Mid Devon

Jobs-led Scenario Sensitivity

Scenario Inputs, Assumptions & Results

August 2015

edge analytics

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Acknowledgements

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Introduction

Context

1.1 During 2014, Edge Analytics was commissioned by David Couttie Associates (DCA), in association with Devon County Council, to produce a suite of 'jobs-led' scenarios for Teignbridge, Exeter, East Devon and Mid Devon. This evidence[1] was used by DCA to inform the Exeter Housing Market Area (HMA) Strategic Housing Market Assessment (SHMA).

1.2 In March 2015, Mid Devon District Council commissioned Edge Analytics to produce an additional 'policy-on' jobs-led scenario. In this scenario, population and housing growth was determined by jobs growth linked to the 'Westwood' development at Junction 27 (J27) of the M5 (an additional 3,525 jobs). The jobs growth trajectory underpinning the **Jobs-led (Policy-on)** scenario represented an adjustment to the Cambridge Econometrics 'Local Economy Forecasting Model' (LEFM) employment projections[2]. The LEFM employment baseline implied an additional 2,981 jobs over the 2013–2033 period. With the additional 3,525 Westwood jobs, the **Jobs-led (Policy-on)** scenario resulted in an additional 6,506 jobs over the 2011–2031 plan period.

1.3 In a jobs-led scenario, three key economic assumptions determine the level of population growth required by a defined jobs growth trajectory: economic activity rates, an unemployment rate and the commuting ratio. In the March 2015 **Jobs-led (Policy-on)** scenario, the commuting ratio was held constant throughout the forecast period, the unemployment rate was incrementally reduced to account for economic recovery following the recession and moderate adjustments were made to the economic activity rates to account for changes to the State Pension Age.

1.4 Household growth under the **Jobs-led (Policy-on)** scenario was assessed using headship rate assumptions from the 2008-based and 2011-based (interim) household projection models from the Department for Communities and Local Government (DCLG). The application of these headship

[1] Edge Analytics (January 2015), Exeter Housing Market Area: Demographic analysis & forecasts.
[2] Serio/Ekosgen (January 2014), Baseline Economic Projections for Devon and its Districts.

rates resulted in a dwelling requirement range of 506 to 504 dwellings per year 2013–2033, an average of 530 per year.

1.5 In April 2015, GL Hearn reviewed the Exeter HMA SHMA and the additional policy-on scenario prepared by Edge Analytics[3]. GL Hearn does not consider the Edge Analytics modelling to be robust, stating that the economic dynamics of the wider area were not considered and that the scenario was based on outdated information regarding the development proposals and associated economic impacts. GL Hearn states that the J27 development proposals are expected to generate a lower number of Full Time Equivalent (FTE) jobs (+2,266), resulting in a need for only an additional 540 dwellings in the District over the plan period.

1.6 An alternative jobs growth outcome resulting from the Westwood development has also been provided by Regeneris, it its Mid Devon Economic & Employment Land Evidence report[4].

Requirements

1.7 Mid Devon District Council has requested that Edge Analytics respond to the GL Hearn critique and provide a rebuttal to the issues raised within their document.

This Report

1.8 As part of the response to the GL Hearn criticisms, Edge Analytics has produced a range of sensitivity scenarios based on the **Jobs-led (Policy-on)** scenario. Alternative jobs-growth trajectories are considered, as are alternative commuting ratio assumptions. These scenarios are presented in this report.

1.9 In Section 2, the scenarios are defined, with the scenario outcomes presented in Section 3. The dwelling growth outcomes are summarised in Section 4.

[3] *Review of Exeter HMA Strategic Housing Market Assessment*, Friends Life Limited, Eden Westwood, Junction 27, Mid Devon. April 2015

2 Scenario Definition

Introduction

2.1 In the March 2015 **Jobs-led (Policy-on)** scenario, the number of jobs increases by 6,506 over the 20-year 2013–2033 period. In response to the GL Hearn and Regeneris criticisms, two alternative jobs-led scenarios have been produced:

- **Jobs-led (Policy-on) GL Hearn**

  Jobs growth is defined using the LEFM baseline (+2,981 jobs 2013–2033), with an additional 2,266 jobs 2013–2033, as specified by GL Hearn.
- **Jobs-led (Policy-on) Regeneris**

  Jobs growth is defined using the LEFM baseline (+2,981 jobs 2013–2033), with an additional 866 jobs 2013–2033, as specified by Regeneris.

