



The transformation of England's population projections in the 2000s

In 2013 the author produced a briefing on global population primarily to assist environmentalists to overcome a reluctance to incorporate population into their thinking.¹ A counterpart briefing on UK Population will be published in Spring 2016. This article sets out the questions, but not conclusions, at the beginning of the UK research project. Both the 2013 briefing and this article can be downloaded from www.anthonyrae.com

1. In 1954 when the Government Actuary Sir George Maddex came to publish the first population projection² for the United Kingdom, and with the current population then standing at 51.1 million, he reported that the country's population growth appeared to be almost at an end. By 1979, 25 years later, he projected that it would peak at 53.75m. So the UK, probably the first country in the world to begin a demographic transition when its population increase accelerated in the 18th century, would now also be amongst the first to complete that transition, maybe even decline.
2. Because in 1944, when the Royal Commission on Population was beginning its work, the mood was one of demographic pessimism. A participant at the time noted afterwards: "In the dozen years before 1944 the birth rate here was running at a level that would mean the extinction of the British inhabitants in these islands by around the end of the century."³ In 1951 another observer reported some of the main findings of the Royal Commission: that average family size was around 2.2 children per married couple; 'that this figure of 2.2 is some 6% deficient for replacing the population'; that 'if 2.2 is maintained the population will increase till about 1977 and thereafter slowly decline'; and that 'in any event, past changes in birth-rates will result in an ageing population.' The Royal Commission, as well as being accurate in its analysis of likely future trends, had also looked backwards to note that the UK birthrate had begun to reduce in the 1870s.
3. 50 years later not much had changed from the essential structure of the Government Actuary's first projection. True his 2003-based forecast (2003B) - the penultimate before this task was handed over to the Office of National Statistics - now recorded the current population at 60m but the future level at which it peaked, at a date almost 50 years hence - 66.8m in 2051 - did not threaten to disrupt that fundamental process of transition. The position at the end date of that projection (2073, when the population would be 66.4m) confirmed the previously established understanding of a long future, after peaking, of stagnation and fractional decline. This had been the pattern in the projections since the mid 1980s.
4. And then something transformatory occurred, marking a sudden and major dislocation not just to the previous data trajectory but also across a much wider range of social and environmental factors that is likely to have a profound impact on sustainability throughout the 21st century. Just one year later, the 2004-based projection increased its estimate of a future maximum UK population by nearly 4m - from 66.8m to 70.7m; shifted the date of future

1 *Global population to 2050 and beyond: Sources, Analysis, Discussion* July 2013 at www.anthonyrae.com

2 All the population projections in this article are those produced by the Government Actuary's Department (1954-2004) and then the ONS. See <http://www.ons.gov.uk/ons/rel/npp/national-population-projections-historic-series/index.html> Because of quantity of ONS documentation associated with each projection individual reports/page numbers are not always cited.

3 Roy Harrod <http://www.tandfonline.com/doi/pdf/10.1080/00220387408421490#preview> He added: "... When the war was over, sure enough, the birthrate fell back again. And then, in 1950, there came an upturn, and the birthrate has been in a fairly satisfactory condition since then."

maximum from 2051 to 2074; and for the first time did not record a situation of 'peak followed by decline'.

5. Two years later the 2006B projection recorded an astonishing further change. Maximum future UK population increased from 70.7m to 85.3m - an increase of 14.8m between consecutive projections - the date of future maximum moved to 2083, again with no peaking. This position was confirmed by the 2008B projection. And then in 2010B there was a second 'great leap upwards', with maximum future UK population rising to 97.0m - a further increase of 11.3m over the previous exercise - with the date of future maximum now pushed 100 years into the future (2110), with ominously still no peaking. Finally the 2012B projections pulled back that maximum to 93.3m, but still with no peaking. The 2014B projections will be available in October 2015.

6. Thus in a space of just seven years and four biennial projections the estimates of the UK's future population had increased by 30.2 million or 45%. By contrast the 11 projections between 1981-2003 displayed a growth of just 6.3 million or 11%. Moreover the long run demographic trajectory had transformed from 'shallow increase, then peaking, then marginal decline' to 'dramatic increase with no peaking'.⁴

7. One might have thought that a transformation in the data underpinning, indeed driving so many components of national activity, would have sent shockwaves through analysts and policymakers, then on to politicians and decision makers in government and local authorities, to think tanks and NGOs, before rippling out into the media and general public. But instead - almost nothing.⁵ So this silence, this failure within government and civil society to react and respond itself becomes part of the research story. The questions prompted by the reversal of the UK's established demographic trajectory are many, each of which will require careful exploration in the research.

