothesis that certain types of household might be more or less reluctant to travel a particular distance to visit a specific destination. This was captured by interacting the household characteristics with these variables characteristics. Some of these interactions have coefficients that seem to make intuitive sense and are statistically significant. These were retained in the final models, which are presented in Table 5.3 below:

³⁰ The alternative specifications examined included (a) dummy variables for the presence or absence of AONBs, etc; (b) the sizes of AONB, etc as a proportion of the size of the destination authority; and (c) the density of AONBs per 1,000 residents in the destination authority, which is designed to capture the idea of local crowding. None of these alternatives performs as well as the simple size variables in statistical terms. The results for Coastline are more erratic and may reflect the difficulty of obtaining a reliable measure of coastline length.

Table 5.3
Conditional Logit Estimates

	Outdoor Trips	Primary Trips	Queued Trips	Residential Trips
Distance	-0.05824 (15.76)**	-0.04854 (27.43)**	-0.03225 (6.56)**	-0.04807 (12.52)**
(Respondent in either social grades A or B)*distance			0.00834 (-1.93)	
(Respondent in either social grades C1 or C2)*distance	-0.00525 (3.06)**		0.00608 (-1.57)	-0.00292 (-1.71)
(Respondent aged between 16 and 34)*distance		0.00281 (-1.87)		-0.00637 (2.87)**
(Respondent disability)*distance			0.00593 (-1.70)	0.00476 (2.09)*
(Respondent non- white)*distance				-0.01266 (-1.93)
(Car ownership)*distance	0.01224 (3.40)**		-0.0129 (2.85)**	0.00699 (-1.95)
(Children present in household)*distance	-0.00283 (-1.49)	0.00521 (2.70)**		
(More than three people in household)*distance		-0.00501 (2.79)**		
Number of attractions	0.00454 (3.43)**	0.00314 (3.16)**		
Number of visitors to attractions	0.00004 (2.11)*	0.00004 (2.87)**	0.00004 (-1.78)	-0.00003 (2.25)*
Size of Local Authority	0.00014 (3.99)**		0.00015 (3.70)**	0.00023 (7.63)**
Size of AONB	-0.00038 (4.10)**	-0.00021 (3.57)**	-0.00051 (3.08)**	-0.00044 (4.87)**
Size of National Park	-0.00074	-0.00049	-0.00019	-0.00048

	Outdoor Trips	Primary Trips	Queued Trips	Residential Trips
	(8.37)**	(7.93)**	(-1.60)	(5.45)**
Length of coast line	-0.00034	-0.00021		-0.00066
	(2.99)**	(4.27)**		(6.25)**
(Number of attractions)*distance		0.000001		0.000001
		(-1.94)		(3.23)**
(Number of visitors to attractions)*distance	0.00009	0.00006	0.00003	0.00008
	(10.53)**	(4.42)**	(2.83)**	(6.41)**
(Presence of AONB)*distance		0.00443		
		(3.28)**		
(Presence of National Park)*distance			0.00602	
			(3.16)**	
(Presence of coast)*distance		-0.00358		
		(3.44)**		
Population				0.00202
				(4.91)**
Total employment	-0.00592	-0.00796	-0.00394	-0.00587
	(6.77)**	(12.82)**	(3.82)**	(5.40)**
Employment in hospitality	0.06847	0.08608		0.05864
	(5.20)**	(8.81)**		(4.69)**
Employment in retail	0.01946	0.04521	0.04296	
	(2.90)**	(9.75)**	(4.47)**	
Observations	43984	93137	17298	54625

*Notes: Data used are from the 2002/2003 GBDVS. Estimation was carried out using Conditional Logit models. The number of observations are indicated at the bottom of the table. Figures in the parenthesis are the reported z-statistics. * indicates significance at the 5 per cent level; ** represents significance at the 1 per cent level.*

6. Estimated Day Visitors

Table 6.1 outlines our estimates of the number of day visitors by Local Authority. These figures are based on the estimated number of day trips by trip type and the average group size by trip types (see Section 3.3). Tables 6.2 and 6.3 contain comparable results for Police Authorities in England and Wales and Fire Authorities in England.

Table 6.1
Local Authority Day Visitors

Local Authority	Non-Local Visits	Local Visits	Local Authority	Non-Local Visits	Local Visits
East Midlands					
Amber Valley	3,563,037	24,382,040	Ashfield	3,111,444	21,602,760
Bassetlaw	3,598,567	21,106,570	Blaby	3,330,811	19,156,600
Bolsover	3,335,650	13,624,230	Boston	1,576,552	11,158,400
Broxtowe	3,191,560	23,729,980	Charnwood	3,128,769	31,825,500
Chesterfield	3,837,283	20,736,790	Corby	2,421,536	10,135,170
Daventry	3,615,331	15,795,790	Derby City	3,527,489	45,656,680
Derbyshire Dales	4,422,091	14,630,380	East Lindsey	2,012,288	24,802,110
East Northamptonshire	2,473,123	16,781,890	Erewash	3,086,375	23,289,170
Gedling	3,034,657	24,395,900	Harborough	3,264,475	16,971,810
High Peak	4,216,054	18,885,330	Hinckley and Bosworth	3,446,375	21,141,650
Kettering	2,326,972	18,338,470	Leicester City	2,737,000	49,811,280
Lincoln	2,937,498	18,650,800	Mansfield	3,607,712	19,122,800
Melton	3,019,796	10,143,550	Newark and Sherwood	4,320,645	21,559,920
North East Derbyshire	3,670,549	19,205,550	North Kesteven	2,270,040	19,776,380
North West Leicestershire	3,485,790	18,115,890	Northampton	2,607,864	43,649,160
Nottingham	3,181,667	57,726,680	Oadby and Wigston	2,847,741	10,862,570
Rushcliffe	2,856,917	25,106,090	Rutland	2,840,134	7,165,074
South Derbyshire	3,763,467	17,406,110	South Holland	1,882,522	15,489,850
South Kesteven	2,598,365	26,480,580	South Northamptonshire	3,062,094	17,503,060
Wellingborough	2,281,382	14,918,170	West Lindsey	2,946,215	15,855,090

Local Authority	Non-Local Visits	Local Visits	Local Authority	Non-Local Visits	Local Visits
East of England					
Babergh	2,327,321	18,007,470	Basildon	3,085,843	36,524,930
Bedford	2,615,477	31,515,120	Braintree	2,976,628	29,144,290
Breckland	2,282,721	24,844,040	Brentwood	3,865,521	16,143,140
Broadland	1,661,338	26,132,300	Broxbourne	4,167,826	18,480,880
Cambridge	2,209,153	26,078,170	Castle Point	2,211,997	17,436,130
Chelmsford	3,034,995	37,081,380	Colchester	2,727,885	34,940,050
Dacorum	4,106,790	30,936,010	East Cambridgeshire	2,314,482	15,839,880
East Hertfordshire	4,002,656	31,164,380	Epping Forest	4,119,674	27,289,350
Fenland	1,828,134	16,886,670	Forest Heath	2,616,018	12,752,360
Great Yarmouth	1,659,857	17,653,980	Harlow	3,052,033	17,394,860
Hertsmere	3,597,038	20,655,380	Huntingdonshire	2,688,208	35,281,480
Ipswich	2,106,954	25,587,520	King's Lynn and West Norfolk	2,083,112	27,756,970
Luton	3,495,049	34,643,710	Maldon	2,209,464	12,750,680
Mid Bedfordshire	3,376,391	27,716,560	Mid Suffolk	2,342,268	18,381,730
North Hertfordshire	3,817,447	27,397,630	North Norfolk	1,975,664	20,145,470
Norwich	1,677,071	29,200,100	Peterborough	2,281,543	34,414,320
Rochford	2,079,904	16,616,640	South Bedfordshire	3,985,650	24,914,890
South Cambridgeshire	2,542,405	29,858,730	South Norfolk	1,987,617	23,836,250
Southend-on-Sea	2,134,254	37,222,270	St Albans	3,761,515	32,086,610
St Edmundsbury	2,471,134	21,539,710	Stevenage	2,854,436	17,722,380
Suffolk Coastal	1,726,505	24,991,570	Tendring	1,592,742	27,299,300
Three Rivers	4,078,402	18,294,220	Thurrock	4,130,153	30,684,960
Uttlesford	3,153,715	15,192,900	Watford	4,136,412	18,863,220
Waveney	2,062,896	22,341,900	Welwyn Hatfield	4,410,866	21,163,850
London					
Barking and Dagenham	3,604,935	30,764,300	Barnet	4,354,117	69,999,200
Bexley	4,002,382	46,091,920	Brent	3,454,805	45,141,140
Bromley	4,714,786	70,530,790	Camden	3,260,250	54,265,760
City of London	697,663	3,028,000	Croydon	4,190,240	73,566,240
Ealing	4,024,171	61,077,270	Enfield	4,162,675	56,095,270
Greenwich	4,226,583	47,089,100	Hackney	3,203,450	40,481,370
Hammersmith and	3,210,629	45,702,100	Haringey	4,083,403	48,725,050