2.2 The three jobs-growth trajectories applied are summarised in Figure 1.

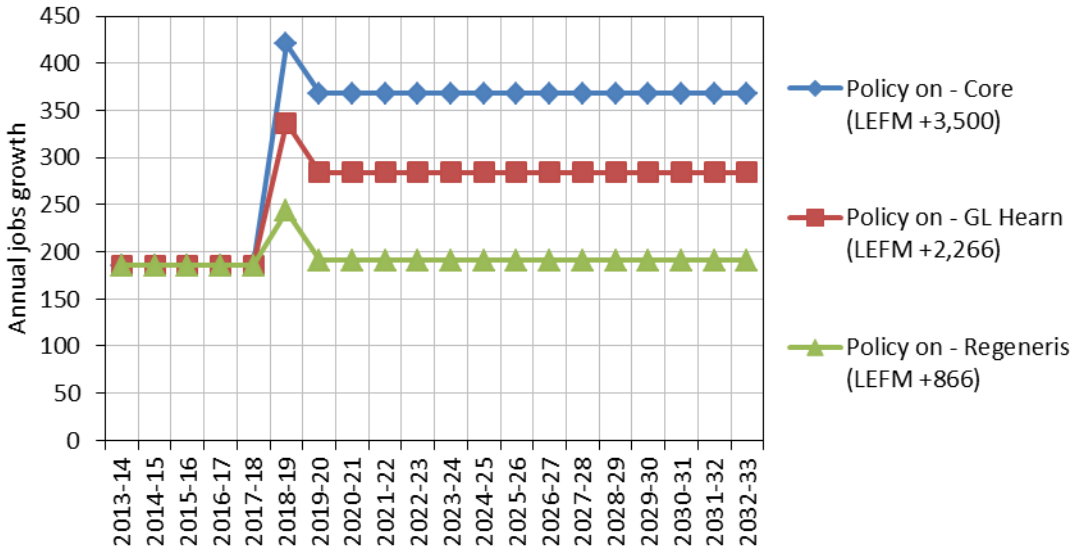

Figure 1: Jobs growth trajectories used in the Mid Devon jobs-led scenarios

2.3 In a jobs-led scenario, population growth is determined by growth in the number of jobs, using migration and three key employment assumptions:

- Unemployment rate
- A Commuting Ratio
- Age-sex-specific Economic Activity Rates.

2.4 In the **Jobs-led (Policy-on)** scenario produced in March 2015, the following key economic assumptions were used:

- **Economic activity rates**

  2011 Census economic activity rates by 5-year age group and sex, with adjustments made over the 2011–2020 period to the following age groups to account for changes to the State Pension Age:

  - Women aged 60-64: 40% increase
  - Women aged 65-69: 20% increase
  - Men aged 60-64: 5% increase
  - Men aged 65-69: 10% increase

- **Unemployment rate**

  A base year (2013) unemployment rate of 6.7% was applied, reducing to a 'pre-recession' average of 2.8% by 2020, remaining fixed throughout the remainder of the forecast period.

- **Commuting ratio**

  A fixed 2011 Census commuting ratio of 1.27 was applied.

2.5 The assumptions listed above have been used to here to produce a range of 'core' jobs-led scenarios. Additionally, three alternative commuting ratio profiles have been applied to each scenario:

- **SENS1:** The Commuting Ratio is incrementally *reduced* from the 2011 Census value of 1.27 to the 2001 Census value of 1.22 by 2021, a reduction of 4%. After 2021, the Commuting Ratio is fixed.
- **SENS2:** The Commuting Ratio is incrementally *increased* from the 2011 Census value of 1.27 in 2011, to 1.32 by 2021. This is a 4% increase, i.e. continuing the inter-Census trend. After 2021, the Commuting Ratio is fixed.

- **SENS3:** The Commuting Ratio is incrementally reduced by 10%, from the 2011 Census value of 1.27 in 2011 to 1.14 by 2021. After 2021, the Commuting Ratio is fixed.

2.6 The four alternative commuting ratio profiles used are summarised in Figure 2. In these sensitivity scenarios, the economic activity rate and unemployment rate assumptions are consistent with the core scenarios (i.e. consistent with the March 2015 scenarios).