Q1 To which demographic components can this change be attributed?

8. The ONS 2012-based report quantifies their primary analysis of the increase in its principal projection by 9.6m between 2012-2037 as follows:

"Some 4.2 million of this increase is directly due to the assumed number of net migrants. Natural change accounts for a further 5.4 million - the difference between 20.2 million births and 14.8 million deaths. Some 3.8 million of this natural change (increase) would occur with zero net migration. ... Some 43% of population growth in the principal projection is ... directly attributable to the assumed number of net migrants. The remaining 57% is attributable to projected natural change (of which 39% would occur with zero net migration and 17% arises from the effect of net migration on natural change ... because migration is concentrated at young adult ages). In total, therefore, some 60% of population growth ... is attributable, directly or indirectly, to future net migration."⁶

9. The Oxford Migration Observatory (OMO) in January 2012 presented a similar set of figures: "the cumulative net inflow of post-2010 migrants accounts for 47% of total population growth. A further 21% of projected population growth is attributable to the additional contribution of new migrants to natural change (i.e. births and deaths)." The RCEP reached the same conclusion in 2011.⁷

10. A decade before, the 2002-based projections had set the principal net migration assumption at 130,000 p.a with a High variant of 190,000. In fact the actual numbers for the next 10 years turned out to be 268-267-265-273-229-229-256-205-177-209 (thousands) respectively - all but one substantially exceeding the High variant. (The recently released net

4 From 2003-based to 2010-based the projection increased from 66.79m to 96.98m or 30.2m. See the table in the appendix for all projections 1954-2012.

5 An exception would be Alistair Murray's briefing *Does Britain need a population policy?* Centre:Forum January 2008 in response to the 2006-based projections.

6 ONS *2012-based Summary Results* November 2013 p.10

7 OMO *The Impact of Migration on UK Population Growth* January 2012; RCEP [see footnote 25] box 2-A p.17

migration figure for 2014 exceeded all these, at 318,000).⁸ By 2010B the net migration assumption was being set at +200,000, although this was then reduced to +165,000 in 2012B.

11. On the other hand the long-term TFR fertility assumption in 2002B of 1.74 – following the ‘the lowest figure ever recorded, 1.63, in 2001’⁹ – had by 2012B only been raised to 1.89 – thus significantly below replacement rate throughout the projection period. This therefore provides an additional and striking dimension to the UK’s demographic transformation: substantial population increase in tandem with below-replacement fertility.

Q2 What is the role of international immigration and net migration in the increased projections?

12. Of course changes to the projections from 2004B onwards would have to be preceded by a parallel changes somewhere within the demographic components some years beforehand. Looking backwards in the record for a discontinuity, the prime candidate has to be net migration.

13. Over the longer run the particular contribution that net migration, and international immigration, has played in this transformation is clearly visible in just a few graphics and graphs: in the decadal totals for net migration between 1901-2010, where the increase in the very last decade of that series is an abrupt change from what preceded¹⁰; in the ONS annual timeline for gross and net migration between 1964-2013¹¹; and finally, on that same timeline, in the surge in international immigration from the late 1990s which saw numbers increase from the low 300,000s to in excess of 500,000 by 2002, below which level it has not dropped since. (By contrast the movement in emigration was much less pronounced.)

14. Looking at the balance between immigration and emigration, there were stable levels of net migration in the ONS Timeline all the way from 1982 (because the period beforehand was characterised by *negative* net migration) to 1997. But in 1998 the level of net migration increased from 48,000 to 140,000, at the start of a dramatic upward movement.

15. Migration Watch, in the analysis they have developed of this demographic component, go further than ONS and OMO, arguing that, if the number of future children of migrants who were already resident in the UK before 2012 is included within the projection calculations, then “all or almost all UK population growth in the longer term would arise from immigration, directly or indirectly.” By contrast they have quantified that negative net migration in the period 1964-1990 resulted in a direct population reduction of 785,000.¹²

Q3 How does the changed UK trajectory fit into the European context, and the conceptual framework of demographic transition?