Local Authority	Non-Local Visits	Local Visits	Local Authority	Non-Local Visits	Local Visits
Fulham					
Harrow	3,654,036	38,653,970	Havering	4,575,144	45,546,230
Hillingdon	4,259,727	51,195,030	Hounslow	3,798,391	44,151,540
Islington	3,455,823	45,618,080	Kensington and Chelsea	5,989,665	47,855,760
Kingston-upon-Thames	4,203,930	37,571,920	Lambeth	4,053,373	65,645,880
Lewisham	4,037,781	55,634,820	Merton	4,140,718	45,466,840
Newham	3,700,349	37,832,390	Redbridge	3,799,837	45,399,840
Richmond-upon-Thames	4,032,136	49,440,460	Southwark	2,217,210	53,616,070
Sutton	4,136,855	44,165,610	Tower Hamlets	3,171,157	40,633,980
Waltham Forest	4,294,062	44,959,590	Wandsworth	3,625,880	76,392,770
Westminster, City of	15,269,329	54,458,590			
North East					
Alnwick	1,824,044	6,566,346	Berwick-upon-Tweed	1,524,735	5,258,049
Blyth Valley	1,697,592	16,484,160	Castle Morpeth	2,691,577	9,868,319
Chester-le-Street	2,460,383	11,164,560	Darlington	2,918,779	20,917,660
Derwentside	2,981,808	16,420,230	Durham	3,221,035	17,521,270
Easington	2,352,855	15,498,220	Gateshead	2,368,814	37,097,730
Hartlepool	2,406,540	16,352,900	Middlesbrough	1,977,264	24,225,800
Newcastle-upon-Tyne	2,059,707	53,588,680	North Tyneside	1,866,355	40,352,710
Redcar and Cleveland	2,189,896	25,459,410	Sedgefield	2,663,838	16,516,390
South Tyneside	1,680,874	28,021,710	Stockton on Tees	2,919,584	35,415,270
Sunderland	3,072,202	50,458,470	Teesdale	2,467,531	5,018,226
Tynedale	2,674,263	12,192,800	Wansbeck	2,191,548	11,499,200
Wear Valley	2,891,807	11,647,830			
North West					
Allerdale	1,361,615	18,703,420	Barrow-in-Furness	857,465	13,976,790
Blackburn with Darwen	3,827,083	23,958,010	Blackpool	2,191,735	29,468,590
Bolton	4,638,035	51,565,760	Burnley	3,763,447	16,634,890
Bury	4,997,435	37,662,760	Carlisle	2,224,400	21,430,410
Chester	4,187,603	27,443,280	Chorley	4,009,419	21,623,300

Local Authority	Non-Local Visits	Local Visits	Local Authority	Non-Local Visits	Local Visits
Congleton	3,791,544	20,220,130	Copeland	822,683	13,868,000
Crewe and Nantwich	3,673,254	22,953,390	Eden	2,073,086	10,609,080
Ellesmere Port and Neston	3,077,979	15,991,610	Fylde	2,143,116	17,014,210
Halton	3,732,516	22,377,480	Hyndburn	3,671,255	15,124,170
Knowsley	3,596,790	25,410,730	Lancaster	2,317,848	28,119,440
Liverpool	3,590,828	84,392,560	Macclesfield	4,658,679	35,788,140
Manchester	3,845,303	81,211,230	Oldham	4,794,805	39,946,260
Pendle	4,009,084	16,238,310	Preston	4,358,579	26,335,490
Ribble Valley	3,596,678	11,884,960	Rochdale	4,664,813	38,292,000
Rossendale	4,064,000	13,488,690	Salford	4,079,501	45,259,300
Sefton	3,689,805	54,324,410	South Lakeland	2,683,243	22,522,430
South Ribble	3,396,129	22,314,800	St Helens	3,776,859	33,192,260
Stockport	4,054,648	63,405,720	Tameside	4,522,392	42,646,560
Trafford	4,242,088	48,112,020	Vale Royal	4,636,805	25,798,440
Warrington	4,077,245	41,311,910	West Lancashire	4,108,725	21,323,270
Wigan	5,042,210	59,521,440	Wirral	2,768,271	63,742,490
Wyre	2,259,062	21,611,000			
South East					
Adur	1,939,688	12,636,600	Arun	2,412,979	30,504,160
Ashford	2,315,792	21,387,540	Aylesbury Vale	4,245,676	36,611,640
Basingstoke and Deane	3,030,859	35,688,710	Bracknell Forest	3,464,415	26,784,610
Brighton and Hove	2,645,527	66,311,900	Canterbury	1,874,285	28,611,220
Cherwell	3,053,945	30,261,810	Chichester	3,067,038	23,520,570
Chiltern	3,494,198	19,362,720	Crawley	3,703,523	21,763,790
Dartford	4,650,326	19,334,840	Dover	1,260,706	21,269,180
East Hampshire	3,110,385	24,058,380	Eastbourne	1,883,720	20,086,640
Eastleigh	2,328,851	26,124,760	Elmbridge	4,026,411	29,977,320
Epsom and Ewell	3,529,632	15,327,240	Fareham	2,131,737	23,417,700
Gosport	2,078,151	16,105,980	Gravesham	4,022,968	18,399,880
Guildford	3,926,044	31,509,010	Hart	3,049,830	19,545,740
Hastings	1,436,151	18,427,070	Havant	2,587,407	23,643,960
Horsham	3,415,504	28,357,350	Isle of Wight	3,155,782	27,066,270
Lewes	1,731,434	19,605,600	Maidstone	2,369,606	30,473,500

Local Authority	Non-Local Visits	Local Visits	Local Authority	Non-Local Visits	Local Visits
Medway Towns	3,043,928	51,746,430	Mid Sussex	3,199,083	29,193,650
Milton Keynes	3,149,779	47,597,470	Mole Valley	3,951,184	18,688,750
New Forest	3,203,063	36,346,730	Oxford	2,464,886	30,588,200
Portsmouth	2,150,033	41,995,680	Reading	2,942,145	34,636,770
Reigate and Banstead	3,937,642	29,906,700	Rother	1,780,147	18,011,810
Runnymede	3,628,347	18,243,090	Rushmoor	3,003,164	20,380,260
Sevenoaks	4,414,726	23,632,430	Shepway	1,736,017	20,155,800
Slough	3,330,568	22,865,730	South Buckinghamshire	4,070,589	13,723,510
South Oxfordshire	3,663,285	30,186,880	Southampton	2,783,354	49,825,280
Spelthorne	3,963,336	21,794,380	Surrey Heath	3,400,474	18,841,250
Swale	2,321,337	24,453,150	Tandridge	4,092,385	17,426,620
Test Valley	3,863,031	24,113,150	Thanet	1,082,250	25,549,180
Tonbridge and Malling	3,203,837	22,732,180	Tunbridge Wells	2,963,714	23,867,260
Vale of White Horse	3,271,030	25,670,340	Waverley	3,390,378	26,850,050
Wealden	2,564,073	29,664,840	West Berkshire	2,746,712	33,177,130
West Oxfordshire	3,169,887	21,113,470	Winchester	3,399,158	24,255,960
Windsor and Maidenhead	4,509,724	32,200,650	Woking	3,746,749	22,240,910
Wokingham	3,259,063	34,934,530	Worthing	2,172,627	23,436,960
Wycombe	3,978,614	35,845,760			
South West					
Bath and North East Somerset	4,679,961	38,875,570	Bournemouth	1,751,247	39,145,960
Bristol	2,807,926	90,646,730	Caradon	2,669,757	16,528,190
Carrick	1,897,757	19,154,310	Cheltenham	3,244,344	28,247,020
Christchurch	1,972,263	9,879,051	Cotswold	3,385,679	18,132,780
East Devon	2,739,277	26,390,970	East Dorset	2,077,987	17,608,200
Exeter	2,796,080	25,163,210	Forest of Dean	3,126,318	15,837,730
Gloucester	2,878,660	23,802,330	Kennet	2,308,697	15,839,010
Kerrier	1,546,472	18,792,120	Mendip	4,089,294	22,184,540
Mid Devon	2,795,079	14,234,600	North Cornwall	1,938,063	16,401,580
North Devon	1,755,080	17,554,620	North Dorset	2,434,346	12,858,230
North Somerset	2,853,474	41,619,180	North Wiltshire	3,443,302	28,003,790
Penwith	1,414,281	12,767,080	Plymouth	2,241,081	51,459,410

