

Technical Note

Gypsy and Traveller Household Formation and Growth Rates

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Household Growth Rates

Abstract and conclusions

- ¹ National and local household formation and growth rates are important components of Gypsy and Traveller accommodation assessments, but little detailed work has been done to assess their likely scale. Nonetheless, nationally, a net growth rate of 3% per annum has been commonly assumed and widely used in local assessments even though there is actually no statistical evidence of households growing so quickly. The result has been to inflate both national and local requirements for additional pitches unrealistically.
- ^{2.} Those seeking to provide evidence of high annual net household growth rates for Gypsies and Travellers have sometimes sought to rely on increases in the number of caravans, as reflected in caravan counts. However, caravan count data are unreliable and erratic so the only proper way to project future population and household growth is through demographic analysis (which, of course, is used to assess housing needs in the settled community).
- ^{3.} The growth in the Gypsy and Traveller population may be as low as 1.25% per annum a rate which is much less than the 3% per annum often assumed, but still at least four times greater than in the general population. Even using extreme and unrealistic assumptions, it is hard to find evidence that net Gypsy and Traveller population and household growth rates are above 2% per annum nationally.
- ^{4.} The often assumed 3% per annum net household growth rate is unrealistic and would require clear statistical evidence before being used for planning purposes. In practice, the best available evidence supports a national net household growth rate of 1.5% per annum for Gypsies and Travellers.
- ^{5.} Some local authorities might perhaps allow for a household growth rate of up to 2.5% per annum, to provide a 'margin' if their populations are relatively youthful; but in areas where on-site surveys indicate that there are fewer children in the Gypsy and Traveller communities, the lower estimate of 1.5% per annum should be used for planning purposes.

Introduction

^{6.} The rate of household growth is a key element in all housing assessments, including Gypsy and Traveller accommodation assessments. Compared with the general population, the relative youthfulness of many Gypsy and Traveller populations means that their birth rates are likely to generate higher-than-average population growth, and proportionately higher *gross* household formation rates. However, while their *gross* rate of household growth might be high, Gypsy and Traveller communities' future accommodation needs are, in practice, affected by any reduction in the number of households due to dissolution and/or by movements in/out of the area and/or by transfers into other forms of housing. Therefore, the *net* rate of household growth is the *gross* rate of formation *minus* any reductions in households due to such factors. Of course, it is the *net* rate that is important in determining future accommodation needs for Gypsies and Travellers.

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- ^{7.} In this context, it is a matter of concern that many Gypsy and Traveller accommodation needs assessments have not distinguished *gross* and *net* growth rates nor provided evidence for their assumed rates of household increase. These deficiencies are particularly important because when assumed growth rates are unrealistically high, and then compounded over a number of planning years, they can yield exaggerated projections of accommodation needs and misdirect public policy. Nonetheless, assessments and guidance documents have assumed 'standard' *net* growth rates of about 3% without sufficiently recognising either the range of factors impacting on the *gross* household growth rates or the implications of unrealistic assumptions when projected forward on a compound basis year by year.
- ⁸ For example, in a study for the Office of the Deputy Prime Minister ('Local Authority Gypsy and Traveller Sites in England', 2003), Pat Niner concluded that *net* growth rates as high as 2%-3% per annum should be assumed. Similarly, the Regional Spatial Strategies (RSS) (which continued to be quoted after their abolition was announced in 2010) used *net* growth rates of 3% per annum without providing any evidence to justify the figure (For example, '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').
- ^{9.} However, the guidance of the Department of Communities and Local Government ('Gypsy and Traveller Accommodation Needs Assessments: Guidance', 2007) was much clearer in saying 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. [In footnote 6, page 25]

- ^{10.} The guidance emphasises that local information and trends should always be taken into account because the *gross* rate of household growth is moderated by reductions in households through dissolution and/or by households moving into bricks and mortar housing or moving to other areas. In other words, even if 3% is plausible as a *gross* growth rate, it is subject to moderation through such reductions in households through dissolution or moves. It is the resulting *net* household growth rate that matters for planning purposes in assessing future accommodation needs.
- ^{11.} The current guidance also recognises that assessments should use local evidence for *net* future household growth rates. A letter from the Minister for Communities and Local Government (Brandon Lewis MP), to Andrew Selous MP (placed in the House of Commons library on March 26th 2014) said:

I can confirm that the annual growth rate figure of 3% does not represent national planning policy.