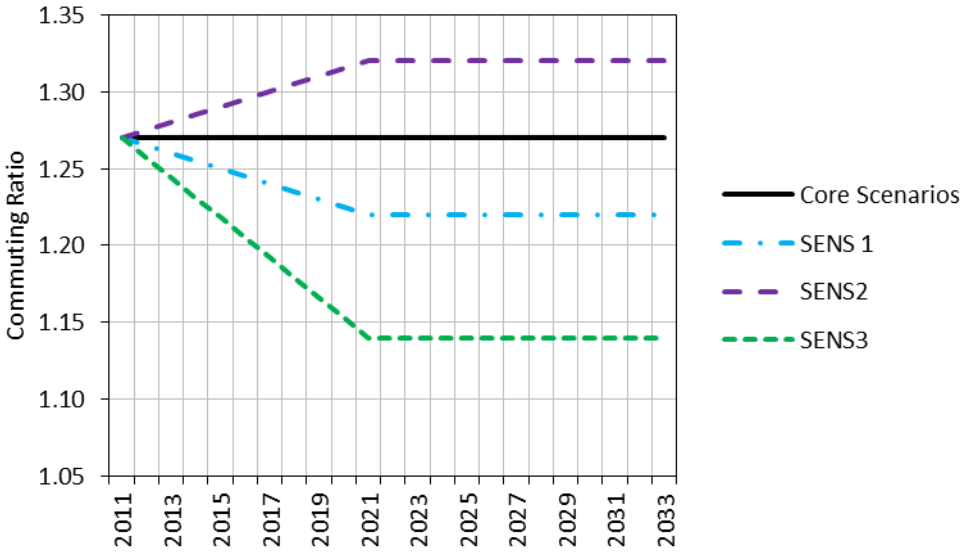

Figure 2: Commuting ratio profiles used in the jobs-led scenarios

2.7 As in the March 2015 scenarios, household growth has been assessed in all scenarios using the 2008-based and 2011-based headship rates, producing two alternative outcomes for each scenario. The dwelling growth outcomes are derived using the 2011 Census dwelling 'vacancy rate', set at 3.6% throughout the forecast period.

2.8 For further detail on the assumptions used, please refer to the Edge Analytics March 2015 report.

3 Scenario Outcomes

3.1 In the charts and tables that follow, the draft scenario results are presented.

3.2 The charts (Figure 3, Figure 4 and Figure 5) summarise population growth 2001–2033.

3.3 The tables present a summary of population change 2013–2033. Each of the scenarios has been run using the 2008-based and 2011-based headship rates, producing two alternative tables:

- The tables containing the 'CLG08' identifier have been produced using the 2008-based headship rates (Table 1, Table 3 and Table 5);
- The 'CLG11' identifier indicates use of the 2011-based (interim) headship rates, trended after 2020 (Table 2, Table 4 and Table 6).

3.4 Only the household and dwelling growth outcomes are different under the CLG08 and CLG11 outcomes, reflecting the alternative headship rate assumptions used.

3.5 Population growth under the **Jobs-led (Policy-on) GL Hearn** and Jobs-**led (Policy-on) Regeneris** scenarios is *lower* than under the **Jobs-led (Policy-on)** scenario, a reflection of the lower jobs-growth targets applied.

3.6 Of the commuting ratio sensitivities, population growth is lowest under SENS3, in which the commuting ratio is incrementally reduced by 10%, from 1.27 in 2011 to 1.14 by 2021. This reduces the net out-commute, increasing the proportion of the resident labour force taking up jobs within Mid Devon.

3.7 It is important to note that adjustments to the three key economic assumptions (economic activity rates, the unemployment rate and the commuting ratio) would alter the balance between jobs growth and population growth. For example, if the net out-commute was to reduce further, the population growth needed to support the defined level of jobs growth would reduce, thereby reducing the dwelling requirements. An increase in the rates of labour force participation would increase the size of the resident labour force and reduce the need for net in-migration to reach the defined jobs growth targets.

