

West Northamptonshire Joint Core Strategy SA Addendum: Final Report (December 2013)

Appendix 3

Quantum of Development SA matrix

Quantum of Development Options

Description of options

Option 1 – Cambridge Tracking: This option assumes the delivery of 41,760 net additional dwellings and 28,401 net additional jobs over the period 2011-2029 in accordance with the Main Modifications to the Joint Core Strategy.

Option 2 – ONS 2011 Extended (reduced phasing): This option assumes the delivery of 36,972 net additional dwellings and 26,849 net additional jobs over the period 2011-2029 in accordance with the Main Modifications to the Joint Core Strategy, but with a slower rate of delivery.

Option 3 – ONS 2011 Extended (reduced SUEs): This option assumes the delivery of 36,972 net additional dwellings and 26,849 net additional jobs over the period 2011-2029 in accordance with the Main Modifications to the Joint Core Strategy, but with the deletion of between two and five SUEs (unspecified).

SA Objective	Appraisal questions. Will the plan/option lead to...?	Option 1 SA Score	Option 2 SA Score	Option 3 SA Score	Justification
Air quality and noise					
<ul style="list-style-type: none"> a) Reduce the need to travel and facilitate modal shift. b) Reduce/minimise the potential increase in congestion. c) Avoid sensitive development within areas of high noise levels or poor air quality. 	<ul style="list-style-type: none"> • An increase in motor vehicle trips and increased dependence on car use? • Sensitive location of new development in areas of high noise levels or poor air quality. • Support for the objectives of local air quality action plans? • Improvements in existing local public transport infrastructure or access to public transport? • Exacerbating existing traffic congestion hotspots or improvements to the current situation? • The inclusion of policies to enhance air quality where new development may deliver a means of doing so? 	+/-	+/-	+/-	<p>All three options would generate significant amounts of traffic and associated emissions and noise.</p> <p>While most development would not be in close proximity to AQMAs, it is likely that all three options would include at least some development within or close to AQMAs, or would generate journeys that would be in AQMAs, and therefore there is the potential for some negative effects.</p> <p>Two of the employment land locations, Junction 16 and the DIRFT site, could result in significant negative effects due to their proximity to the M1.</p> <p>All three options would also come with measures to encourage the use of sustainable transport</p>
Archaeology and cultural heritage					
<ul style="list-style-type: none"> a) Protect the fabric and setting of designated and undesignated 	<ul style="list-style-type: none"> • Development that affects listed buildings, conservation areas, scheduled ancient monuments, registered historic parks and gardens, and registered battlefields (or their 	--?	--?	-?	<p>All three options would be likely to have negative effects on the cultural heritage of the JCS area, due to the extent of historic interest, including listed buildings,</p>

SA Objective	Appraisal questions. Will the plan/option lead to...?	Option 1 SA Score	Option 2 SA Score	Option 3 SA Score	Justification
archaeological sites, monuments, structures and buildings, registered Historic Parks and gardens, registered battlefields, listed buildings and conservation areas (or their settings).	settings)? <ul style="list-style-type: none"> • Development being steered to where it can be accommodated in less sensitive areas? • Distinctive development that is well related to the natural environment and characteristic scale, form materials and detailing of the settlement and contributes to a sense of place? • Promotes the enhancement of the archaeological resource and other aspects of heritage, such as, parks and open spaces, and areas with a particular historical or cultural association? • Will the plan proposals provide opportunities for the enhancement of historic assets, townscapes and landscapes? 				archaeology and historic landscapes. For five of the SUEs, these impacts could be significant, affecting Options 1 and 2. None of the strategic employment sites would give rise to significant negative effects. There is the potential for reduced significance of negative effects on cultural heritage under Option 3, by the deletion of two or more SUEs that are most likely to result in the significant effects.
Biodiversity, flora and fauna					
a) Maintain and enhance the structure and function of habitats and populations of species, including those specifically protected. Enhance and protect greenspace networks and habitat connectivity, including river and stream corridors, to assist in species migration and dispersal. b) Increase the land area of UK Biodiversity Action Plan habitats within the area. c) Maintain and improve the	<ul style="list-style-type: none"> • Avoidance of net loss, damage to, or fragmentation and positive enhancement of designated wildlife sites protected species and priority species / habitats within the Northamptonshire BAP? • Opportunities for people to come into contact with robust wildlife places whilst encouraging respect for and raising awareness of the sensitivity of these sites? • Development which includes the integration of ecological conditions and contributes to improvement in ecological connectivity in rural and urban areas? 	+/--?	+/--?	+/--?	Under the individual appraisals of the SUEs and strategic employment sites, it was found that all of the SUEs and all but one of the strategic employment sites (Junction 16) could result in significant negative effects by virtue of their likelihood to affect locally designated sites and ecological networks, but that these effects would be partially offset by mitigation measures, and the creation of green infrastructure in association with development. It is unlikely that there will be significant differences between the three options.