16. The latest EU28 population projections (2013-based) record an on-aggregate stagnant population through to 2080 (2013: 507m; 2080:520m; with a peaking at 525m in 2050).¹³ Within this there are substantial national reductions: Germany from 82m to 65m (a 21% decline), Poland from 39 to 30, and Romania: 20m to 16m; stagnation: Spain at 47-48 m, and Netherlands at 16m; and moderate increases: Italy from 60m to 65m and Sweden 10m to 14m. Balancing this out are two major locations of growth: France which increases by 13.2m (20%), from 65.6m to 78.8m; and largest of all the United Kingdom, an increase of 21.2m and 33%, from 63.9m to 85.1m.¹⁴

17. So clearly the UK is at greatest variance from the predominant demographic pathway

8 ONS *Migration Statistics Quarterly Report* May 2015 And see www.bbc.co.uk/news/uk-politics-32816454

9 National Statistics/GAD National Population Projections 2002-based p.19

10 House of Commons library migration statistics SN/SG/6077 26 February 2015 chart 5

11 <http://www.neighbourhood.statistics.gov.uk/HTMLDocs/dvc123/index.html>

12 Migration Watch *The impact of immigration on population growth* briefing Paper 15.3 Nov 2014 para.14; *Immigration under Labour* briefing paper 11.36 March 2015 paras.9-10

13 <http://ec.europa.eu/eurostat/web/population-demography-migration-projections/population-projections-data>

14 Comparing three sets of UK projections for 2080-81: ONS is 84.8m, Eurostat is 85.1m, and UN 2012 revision is 76.7m

across Europe and - simplifying the analysis so that it focuses just on population size rather than, say, future support ratios for an ageing population ¹⁵ - has very recently turned away from, indeed has now started to challenge, the predominant European trajectory characterised by peaking and then decline. For Europe as a whole the explanation is the usual complex mixture of interactions between fertility, migration, economic activity and regional differentiation; the RAND Corporation have for some time been reflecting on the policy levers available to respond to Europe's 'population implosion'.¹⁶

18. The structural sub-replacement fertility component within Kaa's 'second demographic transition' (2DT) is confirmed within ONS's projection assumptions, acting therefore as a restraint on population increase.¹⁷ Immigration rates on the other hand are however not properly integrated into the 2DT theoretical model. Coleman's 'third demographic transition' does place increased emphasis on the role of migration levels within its model, although its focus on population composition is probably less important given that only a small number of immigrant flows tend to have TFRs significantly above national average.¹⁸

Q4 What has been the response from policy and decision makers? How were the Projections publicised?

19. To answer these questions we need to work our way back along the information chain that connects the ONS data gathering to governmental policymakers and politicians, to check it for integrity. Starting at the first link in that chain there is evidence that the ONS demographers had thoroughly reviewed the accuracy of the population projection methodology in 2007 ¹⁹ (something also looked at by the British Society for Population Studies in 2008).²⁰

20. What we consistently observe however is a failure in the various ONS projection publications variously to include, draw attention to, or discuss the major growth now being reported in the second part of the projection period. The 'Key Findings' of 2006B projections merely stated that 'The UK population is projected to increase gradually from an estimated 60.6 million in 2006 ... to reach 71.1 million by 2031', but neglected to add that the projections continued forward to a population maximum of 85.3m in 2081. In the commentary on 2008B there is a detailed discussion of various projection sub-variants whilst the Principal variant - showing the 2083 population at 85 million - is ignored, and a High Population variant (integrating high fertility, migration and life expectancy) of 110 million in 2083 is recorded solely in a graph and without comment.²¹

21. The Statistical Bulletin for the 2010B Projections - where the underlying data recorded the second 'great leap upwards' to 97m by 2110 - made no mention of population growth beyond 2035. The more detailed Results document did include reference to the 2085 and, in just one table, 2110 end dates: the latter contained spreads between Low and High combination variants of 63.4m to 136.8m.²²

15 This article does not include a discussion on the issues of ageing and support ratios (although the 2016 briefing will). But see Pensions Commission *Pensions: Challenges and Choices* 2004 p.36pdf "Only high immigration can produce more than a trivial reduction in the projected dependency ratio over the next 50 years. Net inward migration at +300,000 per year could bring the 2040 old-age dependency ratio down from 47.3% to 42.1%. But ... this would only be a temporary effect unless still higher levels of immigration continued in later years, or unless immigrants maintained a higher birth rate than the existing population, since immigrants themselves grow old and become pensioners who need workers to support them."

