



OxCam

WRE Housing & Population Growth

Draft v1

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Acknowledgements

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1 Introduction

The OxCam Arc

- 1.1 The Oxford-Cambridge (OxCam) Arc covers 26 Local Authority Districts (Figure 1), extending between Oxford, Milton Keynes and Cambridge. It is home to approximately 3.8 million people, providing an estimated 2 million jobs (Figure 1).



Figure 1: Local Authority districts covered by the OxCam Arc

- 1.2 The Arc has been identified as an area of huge economic potential: *“The arc between Oxford and Cambridge has long been touted as the area with the greatest growth potential outside London. Bookended by two leading university clusters and containing a concentration of high value employment and the UK’s fastest growing city, it has an agglomeration of assets and activity not found anywhere else in the country”*.¹
- 1.3 The Ministry for Housing, Communities and Local Government (MHCLG) has outlined the Government’s ambitions for the region, stating that the OxCam Arc *“has a unique opportunity to become an economic asset of international standing”*.²
- 1.4 To support the Arc’s economic growth potential, a requirement for up to one million new homes by 2050 has been identified, together with improvements to the region’s transport infrastructure.

¹ Savills (2019) The Oxford-Cambridge Innovation Arc [Savills](#)

² MHCLG (2019) The Oxford-Cambridge Arc, Government ambition and joint declaration between Government and local partners [OxCam Arc](#)

However, with the UK's exit from the European Union and the unprecedented, short-term effects of the COVID-19 crisis, there is considerable uncertainty around the timing of infrastructure and housing delivery.

- 1.5 Councils within the Arc are already seeking to manage significant increases in the rate of house building to meet targets set out in current Local Plans. Achievement of one million homes by 2050 would present a further step-change in housing delivery requirements.

Water Resource Planning

- 1.6 Robust evidence on future housing growth and demographic change are key components of the Water Resources Planning Guidelines (WRPG)^{3,4}, issued by the Environment Agency and Natural Resources Wales, in collaboration with the Department for Environment, Food and Rural Affairs (Defra), the Welsh Government and Ofwat.
- 1.7 These guidelines detail the requirements for the development of Water Resources Management Plans (WRMP), determining how the demand for and supply of water and waste services is to be aligned over long-term horizons that stretch to the end of the century.
- 1.8 Given the considerable challenges presented by climate change and demographic change in planning water and waste resources, the Environment Agency has initiated the development of a new regional framework for water resource management, improving the consistency and coordination of the planning process. Two of these regions, Water Resources South East (WRSE) and Water Resources East (WRE) provide water and waste services in the OxCam Arc. Robust evidence on the range of potential future housing and population growth outcomes within the Arc is critical to the collective business planning process, informing each region's Statement of Regional Resource Position (SRRP) and the WRMP24 statements of each member of the respective regional alliances.

This Report

- 1.9 Edge Analytics is a Data Science specialist, applying a combination of research, data, technology and analytical models to generate insight that informs business planning and decision-making. Edge Analytics has a particular expertise in demographic forecasting and has developed a suite of dynamic products to meet the regulatory requirements for evidence-based planning in the water industry.
- 1.10 This document provides evidence on the potential scale of housing and population growth across the OxCam Arc, taking into account the different development options (scale and distribution) that have been suggested.
- 1.11 The OxCam growth scenarios have been configured within the VICUS framework, which combines demographic, economic and housing statistics with best-practice forecasting methodologies to enable

³ [Water Resources Planning Guideline](#)

⁴ [Water Resources Planning Guideline, Interim Update](#)

macro- and micro-level population and property scenarios to be derived under a wide range of inputs and assumptions. Further information on the VICUS forecasting methodology that has been used to generate the evidence presented in this report can be found in accompanying documents provided to WRSE and WRE member organisations⁵.

- 1.12 This is a 'working document', to be developed and extended as the WRSE/WRE evidence evolves and as a range of alternative OxCam scenarios are considered.
- 1.13 Section 2 provides an overview of the existing growth options that have been detailed for the OxCam Arc, whilst Section 3 describes how these options have been converted into a suite of growth scenarios to be considered within the VICUS framework.
- 1.14 Section 4 summarises the results of these scenarios, presenting outcomes in conjunction with the range of Trend and Housing-led scenarios that have formed part of the WRMP growth alternatives presented to WRSE and WRE member organisations.

⁵ Edge Analytics (2020) VICUS Population & Property Forecasts – Methodology & Results

2 OxCam Development

Background

- 2.1 In 2017, the National Infrastructure Commission (NIC) was commissioned by the UK Government to complete an assessment of the economic growth potential of the OxCam Arc⁶ (then referred to as the Cambridge-Milton Keynes-Oxford Arc). The NIC report recognised the economic potential of the Arc region due to its world-leading research facilities, highly skilled labour force, knowledge-intensive businesses, and technology hubs. The NIC concluded that achievement of the long-term economic ambitions of the Arc were possible only if accompanied by substantial housing growth and improvements to transport and infrastructure across the Arc geography.
- 2.2 The UK Government has secured a Housing & Growth Deal with Oxfordshire, supporting the delivery of 100k homes in its portion of the Arc by 2031. In addition, there is agreement for an additional 22k homes in Cambridge and Oxfordshire through Housing Infrastructure Fund Investments². Despite these developments, it is acknowledged that the rate of housing delivery will require a step-change from the 10-year average of historical net completions, to achieve the levels of growth set out in the current Local Plans, and further still to achieve the targeted one million homes in the Arc by 2050.
- 2.3 Currently, transport connections across the Arc are disjointed, with journeys between Oxford and Cambridge taking over two hours by road, and up to three hours by public transport (often via London). Planned infrastructure improvements include the development of an East-West rail link, extending from Aylesbury to Norwich via Milton Keynes (the Oxford-Bicester section of this is already open). The development of an Oxford-Cambridge Expressway, which would provide a 'high-quality' road link between the M1 and the M40, has also been explored. However, in documents accompanying the 2020 Budget⁷, it is stated that this project has been 'paused' whilst alternative road projects are considered.

