

Annex B – Detailed Appraisal Findings

1 DETAILED APPRAISAL FINDINGS

1.1 INTRODUCTION

This Annex presents the detailed appraisal findings for each of the following sections of the Spatial Options Report:

- Housing
- Future Employment Land Requirements and Protection of Employment Land
- Regional Investment Sites and Major Investment Sites
- Regional Logistics
- Strategic Centres
- Offices
- Regional Casinos
- Waste
- Strategic Park and Ride
- Parking Standards
- Road User Charging
- Role of the Region's Airports

1.2 KEY TO APPRAISAL TABLES

The appraisal tables present findings in summary form using symbols, as well as containing explanatory text. The effect/implications of each option/proposal is expressed in terms of whether it will promote the achievement of each issue in the SA Framework, as follows:

++	Major positive impact
+	Positive impact
∅	Neutral impact
?	Mixed or unclear impact
-	Negative impact
--	Major negative impact

For housing options, three additional columns are included, illustrating 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)

RSDF	Appraisal Questions	Option 1	Option 2	Option 2	Direct?	Permanent?	Significance?	Commentary
	Will the option/proposal...							
1.1	use natural resources such as water and minerals efficiently, including by incorporating efficiency measures into new land use and developments?							This is a policy issue, and is not relevant to Spatial Options on future housing provision.

¹ Two important assumptions have been made for this appraisal. Firstly that each of the three options is deliverable, and delivered, ie that house builders will provide the housing that is envisaged in each of the options, rather than continue to build at existing rates and therefore be able to 'cherry pick' the best and most profitable sites (which are likely to be found outside of the MUAs), and secondly that infrastructure is developed alongside these houses, eg healthcare, education, recreation, retail, employment land, transport etc

RSDF	Appraisal Questions	Option 1	Option 2	Option 2	Direct?	Permanent?	Significance?	Commentary
	Will the option/proposal...							
	promote the balance of water supply and demand?	-	--	--	✓	x	H	<p>Modelling has been carried out by the Environment Agency to understand the impact that housing growth scenarios would have for water supply-demand balance, as specified in water resource plans produced by Water Companies. The scenarios that have been modelled are (1) continuation of RSS growth rates (15,200 housing completions per year, in line with Option 1 'Business as usual'), (2) RSS +25% (19,000 housing completions per year, slightly below the 20,000 completions under Option 2), and (3) RSS +51% (23,000 housing completions per year, in line with Option 3).</p> <p>According to a draft report (provided by Chris Blakeley –full source details not available), modelling conclusions are as follows:</p> <ul style="list-style-type: none"> For RSS growth rates (ie Option 1), surpluses are reduced across all zones, but all remain in surplus except the Severn Zone and the South Staffordshire Critical Period For RSS +25% (ie slightly less housing growth than Option 2), the Staffordshire & East Shropshire, South Staffordshire Water and Oswestry & Ellesmere zones all remain in surplus under this scenario until towards the end of the planning period – but again surpluses are reduced. The Birmingham zone has a small deficit by 2017 and remains in deficit until 2022 when this is removed through Water Company planned developments. The Severn zone starts in deficit and struggles to meet demands until 2015 when resource developments are planned. The Severn zone falls again into deficit in 2019 with it only going into surplus at the end of the planning period. South Staffordshire Water under this scenario would be in deficit during peak week demands by 2011, with the deficit increasing until 2021 when new resources are developed. For RSS +51% (ie Option 3), the Staffordshire & East Shropshire, South Staffordshire Water and Oswestry & Ellesmere zones all remain in surplus in this scenario until 2026. The Birmingham and South Staffordshire Critical Period zones follow a very similar pattern to the 25 % increase scenario with deficits by 2016 and 2009 respectively and remaining in deficit until 2022. The Severn zone starts in deficit and remains in deficit until 2015 and subsequently falls again into deficit in 2018 with it only going into surplus at the end of the planning period. <p>According to the report, with increased housing growth rates there is a greater potential for headroom deficits in all the resource zones with the Birmingham, Severn and South Staffordshire Critical period zones being the most vulnerable.</p> <p>The report also explains that water efficiency saving in all zones would reduce the pressures on supplies, cutting deficits and delaying the need for new water resource developments. However water efficiency savings of 25% would need to be implemented to both the RSS 25% and 51% growth rates to make significant impact on the water resource deficits within the more vulnerable zones.</p> <p>See <i>Figure 6.1</i> in the main report for a map of water company resource zones.</p>

RSDF	Appraisal Questions	Option 1	Option 2	Option 2	Direct?	Permanent?	Significance?	Commentary
	Will the option/proposal...							
	reduce the use of primary aggregates?	+	-	--	✓	*	M	<p>According to the ODPM's Sustainability Impacts Model, approximately 60 tonnes of aggregate is required for the construction of a house and 45 tonnes for a flat. Assuming an average requirement of 52.5 tonnes per dwelling, a continuation of current build rates of 17,400 per annum (average from 2001-2005) would account for 913,000 tonnes of aggregate per year (compared to 19.2m tonnes of primary aggregate used in the Region in 2001). This level of housing construction would consume 22.8mt between 2001 and 2026. In comparison:</p> <ul style="list-style-type: none"> • Option 1 would consume 801,000 tonnes/year, or 20m tonnes by 2026 • Option 2, 1.03mt/year or 26.8mt by 2026 • Option 3, 1.2mt/year or 30.2mt by 2026 <p>This does not include the aggregate that would be required for construction of other infrastructure, eg roads. Given that 4.3mt of recycled aggregate was produced in the region in 2003, this would need to increase by between 19% and 28% (Options 1 and 3).</p>
1.2	promote and support the development of high value and low impact new technologies, especially resource-efficient technologies and environmental technology initiatives?							This is a policy issue, and is not relevant to Spatial Options on future housing provision.
	promote the development of technologies to address climate change, eg new energy generators using renewable sources, more efficient industrial technology and processes to minimise or mitigate for the impacts of climate change?							This is a policy issue, and is not relevant to Spatial Options on future housing provision.
	secure improvements to communication infrastructure?							This is a policy issue, and is not relevant to Spatial Options on future housing provision.
1.3	promote and ensure high standards of sustainable resource-efficient design, construction and maintenance of buildings, where possible exceeding the requirements of the Building Regulations?							This is a policy issue, and is not relevant to Spatial Options on future housing provision.
	ensure the adoption of sustainable design and construction practices in all buildings?							This is a policy issue, and is not relevant to Spatial Options on future housing provision.

RSDF	Appraisal Questions	Option 1	Option 2	Option 2	Direct?	Permanent?	Significance?	Commentary
	Will the option/proposal...							
1.4	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?	-	--	--	x	x	M	<p>The scale and distribution of housing development is only one factor affecting the use of sustainable transport modes – policies in other sections of the RSS will have an influence, for example. However, in general terms, the more concentrated development is around urban areas (where travelling distances are shorter and public transport services more frequent and flexible) the more likely it is that alternatives to the car will be used. In 2001, 55.1% of households were located in the Major Urban Areas, meaning that for every 100 households in the MUAs there were 81 households in ‘other areas’ (a ratio of 1 : 0.81). All of the spatial options will result in households being more widely dispersed around the region:</p> <ul style="list-style-type: none"> • Under Option 1, by 2026, 53.4% of households will be in MUAs, a ratio of 1 : 0.87. • Under Option 2, 52.7% of households will be in MUAs, a ratio of 1 : 0.90. • Under Option 3, 52.4% of households will be in MUAs, a ratio of 1 : 0.91. <p>Therefore, none of the options are likely to contribute to the achievement of this SA objective.</p>
	promote more sustainable transport patterns in areas suffering from congestion?							See entry for main objective, although note that the areas suffering from congestion are not known. It could be assumed that areas of poor air quality are also those areas suffering from congestion.
	promote a shift of freight from road to rail?							Not relevant
	Improve the quality of transport infrastructure?							Not relevant
	make best use of existing airport capacity?							Not relevant
1.5	ensure development is primarily in the major urban areas, and makes efficient use of existing physical infrastructure and helps reduce need to travel, especially by private car?	-	--	--	✓	✓	H	<p>In 2001, 55.1% of households were located in the Major Urban Areas, meaning that for every 100 households in the MUAs there were 81 households in ‘other areas’ (a ratio of 1 : 0.81). All of the spatial options will result in households being more widely dispersed around the region:</p> <ul style="list-style-type: none"> • Under Option 1, by 2026, 53.4% of households will be in MUAs, a ratio of 1 : 0.87. • Under Option 2, 52.7% of households will be in MUAs, a ratio of 1 : 0.90. • Under Option 3, 52.4% of households will be in MUAs, a ratio of 1 : 0.91. <p>Therefore, none of the options are likely to contribute to the achievement of this SA objective.</p>
	focus development in the major urban areas?							
	reduce the number and length of journeys made by car?	-	--	--	x	x	M	<p>The scale and distribution of housing development is only one factor affecting transport patterns and the use of cars – policies in other sections of the RSS will have an influence, for example. However, in general terms, the more concentrated development is around urban areas (where travelling distances are shorter and public</p>
	reduce the need to travel?							

RSDF	Appraisal Questions	Option 1	Option 2	Option 2	Direct?	Permanent?	Significance?	Commentary
	Will the option/proposal...							
	promote alternative, more sustainable, modes of transport to the car (including walking and cycling) through location of housing, employment sites, services and facilities, and appropriate infrastructure for sustainable modes of transport?							transport services more frequent and flexible) the more likely it is that alternatives to the car will be used. As has already been explained, none of the options will result in more concentrated patterns of housing development at a Regional level, and are therefore unlikely to reduce car use or the need to travel. See entry for main objective

RSDF	Appraisal Questions	Option 1	Option 2	Option 2	Direct?	Permanent?	Significance?	Commentary	
	Will the option/proposal...								
1.6	encourage and enable waste minimisation, reuse, recycling and recovery to divert resources away from the waste stream?							<p>Growth in housing will continue to increase waste generation under each option. Waste will originate from households, from increased economic activity and from construction.</p> <p>In terms of municipal waste arisings from households, in 2000-2001, 2.5mt of waste was produced by the Region's 2.15m households, 1.16 tonnes per household, accounting for 21% of the 12.19mt of waste produced from all sources in the Region. Assuming that 1.25 tonnes of municipal waste is likely to arise from each new household in the Region (based on assumptions in the ODPM's Sustainability Impacts Model):</p> <ul style="list-style-type: none"> Under Option 1, 14.1% more household waste will be produced by 2026 (352,864 tonnes arising from a net increase of 282,291 households) Under Option 2, 18.3% more household waste will be produced by 2026 (456,800 tonnes arising from a net increase of 365,440 households) Under Option 3, 22.3% more household waste will be produced by 2026 (558,408 tonnes arising from a net increase of 446,726 households) 	
	reduce waste arisings?	-	--	--	✓	x	H	<p>The Spatial Options Paper also provides projections on likely municipal waste arisings, factoring in issues such as increased waste arisings per household over time, and starting from a baseline in 2005-06. The report predicts that by 2026:</p> <ul style="list-style-type: none"> Under Option 1, 17.1% more household waste will be produced (529,000 tonnes) Under Option 2, 22.8% more household waste will be produced (707,000 tonnes) Under Option 3, 24.6% more household waste will be produced (761,000) <p>In terms of construction and demolition waste, 3.3mt was produced by the Region in 2000-2001, accounting for 27% of the Region's waste arisings. Assuming that 11.25 tonnes of construction and demolition waste would be produced for each dwelling constructed (based on assumptions in the ODPM's Sustainability Impacts Model):</p> <ul style="list-style-type: none"> Under Option 1, a further 171,630 tonnes of C&D waste would be produced as a result of housing construction, 4.3mt of waste between 2001-2026. Under Option 2, a further 221,040 tonnes of C&D waste would be produced as a result of housing construction, 5.53mt of waste between 2001-2026. Under Option 3, a further 258,750 tonnes of C&D waste would be produced as a result of housing construction, 6.47mt of waste between 2001-2026. <p>It is not possible at this stage to estimate likely waste arisings from increased economic activity.</p>	
	ensure that sustainable waste management can be carried out in the Region?								This is a policy issue, and is not relevant to Spatial Options on future housing provision.
	enable communities to take responsibility for their own waste and meet their own needs (self-sufficiency)?								This is a policy issue, and is not relevant to Spatial Options on future housing provision.