16 RAND *Population implosion?: low fertility and policy responses in the EU* 2005; *A growing and ageing population: global societal trends to 2030* report 1 2015

17 D van de Kaa *The Idea of a Second Demographic Transition in Industrialized Countries* 2002

18 D Coleman *Immigration and Ethnic Change in Low-Fertility Countries: A Third Demographic Transition* 2006

19 ONS *Fifty years of United Kingdom national population projections: how accurate have they been?* Population Trends 128 2007

20 <http://www.lse.ac.uk/socialPolicy/BSPS/dayMeetings/Population-Projections.aspx>

21 ONS *2008-based national population projections for the UK and constituent countries* Population Trends 139 2010, figure A p.16 and figure 6 p.22

22 ONS *Statistical bulletin: 2010-based principal projection and key variants* 2011; *Results: 2010-Based National Population Projections* 2011, table 2-2 page 6

22. How can this almost silence be explained? Of course ONS routinely caveat their projections with the statement that these 'become increasingly uncertain the further they are carried forward'. But they have not gone beyond this to prescribe more fundamental qualifications about the validity of the longer term projections. By this taciturn approach to the public presentation of their projections, ONS appear to have sidestepped an obligation to highlight and explain a sudden and unanticipated transformation in UK demographics, which had they done so should have prompted a necessary public debate, whatever its content and outcomes.

23. It might be asked what is the point of producing longer term projections if, to all intents and purposes, they remain hidden behind a curtain? Policy makers later in the chain may have been given an excuse for not knowing, and then focusing, on this new and significant demographic development.

24. The other hypothesis instead would be that, further down the chain, there was a breakdown in the link between ONS analysis and wider governmental policy processes. Reviewing both the ONS and BPS activity over this decade one might conclude that, for all their rigour in analysing in considerable detail both historical and current demographic components, somehow the bigger picture was missed or ignored.²³ So either ONS were not producing policy discussion points or recommendations – and maybe they were not asked for them; or no one had that responsibility? - or if recommendations were produced, at some location within the government process, they were ignored or resisted. Whilst we know that immigration policy was contested within government, was there ever a debate about future population size?²⁴

25. Given the failure of ONS to draw attention to its own longer term projections, maybe it is less surprising that significant independent organisations then adopted the same approach, although they could have challenged it. The Royal Commission on Environmental Pollution in its important study of February 2011 - so drawing on 2008B which recorded maximum population of 87m in 2083 – and despite its stated intention of 'looking at [population growth over] the next forty years to 2050' - nonetheless limited its main period of study to 2033, at which date population would be 71.6m. In the depths of the report it did refer to 'variant projections, including those based on the most extreme or special case assumptions, for the period to 2083' but despite featuring a table which clearly displayed its Principal Projection extending to the 86m level, ignored any textual mention or discussion of that number, its implications and inherent policy dilemmas.²⁵

26. Forum for the Future in June 2010 did the same: limiting its main focus to the period up to 2033 and making purely graphical reference to later dates and higher numbers (principal projection of 77.1m and a high projection of 87.3 in 2050).²⁶ There appears to be a tacit agreement, therefore, to exclude reference to and discussion of the ever more challenging projections for the second half of the 21st century.