Growth Options

- 2.4 Informing the 2017 NIC assessment are a range of scenarios developed by Savills⁸, testing the potential for economic growth in the Arc through an increase in housing supply and investment in transport infrastructure. The following growth scenarios were considered in the analysis:
- **Business as Usual:** a 'baseline' scenario, based on a continuation of recent housing completions, at approximately 15k dwellings per annum (dpa).

⁶ NIC (2016) Partnering for Prosperity: A new deal for the Cambridge-Milton Keynes-Oxford Arc [NIC](#)

⁷ Department for Transport (2020) Road Investment Strategy 2: 2020–2025 [DfT](#)

⁸ Savills (2016) The Property Market within the Cambridge – Milton Keynes – Oxford Corridor – Final report [Savills](#)

- **Incremental Growth:** based on a consideration of each Local Authority's Strategic Housing Market Assessment (SHMA) Objective Assessment of Housing Need (OAN), averaging 20k dpa across the Arc.
- **Transformational Growth (a):** under this growth option, a target figure of 23k homes per year was based on an assessment of OANs and existing housing stock across the Arc, adjusted to account for affordability in each Local Authority.
- **Transformational Growth (b):** under this growth option, with appropriate infrastructure development, an additional 7k dpa is targeted in the Arc region, relieving housing pressures in London⁹, taking housing delivery to 30k dpa to 2050.

2.5 Under the higher Transformational Growth scenario, with an additional 1 million homes across the Arc geography, it was estimated that the population could increase by up to 1.6 million people (46%) by 2050.

2.6 These scenarios were considered further by the NIC, in a 5th Studio study¹⁰ with an objective to *"reach conclusions and make recommendations for the forms of housing development that best fit the needs of the corridor, meeting housing need and supporting jobs and growth"*. The report concluded that the levels of housing growth under both the Incremental Growth and Transformational Growth scenarios were unlikely to be realised if growth was focussed around existing towns and cities, given pre-existing constraints on land availability and infrastructure expansion.

2.7 Alternative spatial options for future housing growth were considered, ranging from multiple, small developments and the expansion of existing settlements, to the development of one large city of approximately 1.9 million people. The report concluded that *"...there is no one-size-fits-all development form that best fit[s] the needs of the corridor, but that a diversity of responses is likely to produce the best overall result, given the wide spectrum of conditions present in the corridor. To realise the scale of growth required by the Transformational Scenario, this would need to include larger-scale new settlements if the cumulative cost of infrastructure and impact on the countryside is to be limited."*

2.8 At the end of 2019, the UK Infrastructure Transitions Research Consortium (ITRC)¹¹ published its detailed spatial analysis of for the Arc¹², evaluating four alternative housing growth trajectories with a 2050 horizon:

- Baseline (c. 14.5k dpa)
- Unplanned (c. 19k dpa)
- Expansion & New Settlements (23k dpa)
- Expansion & New Settlements (30k dpa).

⁹ Based on the then-adopted minimum housing targets for London boroughs, Savills estimated that London would experience a housing shortfall of between 7,000 and 20,000 homes per year, when compared to various housing needs assessments.

¹⁰ 5th Studio (2018) NIC Cambridge, Milton Keynes and Oxford Future Planning Options Project, Final Report [5th Studio](#)

¹¹ The ITRC is a consortium of seven universities (Cambridge, Cardiff, Leeds, Newcastle, Oxford, Southampton, Sussex) led by Oxford and funded by the EPSRC, with significant inputs from others including Cambridge Econometrics.

¹² ITRC (2019) A sustainable Oxford-Cambridge corridor? Spatial analysis of options and futures for the arc [ITRC](#)

- 2.9 Under the ITRC's Baseline scenario, the targeted growth of 14.5k dpa is a continuation of recent housing completions across the Arc's local authorities. The Unplanned scenario assumes *ad hoc* housing growth of 19k dpa, driven by infrastructure improvements but with 'no overall spatial vision'. In line with the Savills analysis, higher growth outcomes consider 23k dpa and 30k dpa scenarios based around the expansion of existing settlements, and the growth of new settlements whilst accommodating some of the housing need pressure from London and the South East.
- 2.10 Under the Expansion distribution of housing growth, the ITRC distributes new dwelling growth to the following existing settlements:
- Milton Keynes: 30%
 - Luton & Bedford: 30%
 - Remaining 40% split between Oxford, Cambridge, Northampton and Peterborough.
- 2.11 Under the New Settlements option, five new towns are considered, as follows:
- Cherwell (North of Bicester)
 - Aylesbury Vale (South of Winslow)
 - Central Bedfordshire (North of Cranfield)
 - Central Bedfordshire (East of Sandy)
 - South Cambridgeshire (North of Bassingbourn).
- 2.12 Each of the ITRC scenarios is considered to be 'transformative', with population growth outcomes ranging from an additional 0.7 million people under the Baseline scenario by 2050, to an additional 2.4 million people under the 'New Settlements' (+30k homes) variant.