Local Authority	Non-Local Visits	Local Visits	Local Authority	Non-Local Visits	Local Visits
Poole	1,764,170	30,905,750	Purbeck	2,093,597	9,172,448
Restormel	2,207,660	19,212,610	Salisbury	3,181,385	25,447,830
Sedgemoor	2,910,140	21,727,200	South Gloucestershire	3,042,123	55,680,860
South Hams	2,522,873	17,579,620	South Somerset	2,942,314	32,667,070
Stroud	3,156,324	23,260,860	Swindon	2,957,884	41,397,360
Taunton Deane	2,730,912	22,973,790	Teignbridge	2,239,081	25,301,620
Tewkesbury	3,059,543	17,545,260	Torbay	1,995,273	27,161,580
Torrige	1,867,198	11,663,680	West Devon	2,162,666	10,025,980
West Dorset	2,230,052	19,952,890	West Somerset	1,742,051	7,121,027
West Wiltshire	3,507,747	26,053,710	Weymouth and Portland	1,611,530	13,388,830
West Midlands					
Birmingham	2,865,396	177,091,300	Bridgnorth	3,760,291	10,671,880
Bromsgrove	3,892,698	18,629,680	Cannock Chase	3,625,693	18,372,340
Coventry	3,051,854	58,794,730	Dudley	4,096,716	59,289,680
East Staffordshire	3,583,567	21,412,790	Herefordshire, County of	4,987,693	37,113,140
Lichfield	4,308,959	19,464,790	Malvern Hills	3,431,383	15,390,400
Newcastle-under-Lyme	3,426,303	24,636,870	North Shropshire	2,911,944	11,608,920
North Warwickshire	3,412,066	12,680,360	Nuneaton and Bedworth	3,235,863	23,393,980
Oswestry	2,257,591	7,945,883	Redditch	3,145,250	16,483,130
Rugby	3,372,021	19,256,720	Sandwell	2,466,576	48,191,750
Shrewsbury and Atcham	2,895,886	21,335,880	Solihull	3,418,423	41,368,640
South Shropshire	2,249,896	8,293,748	South Staffordshire	3,605,227	21,149,110
Stafford	4,266,771	26,116,510	Staffordshire Moorlands	3,737,920	18,990,900
Stoke on Trent	3,510,903	46,557,800	Stratford-on-Avon	4,242,747	25,436,300
Tamworth	3,450,946	14,975,390	Telford and Wrekin	3,367,286	32,397,710
Walsall	3,225,200	44,321,100	Warwick	3,165,643	30,747,020
Wolverhampton	3,427,677	42,167,350	Worcester	3,224,247	21,682,660
Wychavon	3,592,583	24,421,660	Wyre Forest	3,554,248	19,974,730

Local Authority	Non-Local Visits	Local Visits	Local Authority	Non-Local Visits	Local Visits
Yorkshire and The Humber					
Barnsley	5,081,303	41,115,000	Bradford	5,319,574	83,085,880
Calderdale	4,738,529	39,523,320	Craven	3,117,066	11,406,520
Doncaster	4,197,228	53,461,330	East Riding of Yorkshire	2,570,906	64,950,860
Hambleton	3,327,868	18,037,970	Harrogate	4,173,243	34,728,320
Kingston upon Hull	1,380,153	47,138,680	Kirklees	4,734,939	77,446,890
Leeds	5,454,252	154,322,700	North East Lincolnshire	1,706,471	30,474,570
North Lincolnshire	2,908,380	30,271,420	Richmondshire	2,771,512	9,616,354
Rotherham	3,608,074	46,530,910	Ryedale	2,506,564	10,387,060
Scarborough	1,609,670	21,564,710	Selby	3,708,431	15,837,200
Sheffield	3,682,893	105,582,500	Wakefield	5,963,872	61,302,640
York	4,302,299	41,648,960			
Total for England	1,113,544,117	10,430,897,585			

Table 6.2
Police Authority Day Visitors

Police Authority	Local Visits	Non-Local Visits (Ex. Residential)	Non-Local Visits (Inc. Residential)
Avon & Somerset Police	333,496,000	21,034,370	27,987,720
Bedfordshire Police	118,790,300	10,059,890	13,620,110
Cambridgeshire Police	158,359,200	9,972,047	13,980,200
Cheshire Police	211,884,400	23,998,360	31,480,300
City of London Police	3,028,000	549,471	1,480,211
Cleveland Police	101,453,400	7,010,107	9,425,229
Cumbria Police	101,110,100	7,720,398	10,185,890
Derbyshire Police	197,816,300	24,732,290	33,226,520
Devon & Cornwall Police	329,391,200	25,831,630	34,681,590
Dorset Police	152,911,400	11,677,030	16,188,110
Durham Police	114,704,400	16,470,700	21,883,010
Dyfed Powys Police	97,674,610	5,406,956	8,288,066
Essex Police 2000	355,720,900	29,287,840	40,399,190
GLA - Metropolitan Police	1,616,797,000	101,364,100	134,575,900
Gloucestershire Police	126,826,000	14,161,430	19,219,250
Greater Manchester Police	507,623,100	33,397,640	44,540,140
Gwent Police	105,733,000	11,566,310	15,514,990
Hampshire Police	392,568,600	29,520,780	40,264,940
Hertfordshire Police 2000	236,764,600	28,902,670	38,773,670
Humberside Police	172,835,500	5,951,456	8,854,241
Kent Police	331,612,600	26,324,420	35,775,150
Lancashire Police	285,139,100	35,859,150	47,902,260
Leicestershire Police	185,193,900	20,870,390	27,882,810
Lincolnshire Police	132,213,200	11,802,700	16,443,310
Merseyside Police	261,062,500	12,841,940	17,170,120
Norfolk Police	169,569,100	9,939,088	13,330,540
North Wales Police	134,085,800	8,760,088	12,082,210
North Yorkshire Police	163,227,100	19,573,330	25,577,140
Northamptonshire Police	137,121,700	13,792,360	18,611,920
Northumbria Police	271,388,200	17,777,520	23,676,390
Nottinghamshire Police	214,350,700	20,053,750	26,650,570
South Wales Police	239,767,200	13,347,980	17,895,790
South Yorkshire Police	246,689,700	12,135,610	16,476,460
Staffordshire Police	211,676,500	24,934,780	33,695,000

Police Authority	Local Visits	Non-Local Visits (Ex. Residential)	Non-Local Visits (Inc. Residential)
Suffolk Police	143,602,200	11,687,140	15,802,050
Surrey Police 2000	250,805,300	30,443,100	42,234,420
Sussex Police	341,520,900	23,789,020	33,027,090
Thames Valley Police	475,561,200	40,819,440	55,214,860
Warwickshire Police	111,514,400	12,834,440	17,437,980
West Mercia Police	245,949,400	32,448,520	43,480,510
West Midlands Police	471,224,600	16,093,170	22,588,480
West Yorkshire Police	415,681,500	19,458,440	26,078,010
Wiltshire Police	136,741,700	11,647,740	15,475,100

Table 6.3
Fire Authority Day Visitors

Fire Authority	Local Visits	Non-Local Visits (Exc. Residential)	Non-Local Visits (Inc. Residential)
Avon Fire Authority	226,822,300	10,237,970	13,461,360
Bedfordshire Fire Authority	118,790,300	10,059,890	13,620,110
Berkshire Fire Authority	184,599,400	14,948,590	20,166,410
Buckinghamshire Fire Authority	153,141,100	14,148,360	19,255,310
Cambridgeshire Fire Authority	158,359,200	9,972,047	13,980,200
Cheshire Fire Authority	211,884,400	23,998,360	31,480,300
Cleveland Fire Authority	101,453,400	7,010,107	9,425,229
Cornwall	102,855,900	8,653,669	11,652,300
Cumbria	101,110,100	7,720,398	10,185,890
Derbyshire Fire Authority	197,816,300	24,732,290	33,226,520
Devon Fire Authority	226,535,300	17,177,960	23,029,290
Dorset Fire Authority	152,911,400	11,677,030	16,188,110
Durham Fire Authority	114,704,400	16,470,700	21,883,010
East Sussex Fire Authority	172,107,900	8,969,651	12,495,860
Essex Fire Authority	355,720,900	29,287,840	40,399,190
GLA - Fire	1,616,797,000	101,913,600	134,575,900
Gloucestershire	126,826,000	14,161,430	19,219,250
Greater Manchester Fire	507,623,100	33,397,640	44,540,140
Hampshire Fire Authority	392,568,600	29,520,780	40,264,940
Hereford and Worcester Fire Authority	153,695,400	19,328,980	25,763,340
Hertfordshire	236,764,600	28,902,670	38,773,670
Humberside Fire Authority	172,835,500	5,951,456	8,854,241
Kent Fire Authority	331,612,600	26,324,420	35,775,150
Lancashire Fire Authority	285,139,100	35,859,150	47,902,260
Leicestershire Fire Authority	185,193,900	20,870,390	27,882,810
Lincolnshire	132,213,200	11,802,700	16,443,310
Merseyside Fire	261,062,500	12,841,940	17,170,120
Norfolk	169,569,100	9,939,088	13,330,540
North Yorkshire Fire Authority	163,227,100	19,573,330	25,577,140
Northamptonshire	137,121,700	13,792,360	18,611,920
Northumberland	61,868,870	9,490,524	12,707,340
Nottinghamshire Fire Authority	214,350,700	20,053,750	26,650,570
Oxfordshire	137,820,700	11,722,490	15,793,130
Shropshire Fire Authority	92,254,020	13,119,540	17,717,180

Fire Authority	Local Visits	Non-Local Visits (Exc. Residential)	Non-Local Visits (Inc. Residential)
Somerset	106,673,600	10,796,400	14,526,360
South Yorkshire Fire	246,689,700	12,135,610	16,476,460
Staffordshire Fire Authority	211,676,500	24,934,780	33,695,000
Suffolk	143,602,200	11,687,140	15,802,050
Surrey	250,805,300	30,443,100	42,234,420
Tyne and Wear Fire	209,519,300	8,286,993	10,969,050
Warwickshire	111,514,400	12,834,440	17,437,980
West Midlands Fire	471,224,600	16,093,170	22,588,480
West Sussex	169,413,100	14,819,360	20,531,220
West Yorkshire Fire	415,681,500	19,458,440	26,078,010
Wiltshire Fire Authority	136,741,700	11,647,740	15,475,100

Appendix A. Estimating Trips Based on Typical Party Composition

The estimates of the number of day visitors reported in the main report were based on the average group size for different trips given by the GBDVS (Section 3.3). This Appendix reports the estimated number of day visitors based on a second method of estimating day visitors from day trips, which is based on the proportion of trips made by each party composition. These estimates are based on the reported ‘party composition’ from the GBDVS. The party composition categories are:

1. one adult alone;
2. a couple of adults;
3. more than two adults without children, but not an organised party;
4. a group of adults and children of any number, but not an organised party; and,
5. an organised or other type of party.