27. Just two organisations drew some attention to the dramatically changed numbers. OPT (latterly Population Matters) spoke about a 'population nightmare' in 2007 on the occasion of the 2006B first 'great leap upwards' to 85+m, and that the 'UK population increase [is] "out of control" when that was confirmed in 2008B; its comments on 2010B and 2012B did not

23 See e.g British Society for Population Studies day meeting on Population Projections February 2008 at www.lse.ac.uk/socialPolicy/BSPS/dayMeetings/Population-Projections.aspx

24 IPPR Matt Cavanagh *Numbers Matter* 2010 'There was indeed strong political support for the expansion of immigration for work and study but there was also strong official support, as well as support from economists outside government. Later, when ministers started to question this consensus, there was strong official resistance to any major shift' p.32

25 Royal Commission on Environmental Pollution *Demographic Change and the Environment* 2011, para.2.1, 2.16-17 and figure 2-VII The RCEP report appears to reach not entirely consistent conclusions about possible future population trends. On the one hand: "... the analysis suggests that even if it were possible to devise socially acceptable means of constraining population growth, this is unlikely to provide a quick or dramatic effect on the size of the UK population." para.2.18 On the other: on the basis that 'the future of the UK population will be determined in the next few years primarily ... by its economic performance relative to other countries', RCEP judged: "This raises the prospect that, given low total fertility rates and the possibility that the UK demand for labour may not be strong, total population size may not rise very rapidly and could at some point begin to fall." para.2.7

26 Forum for the Future *Growing Pains* June 2010, p.6 table 1.1

however draw attention to the second 'great leap upwards'. Migration Watch in 2009 spoke about a 'population out of control'.²⁷ Media articles were also rare: for example in 2008 the Independent posed its 'Big Question: Why is the UK's population growing so fast, and is this a good thing?'²⁸

28. So whilst over the period of the changed projections there have been vigorous debates about issues consequential to actual and projected population growth, such as immigration, housing, and Green Belt, their primary driver has been almost completely overlooked.

Q5 Was this demographic transformation anticipated, even planned, or alternatively was it unforeseen? Is there a framework of a UK population policy?

29. This part of the research will need to investigate the recent history of government policy, necessarily distinguishing between population and immigration, because whilst there has already been some clarification about what was happening within the policy framework about the latter, that has not extended to the population driver itself. This is still almost entirely unknown.

30. On immigration the balance of accounts and analysis recently emerging has so far tended to present a more persuasive picture of incoherent policy direction - but one underpinned by a pervasive economic determination of the policy line, and a primary focus on political management - to counter the conspiracy theory interpretation sparked by Andrew Neather's 2009 article.²⁹ David Goodhart has written about Labour's 'accidental mass immigration'.³⁰ Migration Watch conclude that "A number of disparate factors came together so the leap in numbers in 1998 was not primarily due to government policy. However, there was no policy response".³¹ The various authors brought together in IPPR 2010 write about 'far from having a grand plan to transform Britain, New Labour didn't have a plan at all'; 'a fairly broad and deep official orthodoxy that immigration was a good thing' led by 'increasingly liberal Treasury officials ... supremely confident in their view that all immigration was economically beneficial', and 'strong official [i.e civil service] resistance to any major shift'.³²

31. What remains to be uncovered is whether there was any government analysis whatsoever around the consequences of immigration in terms of its effects on long-term population size and sustainability impacts. If this did take place it would however have been within a long established policy position. In 2001 ONS restated the UK policy on population presented previously to UN conferences in 1984 and 1994, that: 'The United Kingdom government does not pursue a population policy in the sense of actively trying to influence the overall size of the population, its age-structure, or the components of change except in the field of immigration. Nor has it expressed a view about the size of population, or the age-structure, that would be desirable for the United Kingdom'.³³

32. Yet everything is bounded by its historical context. In 1973 the government appointed Population Panel understood that population remained a significant factor for decision making: '... however imperfect the projections, policy needs to be based on some view of the future'.³⁴ In response, the Prime Minister Edward Heath, asked to appoint a senior Minister to deal with population problems because 'Britain must face the fact that its population cannot go on

27 Optimum Population Trust spoke about a 'population nightmare' in 2007 on the occasion of the 2006B first 'great leap upwards' to 85+m, and that the 'UK population increase [is] 'out of control' when that was confirmed in 2008B. Its comments on 2010B and 2012B did not however draw attention to the second 'great leap'. Migration Watch in Briefing Paper 9.21 2009 spoke about a 'population out of control'.