RSDF	Appraisal Questions	Option 1	Option 2	Option 2	Direct?	Permanent?	Significance?	Commentary
	Will the option/proposal...							
1.7	encourage local sourcing of food, goods and materials?							This is a policy issue, and is not relevant to Spatial Options on future housing provision.
1.8	reward efficient resource use and encouraging development of alternative and renewable resources in order to reduce dependence on fossil fuels?							This is a policy issue, and is not relevant to Spatial Options on future housing provision.
	See questions under Objectives 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 1.7, 1.9, 2.1, 2.2, 2.3, 3.4 and 4.5							
1.9	encourage corporate social and environmental responsibility, with regional organisations and agencies leading by example?							This is a policy issue, and is not relevant to Spatial Options on future housing provision.
	encourage sustainable procurement?							This is a policy issue, and is not relevant to Spatial Options on future housing provision.
1.10	encourage a culture of enterprise and innovation, including social enterprise?							This is a policy issue, and is not relevant to Spatial Options on future housing provision.
1.11	achieve a strong, stable and sustainable economy and prosperity for the benefit of all the Region's inhabitants?	*/ Ø	*/ Ø	*/ Ø				The link between economic growth and housing numbers is unclear. Individual prosperity is unrelated to housing growth.
	narrow the GVA gap between the best and worst performing parts of the Region?							Per capita GVA is unrelated to housing growth or population growth.
	support efficient, competitive, diverse and innovative business, commercial, industrial, retail, tourism and leisure sectors?							Not relevant

RSDF	Appraisal Questions	Option 1	Option 2	Option 2	Direct?	Permanent?	Significance?	Commentary
	Will the option/proposal...							
2.1	reduce overall energy use through increased energy efficiency?							This is a policy issue, and is not relevant to Spatial Options on future housing provision.
	raise energy efficiency to current Building Regulations standards in refurbishments for Decent Homes Standard? (Also see question on EcoHomes standard under issue 5, Housing).							This is a policy issue, and is not relevant to Spatial Options on future housing provision.
2.2	and increase the proportion of energy generated from renewable and low carbon sources, including by micro-generation, CHP, district heating, and in transportation?							This is a policy issue, and is not relevant to Spatial Options on future housing provision.
	promote energy generation from CHP and community heating?							This is a policy issue, and is not relevant to Spatial Options on future housing provision.
2.3	minimise the Region's contribution to the causes of climate change by reducing emissions of greenhouse gases from transport, domestic, commercial and industrial sources?							The climate change implications of accommodating the growth proposed in the three options is significant, unless supporting policies on energy generation, efficiency, transport etc are effective. In broad terms, climate change impacts are likely to be greater from the higher growth options, as a result of their construction, during their occupation (eg by householders), from the transport and economic activities that those householders undertake. In 2002, the West Midlands emitted 16,499,488 tonnes of CO ₂ from all sources, 3.13 tonnes per head. Domestic CO ₂ emissions per household are estimated at 6 tonnes per year (based on assumptions from the ODPM's Sustainability Impacts Model), with the implications of each option as follows:
	reduce the Region's contribution to climate change?	-	-	-	✓	✓	H	<ul style="list-style-type: none"> Domestic energy use associated with the net growth in households under Option 1 would produce an additional 1.69mt tonnes of CO₂ per year by 2026 Option 2 would produce an additional 2.19mt Option 3 would produce an additional 2.68mt. Assuming that 56 tonnes of CO ₂ is produced in 'embodied energy' during the construction of a typical dwelling, the construction of dwellings under Option 1 would produce 21.4mt, Option 2 would produce 27.5mt, and Option 3 32.2mt. However, no conclusive assessments can be made as there is at this point no information on associated transport infrastructure, or on the transport patterns that might be expected to arise with the three options.

RSDF	Appraisal Questions	Option 1	Option 2	Option 2	Direct?	Permanent?	Significance?	Commentary
	Will the option/proposal...							
2.4	implement a managed response to the unavoidable impacts of climate change, ensuring that the design and planning process takes account of the predicted changes in the Region's climate?							This is a policy issue, and is not relevant to Spatial Options on future housing provision.
	promote sustainable urban drainage systems?							This is a policy issue, and is not relevant to Spatial Options on future housing provision.
	promote the adoption of climate change adaptation and climate proofing principles in planning and design?							This is a policy issue, and is not relevant to Spatial Options on future housing provision.
2.5	ensure that land use and development takes into account predicted changes in the Region's climate, including flood risk?	?	?	?				Approximately 6% of the Region is at risk of a 1-in-100 year fluvial flood (below the UK average). These flood risk areas fall into almost all of the Region's local authority areas, although they are largely outside the County of Herefordshire. Therefore, all three options could result in the construction of housing in flood risk areas, with the higher growth options more likely to result with this occurrence. However, the options are not site specific and the issue of flood risk is more likely to be addressed by Local Development Frameworks. A full Flood Risk Assessment is currently being carried out as part of the RSS Phase 2 Revision process.
	prevent all inappropriate development in areas of flood risk?							

RSDF	Appraisal Questions	Option 1	Option 2	Option 2	Direct?	Permanent?	Significance?	Commentary
	Will the option/proposal...							
3.1	value, protect, enhance and restore the Region's environmental assets, including the natural, built and historic environment and landscape?	-	-	-	✓		H	<p>The three options would have different implications for land use. In summary:</p> <ul style="list-style-type: none"> Of the 381,400 dwellings to be constructed under Option 1, 370,390 (or 97.1%) could be provided on land identified in the Urban Capacity studies. Therefore, a minimum of 11,010 dwellings would be sited on land that is not included in the Urban Capacity studies, covering 334ha of land (either greenfield or reallocated from other uses) or 3% of all the land required for the proposed housing growth. This land is located in three of the Region's 34 local authority areas: Herefordshire (170ha), Shrewsbury and Atcham (68ha), and Worcester (95ha). In addition, of the 370,390 houses that would be sited on land from the Urban Capacity Study, 43,165 of these would be on Greenfield sites (1,352ha), or 11.3% of the total number of houses. Of the 491,200 dwellings to be constructed under Option 2, 435,505 (or 88.7%) could be provided land identified in the Urban Capacity studies. Therefore, a minimum of 55,563 dwellings would be sited on land that is not included in the Urban Capacity studies, covering 1,735ha of land or 11.3% of all the land required for the proposed housing growth. This land is located in 20 of the Region's 34 local authority areas: Walsall (1ha), Newcastle under Lyme (1ha), Herefordshire (313ha), North Shropshire (109ha), Oswestry (44ha), Shrewsbury and Atcham (41ha), South Shropshire (87ha), Cannock Chase (22ha), East Staffordshire (182ha), Lichfield (126ha), Stafford (109ha), North Warwickshire (13ha), Nuneaton and Bedworth (57ha), Rugby (137ha), Stratford-upon-Avon (45ha), Warwick (29ha), Malvern Hills (46ha), Redditch (78ha), Worcester (249ha), and Wychavon (48ha) In addition, of the 435,505 houses that would be sited on land from the Urban Capacity Study, 67,175 of these would be on Greenfield sites (2,004ha), or 13.7% of the total number of houses. Of the 575,000 dwellings to be constructed under Option 3, 444,170 (or 77.2%) could be provided on land identified in the Urban Capacity studies. Therefore, a minimum of 130,830 dwellings would be sited on land that is not included in the Urban Capacity studies, covering 3,543ha of land or 22.8% of all the land required for the proposed housing growth. This land is located in 27 of the Region's 34 local authority areas: Birmingham (141ha), Dudley (35ha), Sandwell (28ha), Walsall (30ha), Wolverhampton (37ha), Coventry (370ha), Solihull (69ha), Newcastle-under-Lyme (1ha), Herefordshire (313ha), North Shropshire (109ha), Oswestry (44ha), Shrewsbury and Atcham (41ha), South Shropshire (87ha), Cannock Chase
	value, enhance and protect the Region's natural environmental assets (eg Green Belt, parks and open spaces, AONBs etc)?							
	value, enhance and protect the Region's historic environment assets (eg World Heritage Sites, archaeological remains, historic buildings, parks and gardens, and landscapes, and conservation areas, battlefields and other architectural and historically important features and areas, and their settings)?						H	
	promote heritage-led regeneration?							
	promote the repair and reuse of historic buildings?							
enhance the amenity value of the countryside, meeting the recreational and leisure needs of communities?								

RSDF	Appraisal Questions	Option 1	Option 2	Option 2	Direct?	Permanent?	Significance?	Commentary
	Will the option/proposal...							
	protect, enhance and manage the character and appearance of the region's landscapes and townscapes, maintaining and strengthening local distinctiveness and sense of place?	-	--	--				<p>(109ha), Oswestry (44ha), Shrewsbury and Atcham (41ha), South Shropshire (87ha), Cannock Chase (22ha), East Staffordshire (182ha), Lichfield (274ha), Stafford (109ha), Tamworth (139ha), North Warwickshire (13ha), Nuneaton and Bedworth (131ha), Rugby (407ha), Stratford-upon-Avon (45ha), Warwick (88ha), Malvern Hills (46ha), Redditch (241ha), Worcester (411ha), and Wychavon (131ha). In addition, of the 447,170 houses that would be sited on land from the Urban Capacity Study, 74,835 of these would be on Greenfield sites (2,243ha), or 13.0% of the total number of houses.</p> <p>It should be noted that these calculations do not include land that would be used for other infrastructure associated with housing development, eg roads. It is certain that, when these additional requirements are accounted for, the land requirements would further increase.</p> <p>It should also be noted that Options 2 and 3 could have significant implications for the availability of land for employment use, possibly only being deliverable through the reallocation of employment land sites to housing, and potentially would require the use of other Greenfield sites to meet employment land requirements. Employment land requirements are discussed in a later section.</p> <p>Obviously the implications for individual sites and assets is unclear, and would be determined by Local Development Frameworks. However, further work is underway to understand constraints to develop, and to identify the sites which are most likely to undergo housing development. In addition to the scale and distribution of housing development, the RSS policy framework will be vital to determining how the Region's environmental and historic assets are managed and protected in the face of development pressures.</p>
3.2	value, maintain, restore and re-create regional biodiversity?	-	--	--	✓	x	H	<p>As already explained, in terms of the land use implications arising from the three options, delivery of the higher growth scenarios would require the use of more Greenfield sites, and are therefore more likely to impact negatively on biodiversity. However, the implications for individual sites and assets are unclear, and would be determined by Local Development Frameworks. As has already been explained, further work is underway to understand constraints to develop, and to identify the sites which are most likely to undergo housing development, so that more precise information on biodiversity impacts can be provided. Furthermore, the RSS policy framework will be vital to determining how the Region's biodiversity assets are managed and protected in the face of development pressures.</p> <p>(It should be noted that a detailed assessment of the impacts of proposals on Natura 2000 sites will be carried out as part of the 'Appropriate Assessment' work that will be implemented in parallel to the Sustainability Appraisal.)</p>
	value, enhance and protect the Region's designated sites, including sites designated for geodiversity?							
	value, enhance and protect the Region's priority habitats and species, and promote the delivery of regional biodiversity targets?							
	support development that incorporates improvements to wildlife habitats?							This is a policy issue, and is not relevant to Spatial Options on future housing provision.
3.3	minimise air, water, soil, light and noise pollution levels, and create good quality air, water and soils?	-	--	--	x	x	M	Specific pollution issues are discussed below. However, in very general terms, the higher growth rates are likely to place greater pressures on the capability of the Region's environment to deal with pollution than a lower growth rate.

RSDF	Appraisal Questions	Option 1	Option 2	Option 2	Direct?	Permanent?	Significance?	Commentary
	Will the option/proposal...							
	promote more sustainable transport patterns in areas of low air quality?	?-	?-	?-	x	x	M	In broad terms, air quality impacts are likely to be greater from the higher growth options, as a result of increased traffic associated with higher population growth. However, no conclusive assessments can be made as there is at this stage no information on the transport infrastructure that might be required by each option, on the transport patterns that might be expected to arise with the options. Air Quality Management Areas have been established in 16 of the Region's 34 local authority areas, to deal with the very worst pollution problems. Many of these Areas are very localised (eg an individual street), although the whole of Birmingham is covered. It is therefore not possible to assess the likely impact of the various options on these areas of especially low air quality.
	address air quality impacts arising from specific development activities?							This is a policy issue, and is not relevant to Spatial Options on future housing provision.
	protect and enhance the quality of watercourses in the Region?	?-	?-	?-	x	x	H	It is extremely difficult to assess the likely impacts on watercourses, as it would depend on issues such as water abstraction patterns, the provision of sewage infrastructure etc alongside housing growth and distribution. This information is not yet available. However, in very broad terms, the higher growth rates are likely to put greater pressure on water resources, in terms of abstraction of water and discharge of effluent.
	reduce the quantity of contaminated land in the Region?	?	?	?				At this stage, data is not available on the location of contaminated land in the West Midlands. Furthermore, it is not clear whether sites of contaminated land would be used for housing development. However, it is clear that the majority of new dwellings will be located on PDL – varying from 327,225(or 85.8%) under Option 1 to 369,335 (or 64.2%) under Option 3.
	prevent noise and light pollution?	-	--	--	✓	x	L	Noise and light pollution is, in broad terms, likely to increase as a direct result of housing and population growth. Therefore the higher growth options are likely to have greater impacts on these issues.

RSDF	Appraisal Questions	Option 1	Option 2	Option 2	Direct?	Permanent?	Significance?	Commentary
	Will the option/proposal...							
3.4	encourage land use and development that optimises the use of previously developed land and buildings?	-	--	--	✓	✓	H	<p>All of the options can be delivered using large amounts of PDL, according to data from the Urban Capacity studies. 85.8% of the Option 1 total could be delivered on PDL (327,225 of 381,000 dwellings), 75.0% of Option 2 (368,330 of 500,000), and 64.2% of Option 3 (369,335 of 575,000). These are all above the PPG3 target of 60% by 2008, but Options 2 and 3 are below the RSS target of 76% between 2001 and 2011. Furthermore, a number of district level targets would also be missed, as follows:</p> <ul style="list-style-type: none"> Under Option 1, the following 10 districts would not be able to deliver projected housing growth and meet their RSS district or county-wide PDL use target: Herefordshire, Bridgnorth, Oswestry, South Shropshire, Cannock Chase, South Staffordshire, Staffordshire Moorlands, Rugby, Redditch, Worcester. Under Option 2, the following 21 districts would not be able to meet their RSS district or county-wide PDL use target: Sandwell, Wolverhampton, Coventry, Herefordshire, Bridgnorth, North Shropshire, Oswestry, South Shropshire, Cannock Chase, East Staffordshire, Lichfield, South Staffordshire, Stafford, Staffordshire Moorlands, Nuneaton and Bedworth, Rugby, Stratford upon Avon, Malvern Hills, Redditch, Worcester, Wychavon. Under Option 3, the following 25 districts would not be able to meet their RSS district or county-wide PDL use target: Birmingham, Dudley, Sandwell, Wolverhampton, Coventry, Solihull, Herefordshire, Bridgnorth, North Shropshire, Oswestry, South Shropshire, Cannock Chase, East Staffordshire, Lichfield, South Staffordshire, Stafford, Staffordshire Moorlands, Tamworth, Nuneaton and Bedworth, Rugby, Stratford upon Avon, Warwick, Malvern Hills, Redditch, Worcester, Wychavon. <p>(See <i>Figure 2.1</i> onwards below for further information.)</p>
3.5	encourage land use and development that creates and sustains well-designed, high quality built environments that incorporate green space, encourage biodiversity, and promote local distinctiveness and sense of place?							This is a policy issue, and is not relevant to Spatial Options on future housing provision.
	require good urban design to create attractive, high quality environments where people will choose to live, work and invest?							This is a policy issue, and is not relevant to Spatial Options on future housing provision.
	increase access to good quality green space (eg increase the number of people in towns and cities with accessible greenspace within 300m of their homes)?							This is a policy issue, and is not relevant to Spatial Options on future housing provision.

