

Sustainability Appraisal of Housing Growth Options: An Overall Analysis of Trends

Sustainability Appraisal Criteria	Overall Comments
Climatic factors	Whilst any growth is negative in terms of climatic factors, in broad terms below trend scores positively in relation to the other growth options. The high growth options will not reduce levels of green house gas emissions therefore will not contribute to reducing climate change or resilience and vulnerability to it in Cornwall.
Waste	More housing construction equals more waste but provides an increased possibility of local facilities for reuse, recycling and recovery. The amount of waste generation depends on legislation, design and behaviour of occupants.
Minerals & Geo-diversity	Although there will be impacts on minerals and geodiversity resources from any growth options with highest growth options it is questionable how much demand for materials can be met through use of the secondary aggregates or recycled construction materials. In addition the risk of sterilising mineral and geodiversity resources directly increases in relation to the level of growth.
Soil	Any housing growth will ultimately pressurise non-developed / greenfield sites because every housing development requires the provision of associated services / facilities, e.g. retail, schools etc. The higher growth options will add even more pressure to develop non-developed / greenfield sites. Whilst high growth will encourage local food production it will require more intensification of farming practices which is likely to lead to soil degradation, compaction, erosion and pollution. High growth options will also reduce the capability of Cornwall to supply enough food to meet demand. There is also likely to be competition of land use for other purposes e.g. renewable energy generation, employment etc.
Air	Correlated increase in negative impacts on air quality as construction of the development and use of associated infrastructure are linked to increased impact

	on air quality and air pollution. However within this context the highest growth options do provide some opportunities to make public transport and active travel more viable.
Water	Linear trend. Increasing impacts due to increasing demand and potential surface water run-off, i.e. facilities for clean water supply and sewage treatment needed, and risk of flooding from surface water (the latter is dependent upon design standards and location). Higher growth options may require enhanced standards for sewage treatment. May start to see a conflict with land use between demand for more reservoirs and sewage treatment plants with housing, employment, biodiversity, tourism requirements.
Biodiversity	Increased growth will increase landtake that will inevitably have a negative impact on biodiversity. There is an option to minimise some aspects through the implementation of mitigation measures e.g. wildlife corridors. The extent of the impact depends on location, design and building of the development. Increased footfall from increased population will also have an impact on designated sites.
Landscape	Unless sympathetically located and designed, increased growth will have a negative impact on the local landscape especially in relation to the visual impacts. Increased footfall from increased population will also have an impact on designated sites.
Maritime	Increasing impacts as growth increases due to more people undertaking maritime activities (fishing, coastal walking, surfing, boats) plus impacts of diffuse run-off from hard surfaces.
Historic Environment	Increasing impacts as growth increases and more risk of erosion from associated footfall due to population pressure. Increased need to compromise between development and historic conservation perhaps. Level depends on design and location.
Design	The higher growth options could lend itself to the design of a new vernacular style for Cornwall. Potentially there is also an opportunity to benefit from economies of scale in terms of infrastructure provision, materials, renewables and planning gain.

Social Inclusion	The highest growth options will help to meet housing needs for all, especially the provision for affordable housing. The facilities associated with increased housing will help create balanced communities but this is dependant on how any development is designed.
Crime & Anti Social Behaviour	The highest growth options will lead to urbanisation of the County and potential conflicts due to higher density of population although this depends on distribution and "designing out crime" and the level and range of services provided.
Housing	The highest growth option will deliver 19% more housing than trend based growth and this provides the best opportunity to provide lifetime homes and a mixture of tenures. However, this is very dependent on design and build. There could be a risk of saturating the housing market from over supply. There are links to economy from a potential loss of desirability and lack of employment opportunities.
Health, Sport & Recreation	With the higher growth options the populations mental health is potentially negatively affected through loss of green spaces. Opportunities for informal recreation using the natural environment (green/blue space) is reduced due to more development and more population pressure in those locations. However there are more opportunities for formal recreation facilities and the viability of them.
Economic Development, Regeneration & Tourism	High growth could stimulate the economy and boost jobs in construction. However, it is questionable whether enough jobs can be stimulated within the local economy to support the increased population arising from high housing growth projections. Fluctuations within the economy could lead to dereliction as housing developments are no longer economically viable (potential impact on tourism). Housing growth may increase pressure on existing industries in Cornwall to cease functioning due to perceived noise, disturbance etc e.g. farming, fishing, timber working. Links to housing. Green Jobs might be compromised due to reduced land available for renewable energy generation.
Education & Skills	Too many dependents i.e. distribution, design, location and make up of resident population. Increasing housing growth and associated population could lead to

	provision of HFE but it depends on the make up of the occupants.
Transport & Accessibility	Congestion and emissions get worse with the highest growth options but there are increased opportunities to locate services more locally to reduce travel and make public transport more viable.
Energy	The impact on energy issues from any growth option is dependent on design, location and distribution. High growth could achieve real benefits from the installation and generation of renewables but any increase in housing will lead to increased consumption from users as well as associated infrastructure (street lighting etc). Cornwall is far from being self sufficient regarding energy production. The high growth options mean that many forms of renewable energy generation will be jeopardised due to competing land use purposes. (i.e. housing, employment, retail food etc)