

Note:

In reviewing the comments, we note that the first row of Table 1 in CC63a does indeed include figures which have been transposed from another table incorrectly. Sincere apologies for this error, which we have clearly corrected in the attached.

All of the other figures in the table are correct. The second row which represents jobs per annum is aligned with row 4 of Table 4.1 of CC21. The corrected row 1 now also aligns with the job figures in row 3 of Table 4.1 of CC21. This recognizes that the job inputs have not changed between the two technical notes.

Rows 3 and 4 represent the output of the re-modelling undertaken by Edge Analytics to integrate appropriate assumptions from the 2018-based SNPP. These can be compared with the outputs of the earlier modelling presented in the August 2019 report with regards dwellings per annum (row 4 of CC21) and the population change in rows 1 and 2 of Table 1 of CC63.

In terms of the other point raised, therefore, the 'Policy-on scenario' and the 'Baseline scenario' presented in Table 1 of CC63 do not use the 2018-based projections. They are thus not inconsistent and there is no error in the population figures presented in either table. As set out at the preceding paragraph 3 in the appendix, the table shows both the official 2018-based projection outputs and the employment-led scenarios produced by Edge Analytics in August 2019 (i.e. before they were commissioned to update them). They show the same population outputs as Table 2.1 and Table 2.2 of CC21 as a result. The population outputs in Table 1 in CC63a can therefore be compared directly to show the difference in the modelled population where the 2018-based SNPP are used.

Once again apologies for the error in the presentation of figures in CC63a and any inconvenience caused.

Turley

Technical Note for Calderdale Council

Remodelling the housing needed to support job growth in Calderdale

August 2020¹

1. Turley was commissioned by Calderdale Council ('the Council') to review the official 2018-based household projections and consider their implications for the calculated number of homes needed to support job growth over the plan period. This was documented within a technical note submitted to the Inspector in July 2020² (CC 63).
2. The Inspector responded on 6 August 2020 and asked the Council to:

"...re-run the modelling work, taking account of the 2018-based projections as necessary and where it is considered to be justified (for example, in relation to household formation rates Turley suggests that retention of the 2014-based rates may be preferable)"
3. In accordance with the Inspector's request, the Council commissioned Edge Analytics to remodel the housing growth needed to support the creation of new jobs in Calderdale. The outcome of this modelling is summarised within this supplementary note, with appropriate reference made to CC 63.
4. The modelling updates and effectively replaces that which was presented in the Turley report titled '*Modelling the economic implications of the proposed housing requirement*' which was published in August 2019 (CC 21). Appendix 1 of CC 21 confirms that its modelling applied age-specific fertility and mortality assumptions drawn from the then-latest 2016-based sub-national population projections (SNPP), and equally aligned with their assumptions on future international migration to and from Calderdale. The model made its own assumptions on the number of internal migrants needed to support a specified level of job growth, but assumed that the *profile* of such migrants mirrored that implied by the 2016-based SNPP.
5. The remodelling presented in this note replaces all of these assumptions, and no others, with their equivalents from the 2018-based SNPP. It should be noted that the profile of internal migrants has been drawn from the "alternative internal migration variant", thus justifiably reflecting trends over a five year period comparable to earlier projections, but all other demographic assumptions are understood to be consistent between this variant and the principal 2018-based projection (which exceptionally uses a two year trend for internal migration).
6. As referenced by the Inspector, the July 2020 technical note (CC 63) considered it to be both reasonable and justified to retain the 2014-based household formation rates, on the basis that the 2018-based projections continue to use a methodology that has been previously questioned

¹ This note was reviewed on 14 September 2020 to correct two figures at Table 1; please see footnote 3 for further information. We apologise for any inconvenience caused.

² Technical Note for Calderdale Council: implications of 2018-based household projections, July 2020. Examination document reference CC 63

by Government for the purposes of assessing housing need. As such, the remodelling continues to apply 2014-based household formation rates to the updated population projections, with adjustments – as in CC 21 – to allow for improvements from suppressed rates of younger household formation.

7. Table 1 confirms the outcome of the remodelling, and for reference presents the equivalent figures from CC 21 which drew assumptions from the 2016-based SNPP.