3 Scenario Definition

- 3.1 As part of the wider WRSE & WRE water resource planning initiatives, a suite of potential growth scenarios has been formulated for each region, each water company, and for the Water Resource Zones (WRZ) associated with each company. Developed within the VICUS framework, these scenarios include ONS and Greater London Authority (GLA) trend scenarios, plus a number of housing-led scenarios, which consider future growth based on historical build rates, housing need, housing requirements or planned housing growth outcomes.
- 3.2 **Appendix B provides a summary of all scenarios, including their short-hand notation, description and colour-coding used in the chart illustrations. A prior review of this summary information is recommended to aid interpretation of the *Scenario Outcomes* section of this report.**
- 3.3 The key requirement of the WRMP process is to configure and present housing and population growth outcomes that are underpinned by Local Plan evidence formulated by individual local authorities. Local Plan evidence on future housing growth is typically formulated for a 10–15-year period, shorter than the 2020–2050 outlook required by the WRMP, for which additional estimation is required.
- 3.4 Drawing collated evidence from Edge Analytics' Consilium database, a 'Housing-Plan' trajectory has been formulated for each of the 26 OxCam local authorities, applying a return to a long-term annual growth average following the final year of Local Plan evidence. This combined OxCam trajectory estimates an average of 19k dpa to 2050, with a concentration of growth up to 2030 (Figure 2). The Housing-Plan growth rate is similar to that under the ITRC's 'Unplanned' scenario (at 19k per year).

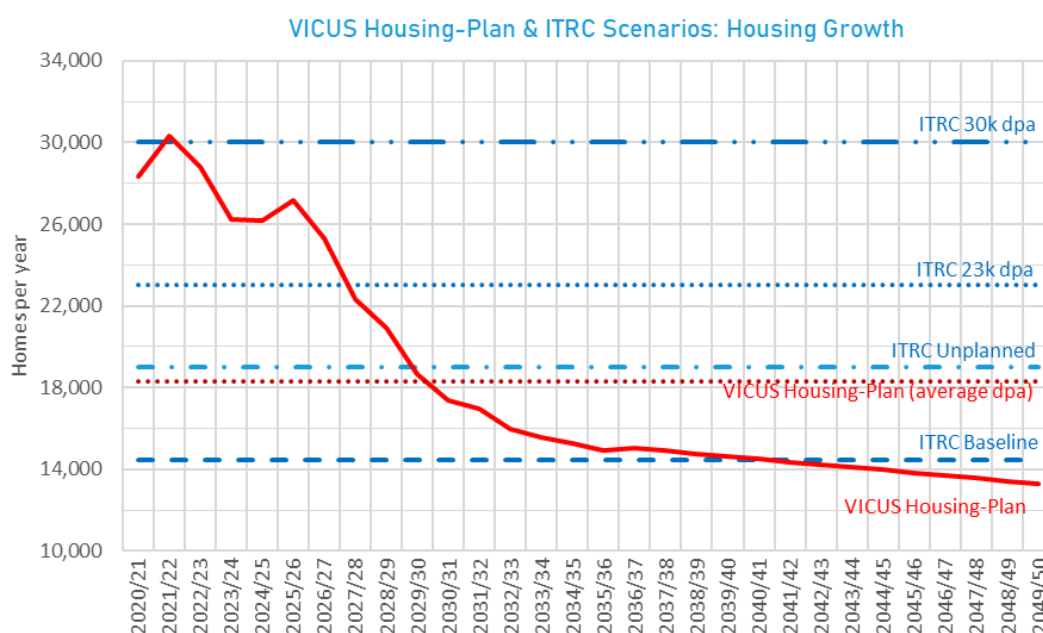


Figure 2: OxCam VICUS Housing-Plan growth vs. ITRC Scenario growth assumptions

3.5 Under the VICUS Housing-Plan scenario, the number of homes across the OxCam Local Authorities increases by approximately 560k between 2020 and 2050, just over half of the Government target of one million. To evaluate the population growth impact of higher housing growth in OxCam to 2050, two additional scenarios have been formulated:

- **OxCam-1** (23k dpa)
- **OxCam-2** (30k dpa)

3.6 In both the OxCam-1 and OxCam-2 scenarios, the existing VICUS Housing-Plan scenario has been adjusted after 2025 to achieve the desired annual average level of housing growth (23k or 30k dpa) between 2020 and 2050 (Figure 3).

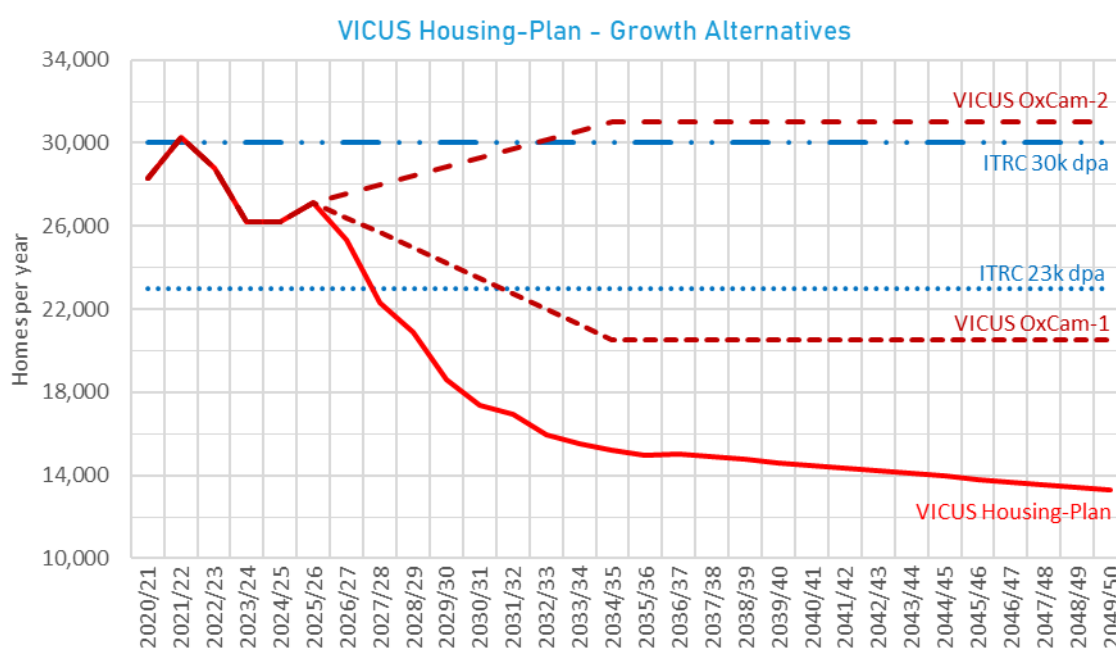


Figure 3: OxCam VICUS Housing-Plan growth alternatives

3.7 Two scenario variants (a & b) have been produced for each of the OxCam-1 and OxCam-2 growth options, based on, respectively, the ‘New Settlements’ and ‘Expansion’ distribution options considered by the ITRC. Housing growth has been distributed between the Local Authorities in line with the approach detailed in the ITRC report. The resulting four OxCam growth scenarios are summarised in Table 1.