Using the available, limited,³¹ information on party compositions, NERA conducted an analysis based on a slightly modified version of the methodology reported in the main report. There are three additional steps for this different methodology:

1. Estimating the proportion of trips made by different party compositions within the same Local Authority and those that were made to other Local Authorities.
2. Using the estimates on the proportions of trips made by each party composition to estimate the total number of local and non-local trips made from each Local Authority by each party composition.
3. Allocating the non-local trips generated by each party composition type to other Local Authorities.

A.1. Estimating the Proportion of Trips made by Different Party Compositions within the Same Local Authority and Those that were made to Other Local Authorities

In order to estimate the proportion of local and non-local trips made by each party composition, a Multinomial Logit model based on respondent and respondent household characteristics was estimated for local trips and, separately, non-local trips.³² In each case (local and non-local trips and for each trip type) the dependent variable was the (unordered)

³¹ The GBDVS instructions and report are unclear on how certain types of groups – e.g. coach parties – were treated. At one point the instructions imply that the party size data should refer to the respondent’s sub-group, such as a family of 2 adults and 3 children travelling in a coach party, whereas elsewhere one might infer that the whole group has been recorded. Since we were not given the detailed information on the party size for each trip it is not possible to resolve this and related issues.

³² A Multinomial Logit model differs from the simple Logit model in that it allows multiple choice variables as opposed to the binary choices used by the Logit model.

category for the relevant party composition with, as explained above, all of the independent respondent and household variables being retained in each model.

Table A.2 to Table A.9 report the results from the Multinomial Logit modelling stage for local and non-local trips for each trip type.

A.2. Estimation of the Total Number of Day Visits by Part Composition Type

Following Section 3.2.3 and using the results from the Multinomial Logit modelling, it was possible to estimate the total number of trips made by each party composition. This was done by applying the Multinomial Logit estimates to the census-pseudo sample.

A.3. Estimating Day Visitors by Part Composition Type

To estimate the total number of day visitors, local and non-local, to Local Authorities it was necessary to attach average party size figures to the five different party types. These were then multiplied by the number of trips made by each party type to each destination to give the total number of day visitors. The party sizes used for this calculation are summarised in Table A.1, below.

**Table A.1
Party Sizes**

Party Composition	Number of people on trip
Alone	1
A couple	2
All adults, but not organised	4
Adults and children	4
An organised party	8

These figures were assigned by NERA. While the first two figures are clearly unquestionable the other three, however, are more subjective.

A.4. Multinomial Logit Models

The results that are used to derive the proportions of local and non-local trips that are made by each of the five possible party compositions are described below in Tables A.2 to A.5 and Tables A.6 to A.9 for local and non-local trips respectively. Each table excludes one of the party composition types; the excluded type is the reference type.

Table A.2
Multinomial Logit Model Estimates - Local Outdoor Trips

	Couple of Adults	All Adult Party	Adults and Children	Organised / Other Party
Respondent aged between 16 and 34	0.569 (2.79)**	1.202 (4.03)**	1.091 (3.84)**	1.532 (3.88)**
Respondent aged between 35 and 49	0.342 (-1.51)	0.910 (2.36)*	1.235 (3.81)**	1.163 (2.37)*
Respondent in either social grades A or B	1.284 (6.16)**	0.228 (-0.74)	0.762 (3.10)**	0.367 (-0.77)
Respondent in either social grades C1 or C2	0.757 (3.89)**	0.045 (-0.18)	0.515 (2.30)*	-0.167 (-0.35)
More than three people in household	-0.401 (2.01)*	0.009 (-0.03)	0.711 (2.49)*	1.428 (2.81)**
Single adult household	-1.102 (6.81)**	-0.610 (2.44)*	0.227 (-1.02)	0.420 (-0.63)
Children present in household	0.171 (-0.70)	0.008 (-0.03)	3.008 (11.72)**	-1.659 (2.45)*
Respondent has a job	-0.332 (2.07)*	-0.874 (2.98)**	-0.512 (2.27)*	-1.102 (2.20)*
Respondent disability	0.233 (-1.34)	-0.286 (-0.84)	-0.064 (-0.26)	1.225 (3.18)**
Respondent non-white	-0.141 (-0.39)	-0.923 (-1.43)	0.767 (-1.77)	1.172 (-0.93)
Car ownership	-0.596 (2.53)*	-0.604 (-1.75)	-0.263 (-1.15)	1.661 (2.67)**

*Notes: Data used are from the 2002/2003 GBDVS. Estimation was carried out using a Multinomial Logit with the inclusion of monthly dummy variables (not reported here for ease of exposition). The number of observations was 13,704. Independent variables are dummy variable indicators for the group indicated on the left-hand side of the table. Figures in the parenthesis are the reported z-statistics. * indicates significance at the 5 per cent level; ** represents significance at the 1 per cent level.*

Table A.3
Multinomial Logit Model Estimates - Local Primary Trips

	Alone	All Adult Party	Adults and Children	Organised / Other Party
Respondent aged between 16 and 34	-0.165 (-1.15)	0.392 (2.87)**	-0.325 (-1.61)	0.147 (-0.39)
Respondent aged between 35 and 49	0.368 (2.11)*	0.137 (-0.77)	0.284 (-1.22)	1.194 (2.47)*
Respondent in either social grades A or B	0.285 (-1.94)	-0.127 (-0.86)	-0.284 (-1.60)	-0.071 (-0.25)
Respondent in either social grades C1 or C2	0.014 (-0.11)	0.135 (-1.05)	-0.164 (-1.02)	-0.305 (-0.96)
More than three people in household	0.502 (3.67)**	0.507 (3.70)**	-0.357 (-1.62)	0.539 (-1.67)
Single adult household	0.839 (6.89)**	0.461 (3.55)**	0.355 (-1.94)	-0.023 (-0.07)
Children present in household	-0.131 (-0.90)	-0.140 (-0.91)	3.054 (15.18)**	-0.128 (-0.32)
Respondent has a job	-0.216 (-1.69)	-0.016 (-0.12)	-0.335 (-1.88)	-0.691 (-1.91)
Respondent disability	-0.123 (-0.85)	0.013 (-0.09)	0.029 (-0.14)	0.449 (-1.38)
Respondent non-white	-0.268 (-1.36)	-0.192 (-0.81)	0.225 (-1.01)	-0.690 (-1.05)
Car ownership	-0.439 (3.36)**	-0.266 (1.98)*	-0.061 (-0.37)	0.273 (-0.79)

*Notes: Data used are from the 2002/2003 GBDVS. Estimation was carried out using a Multinomial Logit with the inclusion of monthly dummy variables (not reported here for ease of exposition). The number of observations was 8,912. Independent variables are dummy variable indicators for the group indicated on the left-hand side of the table. Figures in the parenthesis are the reported z-statistics. * indicates significance at the 5 per cent level; ** represents significance at the 1 per cent level.*

Table A.4
Multinomial Logit Model Estimates - Local Queued Trips

	Alone	Couple of Adults	All Adult Party	Organised / Other Party
Respondent aged between 16 and 34	-0.240 (-0.25)	0.564 (-0.63)	1.715 (-1.87)	-32.504 (23.25)**
Respondent aged between 35 and 49	-0.086 (-0.07)	0.378 (-0.39)	0.855 (-0.77)	1.889 (-0.99)
Respondent in either social grades A or B	0.180 (-0.24)	1.292 (-1.50)	-0.437 (-0.53)	0.313 (-0.22)
Respondent in either social grades C1 or C2	-0.186 (-0.20)	0.902 (-1.02)	-0.134 (-0.16)	0.107 (-0.08)
More than three people in household	1.911 (-1.79)	1.358 (-1.38)	2.784 (2.64)**	0.094 (-0.04)
Single adult household	0.582 (-0.85)	-0.645 (-1.04)	0.285 (-0.45)	0.147 (-0.10)
Children present in household	-4.934 (4.36)**	-5.328 (4.82)**	-5.978 (5.24)**	-2.643 (-1.54)
Respondent has a job	-0.278 (-0.34)	0.171 (-0.27)	-0.049 (-0.07)	1.692 (-1.22)
Respondent disability	-1.003 (-1.15)	-0.415 (-0.51)	-1.513 (-1.71)	2.605 (1.97)*
Respondent non-white	1.188 (-1.33)	-3.258 (2.56)*	-0.822 (-0.80)	-32.542 (26.40)**
Car ownership	-1.609 (1.96)*	-0.438 (-0.54)	-0.830 (-0.94)	-1.081 (-0.75)

*Notes: Data used are from the 2002/2003 GBDVS. Estimation was carried out using a Multinomial Logit with the inclusion of monthly dummy variables (not reported here for ease of exposition). The number of observations was 17,502. Independent variables are dummy variable indicators for the group indicated on the left-hand side of the table. Figures in the parenthesis are the reported z-statistics. * indicates significance at the 5 per cent level; ** represents significance at the 1 per cent level.*

