

Appendix **B**

HOUSEHOLD FORMATION RATES FOR GYPSIES AND TRAVELLERS TECHNICAL NOTE

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Version 1.0

1. Household Formation Rates

Introduction

- 1.1 The rate of future household formations is a key component to any housing assessment, and is particularly important for Gypsy and Traveller Accommodation Assessments. The relative youthfulness of Gypsy and Traveller populations implies that they are likely to grow more quickly than the wider population and therefore will see a higher proportionate rate of new household formation.
- 1.2 Despite the importance of household formations in Gypsy and Traveller Accommodation Assessments, very little work has been undertaken to assess the likely rates of new formations.

History

- 1.3 At the outset we would note that all studies below use net household formation which is the gross household formation rate, minus any loss of households through dissolution.
- 1.4 In a study on behalf of Office of the Deputy Prime Minister in 2003 (Local Authority Gypsy and Traveller Sites in England Office of the Deputy Prime Minister, 2003), Pat Niner identified that household growth rates of 2%-3% per cent a year were appropriate when projecting future formations.
- 1.5 In October the Department of Communities and Local Government issued guidance for conducting Gypsy and Traveller Accommodation Assessments ('Gypsy and Traveller Accommodation Needs Assessments: Guidance'). On page 25 this provides a worked example using a 3% per annum household formation rate, but notes in footnote 6 that:

'The 3% family formation growth rate is used here as an example only. The appropriate rate for individual assessments will depend on the details identified in the local survey, information from agencies working directly with local Gypsy and Traveller communities, and trends identified from figures previously given for the caravan count.'

- 1.6 Therefore, the current guidance is clear that each individual assessment should use local evidence for future household formation rates.
- 1.7 A further key source of information for the use of household formation rates were Regional Spatial Strategies (RSS) which were either produced, or in production across the whole country until their planned abolition was announced in 2010. All of the RSS across the country used a household formation rate of 3% per annum for Gypsies and Travellers. However, none of the published documents (such as 'Accommodation for Gypsies and Travellers and Travelling Showpeople in the East of England: A Revision to the Regional Spatial Strategy for the East of England July 2009') provide any evidence for this position. Instead the 3% simply forms part of the calculation.
- 1.8 Therefore, while there is precedent for using a net household formation rate of 3% per annum for Gypsies and Travellers there is little published evidence to justify this position. This document seeks to bring together all available information on household formation rates to provide a more robust position to assess the appropriate rates to use on future assessments.

Compound Growth

- 1.9 A net household growth rate of 3% does not imply that household numbers will double in 33 years (100/3). Instead the impact of compound growth where the 3% for any year is added to the base population and any subsequent household growth implies that the doubling of household numbers will occur much more quickly. For 3% compound growth the time it would take to double the household numbers is 23.5 years.
- 1.10 The table below shows the impact of a range of compound growth rates on how long they would lead to the household numbers doubling. If the growth rate was 1.5% per annum household numbers would double in 46.5 years.

Figure 1

Compound Growth Rates and Time Taken for Household numbers to Double

Growth Rate per Annum	Time Taken for Household Numbers to Double
3%	23.5 years
2.75%	25.5 years
2,5%	28 years
2,25%	31 years
2%	35 years
1.75%	40 years
1.5%	46.5 years

Evidence for Household Growth

- 1.11 A key source of quantitative information available on Gypsy and Traveller communities derives from a bi-annual survey of Gypsy and Traveller caravans which is conducted by each local authority in England on a specific date in January and July of each year. This count is of caravans and not households which makes it more difficult to interpret for a study such as this.
- 1.12 In January 1979, the date of the first count, there were 8,300 caravans recorded on sites across England. On the date of the most recent count in January 2013 there were 18,729 caravans counted. This equates to a rise of 126% over 34 years. This represents a rise of just over 2.4% per annum. The January 2013 count was lower than the figure for July 2012, but even using that figure sees a growth rate of 2.5% per annum.
- 1.13 Therefore, the number of caravans being counted on sites across England has been growing over the past 34 years at close to 2.5% per annum. There are good reasons for think that this is an overestimate of household formation rates. These include:
- There has been a significant in-migration of Irish Traveller households to England in the past 34 years. While many Irish Travellers have been established in England since before 1979, many are more recent migrants and this will have boosted caravan numbers through migration, not formations;

- Many pitches across the country are sub-let or partially occupied by non Travellers. ORS has visited many hundreds of pitches across the country with non Traveller occupants. These households will again potentially boost caravan count numbers without representing a growth in the number of Gypsy and Traveller households.

^{1.14} Therefore ORS would consider that 2.5% represent a high end estimate of the growth in the number of caravans on sites nationally due to formations, with the real rate of growth from Gypsy and Traveller household formations being lower than this figure.

Evidence for Population Growth

^{1.15} There are two main sources of information for the rate of population growth for the Gypsy and Traveller community, namely the UK Census of Population 2011 and ORS' own household survey data which includes over 2,000 face to face surveys since the start of 2012. These provide a supporting picture for the likely rate of growth among the Gypsy and Traveller population.