RSDF	Appraisal Questions	Option 1	Option 2	Option 2	Direct?	Permanent?	Significance?	Commentary
	Will the option/proposal...							
	protect existing and encourage the development of new biodiversity assets in developments?							This is a policy issue, and is not relevant to Spatial Options on future housing provision.
3.6	encourage local stewardship of local environments, for example by promoting best practice in agricultural management or enabling communities to improve their neighbourhoods?							This is a policy issue, and is not relevant to Spatial Options on future housing provision.
3.7	promote environmental justice, recognising that deprived areas and disadvantaged communities and more likely to be affected by environmental damage and degradation?	?	?	?	*	*	L	Options 2 and 3 would focus more housing development in the most deprived communities within the Region. However, it is not clear what impact this would have on the environmental quality of these areas. High quality regeneration can have a strong positive impact on local environmental quality, by making use of derelict/contaminated sites, developing new parks and other environmental assets, creating pedestrian-friendly street environments, reducing noise disturbances etc. However, it may not be possible to achieve the levels of growth proposed under Options 2 and 3 without creating new environmental problems, eg from increased traffic, increased pressure on green spaces, lower air quality, more noise etc.
	specifically improve environmental quality in deprived communities?							
4.1	enable communities to influence the decisions that affect their neighbourhoods and quality of life?							This is a policy issue, and is not relevant to Spatial Options on future housing provision.
	promote the use of community-based planning tools?							This is a policy issue, and is not relevant to Spatial Options on future housing provision.

RSDF	Appraisal Questions	Option 1	Option 2	Option 2	Direct?	Permanent?	Significance?	Commentary
	Will the option/proposal...							
4.2	ensure easy and equitable access to services, facilities and opportunities, including jobs and learning, regardless of culture, ethnicity, faith, gender, sexuality, age, disability or location?	?+	++	++	x	L		Provision of additional housing may result in improved or worsened access to services, facilities and opportunities, depending on the extent to which this infrastructure is delivered alongside new housing. If no additional infrastructure is provided for (eg hospitals, schools), then pressure on existing resources is likely to increase and access may worsen. However, housing and population growth may also allow for the provision of higher order services (eg retail, cultural/leisure services etc) and create new job opportunities, depending on factors such as the socio-economic profile and demographics of new population etc. Assuming that infrastructure can be provided alongside new houses, and demand on existing infrastructure does not get any worse, then the areas with higher growth rates may result in improved access to facilities and opportunities. With the lower housing growth rates of Option 1 compared to those in Options 2 and 3, housing/population growth may not support the development of new services and other opportunities in areas such as Worcester, Coventry, Redditch where housing/population growth will be limited.
	ensure that existing services and opportunities are retained and, where possible, developed?	∅	∅	∅				All three possible Options are likely to result in existing services and opportunities being retained.
	promote compact, mixed-use developments with good accessibility to local facilities and services that reduce the need to travel?	-	--	--	x	L	M	The development of compact, mixed-use developments is likely to be determined by RSS policy rather than by spatial options. However, spatial development which focuses housing growth in urban areas, where more services/facilities are located, is likely to reduce the need to travel for some services and opportunities, when compared to more dispersed spatial development. Currently, 55.1% of households are located in MUAs. This would fall to 53.4% under Option 1, to 52.7% under Option 2 and 52.4% under Option 3. Therefore, while the higher growth rates may increase demand for, and provision of, services and facilities, these may be more dispersed around the Region and may not reduce the amount of travelling that people do to access services and facilities.
4.3	address poverty and disadvantage, taking into account the particular difficulties of those facing multiple disadvantage?	?+	?+ +	?+ +	x	L	M	The poorest communities within the West Midlands are in parts of Birmingham, Coventry, Wolverhampton, Stoke, Walsall and Sandwell, plus some of the remoter parts of Herefordshire and Shropshire. It is not clear whether housing development will be focused on the most deprived parts of these districts, or whether housing will be suitable for the most deprived people within those communities. However, Option 1 would allow for 163,200 additional houses in these districts (an increase of 15% on the 2001 baseline), compared to 217,000 new houses under Option 2 and 238,000 in Option 3 (a 20% increase on the 2001 baseline).
	ensure the provision of employment land in, or accessible to, the most deprived communities in the Region?							It is not possible to say how the Spatial Options on the future provision of housing is likely to affect the provision of employment land accessible to deprived communities.

RSDF	Appraisal Questions	Option 1	Option 2	Option 2	Direct?	Permanent?	Significance?	Commentary
	Will the option/proposal...							
4.4	improve health and reduce health inequalities by encouraging and enabling healthy active lifestyles and protecting health, as well as providing equitable access to health services?	?+	?+	?+	x	x	M	Health is affected by a wide range of determinants, many of which are not affected by the spatial location of housing. However, health deprivation in the worst areas is likely to be improved through the provision of good quality, new housing. In this way, by focusing more housing in the more deprived areas, Options 2 and 3 are likely to have a greater impact on health inequalities than Option 1. It should be noted, however, that all housing growth would need to be accompanied by an increase in healthcare infrastructure, to ensure that access to health services did not decline.
	diminish inequalities in mortality, health and wellbeing across the Region?		+	+				
	ensure that infrastructure for healthcare is provided to meet projected future demand and need?							
	promote healthy lifestyles and opportunities for exercise (eg through environmental infrastructure and design)?							This is a policy issue, and is not relevant to Spatial Options on future housing provision.
	promote opportunities to participate in sport?							This is a policy issue, and is not relevant to Spatial Options on future housing provision.
4.5	provide decent and affordable housing for all, of the right quantity, type, tenure and affordability for local needs, in clean, safe and pleasant local environments?	--	-	++	✓	x	H	According to the 2003-based Government household projections, 575,000 new dwellings would be required to meet demand in the Region, 23,000 per year. Assuming that this is correct, and would meet demand for housing, Options 1 and 2 would not be guaranteed to sufficiently increase the supply of housing in areas of highest demand. According to the current RSS, 6,000-6,500 affordable homes are required every year between 2001-2011 of a total of 15,250 houses completed (ie 39%-42.5% of all houses completed). This compares to a rate of under 3,000 affordable homes constructed in 2004-05, of a total of 19,000 (16%). Even if the higher growth rates were delivered, it would be necessary to significantly increase the proportion of affordable homes constructed to meet demand, from 16% to approximately 40% of all new houses.
	deliver genuine 'pathways of housing choice'? ²							
	increase the supply of affordable housing?							
	reduce the percentage of unfit/non-decent homes?	?	?+	?+	✓	x	H	828,000 homes in the West Midlands failed to meet the 'decent homes' standard in 2001, 38.5% of all dwellings in the Region, the highest percentage of all the English regions. It is unclear what precise impact the various growth rates would have on the percentage of unfit housing in the Region, although it is understood that the Options 2 and 3 would involve higher rates of demolitions than Option 1, and the construction of more new dwellings is likely to improve the overall stock of housing.

² 'Pathways of Housing Choice' means providing a variety of housing opportunities for people in terms of type, tenure and location over the length of their housing career, so that people can exercise different choices within a locality rather than having to make choices between localities when they want to adjust their housing situation

RSDF	Appraisal Questions	Option 1	Option 2	Option 2	Direct?	Permanent?	Significance?	Commentary
	Will the option/proposal...							
	encourage housing development which makes more efficient use of land (between 30 and 50 dwellings per hectare net)?	?	?	?				The Spatial Options paper says that 'most new developments will be built at densities higher than have occurred in the past', and that 'development should be built at a net density of less than 30 dwellings per hectare and recommends a range of densities, depending on the nature of the area, from 30 – 40 dwellings per hectare in rural areas to over 70 dwellings per hectare in City Centres'. It is unclear, however, what impact the housing proposals will have on housing densities, or whether there will be a link between housing numbers and density of development
	seek greater intensity of development at places with good public transport accessibility (such as city, town, district and local centres or around major nodes along good quality public transport corridors)	-	--	--	✓	✓	H	As previously explained, in 2001, 55.1% of households were located in the Major Urban Areas, meaning that for every 100 households in the MUAs there were 81 households in 'other areas' (a ratio of 1 : 0.81). All of the spatial options will result in households being more widely dispersed around the region: <ul style="list-style-type: none"> • Under Option 1, by 2026, 53.4% of households will be in MUAs, a ratio of 1 : 0.87. • Under Option 2, 52.7% of households will be in MUAs, a ratio of 1 : 0.90. • Under Option 3, 52.4% of households will be in MUAs, a ratio of 1 : 0.91. Therefore, none of the options are likely to contribute to the achievement of this SA objective.
	promote the renovation and reuse of existing building stock, rather than the construction of new houses, where appropriate?	?	?	?				There is no discussion of the renovation/reuse of existing building stock within the Spatial Options document.
	ensure the adoption of sustainable design and construction practices in housing?							This is a policy issue, and is not relevant to Spatial Options on future housing provision.
4.6	reduce crime, fear of crime and antisocial behaviour?							This is likely to be a policy issue, and is not directly relevant to Spatial Options on future housing provision.
	promote the reduction of crime rates?							
	encourage the adoption of principles to 'design out' crime in housing and employment sites?							
4.7	improve opportunities to participate in the diverse cultural, sport and recreational opportunities the West Midlands can offer locally and in the wider region?							There is no discussion of the provision of cultural, sport or recreational issues in relation to the housing options. It is assumed that appropriate infrastructure could and would be provided to meet demand for cultural, sporting and recreational activities in line with the various growth scenarios, but this is not certain.
	ensure that facilities and locations for cultural activities are protected and provided?							

RSDF	Appraisal Questions	Option 1	Option 2	Option 2	Direct?	Permanent?	Significance?	Commentary
	Will the option/proposal...							
	protect and create high quality or valued recreational spaces and avoid erosion of recreational function?	∅	-	--	x	L	M	The creation of recreational spaces is likely to be a policy issue, and is not directly relevant to Spatial Options on future housing provision. The protection of existing spaces is likely to be impacted on by housing distribution, although the impacts would be quite site specific and largely determined by Local Development Frameworks. However, as appraisal findings suggest, Options 2 and 3 would require the use of far more new Greenfield sites than Option 1, which could be largely delivered on PDL, and this may have broadly negative impacts on existing recreation sites.
4.8	encourage physical development with a better balance of jobs, housing, services and facilities within each part of the Region in order to meet local needs locally and encourage stable and sustainable communities?							
	Focus retail and office development in town centres?							This issue would be addressed by other parts of the RSS, and only indirectly influenced by spatial options on housing.
	link housing development and employment opportunities?							
	reverse the pattern of people migrating from metropolitan areas to rural parts of the Region?	-	--	--	x	x	H	The process of intra-regional migration is complex, and it is difficult to assess the likely implications of raw housing numbers. Issues such as the type/mix of housing and affordability are likely to be important factors alongside location. However, a key objective of the RSS is to reverse the trend of urban-to-rural migration, and an important element of delivering this objective is ensuring that there is sufficient housing in the MUAs, while managing the supply of housing in the 'other' areas of the Region. In 2001, 55.1% of households were located in the Major Urban Areas, meaning that for every 100 households in the MUAs there were 81 households in 'other areas' (a ratio of 1 : 0.81). Assuming that each of the three options are delivered, this would fall to 53.4% under Option 1, to 52.7% under Option 2 and 52.4% under Option 3. Therefore, considered in isolation, it seems that none of the options is likely to have a strong positive impact on urban-to-rural migration. There is also the question of whether the higher growth options could be delivered. The level of housing growth envisaged in Options 2 and 3 (19,648 and 23,000 dwellings per annum) has not been delivered by the housebuilding industry in the Region in recent years, and there may be a danger that the industry may not seek to achieve those targets. Instead, housebuilders may 'cherry-pick' available sites in the most favourable locations, which may be outside the MUAs. This may further weaken attempts to reverse urban-to-rural migration and the process of Urban Renaissance.