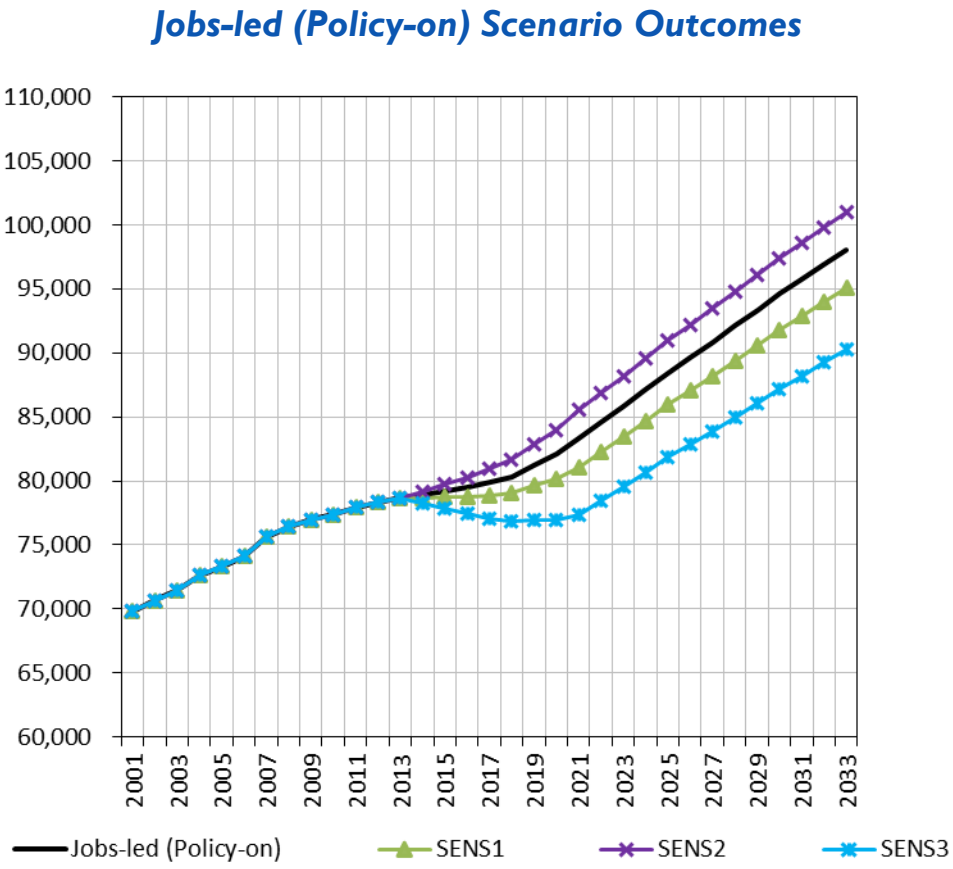

Figure 3: **Jobs-led (Policy-on)** population growth outcomes 2001–2033

Table 1: **Jobs-led (Policy-on)** 'CLG08' scenario outcomes 2001–2033

Jobs-led (Policy-on)	Change 2013–2033				Average per year		
	Population Change	Population Change %	Households Change	Households Change %	Net Migration	Dwellings	Jobs
Core (CLG08)	19,385	24.6%	10,673	31.6%	938	554	325
SENS1 (CLG08)	16,443	20.9%	9,532	28.2%	817	494	325
SENS2 (CLG08)	22,305	28.4%	11,804	34.9%	1,057	612	325
SENS3 (CLG08)	11,648	14.8%	7,665	22.7%	620	398	325

Table 2: **Jobs-led (Policy-on)** 'CLG11' scenario outcomes 2001–2033

Jobs-led (Policy-on)	Change 2013–2033				Average per year		
	Population Change	Population Change %	Households Change	Households Change %	Net Migration	Dwellings	Jobs
Core (CLG11)	19,385	24.6%	9,753	29.3%	938	506	325
SENS1 (CLG11)	16,443	20.9%	8,651	26.0%	817	449	325
SENS2 (CLG11)	22,305	28.4%	10,844	32.6%	1,057	562	325
SENS3 (CLG11)	11,648	14.8%	6,849	20.6%	620	355	325