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conservation status of selected non-designated nature conservation sites.					
Crime and community safety					
a) To improve community safety, reduce crime and the fear of crime.	<ul style="list-style-type: none"> Changes in crime levels and fear of crime through improvements to the environment, layouts of streets and public space, passive surveillance, lighting etc. Leisure facilities for young people at the neighbourhood level including consideration of provision as part of large new residential developments. 	0	0	0	The effects of new development on safety, crime and fear of crime will depend on design proposals for development and factors such as the inclusion of open spaces that are overlooked by buildings to improve safety and security and sufficient lighting. However, these issues will be determined through the detailed proposals for each development location.
Education and training					
a) Improve educational attainment and promote lifelong learning. b) Promote sustainable modes of travel to access education.	<ul style="list-style-type: none"> Improvements in educational attainment, qualification levels and participation in education and training. Adequate supporting educational infrastructure associated with new residential developments. New education facilities well located in relation to walking, cycling and public transport routes. 	++/-?	++/-?	++/-?	It is likely that all three options would require investment in access to educational facilities, whether existing or new, although in a number of instances existing educational facilities are not within easy walking distance.
Energy and climatic factors					
a) Continue to improve energy efficiency of dwellings. b) Continue to increase the provision of 'affordable warmth'. c) To decrease the dependency on oil for space heating. d) Increase the local renewable energy generating capacity.	<ul style="list-style-type: none"> An average increase in the SAP rating of dwellings? A reduction of the average household fuel bill. A decrease in oil consumption. Major developments incorporating renewable energy measures into the design. An increase in energy efficient measures and CHP in the design new developments. An increase in the number of large scale renewable energy schemes. A better consideration of climate change adaptation measures? 	0?	0?	0?	While all new development is likely to involve an increase in energy consumption over current consumption in West Northamptonshire, new development may offer good opportunities for incorporating renewable energy generation and it is assumed that new development will be built to high standards of energy efficiency. The SUEs and strategic employment sites offer the potential to incorporate renewable energy. It is unlikely that there will be significant differences between the three options.

SA Objective	Appraisal questions. Will the plan/option lead to...?	Option 1 SA Score	Option 2 SA Score	Option 3 SA Score	Justification
Health and well being					
a) To improve health and reduce health inequalities.	<ul style="list-style-type: none"> • Healthier lifestyles? • Improved access to healthcare? • Improve the quality of homes? 	++	++	++	It is likely that all three options would require investment in access to health facilities, whether existing or new. The larger new developments would also offer opportunities to incorporate sport and leisure facilities. New high quality housing and access to additional jobs would be likely to be good for health. As a result the majority of the SUEs are considered to have significant positive effects against this objective. It is unlikely that there will be significant differences between the three options.
Labour market and economy					
a) To create high quality employment opportunities and develop a strong culture of enterprise and innovation.	<ul style="list-style-type: none"> • An adequate supply of land, skills and infrastructure (such as ICT) to meet the requirements of growth sectors and fully exploit locational/ economic opportunities while not harming the environment. • Minimise travel distances to work and commuting by modes other than the car. Ensuring access to employment by public transport, walking and cycling. • An appropriate range of employment opportunities in rural areas. 	++	++	++	The difference between the two quantum of development in terms of jobs is not significant (representing less than 100 jobs per annum). The JPU are of the view that around half of the jobs would be linked to locations where employment land is allocated, and the remainder would be in sectors such as retail, education, health, etc. The amount of employment land to be allocated would be the same under all three options and would be sufficient to cater for the jobs growth forecast, giving rise to significant positive effects. It is unlikely that there will be a significant difference between the three options.
Landscape and townscape					
a) Ensure that the quality, character and local distinctiveness of the landscape, and the features within them are conserved and enhanced. b) Enhance the form and design of the	<ul style="list-style-type: none"> • Provide the character areas and SLA's with the highest level of policy protection, make appropriate provision for their economic and social wellbeing and reflect Management Plan objectives? • Encourage development which considers the existing character, form and pattern of the landscape, buildings and settlements? • Encourage development which incorporates green infrastructure into the design e.g. green corridors, linking open space etc.? 	+/--?	+/--?	+/--?	<p>It is assumed that development within the urban areas would be sensitive to the townscapes within which they take place.</p> <p>All three options would require the development of SUEs on greenfield land albeit with varying degrees of landscape sensitivity. For eight of the SUEs under Options 1 and 2, the negative effects could be significant, although policies designed to ensure high quality design should offer some</p>