RSDF	Appraisal Questions	Option 1	Option 2	Option 2	Direct?	Permanent?	Significance?	Commentary
	Will the option/proposal...							
4.9	ensure that the Region's workforce is equipped with the skills to access high quality employment opportunities suited to the changing needs of the Regional economy, whilst recognising the value and contribution of unpaid work?							Not relevant
	reduce inequalities in employment rates across the Region?							Not relevant
	provide employment land near to the potential workforce?	∅	-	--	*	✓	M	Under option 1 there is sufficient urban capacity in most areas to accommodate housing growth, thereby making it likely that new housing could be provided without significant loss of employment land. Under option 2 it is increasingly difficult to deliver housing in urban areas and could result in loss of employment land, therefore reducing employment land at the same time as increasing the number of people in urban areas needing work. Under option 3 only 4 local authorities would have sufficient urban capacity and this may lead to even greater loss of employment land in order to maximise urban housing development.
4.10	promote investment in future prosperity, including ongoing investment and engagement in learning and skills development?							Not relevant
	ensure an appropriate supply of employment sites within the region to support sustainable economic development?	∅	-	--	*	*	M	See above analysis. Ensuring a supply of sites to support economic development is increasingly likely to result in sites being provided outside the urban areas and possibly also increasingly on greenfield sites. This will have consequences for travel to work patterns and other issues associated with loss of greenfield land.
	encourage investment to develop deprived areas and focusing resources in areas of greatest need	∅	-	--	*	*	L	Loss of employment land to accommodate new housing in urban areas will make it increasingly difficult to attract investment into the urban areas where areas of greatest need mainly occur.
	ensure that education and skills infrastructure meets projected future demand and need?	-	--	--	*	*	L	Under all options, most housing growth is envisaged in areas of greatest education and skills deprivation, notably Birmingham, Coventry, Sandwell, Dudley, Stoke, Wolverhampton and Walsall. Increased growth is envisaged in most of these areas under options 2 and 3, making it increasingly challenging to deliver infrastructure to meet future need.
	reduce inequalities in education and skills across the Region?	-	--	--	*	*	L	See above entry. All options are likely to make it more difficult to deliver this objective, and particularly so under options 2 and 3.

Figure 2.1 Urban Capacity (PDL and Greenfield) and Additional Land Requirements - Numbers of Dwellings

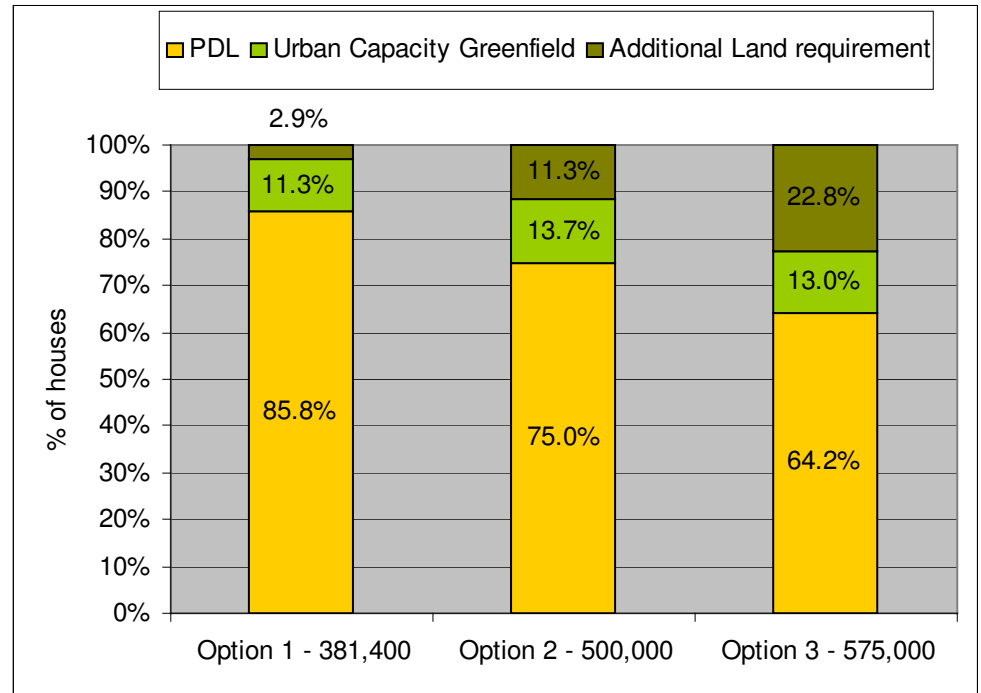
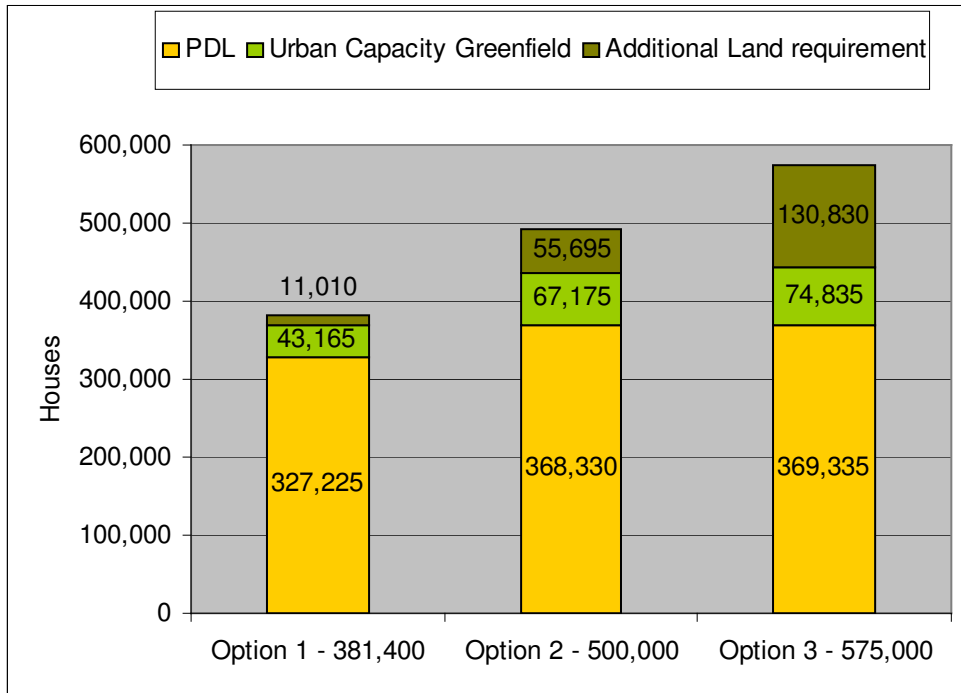


Figure 2.2 Urban Capacity (PDL and Greenfield) and Additional Land Requirements - Hectares of Land Required

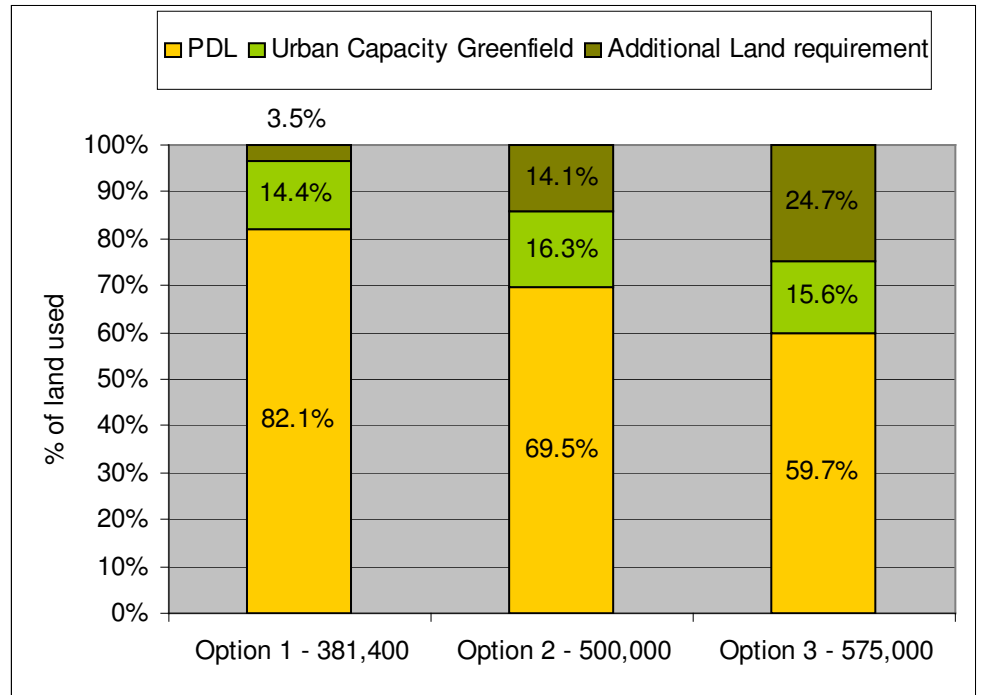
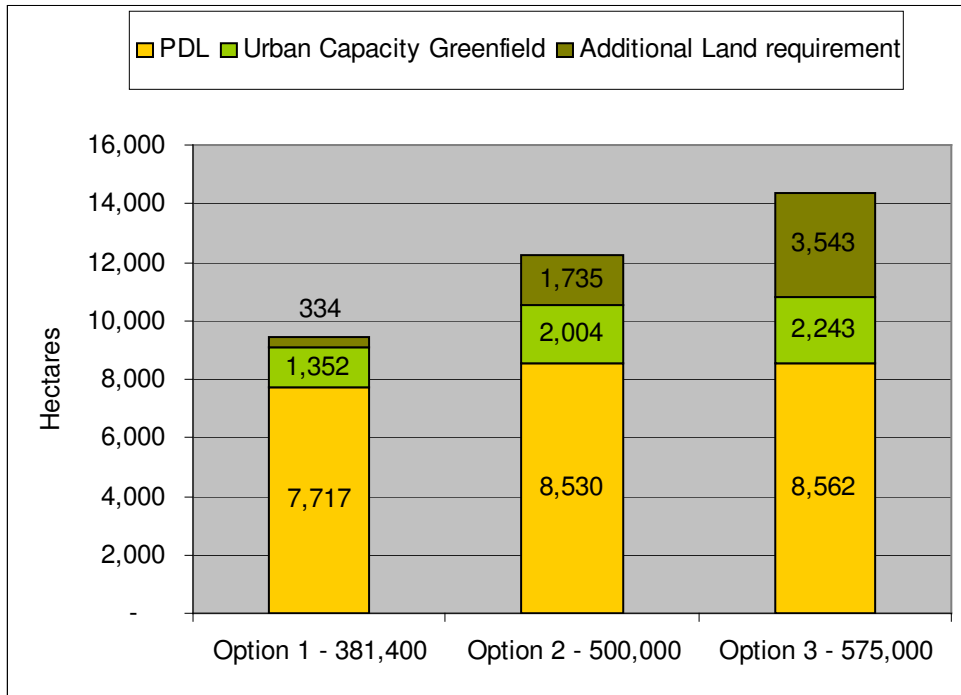


Figure 2.3 Urban Capacity and Additional Land Requirements – Option 1

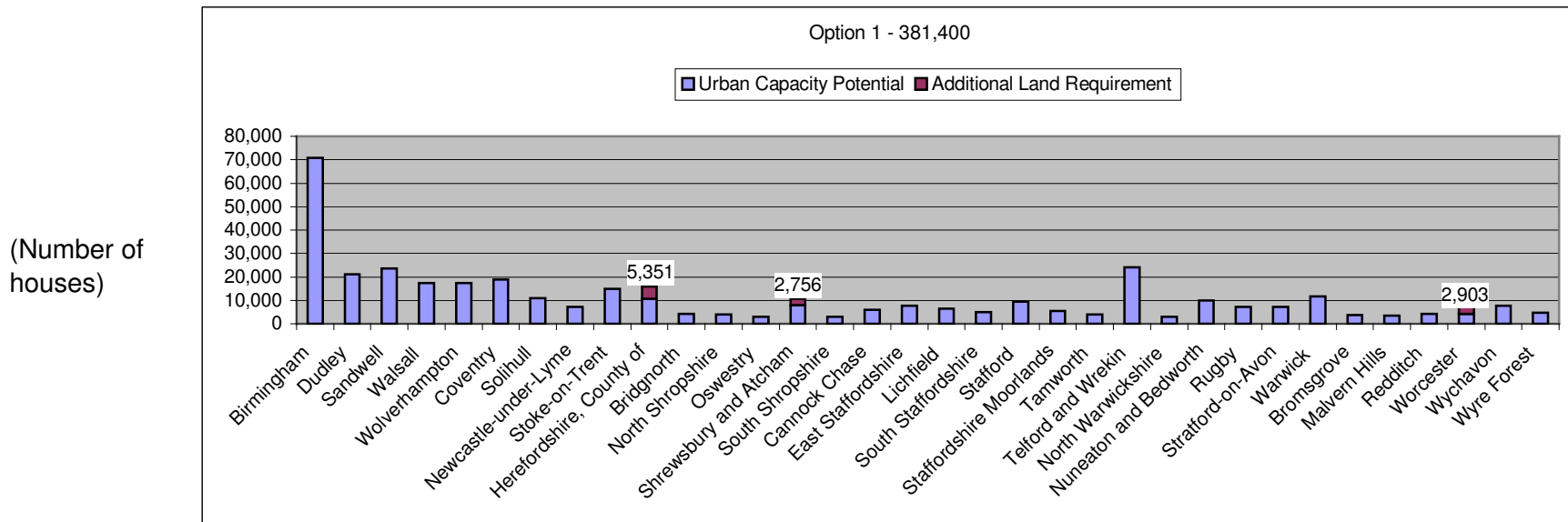
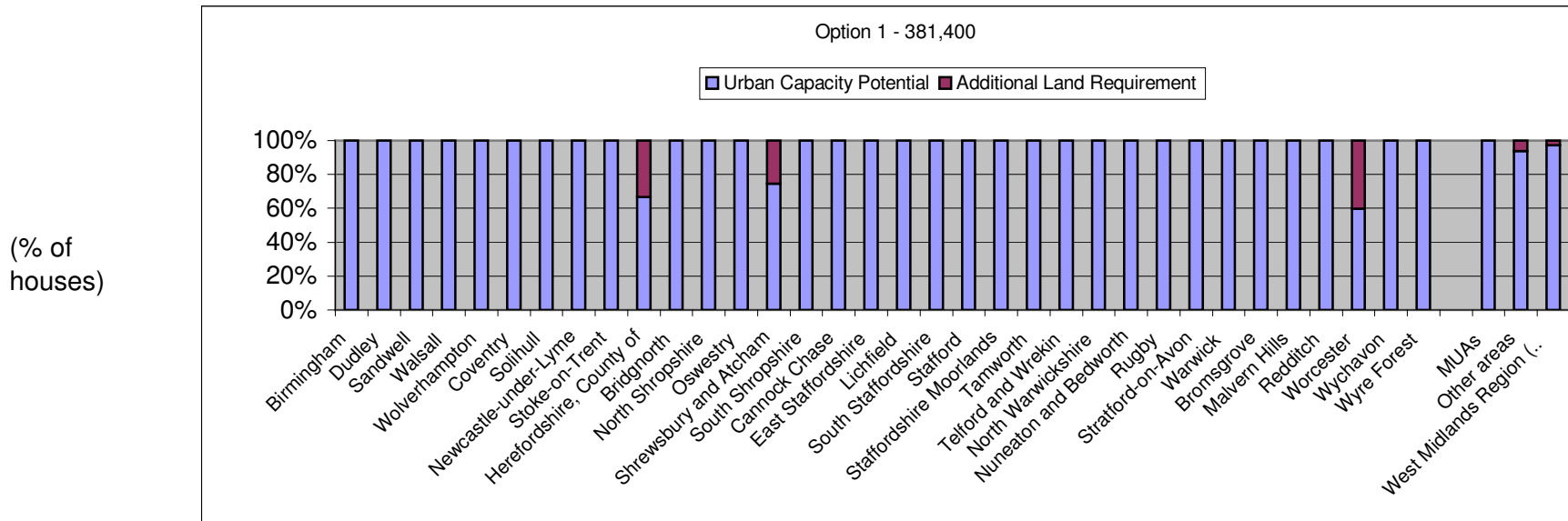