3.8 The chart (Figure 4) that accompanies the Table illustrates the extent to which the additional OxCam growth is distributed between the WRSE and WRE regions based upon a proportional split of local authority totals.

3.9 In each of the four scenarios, the majority of the additional growth is allocated to the WRE geography. Under each of the ‘New Settlement’ scenarios, an estimated 44% of the housing growth uplift is allocated to WRSE, 56% to WRE. Under the ‘Expansion’ scenarios, the uplift is more heavily weighted to WRE (75%) compared to WRSE (25%).

Table 1: VICUS OxCam scenario variants

Scenario	Scenario Variant Housing Distribution	
	New Settlements (a)	Expansion (b)
OxCam-1 (23k dpa)	Cherwell (20%), Aylesbury Vale (20%), Central Bedfordshire (40%), South Cambridgeshire (20%)	Milton Keynes (30%), Luton (15%), Bedford (15%), Oxford (10%), Cambridge (10%), Northampton (10%), Peterborough (10%)
OxCam-2 (30k dpa)		

Regional share of OxCam growth uplift

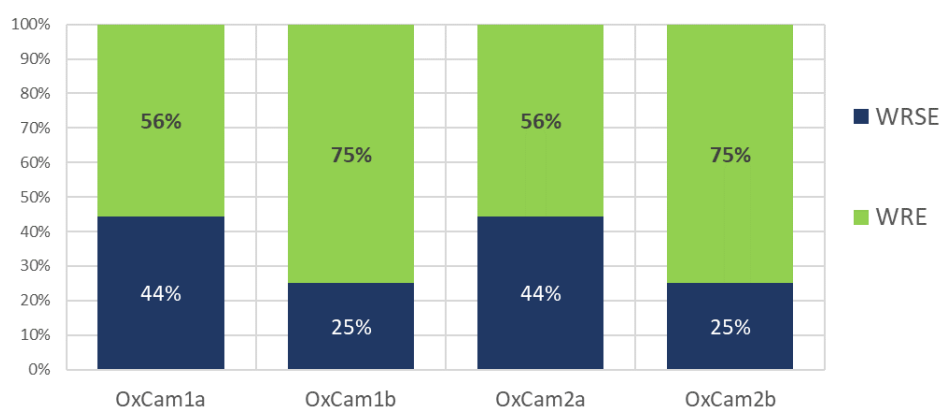


Figure 4: OxCam scenario uplifts - WRSE & WRE regions

3.10 In the housing-led scenarios, household representative rates drawn from the MHCLG's 2014-based household model determine the relationship between the changing age structure of the population and the number of households. However, these rates are based on a time period when household formation amongst young adults (in particular) was subject to both financial and supply constraints.

3.11 A key objective of all Local Plans is to redress the imbalance in the demand and supply of new homes and thus lift the rate of household formation amongst affected groups. To model the potential for a return to higher rates of household formation amongst young adults, household representative rates for 25–44 year-olds have been returned to their 2001 levels by 2039, remaining fixed thereafter. For each of the OxCam scenarios, the 'r' suffix indicates that the 'return' to previous household representative rates has been applied, with the resulting scenario labelling, as follows:

- **OxCam-1a-r** 23k dpa, New Settlements
- **OxCam-1b-r** 23k dpa, Expansion

- **OxCam-2a-r** 30k dpa, New Settlements
- **OxCam-2b-r** 30k dpa, Expansion

3.12 In the following section, a summary of the estimated growth outcomes for each of the OxCam scenarios is presented alongside equivalent outcomes for each of the trend and housing-led scenarios included in the VICUS suite.

4 Scenario Outcomes

OxCam Impact

- 4.1 For the combined 26 local authority areas that make up the OxCam Arc, the resulting population growth associated with the four OxCam scenarios is summarised in Figure 5, alongside the VICUS Housing-Plan outcome and that recorded in the **ONS-14** and **ONS-18** trend scenarios (important benchmarks to the scale of growth estimated under the OxCam scenarios). The full suite of VICUS scenario outcomes, including population and dwelling growth totals for the 2020–2050 forecasts period is also summarised (Figure 6).