Table A.5
Multinomial Logit Model Estimates – Local Residential Trips

	Couple of Adults	Adults and Children	All Adult Party	Organised / Other Party
Respondent aged between 16 and 34	-0.153 (-0.73)	-0.442 (-1.63)	0.530 (1.98)*	-0.638 (-1.33)
Respondent aged between 35 and 49	0.148 (-0.62)	-0.748 (2.32)*	0.758 (2.44)*	-1.290 (2.16)*
Respondent in either social grades A or B	-0.400 (2.00)*	-0.418 (-1.81)	-0.608 (2.62)**	-0.123 (-0.21)
Respondent in either social grades C1 or C2	-0.260 (-1.49)	-0.505 (2.49)*	-0.807 (3.92)**	-0.317 (-0.55)
More than three people in household	-1.011 (5.07)**	0.512 (1.97)*	-0.371 (-1.46)	0.590 (-1.20)
Single adult household	-1.658 (9.21)**	-0.545 (2.64)**	-0.345 (-1.51)	-1.094 (3.39)**
Children present in household	0.616 (2.61)**	-0.142 (-0.55)	3.324 (12.80)**	0.486 (-0.89)
Respondent has a job	0.164 (-0.96)	0.035 (-0.16)	0.232 (-1.02)	0.248 (-0.49)
Respondent disability	0.086 (-0.52)	-0.135 (-0.67)	-0.386 (-1.45)	0.003 (-0.01)
Respondent non-white	0.074 (-0.18)	0.852 (2.89)**	0.354 (-1.12)	-2.386 (3.30)**
Car ownership	-0.013 (-0.08)	0.076 (-0.28)	0.138 (-0.61)	-0.190 (-0.51)

*Notes: Data used are from the 2002/2003 GBDVS. Estimation was carried out using a Multinomial Logit with the inclusion of monthly dummy variables (not reported here for ease of exposition). The number of observations was 13,565. Independent variables are dummy variable indicators for the group indicated on the left-hand side of the table. Figures in the parenthesis are the reported z-statistics. * indicates significance at the 5 per cent level; ** represents significance at the 1 per cent level.*

Table A.6
Multinomial Logit Model Estimates – Non-Local Outdoor Trips

	Adult Alone	Adults and Children	All Adult Party	Organised / Other Party
Respondent aged between 16 and 34	0.507 (-0.85)	0.379 (-0.75)	0.987 (2.06)*	-0.379 (-0.54)
Respondent aged between 35 and 49	2.031 (3.47)**	0.244 (-0.50)	1.207 (2.24)*	0.056 (-0.07)
Respondent in either social grades A or B	1.142 (-1.78)	-0.416 (-1.03)	0.426 (-0.88)	0.860 (-1.21)
Respondent in either social grades C1 or C2	2.115 (4.03)**	-0.046 (-0.13)	1.053 (2.27)*	0.551 (-0.93)
More than three people in household	0.869 (-1.36)	2.372 (4.76)**	1.343 (3.09)**	-0.072 (-0.14)
Single adult household	1.736 (3.75)**	0.097 (-0.24)	1.108 (2.27)*	2.003 (2.98)**
Children present in household	0.461 (-0.71)	-1.316 (2.46)*	1.875 (3.95)**	2.027 (3.73)**
Respondent has a job	0.074 (-0.15)	-1.096 (2.67)**	0.273 (-0.59)	0.418 (-0.81)
Respondent disability	-0.919 (-1.93)	-0.003 (-0.01)	0.065 (-0.15)	-0.698 (-1.02)
Respondent non-white	-3.585 (2.78)**	-2.033 (-1.60)	-0.380 (-0.42)	-30.760 (48.39)**
Car ownership	-1.086 (-1.72)	-1.087 (1.99)*	-0.678 (-1.10)	-1.502 (2.04)*

*Notes: Data used are from the 2002/2003 GBDVS. Estimation was carried out using Multinomial Logit models with the inclusion of monthly dummy variables (not reported here for ease of exposition). The number of observations was 3,593. Independent variables are dummy variable indicators for the group indicated on the left-hand side of the table. Figures in the parenthesis are the reported z-statistics. * indicates significance at the 5 per cent level; ** represents significance at the 1 per cent level.*

Table A.7
Multinomial Logit Model Estimates – Non-Local Primary Trips

	Adult Alone	Adults and Children	All Adult Party	Organised / Other Party
Respondent aged between 16 and 34	-0.125 (-0.31)	-0.142 (-0.54)	-0.157 (-0.4)	-0.580 (-1.17)
Respondent aged between 35 and 49	-0.052 (-0.12)	-0.443 (-1.36)	-0.122 (-0.30)	-1.673 (2.01)*
Respondent in either social grades A or B	1.385 (3.26)**	0.655 (2.24)*	-0.205 (-0.61)	0.05 (-0.08)
Respondent in either social grades C1 or C2	1.153 (2.96)**	0.646 (2.44)*	0.219 (-0.70)	-0.980 (-1.86)
More than three people in household	0.869 (2.09)*	1.083 (3.71)**	-0.555 (-1.28)	0.717 (-1.03)
Single adult household	1.51 (5.73)**	0.270 (-1.15)	-0.375 (-0.96)	-0.09 (-0.17)
Children present in household	0.469 (-1.07)	-0.771 (2.14)*	3.446 (8.13)**	-0.058 (-0.10)
Respondent has a job	0.025 (-0.06)	0.497 (2.00)*	-0.031 (-0.09)	0.832 (-1.80)
Respondent disability	-0.263 (-0.84)	-0.197 (-0.67)	-0.148 (-0.42)	-0.581 (-1.08)
Respondent non-white	-0.453 (-0.71)	0.056 (-0.09)	1.14 (-1.33)	2.752 (2.70)**
Car ownership	-0.578 (-1.57)	-0.585 (-1.92)	0.505 (-1.11)	-1.966 (3.06)**

*Notes: Data used are from the 2002/2003 GBDVS. Estimation was carried out using Multinomial Logit models with the inclusion of monthly dummy variables (not reported here for ease of exposition). The number of observations was 2,521. Independent variables are dummy variable indicators for the group indicated on the left-hand side of the table. Figures in the parenthesis are the reported z-statistics. * indicates significance at the 5 per cent level; ** represents significance at the 1 per cent level.*

Table A.8
Multinomial Logit Model Estimates – Non-Local Queued Trips

	Adult Alone	Couple of Adults	Adults and Children	Organised / Other Party
Respondent aged between 16 and 34	2.007 (-1.92)	0.900 (-1.11)	1.990 (1.99)*	0.855 (-0.57)
Respondent aged between 35 and 49	2.363 (-1.73)	1.046 (-1.06)	1.998 (-1.52)	1.464 (-1.12)
Respondent in either social grades A or B	2.314 (-1.44)	-0.897 (-1.30)	-3.151 (3.66)**	-2.340 (2.80)**
Respondent in either social grades C1 or C2	3.914 (2.16)*	-1.358 (2.04)*	-2.099 (2.61)**	-1.401 (-1.69)
More than three people in household	0.199 (-0.13)	1.365 (-1.39)	4.208 (3.95)**	1.818 (-1.09)
Single adult household	0.271 (-0.37)	0.145 (-0.20)	0.206 (-0.26)	1.729 (-1.65)
Children present in household	-5.138 (3.08)**	-4.605 (4.35)**	-9.170 (6.48)**	-6.295 (4.35)**
Respondent has a job	-0.705 (-0.71)	-1.631 (-1.86)	-2.257 (2.18)*	-1.235 (-1.20)
Respondent disability	0.091 (-0.09)	-1.690 (-1.76)	-1.044 (-0.96)	-2.079 (-1.31)
Respondent non-white	-0.222 (-0.14)	0.487 (-0.34)	0.234 (-0.18)	-36.328 (25.58)**
Car ownership	-0.353 (-0.33)	0.643 (-0.85)	1.718 (-1.73)	1.059 (-0.94)

*Notes: Data used are from the 2002/2003 GBDVS. Estimation was carried out using Multinomial Logit models with the inclusion of monthly dummy variables (not reported here for ease of exposition). The number of observations was 4,225. Independent variables are dummy variable indicators for the group indicated on the left-hand side of the table. Figures in the parenthesis are the reported z-statistics. * indicates significance at the 5 per cent level; ** represents significance at the 1 per cent level.*

Table A.9
Multinomial Logit Model Estimates – Non-Local Residential Trips

	Adult Alone	Adults and Children	All Adult Party	Organised / Other Party
Respondent aged between 16 and 34	0.598 (-1.53)	-0.637 (-1.66)	0.364 (-0.83)	-0.102 (-0.10)
Respondent aged between 35 and 49	0.367 (-0.81)	-0.821 (2.02)*	0.558 (-1.22)	-1.451 (-1.02)
Respondent in either social grades A or B	0.567 (-1.44)	-0.539 (-1.35)	0.593 (-1.21)	-0.659 (-0.97)
Respondent in either social grades C1 or C2	0.389 (-1.06)	0.485 (-1.34)	0.803 (-1.86)	-3.160 (3.61)**
More than three people in household	0.935 (2.30)*	1.142 (3.04)**	-0.036 (-0.07)	-0.821 (-0.69)
Single adult household	2.337 (6.90)**	0.439 (-0.99)	1.091 (2.76)**	1.745 (3.32)**
Children present in household	0.114 (-0.22)	-0.102 (-0.23)	3.999 (7.55)**	0.389 (-0.40)
Respondent has a job	-0.785 (2.02)*	0.128 (-0.41)	0.293 (-0.71)	-0.715 (-1.04)
Respondent disability	-0.569 (-1.32)	-0.195 (-0.52)	1.229 (2.60)**	-0.286 (-0.35)
Respondent non-white	-1.942 (3.51)**	0.960 (-1.77)	-0.420 (-0.62)	2.442 (3.18)**
Car ownership	0.621 (-1.22)	-0.578 (-1.17)	-1.359 (2.41)*	2.953 (2.30)*

*Notes: Data used are from the 2002/2003 GBDVS. Estimation was carried out using Multinomial Logit models with the inclusion of monthly dummy variables (not reported here for ease of exposition). The number of observations was 3,356. Independent variables are dummy variable indicators for the group indicated on the left-hand side of the table. Figures in the parenthesis are the reported z-statistics. * indicates significance at the 5 per cent level; ** represents significance at the 1 per cent level.*

A.5. Estimated Day Visitors Based on Typical Party Size

These figures are based on the estimated number of day trips and typical part sizes by each party composition category.