Figure 2.4 Urban Capacity and Additional Land Requirements – Option 2

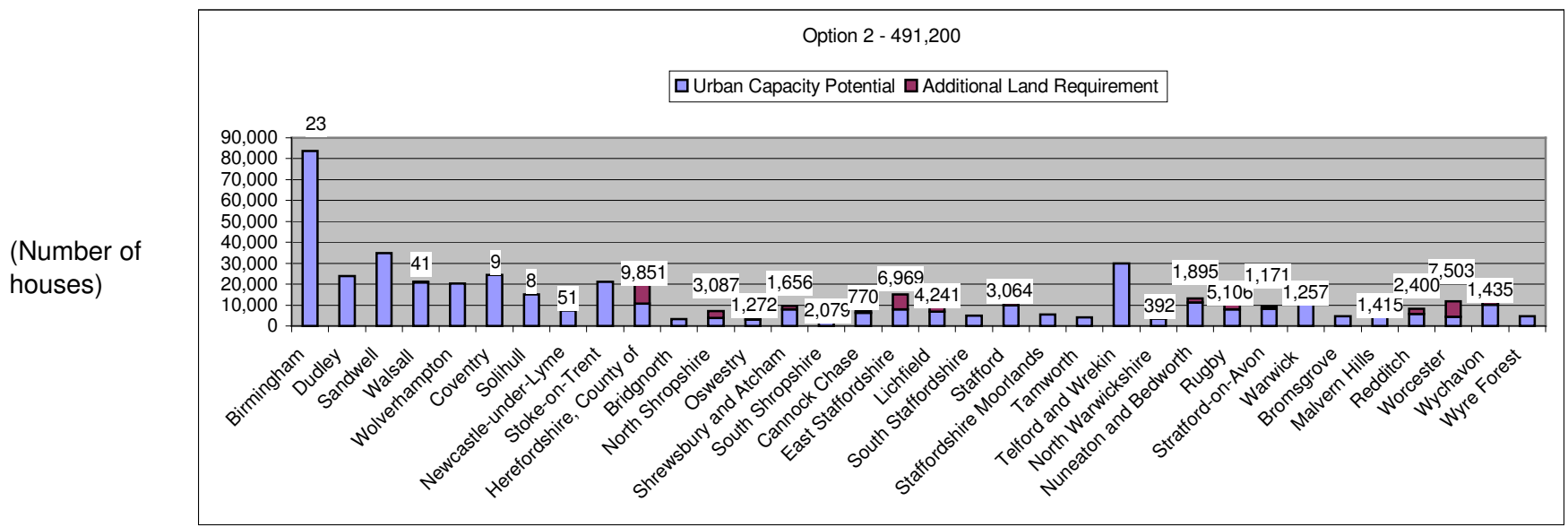
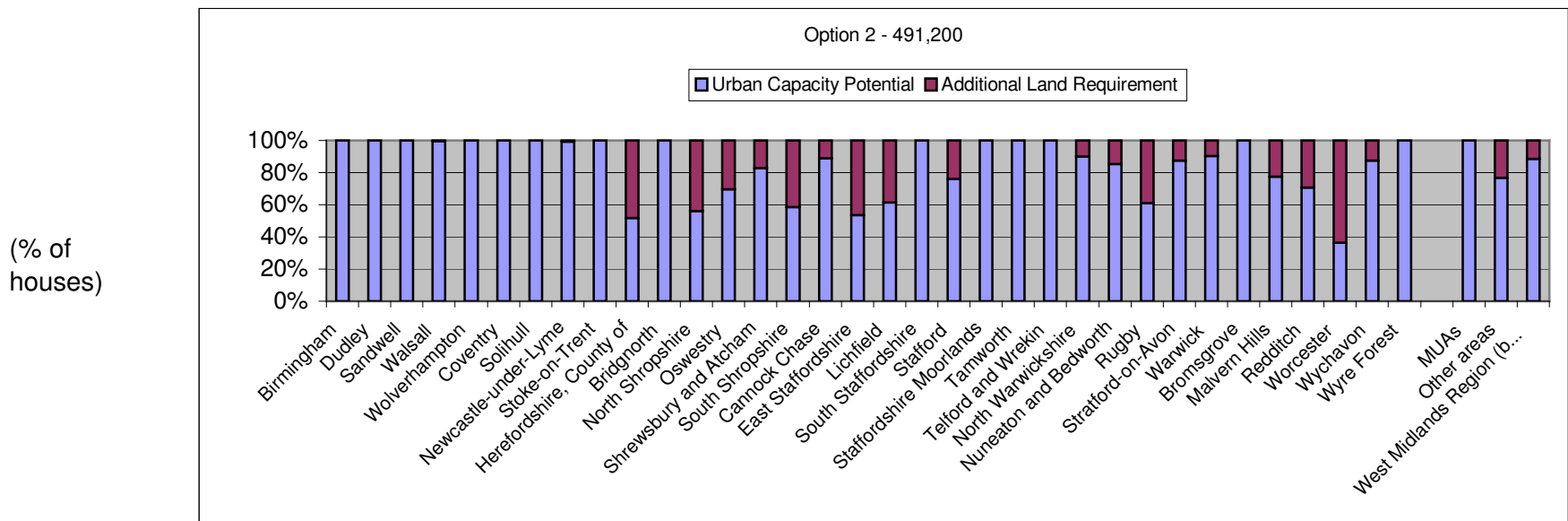