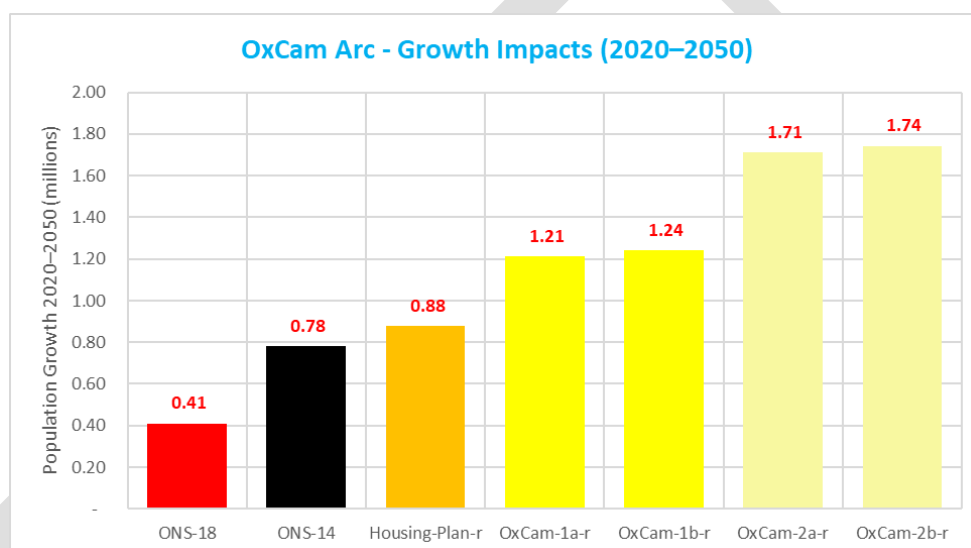


Figure 5: OxCam Arc – Population Growth Scenarios

- 4.2 The latest ONS trend projection (**ONS-18**) estimates growth of approximately 0.41 million across the OxCam Arc to 2050, contrasting to the **ONS-14** total of 0.78 million over the same forecast horizon.
- 4.3 The population growth associated with the OxCam local authorities' combined Local Plan evidence (plus assumptions for growth post-Plan) is approximately 0.88 million, with much of the housing growth (which averages 18k dpa 2020–50) concentrated in the 2020–2030 time-period.
- 4.4 The **OxCam-1** scenarios, which model average housing growth of 23k dpa, under both the New Settlements (a) and Expansion (b) option, result in 1.21 and 1.24 million population growth to 2050 respectively.
- 4.5 With the addition of a further 7k dpa under the **OxCam-2** scenarios, population growth jumps to an estimated 1.71 – 1.74 million by 2050, an average of 30k dpa over a 30 year period.

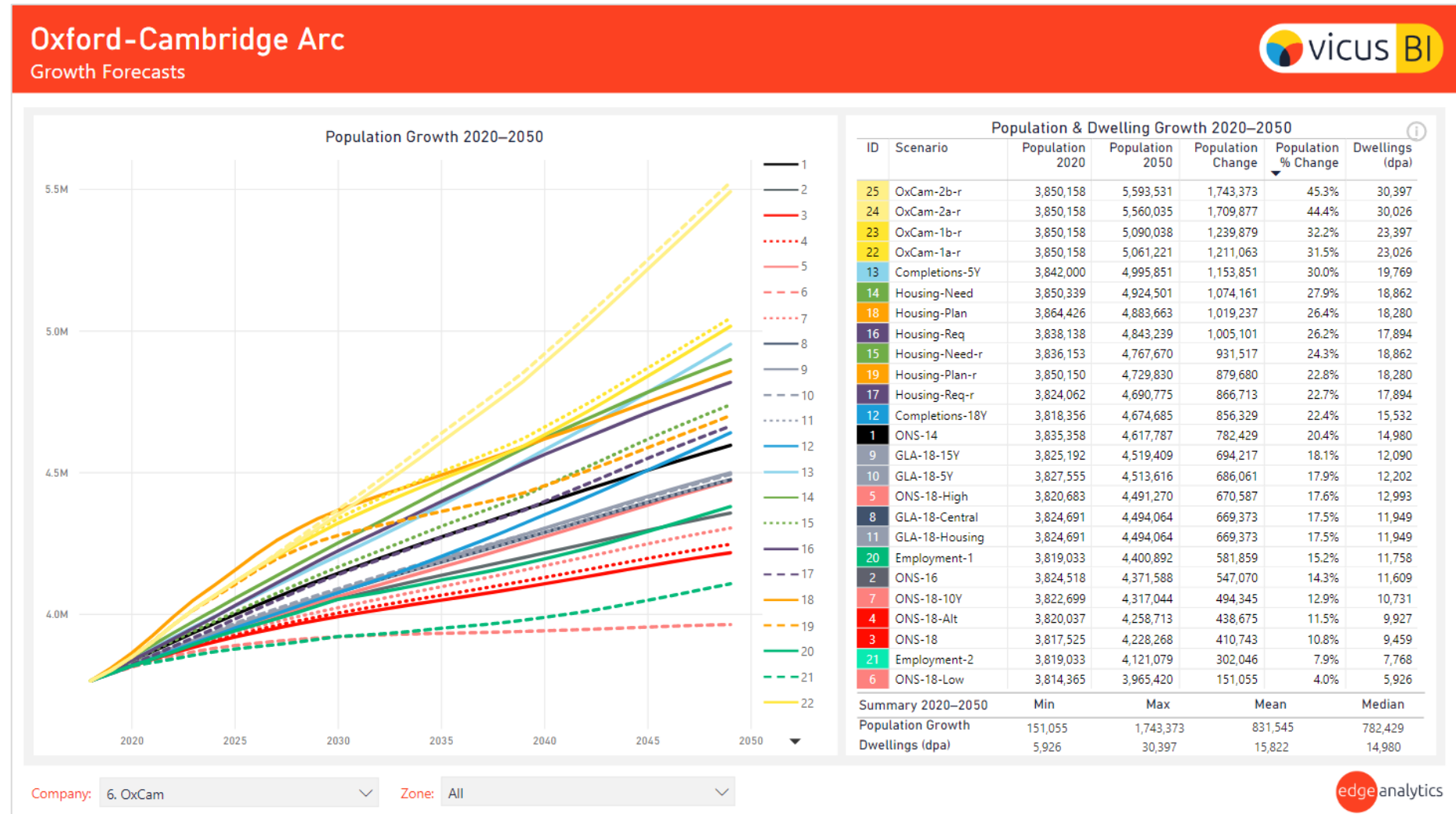


Figure 6: OxCam Arc – Growth Scenarios

WRE Impact

- 4.6 The OxCam Arc covers parts of both the WRSE and WRE geographies, with Figure 4 illustrating the estimated share of the increased OxCam housing growth that is allocated to each geography.
- 4.7 For the full WRE region, the resulting population growth impact of the four OxCam scenarios is summarised alongside the VICUS Housing-Plan outcome and that recorded in the **ONS-14** and **ONS-18** trend scenarios (Figure 7). As above, the full suite of VICUS scenario outcomes, including population and dwelling growth totals for the 2020–2050 forecasts period is also summarised (Figure 8).