Table A.10
Local Authority Day Visits

Local Authority	Non-Local Visits	Local Visits	Local Authority	Non-Local Visits	Local Visits
East Midlands					
Amber Valley	3,583,816	20,100,990	Ashfield	3,116,832	18,023,500
Bassetlaw	3,626,975	17,541,660	Blaby	3,337,583	15,900,660
Bolsover	3,345,995	11,344,120	Boston	1,586,945	9,164,673
Broxtowe	3,195,865	19,469,990	Charnwood	3,144,389	26,284,140
Chesterfield	3,845,233	17,036,290	Corby	2,427,384	8,530,489
Daventry	3,629,946	13,117,760	Derby City	3,529,620	37,640,450
Derbyshire Dales	4,485,895	11,880,080	East Lindsey	2,017,325	20,307,510
East Northamptonshire	2,475,061	13,913,570	Erewash	3,094,491	19,286,480
Gedling	3,036,000	20,051,640	Harborough	3,272,729	13,982,490
High Peak	4,260,874	15,585,230	Hinckley and Bosworth	3,468,659	17,481,960
Kettering	2,340,258	15,168,250	Leicester City	2,756,991	41,437,780
Lincoln	2,946,295	15,342,610	Mansfield	3,619,555	15,961,550
Melton	3,038,125	8,361,904	Newark and Sherwood	4,352,550	17,841,610
North East Derbyshire	3,714,602	15,830,420	North Kesteven	2,280,117	16,373,130
North West Leicestershire	3,505,997	14,961,250	Northampton	2,636,316	36,056,940
Nottingham	3,184,917	47,253,680	Oadby and Wigston	2,853,192	8,999,027
Rushcliffe	2,867,209	20,510,750	Rutland	2,852,602	5,872,127
South Derbyshire	3,774,099	14,466,330	South Holland	1,894,518	12,730,550
South Kesteven	2,612,384	21,931,960	South Northamptonshire	3,063,966	14,474,010
Wellingborough	2,289,009	12,377,470	West Lindsey	2,943,584	13,099,600

Local Authority	Non-Local Visits	Local Visits	Local Authority	Non-Local Visits	Local Visits
East of England					
Babergh	2,311,698	14,741,070	Basildon	3,072,507	30,320,830
Bedford	2,622,482	25,967,590	Braintree	2,976,607	24,146,470
Breckland	2,275,181	20,481,480	Brentwood	3,859,471	13,137,250
Broadland	1,660,025	21,450,340	Broxbourne	4,149,996	15,399,480
Cambridge	2,207,451	20,833,380	Castle Point	2,216,079	14,421,490
Chelmsford	3,039,167	30,438,960	Colchester	2,719,547	28,771,500
Dacorum	4,067,818	25,497,550	East Cambridgeshire	2,301,637	13,065,550
East Hertfordshire	3,997,512	25,624,720	Epping Forest	4,120,325	22,322,150
Fenland	1,828,847	13,964,780	Forest Heath	2,611,067	10,588,830
Great Yarmouth	1,658,904	14,529,350	Harlow	3,051,144	14,470,330
Hertsmere	3,587,037	17,020,400	Huntingdonshire	2,689,610	29,317,380
Ipswich	2,081,477	21,048,630	King's Lynn and West Norfolk	2,073,928	22,748,500
Luton	3,456,646	28,947,190	Maldon	2,216,524	10,536,320
Mid Bedfordshire	3,348,142	22,967,420	Mid Suffolk	2,332,780	15,182,900
North Hertfordshire	3,781,496	22,424,210	North Norfolk	1,981,145	16,239,770
Norwich	1,688,362	23,622,970	Peterborough	2,286,511	28,488,170
Rochford	2,091,300	13,735,120	South Bedfordshire	3,960,969	20,672,130
South Cambridgeshire	2,541,517	24,532,780	South Norfolk	1,990,889	19,488,960
Southend-on-Sea	2,144,918	30,307,560	St Albans	3,759,478	26,137,330
St Edmundsbury	2,470,571	17,722,930	Stevenage	2,866,629	14,753,560
Suffolk Coastal	1,721,816	20,350,940	Tendring	1,581,412	22,068,300
Three Rivers	4,038,808	15,008,990	Thurrock	4,116,636	25,656,870
Uttlesford	3,154,986	12,502,830	Watford	4,132,176	15,450,960
Waveney	2,050,382	18,329,680	Welwyn Hatfield	4,408,867	17,376,140
London					
Barking and Dagenham	3,572,466	25,879,090	Barnet	4,316,036	57,230,130
Bexley	3,966,424	38,143,410	Brent	3,440,292	37,463,920
Bromley	4,631,867	57,493,640	Camden	3,292,575	42,415,380
City of London	726,504	2,232,929	Croydon	4,137,254	60,597,930
Ealing	3,983,262	49,841,370	Enfield	4,122,709	46,322,490
Greenwich	4,188,737	38,557,520	Hackney	3,179,958	32,800,550
Hammersmith and	3,188,893	36,101,880	Haringey	4,037,353	39,538,170

Local Authority	Non-Local Visits	Local Visits	Local Authority	Non-Local Visits	Local Visits
Fulham					
Harrow	3,623,993	31,967,710	Havering	4,534,772	37,604,090
Hillingdon	4,196,697	42,342,180	Hounslow	3,779,076	36,277,580
Islington	3,430,520	36,106,450	Kensington and Chelsea	6,014,364	36,913,820
Kingston-upon-Thames	4,192,219	30,413,060	Lambeth	4,054,685	52,909,480
Lewisham	3,987,225	45,543,070	Merton	4,121,587	36,837,790
Newham	3,660,522	31,739,030	Redbridge	3,755,590	37,515,990
Richmond-upon-Thames	4,027,528	39,386,740	Southwark	2,260,918	43,396,290
Sutton	4,090,101	36,133,760	Tower Hamlets	3,185,072	32,463,800
Waltham Forest	4,254,037	37,003,130	Wandsworth	3,595,627	60,850,770
Westminster, City of	15,152,894	41,964,330			
North East					
Alnwick	1,857,301	5,345,280	Berwick-upon-Tweed	1,549,212	4,250,606
Blyth Valley	1,712,307	13,700,810	Castle Morpeth	2,719,813	8,059,144
Chester-le-Street	2,466,645	9,248,536	Darlington	2,926,978	17,190,660
Derwentside	2,973,773	13,590,820	Durham	3,242,738	14,354,160
Easington	2,365,550	13,049,780	Gateshead	2,387,967	30,511,540
Hartlepool	2,425,722	13,655,030	Middlesbrough	1,983,029	20,258,890
Newcastle-upon-Tyne	2,062,133	43,548,750	North Tyneside	1,875,344	33,030,350
Redcar and Cleveland	2,218,860	21,202,110	Sedgefield	2,673,764	13,758,490
South Tyneside	1,686,673	23,190,360	Stockton on Tees	2,921,920	29,533,600
Sunderland	3,070,245	42,095,550	Teesdale	2,459,834	4,083,961
Tynedale	2,703,039	9,992,416	Wansbeck	2,205,702	9,519,524
Wear Valley	2,881,442	9,634,489			
North West					
Allerdale	1,378,387	15,390,040	Barrow-in-Furness	862,000	11,587,100
Blackburn with Darwen	3,838,696	20,135,470	Blackpool	2,245,645	24,057,980
Bolton	4,643,556	42,789,410	Burnley	3,791,750	13,919,410
Bury	4,985,671	31,224,500	Carlisle	2,206,870	17,549,120
Chester	4,214,559	22,266,420	Chorley	4,023,393	17,874,610