The previous Administration's guidance for local authorities on carrying out Gypsy and Traveller Accommodation Assessments under the Housing Act 2004 is unhelpful in that it uses an illustrative example of calculating future accommodation need based on the 3% growth rate figure. The guidance notes that the appropriate rate for individual assessments will depend on the details identified in the local authority's own assessment of need. As such the Government is not endorsing or supporting the 3% growth rate figure,' ^{12.} Therefore, while there are many assessments where a national Gypsy and Traveller household growth rate of 3% per annum has been assumed (on the basis of 'standard' precedent and/or guidance), there is little to justify this position and it conflicts with current planning guidance. In this context, this document seeks to integrate available evidence about *net* household growth rates in order to provide a more robust basis for future assessments.

Compound growth

^{13.} The assumed rate of household growth is crucially important for Gypsy and Traveller studies because for future planning purposes it is projected over time on a compound basis – so errors are progressively enlarged. For example, if an assumed 3% *net* growth rate is compounded each year then the implication is that the number of households will double in only 23.5 years; whereas if a *net* compound rate of 1.5% is used then the doubling of household numbers would take 46.5 years. The table below shows the impact of a range of compound growth rates.

Table 1

Compound Growth Rates and Time Taken for Number of Households to Double

Household Growth Rate per Annum	Time Taken for Household to Double
3.00%	23.5 years
2.75%	25.5 years
2.50%	28 years
2.25%	31 years
2.00%	35 years
1.75%	40 years
1.50%	46.5 years

^{14.} The above analysis is vivid enough, but another illustration of how different rates of household growth impact on total numbers over time is shown in the table below – which uses a baseline of 100 households while applying different compound growth rates over time. After 5 years, the difference between a 1.5% growth rate and a 3% growth rate is only 8 households (116 minus 108); but with a 20-year projection the difference is 46 households (181 minus 135).

Table 2

Growth in Households Over time from a Baseline of 100 Households

Household Growth Rate per Annum	5 years	10 years	15 years	20 years	50 years	100 years
3.00%	116	134	156	181	438	1,922
2.75%	115	131	150	172	388	1,507
2.50%	113	128	145	164	344	1,181
2.25%	112	125	140	156	304	925
2.00%	110	122	135	149	269	724
1.75%	109	119	130	141	238	567
1.50%	108	116	125	135	211	443

^{15.} In summary, the assumed rate of household growth is crucially important because any exaggerations are magnified when the rate is projected over time on a compound basis. As we have shown, when compounded and projected over the years, a 3% annual rate of household growth implies much larger future Gypsy and Traveller accommodation requirements than a 1.5% per annum rate.

Caravan counts

- ^{16.} Those seeking to demonstrate national Gypsy and Traveller household growth rates of 3% or more per annum have, in some cases, relied on increases in the number of caravans (as reflected in caravan counts) as their evidence. For example, some planning agents have suggested using 5-year trends in the national caravan count as an indication of the general rate of Gypsy and Traveller household growth. For example, the count from July 2008 to July 2013 shows a growth of 19% in the number of caravans on-site which is equivalent to an average annual compound growth rate of 3.5%. So, *if plausible*, this approach could justify using a 3% or higher annual household growth rate in projections of future needs.
- ^{17.} However, caravan count data are unreliable and erratic. For example, the July 2013 caravan count was distorted by the inclusion of 1,000 caravans (5% of the total in England) recorded at a Christian event near Weston-Super-Mare in North Somerset. Not only was this only an estimated number, but there were no checks carried out to establish how many caravans were occupied by Gypsies and Travellers. Therefore, the resulting count overstates the Gypsy and Traveller population and also the rate of household growth.
- ^{18.} ORS has applied the caravan-counting methodology hypothetically to calculate the implied national household growth rates for Gypsies and Travellers over the last 15 years, and the outcomes are shown in the table below. The January 2013 count suggests an average annual growth rate of 1.6% over five years, while the July 2013 count gives an average 5-year rate of 3.5%; likewise a study benchmarked at January 2004 would yield a growth rate of 1%, while one benchmarked at January 2008 would imply a 5% rate of growth. Clearly any model as erratic as this is not appropriate for future planning.