^{1.16} The ethnic status question from the UK Census of Population 2011 for the first time included Gypsy and Irish Traveller as an ethnic category. While it is accepted that non response bias has underestimated the total size of the Gypsy and Traveller population in the Census, the age profile it provides mirrors that obtained by ORS in household surveys. Therefore, there is strong reason to believe that the age profile shown in UK Census of Population 2011 is a valid reflection of the true age profile of the population.

^{1.17} The table below shows this age profile. Assuming that no deaths occur, for a population to double every 23.5 years (3% compound growth), half the population should be under 23.5 years and half should be over 23.5 years. In fact the midway point for the Gypsy and Traveller population is 26 years. Allowing for deaths, the number of younger people in the population must be even higher for the population to double and therefore the age profile of the Gypsy and Traveller population does not come close to doubling in 23.5 years.

Figure 2
Age Profile for the Gypsy and Traveller Community in England (Source: UK Census of Population 2011)

Age Group	Number of People	Cumulative Percentage
Age 0 to 4	5,725	10.4
Age 5 to 7	3,219	16.3
Age 8 to 9	2,006	19.9
Age 10 to 14	5,431	29.8
Age 15	1,089	31.8
Age 16 to 17	2,145	35.7
Age 18 to 19	1,750	38.9
Age 20 to 24	4,464	47.1
Age 25 to 29	4,189	54.7
Age 30 to 34	3,833	61.7
Age 35 to 39	3,779	68.5
Age 40 to 44	3,828	75.5
Age 45 to 49	3,547	82.0
Age 50 to 54	2,811	87.1
Age 55 to 59	2,074	90.9
Age 60 to 64	1,758	94.1
Age 65 to 69	1,215	96.3
Age 70 to 74	905	97.9
Age 75 to 79	594	99.0
Age 80 to 84	303	99.6
Age 85 and over	230	100.0

Modelling Population Growth Rates

- ^{1.18} ORS undertook demographic modelling to illustrate the true likely rate of growth in the Gypsy and Traveller population. For this we used PopGroup, the leading software in population and household forecasting.
- ^{1.19} The two key inputs to the PopGroup model are birth rates and death rates. For birth rates much detailed work has been undertaken in Hungary and this has shown that for their Roma population total fertility rates (TFR) are around 3. This implies the each woman on average can be expected to have three children who reach adulthood. By comparison the TFR for the whole UK population is current just below 2. ORS have not been able to find an equivalent work for the UK Gypsy and Traveller community. The links below provides more information on the Hungarian Roma population.

<http://www.romaniworld.com/cessmod01.htm>

<http://www.tarki.hu/adatbank-h/kutjel/pdf/a779.pdf>

- 1.20 While not directly applicable in this case, a TFR of 3 is consistent with ORS' survey data. This shows the average Gypsy and Traveller women aged 32 years has on average 2.5 children. From this point onwards children start to leave home, so we are not able to follow this through to a full TFR, but we have used 3 in our modelling. We would also note that the equivalent figure for a women aged 24 years in 1.5 children, which is significantly short of the number needed to double the population.
- 1.21 For death, the average life expectancy across the whole population of the UK is currently just over 80 years. However a report by Sheffield University found that the life expectancy of Gypsies and Travellers was 10-12 years less than this figure (Parry et al (2004) The Health Status of Gypsies and Travellers: Report of Department of Health Inequalities in Health Research Initiative, University of Sheffield). We have therefore, used an average life expectancy of 72 years in our model.
- 1.22 The impact of using a TFR of 3 and a life expectancy of 72 years for the Census population age profiles is that the Gypsy and Traveller population is projected to increase by 66% in the next 40 years. This equates to a growth rate of 1.25% per annum, well below 3% per annum.
- 1.23 In the most recent Office of National Statistics 2011 based Interim Population Projections the projected growth rate of the whole population of England to 2021 is 0.83% per annum. Of this 60% is due to natural change and 40% migration, so the rate of natural population growth in whole population of England is almost exactly 0.5% per annum. Therefore the figures modelled by ORS for Gypsies and Travellers show a population growth which is two and half times greater than for the whole population of England.
- 1.24 We would note that population and household growth rates do not run in parallel. The most recent Communities and Local Government 2011 based Household Projections convert these population projections to a projected household growth of 0.95% per annum. The difference between the two figures is due to the impact of an ageing population and more single older people in the population. However, this is being driven by an ageing population, while the Gypsy and Traveller population is relatively young. Therefore, a household growth figure not far in excess of 1.25% per annum is plausible and 3% is highly implausible.

Summary

- 1.25 Household formation rates are an important component of Gypsy and Traveller Accommodation Assessments, but little detailed work has been undertaken to assess their likely scale.
- 1.26 A growth rate of 3% has been commonly used in assessments, but no statistical evidence exists to support households growing this quickly. Caravan count data has shown the on-site number of caravans growing at less than 2.5% per annum and this is likely to be overstating formation rates with the national figure likely to be closer to 2% per annum.
- 1.27 Population modelling shows the true growth in the Gypsy and Traveller population may be as low as 1.25% per annum and this figure would be two and half times greater than the equivalent number for the settled community.
- 1.28 In practice the evidence supports using formation rates of between 1.5% and 2.5% per annum depending upon the relative youthfulness of the local area population. A figure of 3% net growth per annum would be exceptional and would require clear justification and statistical support before being used. In areas where an on-site survey indicates that there are few children in the population a lower figure may be used.