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built environment.	<ul style="list-style-type: none"> Encourage development which incorporates sports infrastructure into the design e.g. public football pitches, mini pitches, swimming pools? 				<p>mitigation. Only Junction 16 of the strategic employment sites could give rise to significant adverse effects.</p> <p>There is the potential for reduced significance of impacts on the landscape under Option 3, by the deletion of two or more SUEs that are most likely to result in the significant negative effects, but this option would still require the development of SUEs and Junction 16 strategic employment site that could result in significant negative effects, although also partially offset by mitigation.</p>
Material assets					
a) To ensure that the housing stock meets the housing needs of the local people.	<ul style="list-style-type: none"> Sufficient affordable housing to meet identified needs, including the needs of the community and local economy. Achieve well-designed compact communities which are developed at sufficient density to support viable local services and public transport provision and which achieve efficient use of land. Good access to facilities, particularly by public transport, walking and cycling. 	++	++?	++?	<p>All three options would deliver significant numbers of additional dwellings, including affordable homes. This would result in significant positive effects.</p> <p>If Option 1 (Cambridge Tracking) proves to be the most accurate of the two quantum alternatives, this introduces uncertainty whether Options 2 and 3 (ONS 2011 Extended) would deliver enough housing to meet all the identified needs.</p> <p>All three options would deliver well-designed development that makes efficient use of land and should help to support viable services and sustainable modes of transport.</p>
Population					
a) To develop and maintain a balanced and sustainable population structure with good access to services and facilities.	<ul style="list-style-type: none"> Development which delivers an appropriate mix of housing including affordable housing and appropriate housing for older people in locations close to local services/facilities. Appropriate community, social and transport infrastructure. 	++	++?	++?	<p>All three options would deliver significant numbers of additional dwellings, and the scale of development would offer opportunities to provide a range of type and tenure of dwelling, including affordable homes. This would result in significant positive effects, although there would be an element of uncertainty under Options 2 and 3, should the ONS 2011 Extended alternative prove not to be as accurate as the Cambridge</p>

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					Tracking alternative in forecasting need.
Social deprivation					
a) To reduce spatial inequalities in social opportunities.	<ul style="list-style-type: none"> Improved provision of key services in deprived communities. Reduced spatial inequalities in access to services including healthcare and education and local/community services. Provision of local facilities which are accessible by walking and cycling and public transport. 	+	+	+	The scale of development under all three options would allow for investment in a range of community services and facilities, and would also provide for the creation of jobs, which could help to address deprivation problems. The effects are likely to be minor positive given that other Government policies not linked to land use planning are likely to have a greater influence.
Soil, geology and land use					
a) Reduce land contamination, and safeguard soil and geological quality and quantity.	<ul style="list-style-type: none"> The remediation of contaminated sites? Levels of development on brownfield sites that are above the national target of 60%? Development that protects soil processes and functions? Development that protects sites valued for their geological characteristics? 	-/0	-/0	-/0	<p>Few of the SUEs and none of the strategic employment sites would result in significant negative effects on this objective.</p> <p>There are two SUEs under Options 1 and 2 (Northampton North and Daventry North East) that could result in significant negative effects due to the potential for development on Grade 2 agricultural land and in the case of one SUE (Daventry North East) there are potential land instability issues.</p> <p>Option 3 could avoid such issues by not providing for development at the SUEs concerned, but Daventry North East SUE would be likely to come forward under all three options.</p> <p>As a result, all of the options are likely to have similar effects.</p>
Waste					
a) To reduce waste generation and disposal, increase recycling and achieve the sustainable management of waste.	<ul style="list-style-type: none"> Explicitly set out to reduce the amount of waste generated by development and land use change? Explicitly encourage development to use re-cycled materials and make provision for recycling / composting in all new development? Make positive provision for appropriate sites for waste management facilities including waste to energy generation, with landfill being the least 	0	0	0	The potential effects of development on waste generation will be influenced by their design and use and the incorporation of sustainable waste management measures. Therefore, development by itself is likely to have a negligible effect on this objective.