Date	Number of caravans	5 year growth in caravans	Percentage growth over 5 years	Annual over last 5 years.
Jan 2015	20,123	1,735	9.54%	1.84%
July 2014	20,035	2,598	14.90%	2.81%
Jan 2014	19,503	1,638	9.17%	1.77%
July 2013	20,911	3,339	19.00%	3.54%
Jan 2013	19,359	1,515	8.49%	1.64%
Jul 2012	19,261	2,112	12.32%	2.35%
Jan 2012	18,746	2,135	12.85%	2.45%
Jul 2011	18,571	2,258	13.84%	2.63%
Jan 2011	18,383	2,637	16.75%	3.15%
Jul 2010	18,134	2,271	14.32%	2.71%
Jan 2010	18,370	3,001	19.53%	3.63%
Jul 2009	17,437	2,318	15.33%	2.89%
Jan 2009	17,865	3,503	24.39%	4.46%
Jul 2008	17,572	2,872	19.54%	3.63%
Jan 2008	17,844	3,895	27.92%	5.05%

Table 3

National CLG Caravan Count July 1998 to July 2014 with Growth Rates (Source: CLG)

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Jul 200717,1492,94820.76%3.84%Jan 200716,6112,89321.09%3.90%Jul 200616,3132,51118.19%3.40%Jan 200615,7462,35217.56%3.29%Jul 200515,8632,09815.24%2.88%Jul 200415,1691,97014.70%2.78%Jul 200415,1192,11016.22%3.05%Jul 200314,7006.03%1.18%Jul 200314,7006.03%1.18%Jul 200213,949Jul 200113,802Jul 200113,394Jul 200113,765Jul 200113,765Jul 200013,765Jul 200013,765Jul 200013,399Jul 200013,399Jul 200013,399Jul 200013,765Jul 200013,765Jul 200013,765Jul 200013,765Jul 200013,765Jul 200013,765Jul 199813,545					
Jul 200616,3132,51118.19%3.40%Jan 200615,7462,35217.56%3.29%Jul 200515,8632,09815.24%2.88%Jan 200515,3691,97014.70%2.78%Jul 200415,1192,11016.22%3.05%Jan 200414,3628176.03%1.18%Jul 200314,7008176.03%1.18%Jul 200313,949Jul 200213,718Jul 200113,802Jul 200113,765Jul 200013,765Jul 200113,399Jul 200013,799Jul 200113,399Jul 200013,709Jul 200013,709Jul 200013,709Jul 200013,709Jul 200013,709Jul 200013,709Jul 200013,709Jul 200013,709Jul 200013,709Jul 2000Jul 2000Jul 2000Jul 2000<	Jul 2007	17,149	2,948	20.76%	3.84%
Jan 200615,7462,35217.56%3.29%Jul 200515,8632,09815.24%2.88%Jan 200515,3691,97014.70%2.78%Jul 200415,1192,11016.22%3.05%Jan 200414,3628176.03%1.18%Jul 200314,7006.03%1.18%Jul 200314,7006.03%1.18%Jul 200313,9496.03%1.18%Jul 200213,7186.03%6.03%Jul 200113,8026.03%6.03%Jul 200113,3946.03%6.03%Jul 200113,3946.03%6.03%Jul 200113,3946.03%6.03%Jul 200113,3946.03%6.03%Jul 200113,3946.03%6.03%Jul 200013,7656.03%6.03%Jul 200013,3996.03%6.03%Jan 199913,0096.03%6.03%	Jan 2007	16,611	2,893	21.09%	3.90%
Jul 200515,8632,09815,24%2.88%Jan 200515,3691,97014.70%2.78%Jul 200415,1192,11016.22%3.05%Jan 200414,3628176.03%1.18%Jul 200314,7006.03%1.18%Jul 200314,7006.03%1.18%Jul 200214,2016.03%1.18%Jul 200213,7486.03%6.03%Jul 200113,8026.03%6.03%Jul 200113,3946.03%6.03%Jul 200013,7656.03%6.03%Jan 200013,3996.03%6.03%Jan 199913,0096.01%6.01%	Jul 2006	16,313	2,511	18.19%	3.40%
Jan 200515,3691,97014.70%2.78%Jul 200415,1192,11016.22%3.05%Jan 200414,3628176.03%1.18%Jul 200314,7006.03%1.18%Jan 200313,9496.03%1.18%Jul 200214,2016.03%1.18%Jul 200213,7186.03%1.18%Jul 200113,8026.03%1.18%Jul 200113,3946.03%1.18%Jul 200113,3946.03%1.18%Jul 200113,3946.03%1.18%Jul 200013,7656.03%1.18%Jan 200013,3996.03%1.18%	Jan 2006	15,746	2,352	17.56%	3.29%