Local Authority	Non-Local Visits	Local Visits	Local Authority	Non-Local Visits	Local Visits
Congleton	3,793,052	16,646,530	Copeland	841,161	11,440,680
Crewe and Nantwich	3,696,388	18,986,650	Eden	2,081,191	8,668,079
Ellesmere Port and Neston	3,090,841	13,313,630	Fylde	2,159,922	13,719,920
Halton	3,744,604	18,837,840	Hyndburn	3,683,010	12,649,290
Knowsley	3,592,005	21,479,430	Lancaster	2,319,280	23,070,790
Liverpool	3,597,953	69,343,410	Macclesfield	4,730,935	29,019,180
Manchester	3,869,176	66,331,300	Oldham	4,816,013	33,368,020
Pendle	3,996,890	13,463,520	Preston	4,335,209	21,769,440
Ribble Valley	3,574,942	9,750,066	Rochdale	4,665,700	31,967,700
Rossendale	4,080,362	11,216,140	Salford	4,075,280	37,059,490
Sefton	3,716,074	44,742,630	South Lakeland	2,748,299	18,165,120
South Ribble	3,405,363	18,511,440	St Helens	3,772,684	27,722,610
Stockport	4,055,117	51,980,710	Tameside	4,512,286	35,492,810
Trafford	4,252,157	39,322,520	Vale Royal	4,664,028	21,356,930
Warrington	4,086,858	34,288,480	West Lancashire	4,145,350	17,738,400
Wigan	5,030,556	49,779,110	Wirral	2,785,120	52,426,400
Wyre	2,253,835	17,695,100			
South East					
Adur	1,923,935	10,287,270	Arun	2,385,542	24,572,870
Ashford	2,297,771	17,771,560	Aylesbury Vale	4,205,568	30,353,450
Basingstoke and Deane	3,000,644	29,495,930	Bracknell Forest	3,458,666	22,155,130
Brighton and Hove	2,613,711	53,033,630	Canterbury	1,873,834	23,367,020
Cherwell	3,056,802	25,030,480	Chichester	3,053,615	18,958,460
Chiltern	3,463,196	15,867,940	Crawley	3,652,019	18,084,710
Dartford	4,644,899	16,047,610	Dover	1,263,337	17,465,740
East Hampshire	3,074,172	19,815,470	Eastbourne	1,877,327	16,143,150
Eastleigh	2,321,607	21,656,140	Elmbridge	4,006,983	24,442,810
Epsom and Ewell	3,522,012	12,513,370	Fareham	2,123,998	19,336,930
Gosport	2,069,946	13,392,060	Gravesham	3,987,072	15,287,990
Guildford	3,893,575	25,521,680	Hart	3,034,119	16,134,410
Hastings	1,429,562	15,083,260	Havant	2,554,838	19,504,850
Horsham	3,368,317	23,179,180	Isle of Wight	3,136,459	22,022,380
Lewes	1,724,903	15,896,060	Maidstone	2,354,929	25,114,100

Local Authority	Non-Local Visits	Local Visits	Local Authority	Non-Local Visits	Local Visits
Medway Towns	3,020,446	43,284,450	Mid Sussex	3,161,907	23,918,770
Milton Keynes	3,159,991	39,715,520	Mole Valley	3,917,224	15,106,770
New Forest	3,195,288	29,553,750	Oxford	2,482,151	24,612,350
Portsmouth	2,143,465	34,419,790	Reading	2,936,837	28,233,030
Reigate and Banstead	3,896,223	24,347,330	Rother	1,766,936	14,411,410
Runnymede	3,612,380	14,803,190	Rushmoor	2,985,040	16,981,560
Sevenoaks	4,380,319	19,385,270	Shepway	1,728,471	16,501,980
Slough	3,324,275	19,016,790	South Buckinghamshire	4,031,452	11,183,460
South Oxfordshire	3,622,937	24,730,430	Southampton	2,756,605	40,687,750
Spelthorne	3,941,198	17,747,970	Surrey Heath	3,380,585	15,508,260
Swale	2,314,428	20,397,280	Tandridge	4,055,504	14,232,110
Test Valley	3,844,504	19,925,270	Thanet	1,087,026	20,897,220
Tonbridge and Malling	3,182,895	18,901,490	Tunbridge Wells	2,944,242	19,533,600
Vale of White Horse	3,237,777	21,105,580	Waverley	3,347,435	21,747,290
Wealden	2,543,458	24,231,230	West Berkshire	2,707,127	27,346,240
West Oxfordshire	3,139,184	17,408,570	Winchester	3,357,264	19,684,250
Windsor and Maidenhead	4,495,750	26,129,120	Woking	3,725,321	18,159,080
Wokingham	3,231,602	28,839,460	Worthing	2,151,832	18,880,630
Wycombe	3,932,662	29,523,580			
South West					
Bath and North East Somerset	4,628,279	31,529,600	Bournemouth	1,738,579	31,652,030
Bristol	2,846,761	73,932,860	Caradon	2,649,291	13,544,800
Carrick	1,889,142	15,554,920	Cheltenham	3,199,354	22,755,190
Christchurch	1,963,710	7,900,457	Cotswold	3,338,671	14,694,390
East Devon	2,711,057	21,258,230	East Dorset	2,047,984	14,279,050
Exeter	2,769,135	20,448,600	Forest of Dean	3,103,452	13,090,310
Gloucester	2,877,516	19,743,060	Kennet	2,277,793	13,069,140
Kerrier	1,526,911	15,472,330	Mendip	4,040,398	18,234,010
Mid Devon	2,777,219	11,720,410	North Cornwall	1,926,022	13,449,240
North Devon	1,756,775	14,399,140	North Dorset	2,399,284	10,492,120
North Somerset	2,830,251	34,011,850	North Wiltshire	3,398,805	23,159,940
Penwith	1,403,849	10,360,970	Plymouth	2,204,999	42,431,520

Local Authority	Non-Local Visits	Local Visits	Local Authority	Non-Local Visits	Local Visits
Poole	1,746,851	25,250,780	Purbeck	2,069,706	7,458,970
Restormel	2,190,319	15,796,720	Salisbury	3,178,501	20,849,330
Sedgemoor	2,881,994	17,871,830	South Gloucestershire	3,003,340	46,149,930
South Hams	2,516,453	14,314,160	South Somerset	2,909,984	26,734,680
Stroud	3,118,165	19,087,320	Swindon	2,921,761	34,224,500
Taunton Deane	2,688,724	18,761,360	Teignbridge	2,246,156	20,643,070
Tewkesbury	3,030,258	14,347,760	Torbay	1,965,361	22,077,050
Torrige	1,856,553	9,538,221	West Devon	2,146,738	8,166,585
West Dorset	2,205,843	16,066,950	West Somerset	1,746,109	5,686,628
West Wiltshire	3,468,832	21,448,360	Weymouth and Portland	1,590,988	10,933,650
West Midlands					
Birmingham	2,820,583	147,091,700	Bridgnorth	3,765,883	8,747,448
Bromsgrove	3,900,715	15,323,230	Cannock Chase	3,622,418	15,461,290
Coventry	3,049,627	48,760,050	Dudley	4,079,407	49,154,600
East Staffordshire	3,608,039	17,720,510	Herefordshire, County of	5,012,812	30,388,300
Lichfield	4,303,744	16,068,070	Malvern Hills	3,412,029	12,464,620
Newcastle-under-Lyme	3,437,066	20,331,620	North Shropshire	2,932,095	9,575,933
North Warwickshire	3,433,803	10,518,410	Nuneaton and Bedworth	3,237,280	19,533,700
Oswestry	2,266,000	6,528,732	Redditch	3,161,217	13,760,620
Rugby	3,380,485	15,828,620	Sandwell	2,459,430	40,232,300
Shrewsbury and Atcham	2,886,760	17,443,320	Solihull	3,418,479	34,187,630
South Shropshire	2,234,705	6,738,566	South Staffordshire	3,594,908	17,564,800
Stafford	4,258,553	21,447,730	Staffordshire Moorlands	3,773,120	15,696,030
Stoke on Trent	3,513,445	38,703,920	Stratford-on-Avon	4,227,490	20,668,030
Tamworth	3,472,238	12,658,970	Telford and Wrekin	3,357,516	27,179,100
Walsall	3,217,866	37,066,990	Warwick	3,192,894	24,880,570
Wolverhampton	3,426,061	34,964,640	Worcester	3,235,435	17,835,780
Wychavon	3,589,069	20,045,040	Wyre Forest	3,575,975	16,420,280

Local Authority	Non-Local Visits	Local Visits	Local Authority	Non-Local Visits	Local Visits
Yorkshire and The Humber					
Barnsley	5,110,794	34,360,720	Bradford	5,287,982	69,257,800
Calderdale	4,745,608	32,577,360	Craven	3,149,614	9,278,592
Doncaster	4,196,421	44,640,810	East Riding of Yorkshire	2,589,329	53,375,730
Hambleton	3,353,570	14,822,050	Harrogate	4,160,301	28,361,060
Kingston upon Hull	1,393,649	39,132,220	Kirklees	4,748,295	64,015,860
Leeds	5,387,906	126,857,300	North East Lincolnshire	1,703,346	25,482,040
North Lincolnshire	2,942,793	25,171,170	Richmondshire	2,791,816	8,016,189
Rotherham	3,614,915	38,901,400	Ryedale	2,542,400	8,453,830
Scarborough	1,644,015	17,505,880	Selby	3,722,877	13,180,200
Sheffield	3,727,971	86,502,660	Wakefield	5,960,647	51,032,610
York	4,328,345	33,862,250			
Total for England	1,111,607,017	8,568,414,801			

