

## 6.0 Summary of the Results of the Sustainability Appraisal of Housing Options

- 6.1 The following schedule (Table 5.1) is a summary of the key findings and conclusions of the Sustainability Appraisal of the Potential Growth Scenarios.
- 6.2 As explained above, the Housing Options and Potential Scenarios have been appraised against questions that closely reflect each of the 33 sustainability objectives for the West Midlands, as set out in the West Midlands RSDF. The Housing Options SA (and the SA (2007) of the Phase 2 Preferred Options) also appraises the option against sub-questions derived from these main questions. As with the SA (2007) a commentary is provided on the key issues and implications arising from the assessment of the effect of the Scenario in accumulation with the effect of the housing figures identified in Policy CF3 of the Phase 2 Preferred Option.
- 6.3 Table 5.1 includes only the SA results for appraisal against the 29 main questions. Where the main question and sub question found differing results, the results are shown in the table as mixed, or with the predominant result for the sub questions that most closely relate to the main question (mixed is of course also shown as the result where this is the outcome of the appraisal of the Housing Options against that key questions).
- 6.4 As the effect is shown as a cumulative effect of the Potential Scenario with the Phase 2 Preferred Option in place, certain conclusions are necessarily reached notwithstanding the actual effect of each Scenario in isolation. For example, if the effect of the housing growth identified in Policy CF3 is that it is likely to have strongly negative implications ('--'), and the effect of the Scenario over and above this effect is negligible, then the only conclusion that can be reached is that the Phase 2 Preferred Option PLUS the relevant Scenario is also likely to have strongly negative implications ('--'). This approach has been adopted as it is a base assumption of the appraisal that the full extent of the housing growth identified in the Phase 2 Preferred Option is taken forward as currently identified. The specific effect of each Scenario in isolation is therefore of limited relevance in identifying the effects of this plus the additional growth identified by each Scenario.
- 6.5 Where SA (2007) assumed the effect on Policy CF3 was not relevant, it has been assumed that this therefore is consistent with the current assessment. However, to ensure that the SA is robust this has been reviewed and a comment has been made in Volume 5 where necessary or appropriate. The objectives that are not relevant to the SA of the options are not included in schedule below, but are listed below at Appendix 1.

++	<b>Strongly positive implications</b>
+	<b>Overall likely to be positive</b>
∅	<b>No effect, neutral, mixed</b>
?	<b>Unclear or not known</b>
-	<b>Overall likely to be negative</b>
--	<b>Strongly negative implications</b>
O	<b>Not relevant</b>

- 6.6 Consistent with the SA, three additional columns will then be included in respect of the housing options being assessed to illustrate if it is possible to do so whether the effect is: -

- Direct or indirect (✓ for direct effects, ✖ for indirect effects)
- Permanent or temporary (✓ for permanent effects, ✖ for temporary effects)
- Significant ('H' for high significance, 'M' for medium, 'L' for low)

6.7 The appraisal will identify significance of the effect of each option in meeting the RSDF objective identified. Where options give rise to significant effects that cannot be mitigated these will be defined.

RSDF Appraisal Questions		SA (2007) <sup>5</sup>	Scenario			Direct/ Indirect	Permanent/ Temporary	Significance	Commentary
No	Will the Option...		1	2	3				
1.1	<b>Use natural resources such as water and minerals efficiently, including by incorporating efficiency measures into new land use and developments, redevelopment and refurbishment?</b>	--?	--?	--?	--?	✓	×	H	Initial EA analysis of supply demand balance of water supply within water resources zones ('WRZ') for growth at the upper end of the NHPAU range indicated that Severn WRZ would experience the most significant issues and that earlier delivery than is currently anticipated of measures to deliver increased water supply within the region (particularly in the east where much of the growth is identified in all Scenarios) would be required. Capacity issues are likely to arise more quickly with the housing options, which the Water Plans being prepared by the water companies (that relate to a number of local authority areas in the region) do not take into account. Further analysis of the new Water Plans is required. The key difference between medium and high level growth is likely to be the time at which the infrastructure may be required. Whilst higher housing numbers could require more primary aggregates, policies to encourage low and efficient consumption of aggregates may reduce overall estimates of aggregates consumption.