Jul 200415,1192,11016.22%3.05%Jan 200414,3628176.03%1.18%Jul 200314,700 </th <th>Jul 2005</th> <th>15,863</th> <th>2,098</th> <th>15.24%</th> <th>2.88%</th>	Jul 2005	15,863	2,098	15.24%	2.88%
Jan 200414,3628176.03%1.18%Jul 200314,700<	Jan 2005	15,369	1,970	14.70%	2.78%
Jul 200314,700Jan 200313,949Jul 200214,201Jan 200213,718Jul 200113,802Jan 200113,394Jul 200013,765Jan 200013,399Jan 199913,009	Jul 2004	15,119	2,110	16.22%	3.05%
Jan 200313,949Jul 200214,201Jan 200213,718Jul 200113,802Jan 200113,394Jul 200013,765Jan 200013,399Jan 199913,009	Jan 2004	14,362	817	6.03%	1.18%
Jul 200214,201Jan 200213,718Jul 200113,802Jan 200113,394Jul 200013,765Jan 200013,399Jan 199913,009	Jul 2003	14,700			
Jan 2002 13,718 Jul 2001 13,802 Jan 2001 13,394 Jul 2000 13,765 Jan 2000 13,399 Jan 1999 13,009	Jan 2003	13,949			
Jul 2001 13,802 Jan 2001 13,394 Jul 2000 13,765 Jan 2000 13,399 Jan 1999 13,009	Jul 2002	14,201			
Jan 2001 13,394 Jul 2000 13,765 Jan 2000 13,399 Jan 1999 13,009	Jan 2002	13,718			
Jul 2000 13,765 Jan 2000 13,399 Jan 1999 13,009	Jul 2001	13,802			
Jan 2000 13,399 Jan 1999 13,009	Jan 2001	13,394			
Jan 1999 13,009	Jul 2000	13,765			
	Jan 2000	13,399			
Jul 1998 13,545	Jan 1999	13,009			
	Jul 1998	13,545			

- ^{19.} The annual rate of growth in the number of caravans varies from slightly over 1% to just over 5% per annum. We would note that if longer time periods are used the figures do become more stable. Over the 36 year period 1979 (the start of the caravan counts) to 2015 the compound growth rate in caravan numbers has been 2.5% per annum.
- ^{20.} However, there is no reason to assume that these widely varying rates correspond with similar rates of increase in the household population. In fact, the highest rates of caravan growth occurred between 2006 and 2009, when the first wave of Gypsy and Traveller accommodation needs assessments were being undertaken so it seems plausible that the assessments prompted the inclusion of additional sites and caravans (which may have been there, but not counted previously). Counting caravan numbers is very poor proxy for Gypsy and Traveller household growth. Caravans counted are not always occupied by Gypsy and Traveller families and numbers of caravans held by families may increase generally as affluence and economic conditions improve, (but without a growth in households)
- 21. There is no reason to believe that the varying rates of increase in the number of caravans are matched by similar growth rates in the household population. The caravan count is not an appropriate planning guide and the only proper way to project future population and household growth is through demographic analysis which should consider both population and household growth rates. This approach is not appropriate to needs studies for the following reasons:

Modelling population growth

Introduction

^{22.} The basic equation for calculating the rate of Gypsy and Traveller population growth seems simple: start with the base population and then calculate the average increase/decrease by allowing for births, deaths and in-/out-migration. Nevertheless, deriving satisfactory estimates is difficult because the evidence is often tenuous – so, in this context, ORS has modelled the growth of the national Gypsy and Traveller population based on the most likely birth and death rates, and by using PopGroup (the leading software for

population and household forecasting). To do so, we have supplemented the available national statistical sources with data derived locally (from our own surveys) and in some cases from international research. None of the supplementary data are beyond question, and none will stand alone; but, when taken together they have cumulative force. In any case the approach we adopt is more critically self-aware than simply adopting 'standard' rates on the basis of precedent.

Migration effects

^{23.} Population growth is affected by national net migration and local migration (as Gypsies and Travellers move from one area to another). In terms of national migration, the population of Gypsies and Travellers is relatively fixed, with little international migration. It is in principle possible for Irish Travellers (based in Ireland) to move to the UK, but there is no evidence of this happening to a significant extent and the vast majority of Irish Travellers were born in the UK or are long-term residents. In relation to local migration effects, Gypsies and Travellers can and do move between local authorities – but in each case the inmigration to one area is matched by an out-migration from another area. Since it is difficult to estimate the net effect of such movements over local plan periods, ORS normally assumes that there will be nil net migration to/from an area. Nonetheless, where it is possible to estimate specific in-/out- migration effects, we take account of them, while distinguishing between migration and household formation effects.

Population profile

- ^{24.} The main source for the rate of Gypsy and Traveller population growth is the UK 2011 Census. In some cases the data can be supplemented by ORS's own household survey data which is derived from more than 2,000 face-to-face interviews with Gypsies and Travellers since 2012. The ethnicity question in the 2011 census included for the first time 'Gypsy and Irish Traveller' as a specific category. While non-response bias probably means that the size of the population was underestimated, the age profile the census provides is not necessarily distorted and matches the profile derived from ORS's extensive household surveys.
- ^{25.} The age profile is important, as the table below (derived from census data) shows. Even assuming zero deaths in the population, achieving an annual population growth of 3% (that is, doubling in size every 23.5 years) would require half of the "year one" population to be aged under 23.5 years. When deaths are accounted for (at a rate of 0.5% per annum), to achieve the same rate of growth, a population of Gypsies and Travellers would need about half its members to be aged under 16 years. In fact, though, the 2011 census shows that the midway age point for the national Gypsy and Traveller population is 26 years so the population could not possibly double in 23.5 years.

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

Table 4

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

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

Birth and fertility rates

- ^{26.} The table above provides a way of understanding the rate of population growth through births. The table shows that surviving children aged 0-4 years comprise 10.4% of the Gypsy and Traveller population which means that, on average, 2.1% of the total population was born each year (over the last 5 years). The same estimate is confirmed if we consider that those aged 0-14 comprise 29.8% of the Gypsy and Traveller population which also means that almost exactly 2% of the population was born each year. (Deaths during infancy will have minimal impact within the early age groups, so the data provides the best basis for estimating of the birth rate for the Gypsy and Traveller population.)
- ^{27.} The total fertility rate (TFR) for the whole UK population is just below 2 which means that on average each woman can be expected to have just less than two children who reach adulthood. We know of only one estimate of the fertility rates of the UK Gypsy and Traveller community. This is contained in the book, 'Ethnic identity and inequalities in Britain: The dynamics of diversity' by Dr Stephen Jivraj and Professor Ludi Simpson published in May 2015. This draws on the 2011 Census data and provides an estimated total fertility rate of 2.75 for the Gypsy and traveller community.
- ^{28.} ORS's have been able to examine our own survey data to investigate the fertility rate of Gypsy and Traveller women. The ORS data shows that, on average, Gypsy and Traveller women aged 32 years have 2.5 children (but, because the children of mothers above this age point tend to leave home progressively, full TFRs were not completed). On this basis it is reasonable to assume an average of three children per woman during her lifetime which would be consistent with the evidence from the 2011 Census of a figure of around 2.75 children per woman. In any case, the TFR for women aged 24 years is 1.5 children, which is significantly short of the number needed to double the population in 23.5 years and therefore certainly implies a net growth rate of less than 3% per annum.