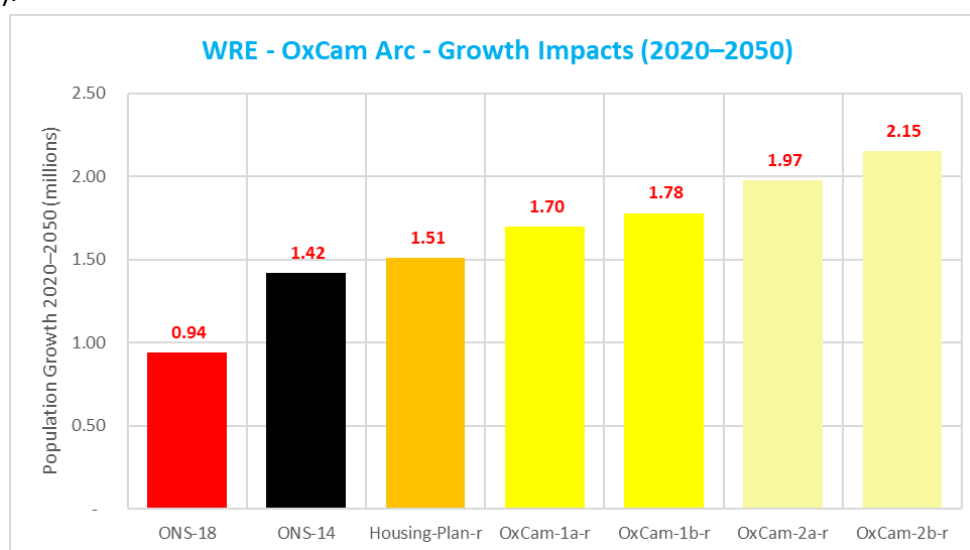


Figure 7: WRSE - OxCam Arc - Growth Impacts

- 4.8 The **ONS-14** scenario projects population growth of 1.42 million over the 2020–2050 forecast period, compared to 0.94 million under the **ONS-18** outcome.
- 4.9 The combined Local Plan evidence (plus assumptions for growth post-Plan) results in an estimated increase of 1.51 million in the WRE population.
- 4.10 The **OxCam-1** scenarios, which model average housing growth of 23k dpa under both the New Settlements (a) and Expansion (b) options, result in 1.70 and 1.78 million population growth respectively to 2050, an extra 0.19 million and 0.27 million on the Housing-Plan scenario.
- 4.11 The **OxCam-2** scenarios, which model average housing growth of 30k dpa, under both the New Settlements (a) and Expansion (b) option, result in 1.97 and 2.15 million population growth respectively to 2050, an extra 0.47 million and 0.64 million on the Housing-Plan scenario.