28 <http://www.independent.co.uk/news/uk/home-news/the-big-question-why-is-the-uks-population-growing-so-fast-and-is-this-a-good-thing-910679.html>

29 <http://www.standard.co.uk/news/dont-listen-to-the-whingers--london-needs-immigrants-6786170.html>

30 Prospect <http://www.prospectmagazine.co.uk/magazine/transforming-britain-by-accident> February 2010

31 Migration Watch *Immigration under Labour* Briefing Paper 11.36 March 2015, para.17

32 IPPR *Immigration under Labour* November 2010 p.6, p.33

33 ONS Population Trends vol.72 1993 pp 1-2, quoted in Population Trends 103, 2001 p.52pdf

34 quoted RCEP p.13

increasing indefinitely' ³⁵, responded with an implied negative: "... it is bound to be a question of public opinion and individual behaviour".³⁶

33. But the 2001 policy restatement, issued probably in the context of the 1998B projections (59.2m base year, peaking at 64.9m in 2036), did make appropriate references to the need to be mindful of public issues and attitudes – 'The current level of births has not been the cause of general anxiety. ... The 'ageing' of the population does raise social and economic issues.' - and recognised the need for some degree of policy activism where appropriate: 'The Government takes population matters into account in formulating economic and social policy.'

34. Asked in 2006 a question similar to that put to Edward Heath – 'Does the Government have a population policy?' PM Tony Blair replied, with unconscious irony, "A population policy? No, but we do have a migration policy obviously." A 'proper cost-benefit analysis of the costs and benefits of different levels of population' was suggested to him, or an independent commission that could inform public debate. The PM also exposed the extent of his understanding about what might be generating population growth: "I am not sure that the driver is simply migration or even mainly."³⁷

35. However the next year, future PM David Cameron was better informed, and reached this conclusion: "Our current level of population growth and atomisation is unsustainable. Immigration is too high"; and then, with a nod back to Blair, continued "So the question is: what can we do about it? The first and most basic requirement is for the government of this country to actually have a population strategy. That in itself would make a welcome change." He proposed 'a series of steps to ensure that our population grows at a more sustainable rate.'³⁸

36. Some of the think tanks have debated the need for or viability of a population policy. In July 2011 OMO issued a short 'think piece' on the subject *Population - how Big is Too Big?*, but ultimately concluded that "there is no easy answer to the question of how large the UK population should be, or why", and then that "oft-repeated rhetoric around the need to keep the population below 70 million ...serves little purpose other than to create confusion."³⁹ Murray for Centre:Forum in 2008 reached a similar passive view.⁴⁰ IPPR on the other hand in 2006 identified nine advantages for government having a more explicit population policy under government direction.⁴¹

37. Two initial conclusions might be hypothesised for further investigation: that across the period of the Labour government 1997-2010 a series of policy initiatives were undertaken in apparent ignorance of, and not connected to, their population growth and sustainability consequences; and which were driven by the prevalent 'economic determinism' of the government's policy framework. Secondly that, in the absence of a government policy for future population size, having one around the level of current and future nett migration becomes a necessary proxy; if, that is, it can be implemented.

35 It should be noted that the 1971-based projection had identified a significant increase in the UK population from 55.7m in 1971 to 66.3m in 2011, or 19% over 40 years.

36 *Hansard* 18 December 1973 vol 866 cc1142-4

37 www.publications.parliament.uk/pa/cm200506/cmselect/cmliaisn/uc709-iii/uc70902.htm And see http://news.bbc.co.uk/1/hi/uk_politics/5144708.stm

38 David Cameron *The Challenges of a Growing Population* speech 29th October 2007 <http://conservativehome.blogs.com/torydiary/files/population.pdf>

39 www.migrationobservatory.ox.ac.uk/sites/files/migobs/Commentary-population_0.pdf

40 Alistair Murray *Does Britain need a population policy?* Centre:Forum January 2008 "The case that population growth is now occurring at an unsustainable pace is far from proven. ... Even if we accept that the population is growing too fast, there are a number of difficulties in trying to turn this into coherent policy."

41 IPPR Mike Dixon, Julia Margo *Population Politics* 2006 p.65 and 149 "The crucial first step is to make certain that an explicit and enabling approach to demography has clear lines of ministerial responsibility: without structural reform, a coherent and holistic strategy may fall by the wayside."

Q6 What are the policy levers available to reduce the population projections should there be a wish to do so?