Figure 2.5 Urban Capacity and Additional Land Requirements – Option 3

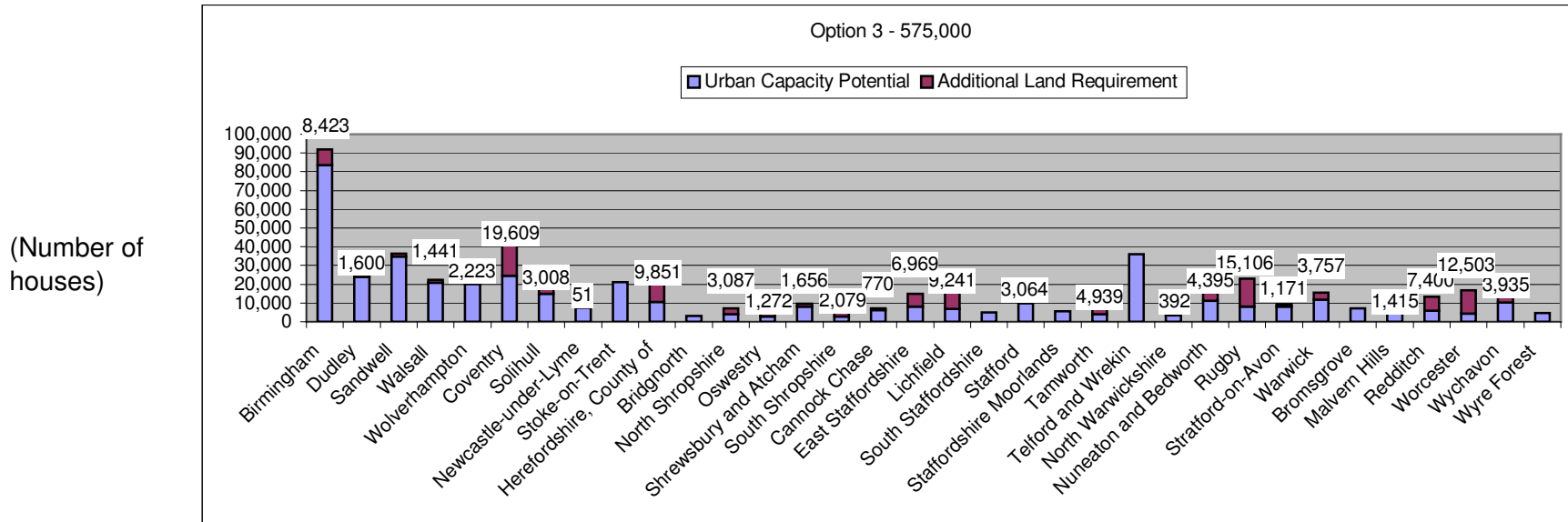
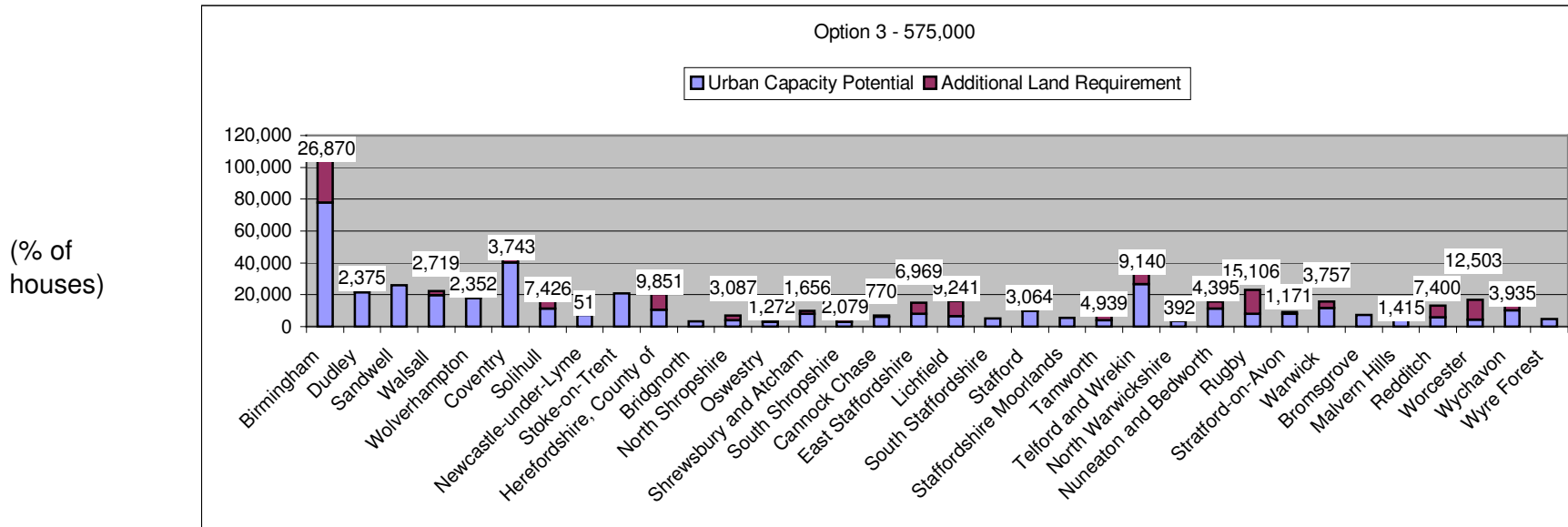
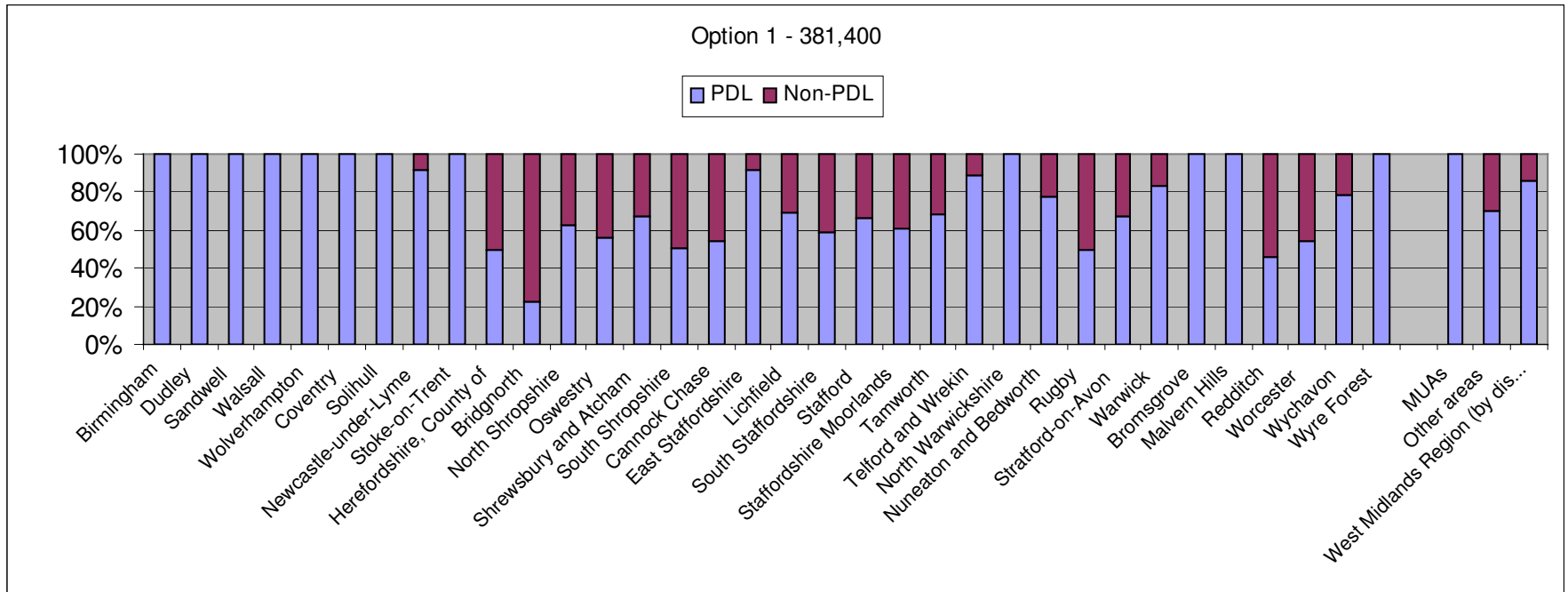
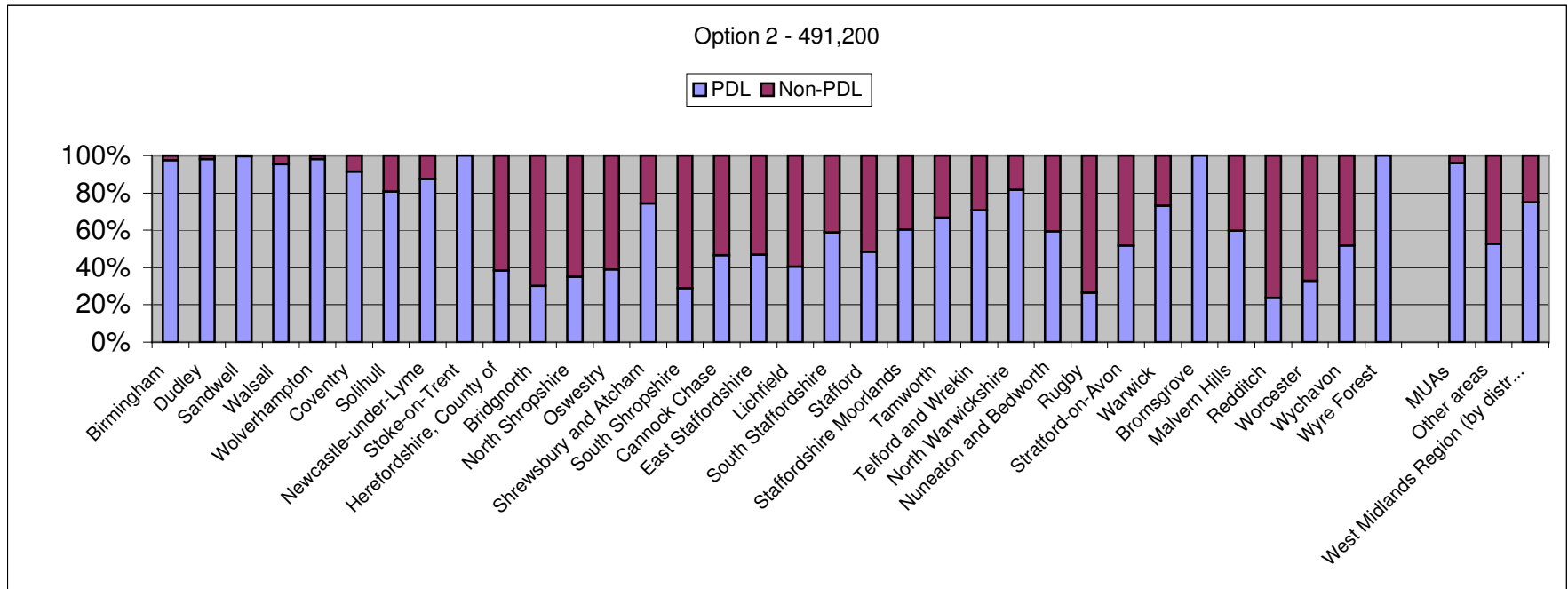
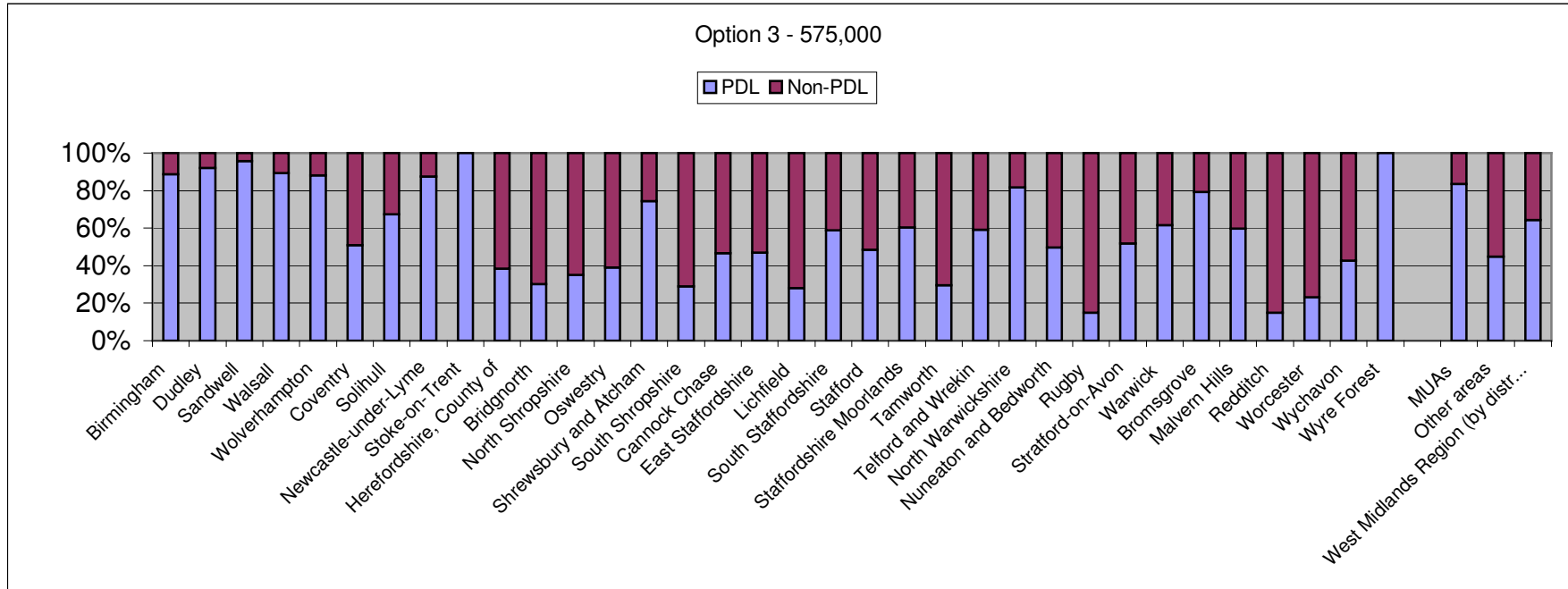


Figure 2.6 % of Houses that could be constructed on PDL – By District







SUSTAINABILITY APPRAISAL OF SECTIONS ON 'FUTURE EMPLOYMENT LAND REQUIREMENTS' AND 'PROTECTION OF EMPLOYMENT LAND', FROM SPATIAL OPTIONS PAPER (27 SEPTEMBER 2006)

RSDF	Appraisal Questions Will the proposal...	Effects			Commentary
		Short	Med	Long	
1.1	use natural resources such as water and minerals efficiently, including by incorporating efficiency measures into new land use and developments?		∅		
	promote the balance of water supply and demand?		∅		
	reduce the use of primary aggregates?		∅		
1.2	promote and support the development of high value and low impact new technologies, especially resource-efficient technologies and environmental technology initiatives?		∅		
	promote the development of technologies to address climate change, eg new energy generators using renewable sources, more efficient industrial technology and processes to minimise or mitigate for the impacts of climate change?		∅		
	secure improvements to communication infrastructure?		∅		
1.3	promote and ensure high standards of sustainable resource-efficient design, construction and maintenance of buildings, where possible exceeding the requirements of the Building Regulations?		∅		
	ensure the adoption of sustainable design and construction practices in all buildings?		∅		
1.4	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?		∅		
	promote more sustainable transport patterns in areas suffering from congestion?		∅		
	promote a shift of freight from road to rail?		∅		
	improve the quality of transport infrastructure?		∅		
	make best use of existing airport capacity?		∅		
1.5	ensure development is primarily focused in the major urban areas, makes efficient use of existing physical infrastructure and helps reduce need to travel, especially by private car?	+	++	++	Options paper addresses importance of estimating future employment land needs based on household projections for local authority areas. This should help to provide employment land which reduces the need to travel. <i>Indirect, permanent</i>
	focus development in the major urban areas?	?	?	?	The options paper states the need to focus development in the MUAs, although this constitutes less than a half of future employment land provision. <i>Direct, permanent</i>
	reduce the number and length of journeys made by car?	+	++	++	See above
	reduce the need to travel?	+	++	++	See above
	promote alternative, more sustainable, modes of transport to the car (including walking and cycling) through location of housing, employment sites, services and facilities, and	+	++	++	See above. It is also suggested that "sustainable access" be considered in the allocation of employment land

RSDF	Appraisal Questions	Effects			Commentary
	Will the proposal...	Short	Med	Long	
	appropriate infrastructure for sustainable modes of transport?				requirements, although this may be more of a consideration for specific sites rather than strategic allocations. <i>Direct, permanent</i>
1.6	encourage and enable waste minimisation, reuse, recycling and recovery to divert resources away from the waste stream?		∅		
	reduce waste arisings?		∅		
	ensure that sustainable waste management can be carried out in the Region?		∅		
	enable communities to take responsibility for their own waste and meet their own needs (self-sufficiency)?		∅		
1.7	encourage local sourcing of food, goods and materials?		∅		
1.8	reward efficient resource use and encourage development of alternative and renewable resources in order to reduce dependence on fossil fuels?		∅		
	See questions under Objectives 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 1.7, 1.9, 2.1, 2.2, 2.3, 3.4 and 4.5				
1.9	encourage corporate social and environmental responsibility, with regional organisations and agencies leading by example?		∅		
	encourage sustainable procurement?		∅		
1.10	encourage a culture of enterprise and innovation, including social enterprise?		∅		
1.11	achieve a strong, stable and sustainable economy and prosperity for the benefit of all the Region's inhabitants?	+	++	++	Defining employment land requirements and safeguarding sites will help to support regional economic growth. <i>Direct, permanent</i>
	narrow the GVA gap between the best and worst performing parts of the Region?	?	?	?	Policy UR1 emphasises the need for targeted action in MUAs in areas of greatest need. Outside of the MUAs, productivity is low in Shropshire, Staffordshire, Herefordshire and Worcestershire. Although policy UR3 encourages the enhancement of city, town and district centres generally as drivers of economic growth, and policy UR2 identifies regeneration areas which are linked to patterns of deprivation, it is not apparent that any particular focus will be placed on areas of employment need outside the identified areas of MUAs and those areas in policy UR2. <i>Direct, permanent</i>
	support efficient, competitive, diverse and innovative business, commercial, industrial, retail, tourism and leisure sectors?		∅		
2.1	reduce overall energy use through increased energy efficiency?		∅		
	raise energy efficiency to current Building Regulations standards in refurbishments for Decent Homes Standard? (Also see question on EcoHomes standard under issue 5, Housing).		∅		