Death rates

^{29.} Although the above data imply an annual growth rate through births of about 2%, the death rate has also to be taken into account – which means that the *net* population growth cannot conceivably achieve 2% per

annum. In England and Wales there are nearly half-a-million deaths each year – about 0.85% of the total population of 56.1 million in 2011. If this death rate is applied to the Gypsy and Traveller community then the resulting projected growth rate is in the region of 1.15%-1.25% per annum.

- ^{30.} However, the Gypsy and Traveller population is significantly younger than average and may be expected to have a lower percentage death rate overall (even though a smaller than average proportion of the population lives beyond 68 to 70 years). While there can be no certainty, an assumed death rate of around 0.5% to 0.6% per annum would imply a net population growth rate of around 1.5% per annum.
- ^{31.} Even though the population is younger and has a lower death rate than average, Gypsies and Travellers are less likely than average to live beyond 68 to 70 years. Whereas the average life expectancy across the whole population of the UK is currently just over 80 years, a Sheffield University study found that Gypsy and Traveller life expectancy is about 10-12 years less than average (Parry et al (2004) 'The Health Status of Gypsies and Travellers: Report of Department of Health Inequalities in Health Research Initiative', University of Sheffield). Therefore, in our population growth modelling we have used a conservative estimate of average life expectancy as 72 years which is entirely consistent with the lower-than-average number of Gypsies and Travellers aged over 70 years in the 2011 census (and also in ORS's own survey data). On the basis of the Sheffield study, we could have supposed a life expectancy of only 68, but we have been cautious in our approach.

Modelling outputs

- ^{32.} If we assume a TFR of 3 and an average life expectancy of 72 years for Gypsies and Travellers, then the modelling projects the population to increase by 66% over the next 40 years implying a population compound growth rate of 1.25% per annum (well below the 3% per annum often assumed). If we assume that Gypsy and Traveller life expectancy increases to 77 years by 2050, then the projected population growth rate rises to nearly 1.5% per annum. To generate an 'upper range' rate of population growth, we have assumed a TFR of 4 and an average life expectancy rising to 77 over the next 40 years which then yields an 'upper range' growth rate of 1.9% per annum. We should note, though, that national TFR rates of 4 are currently found only in sub-Saharan Africa and Afghanistan, so it is an implausible assumption.
- ^{33.} There are indications that these modelling outputs are well founded. For example, in the ONS's 2012-based Sub-National Population Projections the projected population growth rate for England to 2037 is 0.6% per annum, of which 60% is due to natural change and 40% due to migration. Therefore, the natural population growth rate for England is almost exactly 0.35% per annum meaning that our estimate of the Gypsy and Traveller population growth rate is four times greater than that of the general population of England.
- ^{34.} The ORS Gypsy and Traveller findings are also supported by data for comparable populations around the world. As noted, on the basis of sophisticated analysis, Hungary is planning for its Roma population to grow at around 2.0% per annum, but the underlying demographic growth is typically closer to 1.5% per annum. The World Bank estimates that the populations of Bolivia, Cambodia, Egypt, Malaysia, Pakistan, Paraguay, Philippines and Venezuela (countries with high birth rates and improving life expectancy) all show population growth rates of around 1.7% per annum. Therefore, in the context of national data, ORS's modelling and plausible international comparisons, it is implausible to assume a net 3% annual growth rate for the Gypsy and Traveller population.