Table 1: Effect of Remodelling Housing Need Evidence for Calderdale (2018-33)

Scenario	Baseline job growth		“Policy-on” job growth	
	2016-based	2018-based	2016-based	2018-based
Demographic assumptions				
Total job growth ^{3*}	7,791	7,791	10,318	10,318
Jobs per annum*	519	519	688	688
Total population growth	17,827	14,881	22,318	19,320
Dwellings per annum	910	869	1,040	999

Source: Edge Analytics

* total jobs, not FTE

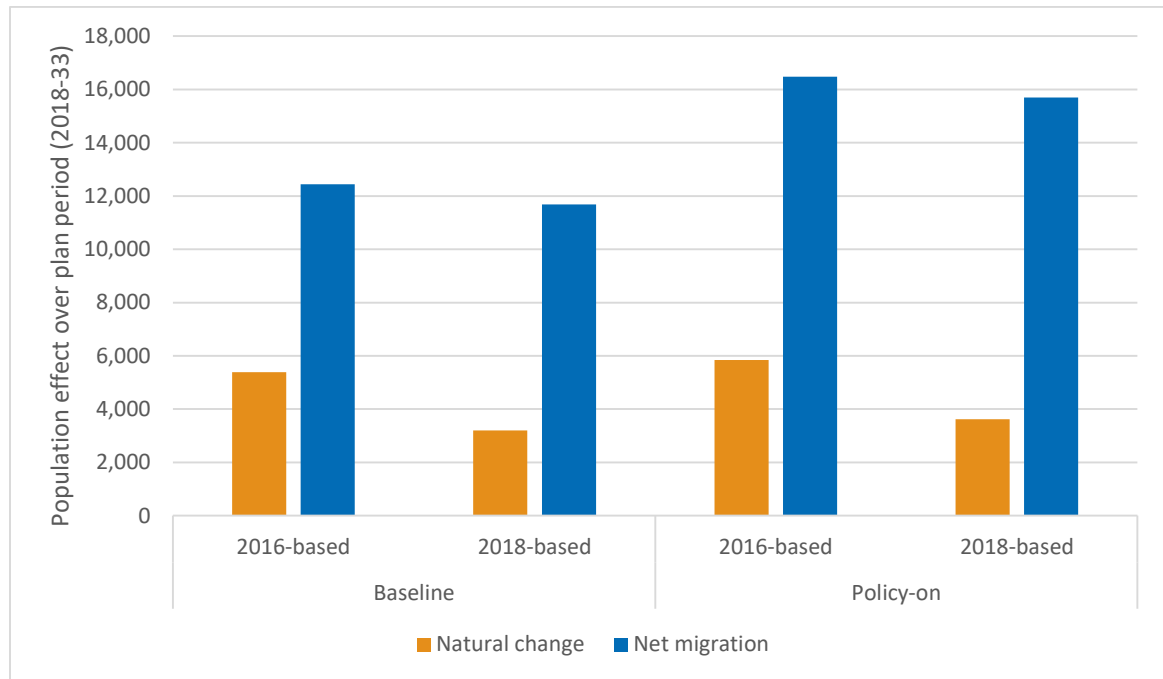
8. While CC 21 suggested that 910 dwellings per annum would be needed over the plan period (2018-33) to support a baseline level of job growth⁴, the application of more up-to-date demographic assumptions reduces this estimate by circa 5% to **869 dwellings per annum**. It is likewise now suggested that **999 dwellings per annum** could be needed to support the “policy-on” scenario, which is 4% lower than the estimate of 1,040 dwellings per annum presented in CC 21.
9. As anticipated through the evidence presented in CC 63, Figure 1 overleaf shows that this reduction is largely caused by the assumption of less pronounced natural change in the population, due to reducing birth rates and a slowing growth in life expectancy⁵. The assumed level of net migration remains relatively similar, if lower due to the profile of migrants that can now be assumed based on recent trends.

³ This original version of this note erroneously replicated the “total housing provision” row from Table 4.1 of CC 21, but instead should have aligned with the “**total job growth**” specified under the baseline and “policy-on” scenarios. This has now been corrected in this second version of the note. For the avoidance of doubt, **all other figures were – and remain – accurate.**

⁴ As introduced in the 2018 Employment Land Study (EV 01)

⁵ See paragraphs 8 and 9 in particular of CC 63

Figure 1: Components of Population Change in Original and Remodelled Scenarios



Source: Edge Analytics; Turley analysis

10. With the Council proposing a requirement for 997 dwellings per annum, this remodelling now suggests – based on the latest demographic evidence available – that **such a level of housing provision would likely provide the labour force needed to support the “policy-on” job growth scenario**. The remaining difference of 2 dwellings per annum, or 30 dwellings across the entire plan period, is of a scale which could be judged as being within a reasonable margin of error that is inevitable in any such modelling exercise, particularly when recognising that the relevant PPG emphasises that establishing the future need for housing is ‘*not an exact science*’⁶.

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⁶ PPG Reference ID 2a-014-20140306