<sup>5</sup> Appraisal of Policy CF3: Level and distribution of new housing development (pp.C51-C75)

RSDF Appraisal Questions		SA (2007) 5	Scenario			Direct/ Indirect	Permanent/ Temporary	Significance	Commentary
No	Will the Option...		1	2	3				
1.4	<b>Increase use of public transport, cycling and walking as a proportion of total travel in order to reduce road traffic congestion, pollution and accidents, and improve health through increased physical activity?</b>	-	-	-	-	✓	✓	M	Generally, more concentrated development around urban areas will lead to more sustainable transport patterns being promoted (where alternative modes are available). This needs to be balanced with the fact that urban areas are often also the foci for congestion. Initial analysis carried out on behalf of the Highways Agency to consider the effect of the Phase 2 Preferred Option with the medium/high level initial options concluded that there was actually little difference in terms of effect on highway capacity between the Preferred Option in isolation and the Preferred Option with the medium/high level growth options. There are, however, public transport routes (particularly into the Birmingham conurbation) which are already suffering from limited capacity that may need to be addressed in the delivery of growth to ensure that sustainable transport patterns can be promoted. If the Eco-Town at Middle Quinton is brought forward (all Scenarios) as an option for additional growth in Stratford on Avon/Whychavon, investment in alternative modes would be likely to be required as it is not currently in a location benefiting from existing public transport opportunities.

RSDF Appraisal Questions		SA (2007) 5	Scenario			Direct/ Indirect	Permanent/ Temporary	Significance	Commentary
No	Will the Option...		1	2	3				
1.5	<b>Ensure development is primarily focused in the major urban areas and makes efficient use of existing physical infrastructure and reduces need to travel, especially by private car?</b>	?	-	-	-	✓	✓	H	With regard to focussing development in the MUAs, based on the information available at this time, it must be assumed that a mix of development within and outside urban areas is likely to be required to accommodate the growth leading to mixed effects in respect of this question. Precise effects would need to be assessed via the LDF processes of local authorities. With regard to reducing the need to travel, many of the issues are the same as for 1.4 above. Policies to promote the primacy of Birmingham within the region will naturally be more likely to lead to an increase in the number and length of journeys within the region if development is outside of the Birmingham MUA. Scenario 1 seeks to provide new housing in the area of economic growth where there is obvious potential for reducing the length of journeys (particularly for commuters). However this will depend on a sufficient critical mass of development being provided to bring forward necessary investment or in other public sector investment in new or improved sustainable transport modes between these key uses. Development in North Staffordshire (Scenarios 2 and 3) will require development of alternative modes of transport between Stoke and Newcastle.
1.6	<b>Encourage and enable waste minimisation, reuse, recycling and recovery to divert resources away from waste stream, including the use of recycled materials where possible?</b>	-(0)	-	-	-	✓	×	M	With regard to waste arisings (other elements of the objectives are not relevant) the SA (2007) found that housing in the Phase 2 Preferred Option would result in 15.7% more waste being produced by 2026. Based on the numbers in three Scenarios, and the calculation assumptions in the SA (2007), it can be estimated that the medium growth Scenarios (1 and 2) plus the Phase 2 Preferred Option growth would give rise to a 17.7% increase in waste by 2026 and the high growth Scenario (3) plus the Phase 2 Preferred Option growth would give rise to circa 19.3% increase in waste by 2026. The development of the Middle Quinton Eco-Town could lead to reductions in waste generated in Stratford on Avon and Whychavon as a result of the strict recycling requirements for Eco-Towns. The updated baseline data indicated that the region has a good record in waste recovery generally with the highest national rate.