RSDF	Appraisal Questions Will the proposal...	Effects			Commentary
		Short	Med	Long	
2.2	increase the proportion of energy generated from renewable and low carbon sources, including by microgeneration, CHP, district heating, and in transportation? promote energy generation from CHP and community heating?		∅		
2.3	minimise the Region's contribution to the causes of climate change by reducing emissions of greenhouse gases from transport, domestic, commercial and industrial sources? reduce the Region's contribution to climate change?	-	--	--	Providing land for new economic development and growth is likely to increase the emission of greenhouse gases from the commercial and industrial sector, and probably also from the transport sector. <i>Direct, permanent</i> See above
2.4	ensure that land use and development takes into account predicted changes in the Region's climate, including flood risk? promote sustainable urban drainage systems? promote the adoption of climate change adaptation and climate proofing principles in planning and design?		∅		
2.5	implement a managed response to the unavoidable impacts of climate change, ensuring that the design and planning process takes account of the predicted changes in the Region's climate? prevent all inappropriate development in areas of flood risk?		∅		
3.1	value, protect, enhance and restore the Region's environmental assets, including the natural, built and historic environment and landscape? value, enhance and protect the Region's natural environmental assets (eg Green Belt, parks and open spaces, AONBs etc)? value, enhance and protect the Region's historic environment assets (eg World Heritage Sites, archaeological remains, historic buildings, parks and gardens, and landscapes, and conservation areas, battlefields and other architectural and historically important features and areas, and their settings)? promote heritage-led regeneration? promote the repair and reuse of historic buildings? enhance the amenity value of the countryside, meeting the recreational and leisure needs of communities?	?	?	?	Providing land for new economic development could result in loss of greenfield land to development which may have a value as open space or adversely affect the landscape or townscape, although policy PA6 envisages maximum use of recycled land and allows development on greenfield sites only as a last resort. <i>Indirect, permanent</i> Providing land for new economic development could result in loss of greenfield land to development which may have a value as open space, although policy PA6 envisages maximum use of recycled land and allows development on greenfield sites only as a last resort. <i>Indirect, permanent</i> ∅ ∅ ∅ Providing land for new economic development could result in loss of greenfield land to development which may have

RSDF	Appraisal Questions	Effects			Commentary
	Will the proposal...	Short	Med	Long	
					amenity value, although policy PA6 envisages maximum use of recycled land and allows development on greenfield sites only as a last resort. <i>Indirect, permanent</i>
	protect, enhance and manage the character and appearance of the region's landscapes and townscapes, maintaining and strengthening local distinctiveness and sense of place?	?	?	?	Providing land for new economic development could result in loss of greenfield land to development which may adversely affect the landscape or townscape, although policy PA6 envisages maximum use of recycled land and allows development on greenfield sites only as a last resort. <i>Indirect, permanent</i>
3.2	value, maintain, restore and re-create regional biodiversity, where possible using approaches that improve the resilience of natural systems such as linking fragmented habitats?	?	?	?	Providing land for new economic development could result in loss of greenfield land to development which may have adverse impacts on biodiversity, although policy PA6 envisages maximum use of recycled land and allows development on greenfield sites only as a last resort. <i>Indirect, permanent</i>
	value, enhance and protect the Region's designated sites, including sites designated for geodiversity?		∅		
	value, enhance and protect the Region's priority habitats and species, and promote the delivery of regional biodiversity targets?		∅		
	support development that incorporates improvements to wildlife habitats?		∅		
3.3	minimise air, water, soil, light and noise pollution levels, and create good quality air, water and soils?		∅		
	promote more sustainable transport patterns in areas of low air quality?		∅		
	address air quality impacts arising from specific development activities?		∅		
	protect and enhance the quality of watercourses in the Region?		∅		
	reduce the quantity of contaminated land in the Region?		∅		
	prevent noise and light pollution?		∅		
3.4	encourage land use and development that optimises the use of previously developed land and buildings?	+	+	+	The options paper identifies that greenfield sites may be used if sufficient previously developed land is not available. Optimising the use of previously developed land is not explicitly covered, although policy PA6 envisages maximum use of recycled land and allows development on greenfield sites only as a last resort. The option to safeguard employment land may also reduce the likelihood of greenfield development for employment sites. <i>Direct, permanent</i>
3.5	encourage land use and development that creates and sustains well-designed, high		∅		

RSDF	Appraisal Questions Will the proposal...	Effects			Commentary
		Short	Med	Long	
	quality built environments that incorporate green space, encourage biodiversity, and promote local distinctiveness and sense of place?				
	require good urban design to create attractive, high quality environments where people will choose to live, work and invest?		∅		
	increase access to good quality green space (eg increase the number of people in towns and cities with accessible greenspace within 300m of their homes)?		∅		
	protect existing and encourage the development of new biodiversity assets in developments?		∅		
3.6	encourage local stewardship of local environments, for example by promoting best practice in agricultural management or enabling communities to improve their neighbourhoods?		∅		
3.7	promote environmental justice, recognising that deprived areas and disadvantaged communities and more likely to be affected by environmental damage and degradation?		∅		
	specifically improve environmental quality in deprived communities?		∅		
4.1	enable communities to influence the decisions that affect their neighbourhoods and quality of life?		∅		
	promote the use of community-based planning tools?		∅		
4.2	ensure easy and equitable access to services, facilities and opportunities, including jobs and learning, regardless of culture, ethnicity, faith, gender, sexuality, age, disability or location?	+	+	+	Options paper addresses importance of estimating future employment land needs based on household projections for local authority areas. This should help to support access to job opportunities regardless of location. <i>Direct, permanent</i>
	ensure that existing services and opportunities are retained and, where possible, developed?	+/-	+/-	?/-	The possibility of safeguarding employment land is identified as an option, although it is also possible that employment land may be converted to housing. <i>Direct and temporary or indirect and permanent</i>
	promote compact, mixed-use developments with good accessibility to local facilities and services that reduce the need to travel?		∅		
4.3	address poverty and disadvantage, taking into account the particular difficulties of those facing multiple disadvantage?	0	0	0	Issues of poverty and disadvantage are not apparently considered in assessing employment land needs and requirements. However, see comments below on provision of employment land.
	ensure the provision of employment land in, or accessible to, the most deprived communities in the Region?	+	++	++	The options paper highlights the need to focus development in the MUAs which include a number of the most deprived areas in the region. Policy UR2 of the RSS also addresses the need for regeneration in towns outside the MUAs, linking areas of deprivation with access to employment. <i>Indirect, permanent</i>

RSDF	Appraisal Questions Will the proposal...	Effects			Commentary
		Short	Med	Long	
4.4	improve health and reduce health inequalities by encouraging and enabling healthy active lifestyles and protecting health, as well as providing equitable access to health services?		∅		
	diminish inequalities in mortality, health and wellbeing across the Region?		∅		
	ensure that infrastructure for healthcare is provided to meet projected future demand and need?		∅		
	promote healthy lifestyles and opportunities for exercise (eg through environmental infrastructure and design)?		∅		
	promote opportunities to participate in sport?		∅		
4.5	provide decent and affordable housing for all, of the right quantity, type, tenure and affordability for local needs, in clean, safe and pleasant local environments?		∅		
	deliver genuine 'pathways of housing choice'?		∅		
	increase the supply of affordable housing?		∅		
	reduce the percentage of unfit/non-decent homes?		∅		
	encourage housing development which makes more efficient use of land (between 30 and 50 dwellings per hectare net); and seek greater intensity of development at places with good public transport accessibility (such as city, town, district and local centres or around major nodes along good quality public transport corridors)?		∅		
	promote the renovation and reuse of existing building stock, rather than the construction of new houses, where appropriate?		∅		
	ensure the adoption of sustainable design and construction practices in housing?		∅		
4.6	reduce crime, fear of crime and antisocial behaviour?		∅		
	promote the reduction of crime rates?		∅		
	encourage the adoption of principles to 'design out' crime in housing and employment sites?		∅		
4.7	improve opportunities to participate in the diverse cultural, sport and recreational opportunities the West Midlands can offer locally and in the wider region?		∅		
	ensure that facilities and locations for cultural activities are protected and provided?		∅		
	protect and create high quality or valued recreational spaces and avoid erosion of recreational function?		∅		
4.8	encourage physical development with a better balance of jobs, housing, services and facilities within each part of the Region in order to meet local needs locally and encourage stable and sustainable communities?	+	+	+	Options paper addresses importance of estimating future employment land needs based on household projections for local authority areas. This should help to support a better balance between housing and jobs. <i>Direct, permanent</i>
	focus retail and office development in town centres?		∅		
	link housing development and employment opportunities?	+	+	+	See above comments
	reverse the pattern of people migrating from metropolitan areas to rural parts of the Region?		∅		
4.9	ensure that the Region's workforce is equipped with the skills to access high quality employment opportunities suited to the changing needs of the Regional economy,		∅		

RSDF	Appraisal Questions	Effects			Commentary
	Will the proposal...	Short	Med	Long	
	whilst recognising the value and contribution of unpaid work?				
	reduce inequalities in employment rates across the Region?	+	++	++	The options paper highlights the need to focus development in the MUAs which include most of the areas of greatest employment deprivation in the region. Policy UR1 also emphasises the need for targeted action in MUAs in areas of greatest need. <i>Indirect, permanent</i>
	provide employment land near to the potential workforce?	+	+	+	Options paper addresses importance of estimating future employment land needs based on household projections for local authority areas. This should help to support the provision of employment land near to potential employees where possible, although travel to work patterns are generally complex and vary with type of employment and economic status. <i>Direct, permanent</i>
4.10	promote investment in future prosperity, including ongoing investment and engagement in learning and skills development?	+	++	++	Defining requirements for the provision of employment land will help to promote investment in future economic development. <i>Direct, permanent</i>
	ensure an appropriate supply of employment sites within the region to support sustainable economic development?	+	++	++	Defining employment land requirements will help to provide an appropriate supply of sites. <i>Direct, permanent</i>
	Encourage investment to develop deprived areas and focusing resources in areas of greatest need	+	++	++	It is not apparent that any account has been taken of areas of deprivation or any focus of resources on areas of need. However, concentrating employment land provision in the MUAs will ensure provision in some of the most deprived areas. Deprivation in other areas is given a focus in policies UR2 and UR3. <i>Indirect, permanent</i>
	ensure that education and skills infrastructure meets projected future demand and need?	+	+	+	There is a need to take account of the education and skills infrastructure needed to support future economic growth. Although this issue is not addressed in the options paper, policy UR4 encourages local authorities to coordinate land use and investment decisions with improved education and skills service delivery. <i>Indirect, permanent</i>
	reduce inequalities in education and skills across the Region?		∅		
	Summary	Defining employment land requirements and safeguarding sites will help to support regional economic growth, although this will almost inevitably increase emissions of greenhouse			

RSDF	Appraisal Questions	Effects			Commentary
	Will the proposal...	Short	Med	Long	
	<p>gases from the commercial and industrial sector, and probably also from the transport sector. The options paper addresses importance of estimating future employment land needs based on household projections for local authority areas which will focus the provision of employment land in reasonable proximity to new housing development. This will help to support the provision of employment land near to potential employees where possible, improving access to job opportunities and helping to reduce the need to travel. However, travel to work patterns are generally complex and vary with type of employment and economic status. "Sustainable access" is identified as a possible criterion for allocating employment land, although this needs to be more clearly defined.</p> <p>Although issues of poverty and disadvantage are not apparently considered in assessing employment land needs and requirements, the options paper states the need to focus development in the MUAs which include a number of the most deprived areas in the region. RSS policy gives additional emphasis to this objective in MUAs and twelve other named regeneration areas, although it is not apparent that any particular focus will be placed on areas of deprivation and employment need outside these areas. Although the focus is on MUAs, their allocation constitutes less than a half of future employment land provision.</p> <p>There is a need to take account of the education and skills infrastructure needed to support future economic growth and this is covered in RSS policy.</p> <p>Although RSS policy prioritises the use of previously developed land, greenfield sites may be used for employment land if sufficient previously developed land is not available.</p>				
	<p>Mitigation</p> <p>Ensure a clearer focus on provision of employment land linked to deprivation and employment need. Add an additional criterion in table E8.</p> <p>Clearer definition of "sustainable access".</p> <p>Greater emphasis on resource efficiency and the need for reduction of greenhouse gas emissions from industry, commerce and transport.</p>				

SUSTAINABILITY APPRAISAL OF SECTIONS ON 'REGIONAL INVESTMENT SITES' AND 'MAJOR INVESTMENT SITES', FROM SPATIAL OPTIONS PAPER (27 SEPTEMBER 2006)

RSDF	Appraisal Questions	Effects			Commentary
		Short	Med	Long	
1.1	Will the proposal... use natural resources such as water and minerals efficiently, including by incorporating efficiency measures into new land use and developments?		∅		
	promote the balance of water supply and demand?		∅		
	reduce the use of primary aggregates?		∅		
1.2	promote and support the development of high value and low impact new technologies, especially resource-efficient technologies and environmental technology initiatives?	+	++	++	Provision of sites to support the High-Technology Corridors will help to support the growth of businesses based on new technologies. Environmental technologies is identified as a business cluster which may benefit from this support, as are sectors focusing on higher added value. <i>Direct, permanent</i>
	promote the development of technologies to address climate change, eg new energy generators using renewable sources, more efficient industrial technology and processes to minimise or mitigate for the impacts of climate change?	+/0	++/0	++/0	Environmental technologies is identified as a business cluster which may benefit from this support, although there is no specific mention of technologies to address climate change. <i>Direct, permanent</i>
	secure improvements to communication infrastructure?		∅		
1.3	promote and ensure high standards of sustainable resource-efficient design, construction and maintenance of buildings, where possible exceeding the requirements of the Building Regulations?		∅		
	ensure the adoption of sustainable design and construction practices in all buildings?		∅		
1.4	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?		∅		
	promote more sustainable transport patterns in areas suffering from congestion?		∅		
	promote a shift of freight from road to rail?		∅		
	improve the quality of transport infrastructure?		∅		
	make best use of existing airport capacity?		∅		
1.5	ensure development is primarily focused in the major urban areas, makes efficient use of existing physical infrastructure and helps reduce need to travel, especially by private car?		∅		
	focus development in the major urban areas?		∅		
	reduce the number and length of journeys made by car?		∅		