38. This is the key issue because, unless something changes in relation to the actual performance of its underlying modelling assumptions, the ONS Principal Projection will continue towards its forecast maximum - allowing, of course, for an inherent variability in successive projections. But the prerequisites would be that there are 'policy levers' capable of influencing fertility, net migration and its components, etc; sufficient social and political consensus in favour of pulling them; and sufficient certainty also that doing so will have the desired outcome. In the absence of almost any expert and public debate on these matters, none of these preconditions are in place.

39. Instead the established and predominant position is that such levers do not exist, and that they shouldn't be pulled in any case. This is inhibiting useful debate. In addition to ignoring growth effectively beyond 2033, the outlook of RCEP 2011 towards a population policy intervention was essentially passive and pessimistic: 'There are in practice no policy options open to Government in a democracy which would have a significant impact on the size of the population of the UK on a relevant timescale. ... They suggest that even if it were possible to devise socially acceptable means of constraining population growth, they would take effect slowly and population would almost certainly rise for some time before it could start to decline.⁴² OMO in 2011 reviewed a whole series of 'problematic aspects of building long-term demographic objectives into migration policy-making'.⁴³

40. Then there is an entire other level of policy-making - across the spatial planning process - where absence of policy levers explicitly linked to future population size is preventing the articulation of arguments and feedback loops seeking to protect core sustainability factors related to land use, connectivity and biodiversity. In Local Plan processes up and down the country intense pressure is now being applied to Green Belt designations and boundaries on the grounds of increased housing requirements⁴⁴. The primary driver of this is demographic - not just population growth but also household formation, and ageing - but the need for the driver itself to be influenceable cannot be articulated within the planning framework. As IPPR noted in 2006: '... a comprehensive awareness of the policy challenges that demographic trends will amplify, cause and mitigate would flag up where attention needs to be focused.'⁴⁵

Q7 Where will increase population growth be distributed across the UK?

41. Most of the data cited in this article is for the United Kingdom and yet its subject is the transformation of *England's* population projections. That is because the sustainability impacts of projected population growth will not be evenly distributed across the UK's land area. 21 million, or 92.5% of the growth between 2012-87 (2012B) will be located within England's 53.5 % of the UK area. By contrast just 1.7m would be in the 110,000+ square kilometres of Scotland, Wales and N Ireland. Then within England itself there is a second marked concentration: over the shorter period 2012-22, where the population as a whole increases by 7.2%, 13% would be in London - with the East of England (8.6%) and the SE (7.8%) also above the national average - but just 2.9% in the NE.⁴⁶ The particular characteristics of the London population also increases its birthrate, and economic participation rates.

42. In consequence the sustainability impacts of UK growth will be concentrated and magnified in just a few regions, although spreading beyond them as well.

42 Royal Commission on Environmental Pollution *Demographic Change and the Environment* para.6.9 There is a section entitled *Limiting the growth in the aggregate population?* on p.89.

43 OMO *Demographic Objectives in Migration Policy-Making* March 2011 p.5 et seq

44 CPRE *Green Belt under siege: the NPPF three years on* March 2015

45 IPPR *Population Politics* 2006, p.66

46 ONS 2012-based Subnational Population Projections for England table 1

Q8 How will environmental sustainability be affected by this level of population increase?

43. What is striking, and concerning, given the absence of public debate about the population projections, is the wide spectrum of different factors - general and national, sectoral, and spatial - where sustainability will be impacted by very large scale population growth projected to continue without cessation for another century. There have been a limited number of studies undertaken but this issue has not been integrated into central and regional/local government processes - such as the planning framework.

44. The principal national study is RCEP's *Demographic Change and the Environment* but, on the 'population versus consumption' cliché, it chose to come down on the side of consumption rather than following the Royal Society position that both require attention: "it is not the total size of the UK population which is the problem: it is how and where people choose to live which presents the main environmental challenge from demographic change". It concluded therefore that: "Any attempt to implement a 'population policy' would ... have little impact on the total population, and the objections on social and ethical grounds would outweigh the environmental gains."⁴⁷

45. By contrast Forum for the Future's *Growing Pains* of June 2010 supported an active public policy stance: "It must therefore make good sense to see how best to constrain overall numbers where possible. The two main areas where such interventions could happen on the UK scale are reproduction and migration" However its judgement about the policy outcome - that "the population projections both for increases due to migration and for increases due to 'natural' growth can be turned onto the kind of net reduction path implied by the lower projections for population growth" - may be judged to be over-optimistic.⁴⁸