RSDF Appraisal Questions		SA (2007) 5	Scenario			Direct/ Indirect	Permanent/ Temporary	Significance	Commentary
No	Will the Option...		1	2	3				
1.11	<b>Achieve a strong, stable and sustainable economy and prosperity for the benefit of all the Region's inhabitants?</b>	-?	-?	+	(Ø)?	*	✓	?	The SA (2007) concluded that whilst at a regional level the Phase 2 Preferred Option housing growth is close to that required to support economic growth, at a district level the housing will not meet projected demand and support the economic growth. Work is currently underway to assess in detail whether the Regional Economic Strategy (published after the SA (2007) completed/Preferred Option published) now achieves alignment of economic growth with housing growth in the Preferred Option. Until the results of this work indicate whether the effect of Preferred Option should actually be '+' or '-', analysis of the effect over and above the Phase 2 Preferred Option can only be identified as unclear at this time. The levels of growth proposed are considered sufficient to result in a narrowing of the GVA gap per capita between the most and least affordable parts of the region. However this is reliant on a critical mass being provided in the worse performing areas (e.g. the north-east of the region) and particularly where a more concentrated form of development is identified. Scenario 1, which provides most of the growth in the south-eastern or best performing corner of the region, could be expected to result in the gap actually widening (e.g. between the south-east and north-east of the region).
2.3	<b>Minimise the region's contribution to the causes of climate change by reducing emissions of greenhouse gases from transport, domestic, commercial and industrial sources?</b>	--	--?	--?	--?	✓	✓	H	The SA (2007) concluded that the climate change implications of the growth identified in the Phase 2 Preferred Option were likely to be significantly negative unless policies on energy generation, efficiency, alternative modes of transportation, etc were effective. On this basis, it must be assumed that higher growth would be likely to generate greater effects on climate change. Whilst, the update to the baseline carried out as part of this appraisal has provided an indication that emissions for the UK are generally decreasing; a real commitment to ensuring a continuation or strengthening of policy objectives, and delivery at a local level, is required to ensure effectiveness. Due to the nature of the data that is available on climate change it is not possible to identify whether the distribution of housing growth identified by the three Scenarios will lead to a different conclusion for each of the Scenarios.

RSDF Appraisal Questions		SA (2007) 5	Scenario			Direct/ Indirect	Permanent/ Temporary	Significance	Commentary
No	Will the Option...		1	2	3				
2.5	<b>Ensure land use and development that takes into account predicted changes in the region's climate including flood risk?</b>	?	?	?	?	✓	✓	H	It is clear from the Regional Flood Risk Assessment (RFRA) that there are greater issues in relation to flooding and flood risks in some locations, which would need to be effectively mitigated. However it is also clear that there is a general risk of flooding throughout the region. In addition, whilst additional information is available at this time than was available at the time of preparation of the SA (2007), full coverage of Strategic FRAs (SFRA) is not yet available and the RFRA is at insufficient detail to provide detailed analysis of flood risk for each Scenario. Further analysis would need to be made at such time that full SFRA coverage is available. General indications from the RFRA are that Burton on Trent (Scenarios 2 and 3), Worcester (Scenarios 1 and 3), Warwick (all Scenarios) and Rugby (all Scenarios) have greater issues than other parts of the region in terms of levels of fluvial flood risk, although this does not mean growth cannot occur in these locations, subject to potential mitigation.
3.1	<b>Value, protect, enhance and restore the Region's environmental assets, including (i) the natural environment (ii) the built environment (iii) the historic environment and (iv) landscape?</b>	-?	-?	-?	-?	✓	✓	M	Where development is not limited to MUAs it could have implications for the local natural/historic environmental assets/the countryside. As the Scenarios identify that the bulk of the growth could occur within urban areas or as urban extensions, it is not possible at this stage to closely analyse the precise effects on specific assets within the region. This will need to be assessed via the LDF process for individual authorities. Based on the assumption that where more development is identified in non-MUA areas then a more significantly negative effect on assets is likely, and the data in Table 4.2 (which considers the split between MUA/non MUA growth brought forward as a result of the three Scenarios), it must be assumed that Scenario 3 is likely to have a greater effect on this indicator than the Phase 2 Preferred Option in isolation and also Scenarios 2 and 3 (with the possible exception of the impact on heritage assets). With regard to historic environmental assets the SA (2007) identifies Worcester (Scenarios 1 and 3), as a sensitive location (amongst other locations) and this appraisal indicates that (dependent on sites identified via the LDF process, assets in Worcester may be affected by the Scenarios (The scenarios propose growth in Herefordshire and Shropshire, but assume that this growth will be in the rural area.) In addition, growth in