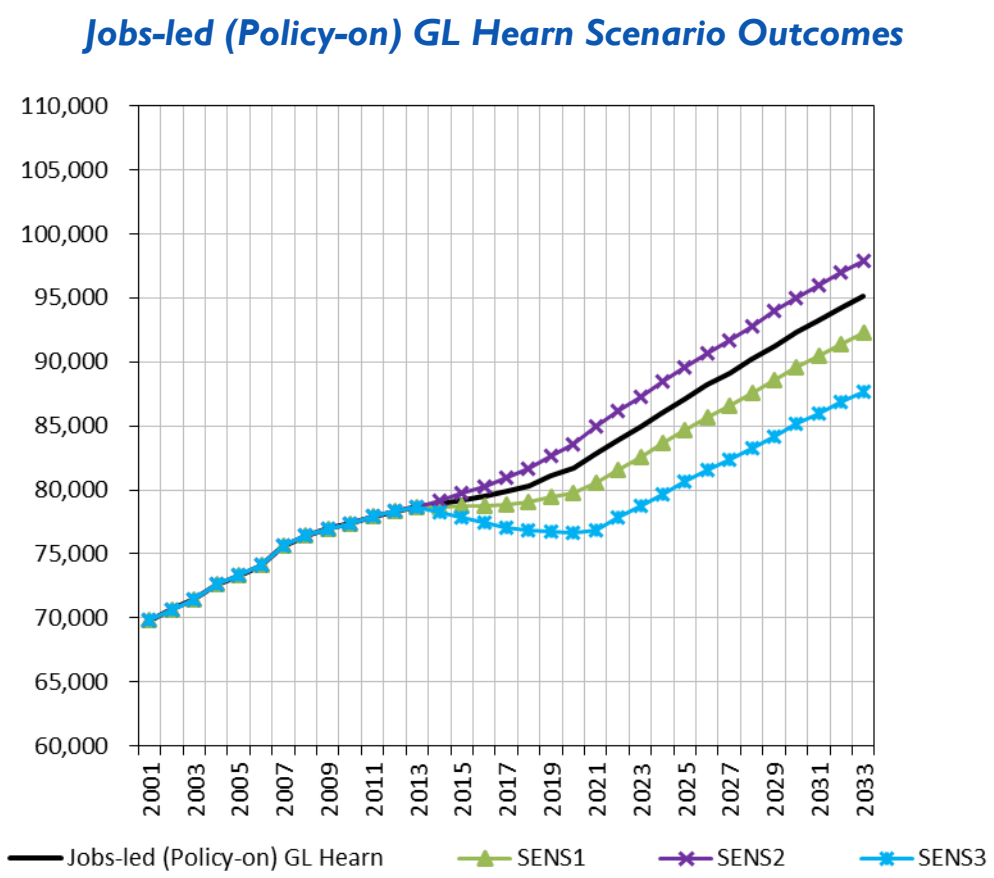

Figure 4: **Jobs-led (Policy-on) GL Hearn** population growth outcomes 2001–2033

Table 3: **Jobs-led (Policy-on) GL Hearn** 'CLG08' scenario outcomes 2001–2033

Jobs-led (Policy-on) GL Hearn	Change 2013–2033				Average per year		
	Population Change	Population Change %	Households Change	Households Change %	Net Migration	Dwellings	Jobs
Core (CLG08)	16,462	20.9%	9,522	28.2%	806	494	262
SENS1 (CLG08)	13,633	17.3%	8,422	24.9%	691	437	262
SENS2 (CLG08)	19,266	24.5%	10,609	31.4%	921	550	262
SENS3 (CLG08)	9,021	11.5%	6,623	19.6%	501	344	262

Table 4: **Jobs-led (Policy-on) GL Hearn** 'CLG11' scenario outcomes 2001–2033

Jobs-led (Policy-on) GL Hearn	Change 2013–2033				Average per year		
	Population Change	Population Change %	Households Change	Households Change %	Net Migration	Dwellings	Jobs
Core (CLG11)	16,462	20.9%	8,661	26.0%	806	449	262
SENS1 (CLG11)	13,633	17.3%	7,599	22.8%	691	394	262
SENS2 (CLG11)	19,266	24.5%	9,711	29.2%	921	504	262
SENS3 (CLG11)	9,021	11.5%	5,861	17.6%	501	304	262