46. Then there have been sectoral studies - for example, looking at population & housing (by Population Matters 2011⁴⁹) and population & water (Royal Geographical Society 2012⁵⁰) - and spatial studies that in particular examine the stresses created by the growth 'hotspot' of London. RGS notes that 'On a world ranking of water availability - from most to least - SE England would be 161st out of 180 world regions'. However the London region alone now has the policy mechanisms and resources capable of reflecting on the challenges of population growth, as can be seen in the 2014 London Plan - and also in statements by its mayor, with his usual careless panache - but this is the exception because the regional tier of government, big enough to undertake such analyses, has been abolished everywhere else.⁵¹

Conclusions

47. As the research project gets under way, the initial sift of the evidence seems to point towards a 'longrun and pervasive failure in the government policy framework, with potential serious negative impacts for sustainability' as the most likely explanation of how the consequences of a major dislocation in the UK's future demographic trajectory came to be overlooked, and how it was caused in the first place.

48. At the moment (2015), a decade after the projection numbers first started to move upwards, the demographic transformation that they represent is still not talked about in public by data gatherers and policymakers - at every level; is not analysed by demographers, with suggestions for possible 'intervention' scenarios; and is almost entirely unknown by the

47 RCEP *op cit* paras.6.44 then 6.9. However 'the total size of the UK population' it was considering was just 72m (in 2033), and not 86m or 97m. Royal Society: "Consumption and demography are closely inter-twined ... [and] ... policies should not treat [them] as separate issues." *People and the Planet* 2012 p.62

48 Forum for the Future *Growing Pains* June 2010 para.3.3

49 Population Matters *Population Growth and Housing Expansion in the UK* January 2013

50 RGS *Water policy in the UK: The challenges* 2012

51 RGS *op cit* p.6pdf And see *Population And Employment Projections to Support the London Infrastructure Plan 2050* November 2013 www.london.gov.uk/priorities/business-economy/vision-and-strategy/infrastructure-plan-2050 These project the Greater London population to increase from 8.2m in 2011 to 11.3m in 2050. Mayor Boris Johnson made a typically flippant comment about the scale of this growth: "I don't know exactly where they will all go either; though when I drive through the cities of the north I see plenty of depopulated space." Margaret Thatcher lecture, November 2013

population at large. So: not available as an object of public policy.

49. This very recent inversion of the UK's previously established demographic transition is taking place within a global context where population peaking at sustainable levels is becoming less assured.⁵² The conclusion to the UN 2011 Demographic Trends report stated then: "... The reduction of fertility may be inevitable, but considerable effort is still required to make it a reality over the next few decades."

50. But how can the UK contribute to meeting *its* obligation within this global effort if a policy vacuum exists, and remains; where population growth is denied existence as an issue, without levers or people to pull them?

Anthony Rae

ar@anthonyrae.com July 2015

Appendix UK population projections 1954-2012

Base year	Population in base year <i>millions</i>	Projected peak population <i>millions</i>	Peak year	Projection end year
1954	51.066	53.747	1979	1979
1961	52.925	67.904	2001	2001
1971	55.668	66.336	2011	2011
1979	55.946	55.995	2019	2019
1981	56.252	60.342	2051	2051
1985	56.618	60.040	2026*	2055*
1991	57.649	62.197	2027*	2061*
1992	57.998	62.344	2027*	2062*
1994	58.395	61.156	2023*	2034*
1996	58.801	62.822	2031*	2066*
1998	59.237	64.888	2036*	2068*
2000	59.756	65.837	2040*	2070*
2001	58.837	63.922	2041*	2071*
2002	59.229	65.471	2046*	2072*
2003	59.994	66.787	2051*	2073*
2004	59.835	70.691	2074	2074
2006	60.587	85.252	2081	2081
2008	61.393	85.684	2083	2083
2010	62.262	96.979	2110	2110
2012	63.705	93.332	2112	2112

* Projected population is approximately stable between Peak year (column 4) and Projection end year (column 5)

⁵² Gerland et al *World population stabilization unlikely this century* September 2014 at www.sciencemag.org/content/346/6206/234