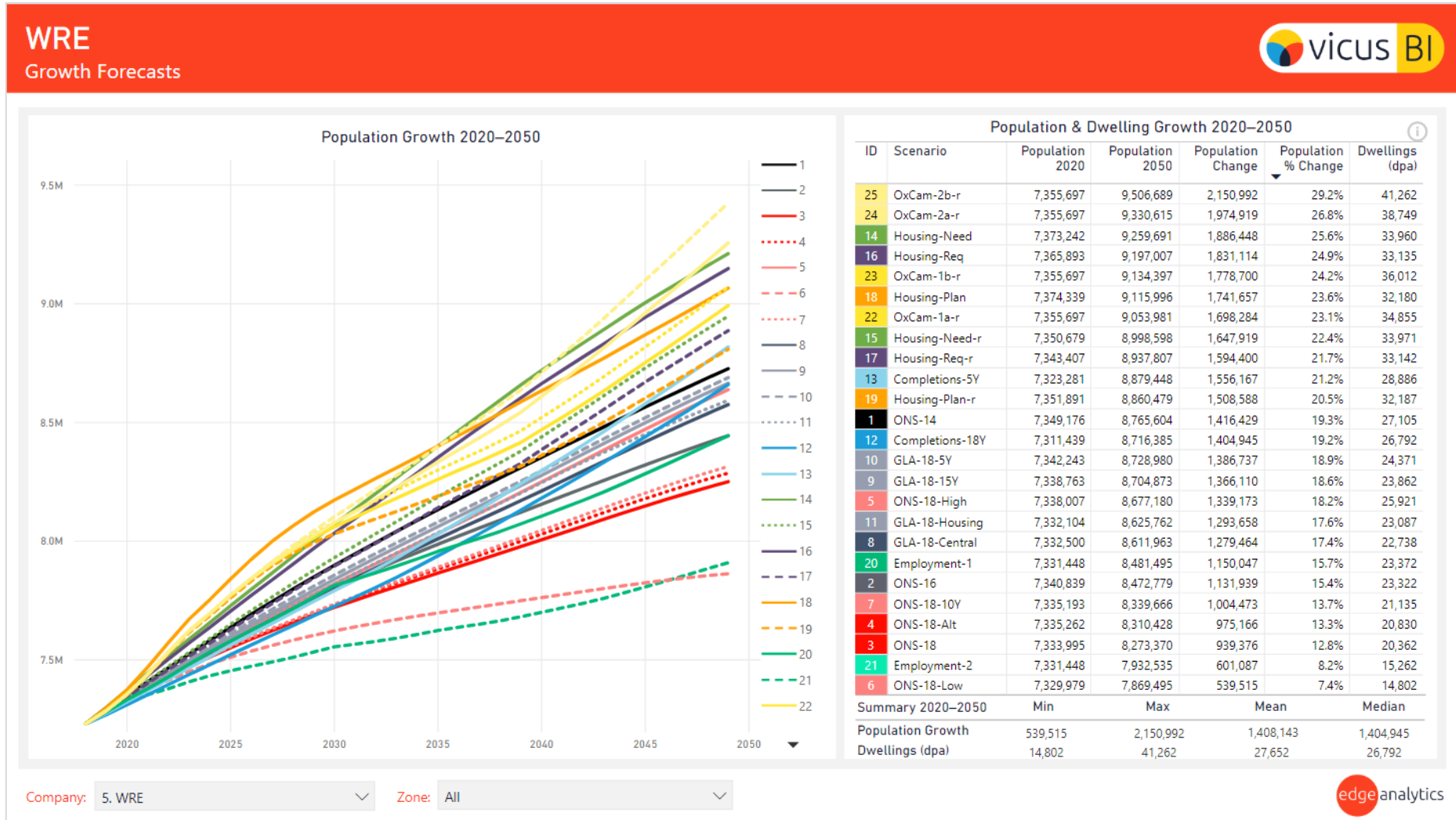


Figure 8: WRE Growth Scenarios, 2020–2050

Appendix A OxCam Area Definition

A.1 Based on the 2019 MHCLG definition, the following Local Authorities are included in the OxCam Arc:

Area Code	Area Name
E07000004	Aylesbury Vale
E06000055	Bedford
E07000008	Cambridge
E06000056	Central Bedfordshire
E07000177	Cherwell
E07000005	Chiltern
E07000150	Corby
E07000151	Daventry
E07000009	East Cambridgeshire
E07000152	East Northamptonshire
E07000010	Fenland
E07000011	Huntingdonshire
E07000153	Kettering
E06000032	Luton
E06000042	Milton Keynes
E07000154	Northampton
E07000178	Oxford
E06000031	Peterborough
E07000006	South Bucks
E07000012	South Cambridgeshire
E07000155	South Northamptonshire
E07000179	South Oxfordshire
E07000180	Vale of White Horse
E07000156	Wellingborough
E07000181	West Oxfordshire
E07000007	Wycombe

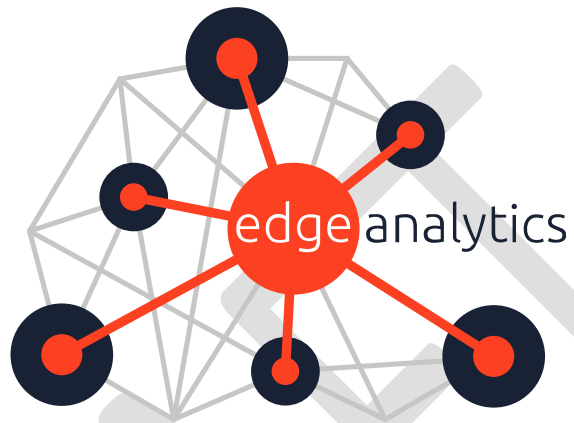
Appendix B VICUS Scenario Definition

ID	Scenario	Description	URL	
Trend Projections	1	ONS-14	ONS 2014-based sub-national population projection (SNPP), using a six-year history (2008–2014) to derive local fertility, mortality and internal migration assumptions, with a long-term UK net international migration assumption of +185k p.a.	ONS 2014
	2	ONS-16	ONS 2016-based Principal sub-national population projection (SNPP), using a five-year history (2011–2016) to derive local fertility, mortality and internal migration assumptions, and a long-term UK net international migration assumption of +165k. In line with the ONS 2016-based national population projection (NPP), this round of projections includes a reduced UK fertility outlook compared to ONS-14 and a dampened rate of improvement in life expectancy compared to ONS-14.	ONS 2016
	3	ONS-18	ONS 2018-based Principal sub-national population projection (SNPP), using a five-year history (2013–2018) to derive local fertility & mortality assumptions and a long-term UK net international migration assumption of +190k. Unlike earlier rounds of SNPP, the 2018-based Principal projection uses a two-year history (2016–2018) of internal migration assumptions, following recent changes to the methodology used for its estimation, which have only covered the latest 2 years. In line with the ONS 2018-based national population projection (NPP), this round of projections includes a reduced UK fertility outlook compared to ONS-16 and a dampened rate of improvement in life expectancy compared to ONS-16.	ONS 2018
	4	ONS-18-Alt	ONS 2018-based Alternative Internal Migration sub-national population projection (SNPP), produced by ONS as a comparison with the Principal projection. It uses a five-year average of internal migration (2013–2018), combining 3 years of data based on the old methodology and 2 years based on the new methodology. All other assumptions are consistent with ONS-18.	
	5	ONS-18-High	ONS 2018-based High International Migration sub-national population projection (SNPP), incorporating a High long-term UK net international migration assumption of +290k p.a., with all other assumptions consistent with ONS-18.	
	6	ONS-18-Low	ONS 2018-based Low International Migration sub-national population projection (SNPP), incorporating a Low long-term UK net international migration assumption of +90k p.a., with all other assumptions consistent with ONS-18.	
	7	ONS-18-10Y	ONS 2016-based 10yr Migration (all types) sub-national population projection, using a ten-year history (2008–2018) to derive internal migration assumptions, with all other assumptions consistent with ONS-18.	
	8	GLA-18-Central	Greater London Authority (GLA) 2018-based Central population projection, incorporating: GLA's own adjustments to the mid-year population estimates of London Boroughs; local fertility and mortality assumptions, trended in line with the ONS 2018-based NPP assumptions; internal and international migration assumptions derived from a 10-year history (2008–2018). This scenario includes projections for London Boroughs and for all other local authority areas.	GLA
	9	GLA-18-15Y	GLA 2018-based long-term trend projection, incorporating internal and international migration assumptions derived from a 15-year history (2003–2018), with all other assumptions consistent with the Central scenario. This scenario includes projections for London Boroughs and for all other local authority areas.	
	10	GLA-18-5Y	GLA 2018-based short-term trend projection, incorporating internal and international migration assumptions derived from a 5-year history (2013–2018), with all other assumptions consistent with the Central scenario. This scenario includes projections for London Boroughs and for all other local authority areas.	
Housing-led Forecasts	11	GLA-Housing	GLA 2018-based Housing-led projection, based on data from the 2016 Strategic Housing Land Availability Assessment (SHLAA). Beyond 2041, housing growth is aligned to the 2035–2041 average. Whilst the housing-led approach is applied to each London Borough, the population projection for Greater London, in total, remains consistent with the Central scenario. This scenario includes projections for London Boroughs only and is combined with the Central scenario for all other local authority areas when aggregated to WRZ geographies.	GLA Housing