SA Objective	Appraisal questions. Will the plan/option lead to...?	Option 1 SA Score	Option 2 SA Score	Option 3 SA Score	Justification
	favoured option? • Encourage the reduction in the production and movement of hazardous waste?				
Water					
a) Maintain and continue to improve the quality of ground and river water. b) Reduce risk of flooding. c) Improve efficiency of water use. d) Identify opportunities to implement strategic flood risk management options/measures to reflect the objectives in the River Nene and Great Ouse CFMPs.	<ul style="list-style-type: none"> • Development where adequate water supply, foul drainage, sewage treatment facilities and surface water drainage is available? • Water efficient design and reduction in water consumption (e.g. rainwater recycling/grey water reuse and BREEAM/EcoHomes Excellent Standard)? • Development which supports and corresponds with PPS 25 and the flood risk management policies of the EA? • Development likely to affect the ecological status of groundwater and surface water and the ability of receiving water to accept additional flows? • Development that results in increased spills from combined sewer outlets? • The incorporation of the flood risk management policies set out in the River Nene CFMP and the Great Ouse CFMP? • Safeguarding of flood storage areas identified in the Nene and Great Ouse CFMPs? • Development which incorporates SUDS (including their long-term maintenance), to ensure there is no increase in flood risk (and where possible lead to a reduction in flood risk)? 	0?	0?	0?	<p>A Phase 1 Water Cycle Study was undertaken on the basis of the proposed housing development included in the East Midlands Plan, being 62,125 net additional dwellings for the period 2001-2026 in the West Northants JCS area. The Phase 1 Water Cycle Study found no significant constraints to that level of growth with respect to water resources and waste water treatment, subject to appropriate investment and changes to discharge consent licences.</p> <p>Phase 2 of the Water Cycle Study was prepared at the time of the pre-submission Core Strategy, which planned for 50,150 dwellings to be delivered over the period 2001-2026, of which 15,680 had been completed between 2001-2010, leaving 34,470 left to deliver 2010-2026. The Phase 2 Water Cycle Study found no significant constraints to delivering the development in the pre-submission JCS in terms of water resources, subject to implementation of Code for Sustainable Homes and Building Regulations standards.</p> <p>Similarly, the Phase 2 Water Cycle Study did not raise significant constraints with respect to waste water treatment capacity, although it was noted that additional licences and investment in infrastructure would be required. However, the Water Cycle study raised issues with respect to compliance with the Water Framework Directive, with regard to phosphates linked to the quality of treated wastewater discharge.</p>

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					<p>Although the JCS plan period is to be extended by three years to 2029, the total amount of housing to be delivered under Options 1, 2 and 3 will still fall short of what was proposed in the East Midlands Plan. However, Option 1 would deliver 7,980 more dwellings than the pre-submission JCS, and Options 2 and 3 would deliver 3,192 more dwellings than the pre-submission JCS.</p> <p>On the basis of both the Phase 1 and Phase 2 Water Cycle Studies, it is not thought that there will be water related issues with respect to any of the three options. However, given the increase in development over that proposed in the pre-submission Core Strategy, and the potential issues regarding meeting WFD objectives, there is some uncertainty over this conclusion.</p> <p>All three options should be able to be delivered without significantly increasing the risk of flooding, particularly if sustainable drainage systems (SuDS) are integrated into the overall design.</p>