Table A.11
Fire Authority Day Visits

Fire Authority	Local	Non-Local
Avon Fire Authority	185,624,200	13,407,760
Bedfordshire Fire Authority	98,554,320	13,522,540
Berkshire Fire Authority	151,719,800	20,056,420
Buckinghamshire Fire Authority	126,643,900	19,111,090
Cambridgeshire Fire Authority	130,202,000	13,968,520
Cheshire Fire Authority	174,715,700	31,675,690
Cleveland Fire Authority	84,649,630	9,470,867
Cornwall	84,178,980	11,572,320
Cumbria	82,800,130	10,275,610
Derbyshire Fire Authority	163,170,400	33,410,710
Devon Fire Authority	184,997,000	22,872,880
Dorset Fire Authority	124,034,000	16,040,160
Durham Fire Authority	94,910,900	21,915,600
East Sussex Fire Authority	138,798,700	12,412,300
Essex Fire Authority	292,836,000	40,344,260
GLA - Fire	1,311,987,000	133,602,100
Gloucestershire	103,718,000	19,047,620
Greater Manchester Fire	419,315,600	44,574,540
Hampshire Fire Authority	322,610,600	40,007,880
Hereford and Worcester Fire Authority	126,237,900	25,817,990
Hertfordshire	194,693,300	38,609,110
Humberside Fire Authority	143,161,200	8,943,206
Kent Fire Authority	273,955,300	35,607,880
Lancashire Fire Authority	235,571,600	48,056,990
Leicestershire Fire Authority	153,281,300	27,984,450
Lincolnshire	108,950,000	16,510,390
Merseyside Fire	215,714,500	17,148,710
Norfolk	138,561,400	13,357,980
North Yorkshire Fire Authority	133,480,100	25,737,460
Northamptonshire	113,638,500	18,630,080
Northumberland	50,867,780	12,843,450
Nottinghamshire Fire Authority	176,654,400	26,715,160
Oxfordshire	112,887,400	15,697,140
Shropshire Fire Authority	76,213,100	17,721,410

Fire Authority	Local	Non-Local
Somerset	87,288,510	14,392,130
South Yorkshire Fire	204,405,600	16,555,770
Staffordshire Fire Authority	175,652,900	33,747,150
Suffolk	117,965,000	15,735,350
Surrey	204,129,900	41,962,720
Tyne and Wear Fire	172,376,600	11,002,810
Warwickshire	91,429,320	17,463,130
West Midlands Fire	391,457,900	22,544,160
West Sussex	137,881,900	20,343,210
West Yorkshire Fire	343,740,900	26,035,520
Wiltshire Fire Authority	112,751,300	15,315,260

Table A.12
Police Authority day Visitors

Police Authority	Local Visits	Non-Local Visits
Avon & Somerset Police	272,912,700	27,799,890
Bedfordshire Police	98,554,320	13,522,540
Cambridgeshire Police	130,202,000	13,968,520
Cheshire Police	174,715,700	31,675,690
City of London Police	2,232,929	1,649,373
Cleveland Police	84,649,630	9,470,867
Cumbria Police	82,800,130	10,275,610
Derbyshire Police	163,170,400	33,410,710
Devon & Cornwall Police	269,176,000	34,445,190
Dorset Police	124,034,000	16,040,160
Durham Police	94,910,900	21,915,600
Dyfed Powys Police	80,373,310	8,375,967
Essex Police 2000	292,836,000	40,344,260
GLA - Metropolitan Police	1,311,987,000	133,602,100
Gloucestershire Police	103,718,000	19,047,620
Greater Manchester Police	419,315,600	44,574,540
Gwent Police	88,432,780	15,545,930
Hampshire Police	322,610,600	40,007,880
Hertfordshire Police 2000	194,693,300	38,609,110
Humberside Police	143,161,200	8,943,206
Kent Police	273,955,300	35,607,880
Lancashire Police	235,571,600	48,056,990
Leicestershire Police	153,281,300	27,984,450
Lincolnshire Police	108,950,000	16,510,390
Merseyside Police	215,714,500	17,148,710
Norfolk Police	138,561,400	13,357,980
North Wales Police	110,382,000	12,143,760
North Yorkshire Police	133,480,100	25,737,460
Northamptonshire Police	113,638,500	18,630,080
Northumbria Police	223,244,300	23,846,260
Nottinghamshire Police	176,654,400	26,715,160
South Wales Police	199,120,900	18,007,310
South Yorkshire Police	204,405,600	16,555,770
Staffordshire Police	175,652,900	33,747,150
Suffolk Police	117,965,000	15,735,350

Police Authority	Local Visits	Non-Local Visits
Surrey Police 2000	204,129,900	41,962,720
Sussex Police	276,680,600	32,755,510
Thames Valley Police	391,251,100	54,864,640
Warwickshire Police	91,429,320	17,463,130
West Mercia Police	202,451,000	43,539,400
West Midlands Police	391,457,900	22,544,160
West Yorkshire Police	343,740,900	26,035,520
Wiltshire Police	112,751,300	15,315,260

Appendix B. Trip Type Compositions

This Appendix provides a list of the different trip purposes supplied in the GBDVS and the trip type (outdoor, primary, queued and residential) as used in this analysis:

**Table B.1.
Trip Type Allocations**

Trip Purpose	Trip Type
Long walk, hike, ramble (minimum of 2 miles)	Outdoor
Short walk/stroll (inc. dog-walking for leisure - up to 2 miles)	Outdoor
Hill walking	Outdoor
Cycling	Outdoor
Mountain biking	Outdoor
Swimming - indoor pool	Outdoor
Swimming - outdoor pool	Outdoor
Swimming - sea	Outdoor
Swimming - lake/loch/river/inland water	Outdoor
Fishing - sea angling, coarse fishing, game fishing	Outdoor
Horse riding, pony trekking	Outdoor
Water sports - sailing (motor or sail), rowing, canoeing, jet biking	Outdoor
Other water sports - windsurfing, surfing, body-boarding, water-skiing	Outdoor
Motor sports	Outdoor
Field sports - hunting, shooting, etc.	Outdoor
Air sports - gliding, flying, microlites, ballooning, parachuting	Outdoor
Bird watching, nature study	Outdoor
An outdoor fair or exhibition - country fair, agricultural show	Outdoor
Country park, managed to provide informal public recreation	Outdoor
Other gardens or parkland in the countryside	Outdoor
Went for drive/sightseeing	Outdoor
Relax/sit in car	Outdoor
Had a picnic	Outdoor
Hired a rowing/ paddle boat	Outdoor
Went on a river/lake boat trip	Outdoor
Informal sport (e.g. rounders, football)	Outdoor
Sunbathe/sit	Outdoor
Beach, sunbathe, paddle	Outdoor
Barbecue	Outdoor
Car Boot Sale	Outdoor
Playing indoor sports - 5-a-side football, badminton, basketball etc	Primary
Going to the gym, aerobics class, yoga class, etc.	Primary
Playing outdoor sports - football, rugby, hockey, cricket, golf, running, jogging etc	Primary
Watching a sports event/match on television in a pub/club	Primary
Religious activities	Primary
Craft centres	Primary

Trip Purpose	Trip Type
A park or gardens in a town or city	Primary
Go for a drink in a pub/club/hotel	Primary
Go for a meal/snack in a pub/club/hotel	Primary
Go for a meal in a restaurant/ cafe	Primary
Go for a snack at a fast-food outlet	Primary
Went to a play/concert/opera/ballet	Primary
Went to the cinema	Primary
Went to disco/nightclub	Primary
Went to bingo, casino	Primary
Went to a factory outlet/ went to a major out-of-town shopping centre	Primary
Visited a town or city for shopping for non-essential items (do NOT include food and groceries)	Primary
Going to a garden centre	Primary
Visiting health or beauty centre/ spa for leisure (e.g. having a massage or beauty treatment but not just to get yo	Primary
Dancing	Primary
Choir Practice	Primary
Party	Primary
Food Shopping	Primary
A live match or a live sports event - football, rugby, cricket athletics meeting, car rally, etc	Queued
An exhibition such as the Motor Show, Ideal Homes, holiday exhibition etc	Queued
Historic/stately home	Queued
Castle, ancient monument/site	Queued
Cathedral/ancient church	Queued
Theme/amusement park	Queued
Nature reserve/ wetlands	Queued
Zoo, wildlife or safari park	Queued
Heritage or visitor centre	Queued
Museum or art gallery	Queued
Steam or heritage railway	Queued
Other industrial heritage sites or workplaces such as a distillery, mill,etc	Queued
Working farms/ rare breeds centre	Queued
Science or technology centre	Queued
Went to a fairground/carnival	Queued
Botanical garden or arboretum	Queued
Other hobby/special interest	Residential
Played with children/ informal games (e.g. kids' games)	Residential
Just relaxing	Residential
Visit friends, relatives at home	Residential
Wedding/Christening	Residential
Others	Residential

The trip purposes defined in this table are taken directly from the GBDVS. The trip types were assigned by NERA. Where possible this was done as had been done by CURDS. Where trip purposes did not match those used by CURDS they were allocated to the category to which they were best suited.

Appendix C. Social Grade Definitions

The table below provides the definitions of the Social Grades used in the analysis conducted by NERA:

Table C.1
Social Grades

Social Grade	Social Status	Occupation
A	Upper middle class	Higher managerial, administrative or professional
B	Middle class	Intermediate managerial, administrative or professional
C1	Lower middle class	Supervisory or clerical, junior managerial, administrative or professional
C2	Skilled working class	Skilled manual workers
D	Working class	Semi and unskilled manual workers
E	Those at the lowest level of subsistence	State pensioners or widows (no other earner), casual or lowest grade workers

This table provides Social Class based on occupation as used on this analysis.

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