Household growth

- ^{35.} In addition to population growth influencing the number of households, the size of households also affects the number. Hence, population and household growth rates do not necessarily match directly, mainly due to the current tendency for people to live in smaller (childless or single person) households (including, of course, older people (following divorce or as surviving partners)). Based on such factors, the CLG 2012-based projections convert current population data to a projected household growth rate of 0.85% per annum (compared with a population growth rate of 0.6% per annum).
- ^{36.} Because the Gypsy and Traveller population is relatively young and has many single parent households, a 1.5% annual population growth could yield higher-than-average household growth rates, particularly if average household sizes fall or if younger-than-average households form. However, while there is evidence that Gypsy and Traveller households already form at an earlier age than in the general population, the scope for a more rapid rate of growth, through even earlier household formation, is limited.
- ^{37.} Based on the 2011 census, the table below compares the age of household representatives in English households with those in Gypsy and Traveller households showing that the latter has many more household representatives aged under-25 years. In the general English population 3.6% of household representatives are aged 16-24, compared with 8.7% in the Gypsy and Traveller population. Because the census includes both housed and on-site Gypsies and Travellers without differentiation, it is not possible to know if there are different formation rates on sites and in housing. However, ORS's survey data (for sites in areas such as Central Bedfordshire, Cheshire, Essex, Gloucestershire and a number of authorities in Hertfordshire) shows that about 10% of Gypsy and Traveller households have household representatives aged under-25 years.

Table 5

Age of Head of Household (Source: UK Census of Population 2011)

	All households in England		Gypsy and Traveller households in England	
Age of household representative	Number of households	Percentage of households	Number of households	Percentage of households
Age 24 and under	790,974	3.6%	1,698	8.7%
Age 25 to 34	3,158,258	14.3%	4,232	21.7%
Age 35 to 49	6,563,651	29.7%	6,899	35.5%
Age 50 to 64	5,828,761	26.4%	4,310	22.2%
Age 65 to 74	2,764,474	12.5%	1,473	7.6%
Age 75 to 84	2,097,807	9.5%	682	3.5%
Age 85 and over	859,443	3.9%	164	0.8%
Total	22,063,368	100%	19,458	100%

^{38.} The following table shows that the proportion of single person Gypsy and Traveller households is not dissimilar to the wider population of England; but there are more lone parents, fewer couples without children, and fewer households with non-dependent children amongst Gypsies and Travellers. This data suggest that Gypsy and Traveller households form at an earlier age than the general population.

Table 6

Household Type (Source: UK Census of Population 2011)

	All househo	ds in England	Gypsy and ⁻ households i	
Household Type	Number of households	Percentage of households	Number of households	Percentage of households
Single person	6,666,493	30.3%	5,741	29.5%
Couple with no children	5,681,847	25.7%	2345	12.1%
Couple with dependent children	4,266,670	19.3%	3683	18.9%
Couple with non-dependent children	1,342,841	6.1%	822	4.2%
Lone parent: Dependent children	1,573,255	7.1%	3,949	20.3%
Lone parent: All children non-dependent	766,569	3.5%	795	4.1%
Other households	1,765,693	8.0%	2,123	10.9%
Total	22,063,368	100%	19,458	100%