RSDF Appraisal Questions		SA (2007) 5	Scenario			Direct/ Indirect	Permanent/ Temporary	Significance	Commentary
No	Will the Option...		1	2	3				
								and around Warwick identified in all three Scenarios has the potential to impact on the historic character of the town unless suitable mitigation through design quality is achieved. All three Scenarios indicate the potential for growth to be accommodated via urban extensions. Generally, urban extensions have the potential to affect landscapes in the urban fringe either negatively through urbanising natural or open areas of value or could also have a positive effect through the improvement of poor quality areas in this fringe zone. Smaller villages currently beyond those urban areas and which may be affected by proposals for extensions identified via LDFs are likely to suffer from a loss of character from large scale urban extensions (if these come forward). With regard to protecting and managing the appearance of townscapes and landscapes, comparative large scale increases in settlement sizes (e.g., urban extensions) or where a new settlement is proposed (e.g. Scenario 1 - Solihull) are likely to have a more damaging effect than small scale incremental increases. Given the scale of growth envisaged by Scenario 3, a general conclusion could be reached that there is an increased likelihood of larger scale extensions than for Scenarios 1 and 2 and therefore a potentially more significant effect.	
3.2	<b>Value, maintain, restore and re-create regional biodiversity?</b>	?	?	?	? (-)	✓	✓	L	The majority of the environmental designations are in the rural west but there are also a number of environmental designations in the east where much of the additional growth identified by the Scenarios is located. This could have a potentially significant effect on biodiversity depending on the design and site specific issues. These cannot be identified at this stage as specific growth sites will need to come forward via the LDF process. However it could be concluded that the highest level of growth could have a potentially negative effect.

RSDF Appraisal Questions		SA (2007) 5	Scenario			Direct/ Indirect	Permanent/ Temporary	Significance	Commentary
No	Will the Option...		1	2	3				
3.3	<b>Minimise air, water, soil, light and noise pollution levels and create good quality air, water and soils?</b>	∅	∅	∅	-?	* (✓)	✓	M/H	<p>The SA (2007) identified that the areas of lowest air quality are generally within the urban areas and also along the main road transportation corridors (notably the M5, M6 and M42 motorway corridors). The authorities located within these areas have already declared AQMAs (some of these have been extended since the SA (2007) was published). The majority of the growth identified in the Scenarios is focused on those areas identified as being of low quality/with AQMAs in place. Whilst this results in a negative conclusion generally in respect of this indicator, much will arise from detailed analysis prior to the identification of individual sites through the LDF process. Generally, increased development, particularly in areas already subject to the effects of nutrient enrichment could be expected to have adverse effect on water quality/ability to accommodate increased flows (this is of particular significance in areas such as Birmingham, Solihull, Telford and Stoke on Trent/Newcastle where growth is envisaged in most of the Scenarios being appraised). The key issues are the timing of funding to resolve these issues and also the planning consent risks associated with supply enhancement required to mitigate adverse effects. With regard to soil quality if local authorities identify the majority of the additional growth in existing MUAs and larger settlements then there will be a greater potential for redevelopment of contaminated land. Much will also depend on the phasing of development, particularly in times of economic decline, as developers may seek to develop 'easier' non-contaminated sites over contaminated sites in the region. With regard to noise and light pollution Scenarios which include new development within the open countryside (e.g. the new settlement in Solihull in Scenario 1, or the urban extensions that could be brought forward by local authorities as part of the LDF processes) would be likely to have a significant effect on noise and light pollution. Therefore, given that Scenario 3 would constitute the highest level of growth through urban extensions it is likely to have a more negative impact on noise and light pollution than Scenarios 1 and 2.</p>