ID	Scenario	Description	URL	
Housing-led Forecasts	12	Completions-18Y	A Housing-led scenario, with population growth underpinned by a continuation of the rate of housing growth recorded in each local authority's 18-year completions history (2001–2019).	MHCLG Live Table 122
	13	Completions-5Y	A Housing-led scenario, with population growth underpinned by a continuation of the rate of housing growth recorded in each local authority's 5-year completions history (2014–2019).	
	14	Housing-Need	A Housing-led scenario, with population growth underpinned by the trajectory of housing growth associated with each local authority's Local Housing Need (LHN) or Objectively Assessed Housing Need (OAHN). Following the final year of data, projected housing growth in non-London areas returns to the ONS-14 & ONS-16 long-term annual growth average by 2050. For London Boroughs, housing growth returns to the GLA Central scenario long-term annual average by 2050.	
	15	Housing-Need-r	A Housing-led scenario, consistent with the Housing-Need scenario, but with household representative rates for young adults returning to (higher) 2001 levels by 2039, remaining fixed thereafter.	
	16	Housing-Req	A Housing-led scenario, with population growth underpinned by the trajectory of housing growth associated with each local authority's housing Requirement. Following the final year of data, projected housing growth in non-London areas returns to the ONS-14 & ONS-16 long-term annual growth average by 2050. For London Boroughs, housing growth returns to the GLA Central scenario long-term annual average by 2050.	
	17	Housing-Req-r	A Housing-led scenario, consistent with the Housing-Req scenario, but with household representative rates for young adults returning to (higher) 2001 levels by 2039, remaining fixed thereafter.	
	18	Housing-Plan	A Housing-led scenario, with population growth underpinned by each local authority's Local Plan housing growth trajectory. Following the final year of data, projected housing growth in non-London areas returns to the ONS-14 & ONS-16 long-term annual growth average by 2050. For London Boroughs, housing growth returns to the GLA Central scenario long-term annual average by 2050.	
	19	Housing-Plan-r	A Housing-led scenario, consistent with the Housing-Plan scenario, but with household representative rates for young adults returning to (higher) 2001 levels by 2039, remaining fixed thereafter.	
Employment-Led Forecasts	20	Employment-1	An Employment-led scenario with 1.0% pa growth in London to 2030 and 0.5% pa thereafter; outside London 0.8% pa growth to 2030, 0.4% thereafter.	
	21	Employment-2	An Employment-led scenario with 0.5% pa growth in London to 2030 and 0.25% pa thereafter; outside London 0.4% pa growth to 2030, 0.2% thereafter.	
OxCam Housing-Led Forecasts	22	OxCam-1a-r	'New Settlement' 23k dpa scenario, with c.4.2k dpa above Housing Plan distributed between Cherwell (20%), Aylesbury Vale (20%), Central Bedfordshire (40%), South Cambridgeshire (20%). Household representative rates for young adults returning to (higher) 2001 levels by 2039, remaining fixed thereafter.	
	23	OxCam-1b-r	'Expansion' 23k dpa scenario, with c 4.2k dpa distributed between: Milton Keynes: (30%) Luton (15%), Bedford (15%), Oxford (10%), Cambridge (10%), Northampton (10%), and Peterborough (10%). Household representative rates for young adults returning to (higher) 2001 levels by 2039, remaining fixed thereafter.	
	24	OxCam-2a-r	'New Settlement' 30k dpa scenario, with c.11.2k dpa above Housing Plan distributed between Cherwell (20%), Aylesbury Vale (20%), Central Bedfordshire (40%), South Cambridgeshire (20%). Household representative rates for young adults returning to (higher) 2001 levels by 2039, remaining fixed thereafter.	
	25	OxCam-2b-r	'Expansion' 30k dpa scenario, with c 11.2k dpa distributed between: Milton Keynes: (30%) Luton (15%), Bedford (15%), Oxford (10%), Cambridge (10%), Northampton (10%), and Peterborough (10%). Household representative rates for young adults returning to (higher) 2001 levels by 2039, remaining fixed thereafter.	

Appendix C Glossary of Terms

Defra	Department for Environment, Food and Rural Affairs
EA	Environment Agency
EU	European Union
GLA	Greater London Authority
ITRC	Infrastructure Transitions Research Consortium
LPA	Local Planning Authority
MHCLG	Ministry for Housing, Communities and Local Government
NIC	National Infrastructure Commission
OAN	Objective Assessment of (Housing) Need
ONS	Office for National Statistics
OxCam	Oxford Cambridge Arc
SHLAA	Strategic Housing Land Availability Assessment
SHMA	Strategic Housing Market Assessment
SRRP	Statement of Regional Resource Position
WG	Welsh Government
WRE	Water Resources East
WRMP	Water Resources Management Plan
WRPG	Water Resources Planning Guidelines
WRSE	Water Resources South East
WRZ	Water Resource Zone



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