- ^{39.} ORS's own site survey data is broadly compatible with the data above. We have found that: around 50% of pitches have dependent children compared with 45% in the census; there is a high proportion of lone parents; and about a fifth of Gypsy and Traveller households appear to be single person households. One possible explanation for the census finding a higher proportion of single person households than the ORS surveys is that many older households are living in bricks and mortar housing (perhaps for health-related reasons).
- ^{40.} ORS's on-site surveys have also found more female than male residents. It is possible that some single person households were men linked to lone parent females and unwilling to take part in the surveys. A further possible factor is that at any time about 10% of the male Gypsy and Traveller population is in prison an inference drawn from the fact that about 5% of the male prison population identify themselves as Gypsies and Travellers ('People in Prison: Gypsies, Romany and Travellers', Her Majesty's Inspectorate of Prisons, February 2004) which implies that around 4,000 Gypsies and Travellers are in prison. Given that almost all of the 4,000 people are male and that there are around 200,000 Gypsies and Travellers in total, this equates to about 4% of the total male population, but closer to 10% of the adult male population.
- ^{41.} The key point, though, is that since 20% of Gypsy and Traveller households are lone parents, and up to 30% are single persons, there is limited potential for further reductions in average household size to increase current household formation rates significantly and there is no reason to think that earlier household formations or increasing divorce rates will in the medium term affect household formation rates. While there are differences with the general population, a 1.5% per annum Gypsy and Traveller population

growth rate is likely to lead to a household growth rate of 1.5% per annum – more than the 0.85% for the English population as a whole, but much less than the often assumed 3% rate for Gypsies and Travellers.

Household dissolution rates

^{42.} Finally, consideration of household dissolution rates also suggests that the net household growth rate for Gypsies and Travellers is very unlikely to reach 3% per annum (as often assumed). The table below, derived from ORS's mainstream strategic housing market assessments, shows that generally household dissolution rates are between 1.0% and 1.7% per annum. London is different because people tend to move out upon retirement, rather than remaining in London until death. To adopt a 1.0% dissolution rate as a standard guide nationally would be too low, because it means that average households will live for 70 years after formation. A 1.5% dissolution rate would be a more plausible as a national guide, implying that average households live for 47 years after formation.

Table 7

Annual Dissolution Rates (Source: SHMAs undertaken by ORS)

Area	Annual projected household dissolution	Number of households	Percentage
Greater London	25,000	3,266,173	0.77%
Blaenau Gwent	468.2	30,416	1.54%
Bradford	3,355	199,296	1.68%
Ceredigion	348	31,562	1.10%
Exeter, East Devon, Mid Devon, Teignbridge and Torbay	4,318	254,084	1.70%
Neath Port Talbot	1,352	57,609	2.34%
Norwich, South Norfolk and Broadland	1,626	166,464	0.98%
Suffolk Coastal	633	53,558	1.18%
Monmouthshire Newport Torfaen	1,420	137,929	1.03%

^{43.} The 1.5% dissolution rate is important because the death rate is a key factor in moderating the gross household growth rate. Significantly, applying a 1.5% dissolution rate to a 3% gross household growth formation rate yields a *net* rate of 1.5% per annum – which ORS considers is a realistic figure for the Gypsy and Traveller population and which is in line with other demographic information. After all, based on the dissolution rate, a *net* household formation rate of 3% per annum would require a 4.5% per annum gross formation rate (which in turn would require extremely unrealistic assumptions about birth rates).

Summary conclusions

- ^{44.} Future Gypsy and Traveller accommodation needs have typically been over-estimated because population and household growth rates have been projected on the basis of assumed 3% per annum net growth rates.
- ^{45.} Unreliable caravan counts have been used to support the supposed growth rate, but there is no reason to suppose that the rate of increase in caravans corresponds to the annual growth of the Gypsy and Traveller population or households.

- ^{46.} The growth of the national Gypsy and Traveller population may be as low as 1.25% per annum which is still four times greater than in the settled community. Even using extreme and unrealistic assumptions, it is hard to find evidence that the net national Gypsy and Traveller population and household growth is above 2% per annum nationally. The often assumed 3% net household growth rate per annum for Gypsies and Travellers is unrealistic.
- ^{47.} The best available evidence suggests that the net annual Gypsy and Traveller household growth rate is 1.5% per annum. The often assumed 3% per annum net rate is unrealistic. Some local authorities might allow for a household growth rate of up to 2.5% per annum, to provide a 'margin' if their populations are relatively youthful; but in areas where on-site surveys indicate that there are fewer children in the Gypsy and Traveller population, the lower estimate of 1.5% per annum should be used.