RSDF Appraisal Questions		SA (2007)	Scenario			Direct/ Indirect	Permanent/ Temporary	Significance	Commentary
No	Will the Option...		1	2	3				
3.4	<b>Encourage land use and development that optimises the use of previously developed land and buildings</b>	+	+?	+?	∅	✓	✓	H	As none of the Scenarios are definitive in whether local authorities should look at urban growth over urban extensions it is not possible to draw clear conclusions on the overall effect on encouraging the reuse of PDL albeit it is assumed that existing planning policies which seek to promote brownfield over Greenfield development are in place and would be likely to have a generally positive effect. For the high growth Scenario (3), it is assumed that the effect may be more mixed as the increased development pressure from the additional growth may result in a need to develop both brown and Greenfield sites. Phasing is key as developers may prefer development on 'easier' greenfield sites before developing potentially contaminated PDL.
4.3	<b>Address poverty and disadvantage, taking into account the particular difficulties of those facing multiple disadvantage?</b>	?	?	?	?	?	?	?	As for the SA (2007), it is unclear what effect the additional housing growth would have on poverty and disadvantage. There has been no change in respect of the location of the poorest communities from that considered within the SA (2007) and additional housing growth is identified in these areas for all of the Scenarios.
4.5	<b>Provide decent and affordable housing for all, of the right quantity, type, tenure and affordability to meet local needs, in clean, safe and pleasant local environments?</b>	-	+	+	++	✓	✓	H	The SA (2007) concludes that Policy CF3 aims to provide the right mix of housing in the right places to support housing market renewal, to address affordability and to deliver mixed communities but that the figures identified in the Phase 2 Preferred Option do not seem to meet local needs where these are identified. On the basis that it must be assumed that the numbers identified by the NHPAU in respect of the West Midlands will have a positive effect on the provision of decent and affordable housing it follows that, at a regional level, the numbers proposed by the NHPAU and addressed by this Appraisal will address local needs. For the higher growth Scenario (3), the number of additional housing units proposed at a regional level could be expected to have a very positive effect on overall housing need at a regional level. Other elements of the objective are not directly relevant to policy CF3.

RSDF Appraisal Questions		SA (2007) 5	Scenario			Direct/ Indirect	Permanent/ Temporary	Significance	Commentary
No	Will the Option...		1	2	3				
4.8	<b>Encourage physical development with a better balance of jobs, housing, social and cultural services and amenities within each part of the Region in order to meet local needs locally and encourage stable and sustainable communities?</b>	--?(O)	-?	-?	-?	✓	✓	H	Although the SA (2007) concluded that linking housing development and employment is not directly relevant to policy CF3, work being undertaken for Advantage West Midlands <sup>6</sup> indicates that the shortage of housing provision in some parts of the region may risk harming the economic position and that additional housing provision could assist in unlocking labour market barriers, suggesting that all scenarios could have a positive impact, particularly given that they target housing in the south east, which is identified as needing to achieve a better balance. Another element of this objective is reversing the pattern of people migrating from metropolitan areas to rural parts of the Region. The SA (2007) concludes that the Phase 2 Preferred Option will not reverse the trend of out migration from the metropolitan areas because housing provision would not meet locally generated need in a number of districts and particularly MUAs, and there is an over provision of dwellings to districts outside the MUAs, and this approach would support continued out migration. Whilst the logic applied determining that this would be a strongly negative impact is open to question, for consistency this impact is used as the starting point for the appraisal of the impact of the three scenarios (notwithstanding that all three scenarios make additional provision in Birmingham and Solihull, which were identified by SA (2007) as having particularly acute shortfalls.
4.10	<b>Promote investment in future prosperity, including ongoing investment and engagement in learning and skills development?</b>	-(O)	-?	-?	-?	x	✓	M	Many elements of this objective are not relevant to Policy CF3 and the housing options, but it could be argued that the need to deliver increased housing could lead to 'competition' for sites for either housing or economic development. This could result in employment sites being redeveloped for housing purposes. Much of this pressure will need to be resolved via LDFs on a site by site basis.

Table 5.1 – Summary of the Sustainability Appraisal of the effect of the Housing Scenarios 1, 2 and 3 on Sustainable Development

Source: NLP

<sup>6</sup> Draft Housing and Economy Study, Ove Arup and Partners for Advantage West Midlands, Executive Summary, September 2008