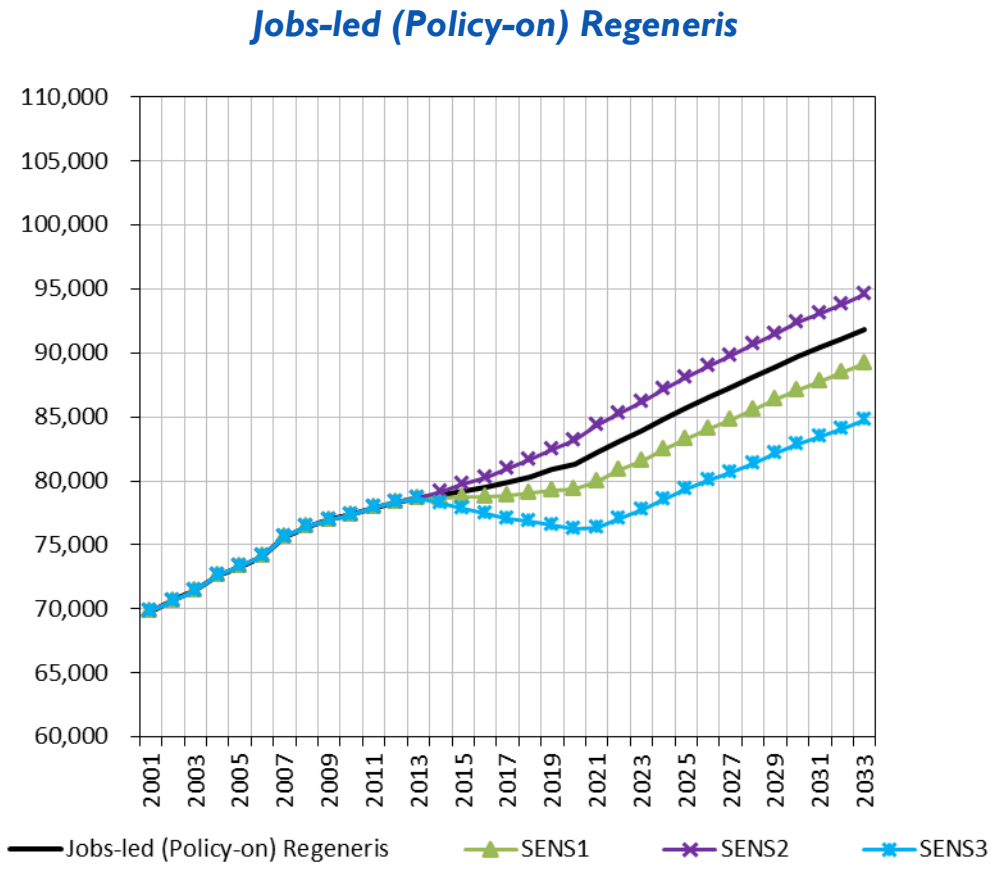

Figure 5: **Jobs-led (Policy-on) Regeneris** population growth outcomes 2001–2033

Table 5: **Jobs-led (Policy-on) Regeneris** 'CLG08' scenario outcomes 2001–2033

Jobs-led (Policy-on) Regeneris	Change 2013–2033				Average per year		
	Population Change	Population Change %	Households Change	Households Change %	Net Migration	Dwellings	Jobs
Core (CLG08)	13,212	16.8%	8,238	24.4%	660	427	192
SENS1 (CLG08)	10,510	13.4%	7,185	21.3%	550	373	192
SENS2 (CLG08)	15,887	20.2%	9,278	27.5%	769	481	192
SENS3 (CLG08)	6,101	7.8%	5,462	16.2%	369	283	192

Table 6: **Jobs-led (Policy-on) Regeneris** 'CLG11' scenario outcomes 2001–2033

Jobs-led (Policy-on) Regeneris	Change 2013–2033				Average per year		
	Population Change	Population Change %	Households Change	Households Change %	Net Migration	Dwellings	Jobs
Core (CLG11)	13,212	16.8%	7,443	22.4%	660	386	192
SENS1 (CLG11)	10,510	13.4%	6,425	19.3%	550	333	192
SENS2 (CLG11)	15,887	20.2%	8,448	25.4%	769	438	192
SENS3 (CLG11)	6,101	7.8%	4,760	14.3%	369	247	192

4 Summary

4.1 This report has provided an update on the **Jobs-led (Policy-on)** scenario delivered previously to Mid Devon District Council in March 2015.

4.2 In the tables that follow, the average annual dwelling-growth outcomes are summarised for each scenario. The 'CLG11' and 'CLG08' outcomes have been presented, together with the average of the two, for comparability with the March 2015 Edge Analytics scenarios.

Table 7: **Jobs-led (Policy-on)** dwelling requirement summary

Scenario	Average Annual Dwelling Requirement 2013–2033		
	CLG08	CLG11	Average
Jobs-led (Policy-on)	554	506	554
SENS1	494	449	494
SENS2	612	562	612
SENS3	398	355	398

Table 8: **Jobs-led (Policy-on) GL Hearn** dwelling requirement summary

Scenario	Average Annual Dwelling Requirement 2013–2033		
	CLG08	CLG11	Average
Jobs-led (Policy-on) GL Hearn	494	449	494
SENS1	437	394	437
SENS2	550	504	550
SENS3	344	304	344

Table 9: **Jobs-led (Policy-on) Regeneris** dwelling requirement summary

Scenario	Average Annual Dwelling Requirement 2013–2033		
	CLG08	CLG11	Average
Jobs-led (Policy-on) Regeneris	427	386	427
SENS1	373	333	373
SENS2	481	438	481
SENS3	283	247	283