RSDF	Appraisal Questions Will the proposal...	Effects			Commentary
		Short	Med	Long	
	reduce the need to travel?		∅		
	promote alternative, more sustainable, modes of transport to the car (including walking and cycling) through location of housing, employment sites, services and facilities, and appropriate infrastructure for sustainable modes of transport?		∅		
1.6	encourage and enable waste minimisation, reuse, recycling and recovery to divert resources away from the waste stream?		∅		
	reduce waste arisings?		∅		
	ensure that sustainable waste management can be carried out in the Region?		∅		
	enable communities to take responsibility for their own waste and meet their own needs (self-sufficiency)?		∅		
1.7	encourage local sourcing of food, goods and materials?		∅		
1.8	reward efficient resource use and encourage development of alternative and renewable resources in order to reduce dependence on fossil fuels?		∅		
	See questions under Objectives 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 1.7, 1.9, 2.1, 2.2, 2.3, 3.4 and 4.5				
1.9	encourage corporate social and environmental responsibility, with regional organisations and agencies leading by example?		∅		
	encourage sustainable procurement?		∅		
1.10	encourage a culture of enterprise and innovation, including social enterprise?		∅		
1.11	achieve a strong, stable and sustainable economy and prosperity for the benefit of all the Region's inhabitants?	+	++	++	See below
	narrow the GVA gap between the best and worst performing parts of the Region?	+	++	++	Provision of sites to support Regeneration Zone activity will help to address regional inequalities in economic growth. <i>Direct, permanent</i>
	support efficient, competitive, diverse and innovative business, commercial, industrial, retail, tourism and leisure sectors?	+	++	++	Support of the Central Technology Belt and the High-Technology Corridor will help to support the growth of innovative businesses. The options paper identifies that provision of RISs create significant employment opportunities and contribute to the diversification of the regional economy, although the potential number of sites and employment numbers which may be created are not known. <i>Direct, permanent</i>
2.1	reduce overall energy use through increased energy efficiency?		∅		
	raise energy efficiency to current Building Regulations standards in refurbishments for Decent Homes Standard? (Also see question on EcoHomes standard under issue 5, Housing).		∅		

RSDF	Appraisal Questions Will the proposal...	Effects			Commentary
		Short	Med	Long	
2.2	increase the proportion of energy generated from renewable and low carbon sources, including by microgeneration, CHP, district heating, and in transportation? promote energy generation from CHP and community heating?		∅		
2.3	minimise the Region's contribution to the causes of climate change by reducing emissions of greenhouse gases from transport, domestic, commercial and industrial sources? reduce the Region's contribution to climate change?	?	?	?	Provision of sites to encourage new commercial/industrial development may promote increased greenhouse gas emissions from the sector, although this may be offset by reductions due to declines in other commercial or industrial activity. Overall balance of effects is unknown. <i>Indirect, temporary</i> See above
2.4	ensure that land use and development takes into account predicted changes in the Region's climate, including flood risk? promote sustainable urban drainage systems? promote the adoption of climate change adaptation and climate proofing principles in planning and design?		∅		
2.5	implement a managed response to the unavoidable impacts of climate change, ensuring that the design and planning process takes account of the predicted changes in the Region's climate? prevent all inappropriate development in areas of flood risk?		∅		
3.1	value, protect, enhance and restore the Region's environmental assets, including the natural, built and historic environment and landscape? value, enhance and protect the Region's natural environmental assets (eg Green Belt, parks and open spaces, AONBs etc)? value, enhance and protect the Region's historic environment assets (eg World Heritage Sites, archaeological remains, historic buildings, parks and gardens, and landscapes, and conservation areas, battlefields and other architectural and historically important features and areas, and their settings)? promote heritage-led regeneration? promote the repair and reuse of historic buildings? enhance the amenity value of the countryside, meeting the recreational and leisure needs of communities?	?	?	?	Provision of new RISs and MISs could result in loss of greenfield land to development which may have a value as open space or adversely affect the landscape or townscape, although policy PA6 envisages maximum use of recycled land and allows development on greenfield sites only as a last resort. <i>Indirect, permanent</i> Provision of new RISs and MISs could result in loss of greenfield land to development which may have a value as open space, although policy PA6 envisages maximum use of recycled land and allows development on greenfield sites only as a last resort. <i>Indirect, permanent</i> ∅ ∅ Provision of new RISs and MISs could result in loss of greenfield land to development which may have amenity value, although policy PA6 envisages maximum use of recycled land and allows development on greenfield sites

RSDF	Appraisal Questions	Effects			Commentary
	Will the proposal...	Short	Med	Long	
					only as a last resort. <i>Indirect, permanent</i>
	protect, enhance and manage the character and appearance of the region's landscapes and townscapes, maintaining and strengthening local distinctiveness and sense of place?	?	?	?	Provision of new RISs and MISs could result in loss of greenfield land to development which may adversely affect the landscape or townscape, although policy PA6 envisages maximum use of recycled land and allows development on greenfield sites only as a last resort. <i>Indirect, permanent</i>
3.2	value, maintain, restore and re-create regional biodiversity, where possible using approaches that improve the resilience of natural systems such as linking fragmented habitats?	?	?	?	Provision of new RISs and MISs could result in loss of greenfield land to development which may have adverse impacts on biodiversity, although policy PA6 envisages maximum use of recycled land and allows development on greenfield sites only as a last resort. <i>Indirect, permanent</i>
	value, enhance and protect the Region's designated sites, including sites designated for geodiversity?		∅		
	value, enhance and protect the Region's priority habitats and species, and promote the delivery of regional biodiversity targets?		∅		
	support development that incorporates improvements to wildlife habitats?		∅		
3.3	minimise air, water, soil, light and noise pollution levels, and create good quality air, water and soils?		∅		
	promote more sustainable transport patterns in areas of low air quality?		∅		
	address air quality impacts arising from specific development activities?		∅		
	protect and enhance the quality of watercourses in the Region?		∅		
	reduce the quantity of contaminated land in the Region?	+	0	0	The options paper identifies that a MIS is likely to become available where land decontamination will be undertaken. <i>Indirect, permanent</i>
	prevent noise and light pollution?		∅		
3.4	encourage land use and development that optimises the use of previously developed land and buildings?	?	?	?	The options paper envisages the potential need for greenfield land to accommodate new RIS/MIS sites, although policy PA6 envisages maximum use of recycled land and allows development on greenfield sites only as a last resort. <i>Direct, permanent</i>
3.5	encourage land use and development that creates and sustains well-designed, high quality built environments that incorporate green space, encourage biodiversity, and promote local distinctiveness and sense of place?	?	?	?	See below on access to green space.
	require good urban design to create attractive, high quality environments where people will choose to live, work and invest?		∅		
	increase access to good quality green space (eg increase the number of people in towns and cities with accessible greenspace within 300m of	?	?	?	Could decrease access to green space with development on greenfield sites as envisaged in the options paper, although policy PA6 envisages maximum

RSDF	Appraisal Questions Will the proposal...	Effects			Commentary
		Short	Med	Long	
	their homes)?				use of recycled land and allows development on greenfield sites only as a last resort. <i>Indirect, permanent</i>
	protect existing and encourage the development of new biodiversity assets in developments?		∅		
3.6	encourage local stewardship of local environments, for example by promoting best practice in agricultural management or enabling communities to improve their neighbourhoods?		∅		
3.7	promote environmental justice, recognising that deprived areas and disadvantaged communities and more likely to be affected by environmental damage and degradation?		∅		
	specifically improve environmental quality in deprived communities?		∅		
4.1	enable communities to influence the decisions that affect their neighbourhoods and quality of life?		∅		
	promote the use of community-based planning tools?		∅		
4.2	ensure easy and equitable access to services, facilities and opportunities, including jobs and learning, regardless of culture, ethnicity, faith, gender, sexuality, age, disability or location?		∅		
	ensure that existing services and opportunities are retained and, where possible, developed?		∅		
	promote compact, mixed-use developments with good accessibility to local facilities and services that reduce the need to travel?		∅		
4.3	address poverty and disadvantage, taking into account the particular difficulties of those facing multiple disadvantage?		∅		
	ensure the provision of employment land in, or accessible to, the most deprived communities in the Region?		∅		
4.4	improve health and reduce health inequalities by encouraging and enabling healthy active lifestyles and protecting health, as well as providing equitable access to health services?		∅		
	diminish inequalities in mortality, health and wellbeing across the Region?		∅		
	ensure that infrastructure for healthcare is provided to meet projected future demand and need?		∅		
	promote healthy lifestyles and opportunities for exercise (eg through environmental infrastructure and design)?		∅		
	promote opportunities to participate in sport?		∅		
4.5	provide decent and affordable housing for all, of the right quantity, type, tenure and affordability for local needs, in clean, safe and pleasant local environments?		∅		
	deliver genuine 'pathways of housing choice'?		∅		

RSDF	Appraisal Questions Will the proposal...	Effects			Commentary
		Short	Med	Long	
	increase the supply of affordable housing?		∅		
	reduce the percentage of unfit/non-decent homes?		∅		
	encourage housing development which makes more efficient use of land (between 30 and 50 dwellings per hectare net); and seek greater intensity of development at places with good public transport accessibility (such as city, town, district and local centres or around major nodes along good quality public transport corridors)?		∅		
	promote the renovation and reuse of existing building stock, rather than the construction of new houses, where appropriate?		∅		
	ensure the adoption of sustainable design and construction practices in housing?		∅		
4.6	reduce crime, fear of crime and antisocial behaviour?		∅		
	promote the reduction of crime rates?		∅		
	encourage the adoption of principles to 'design out' crime in housing and employment sites?		∅		
4.7	improve opportunities to participate in the diverse cultural, sport and recreational opportunities the West Midlands can offer locally and in the wider region?		∅		
	ensure that facilities and locations for cultural activities are protected and provided?		∅		
	protect and create high quality or valued recreational spaces and avoid erosion of recreational function?		∅		
4.8	encourage physical development with a better balance of jobs, housing, services and facilities within each part of the Region in order to meet local needs locally and encourage stable and sustainable communities?		∅		
	focus retail and office development in town centres?	?	?	?	There is an option to change policy on the control of uses on RIS, which will be clarified in the preferred option, but which could allow office development on RIS. The options paper highlights the need to ensure that this does not conflict with the objective of focusing office development in town centres, although the possible policy approach and potential effects are currently unclear. <i>Direct, permanent</i>
	link housing development and employment opportunities?		∅		
	reverse the pattern of people migrating from metropolitan areas to rural parts of the Region?		∅		
4.9	ensure that the Region's workforce is equipped with the skills to access high quality employment opportunities suited to the changing needs of the Regional economy, whilst recognising the		∅		

RSDF	Appraisal Questions Will the proposal...	Effects			Commentary
		Short	Med	Long	
	value and contribution of unpaid work?				
	reduce inequalities in employment rates across the Region?	+	+	+	Provision of sites to support Regeneration Zone activity will help to address regional inequalities in employment rates. <i>Direct, permanent</i>
	provide employment land near to the potential workforce?		∅		
4.10	promote investment in future prosperity, including ongoing investment and engagement in learning and skills development?	+	+	+	Identification of RISs/MISs will support investment in future prosperity. <i>Direct, permanent</i>
	ensure an appropriate supply of employment sites within the region to support sustainable economic development?	+	+	+	The options paper identifies that there is a need for additional supply of employment sites in several areas to fill gaps in existing provision. <i>Direct, permanent</i>
	Encourage investment to develop deprived areas and focusing resources in areas of greatest need	+	+	+	Provision of sites to support Regeneration Zone activity will help to encourage investment in areas of need. <i>Direct, permanent</i>
	ensure that education and skills infrastructure meets projected future demand and need?		∅		
	reduce inequalities in education and skills across the Region?		∅		
	<p>Summary</p> <p>Provision of RISs is likely to create significant employment opportunities and contribute to the diversification of the regional economy, although the potential number of sites and employment numbers which may be created are not known. New commercial/industrial development may promote increased greenhouse gas emissions from the sector, although this may be offset by reductions due to declines in other commercial or industrial activity.</p> <p>However, provision of sites could also result in loss of greenfield land to development which may have a value as open space, or adversely affect the landscape or townscape or biodiversity, although policy PA6 envisages maximum use of recycled land and allows development on greenfield sites only as a last resort.</p> <p>Provision of sites to support the Central Technology Belt and the High-Technology Corridor will help to support the growth of innovative businesses based on new technologies, including businesses in environmental technologies and sectors focusing on higher added value.</p> <p>The focus on Regeneration Zones for provision of new investment sites will help to address regional inequalities in employment rates and economic growth.</p> <p>The options paper highlights the need to ensure that the types of permitted development does not conflict with the objective of focusing office development in town centres, although the possible policy approach and potential effects are currently unclear.</p>				
	<p>Mitigation</p> <p>Greater emphasis on resource efficiency and the need for reduction of greenhouse gas emissions from industry and commerce.</p> <p>Clarify the policy options for control of uses on RISs.</p>				

RSDF	Appraisal Questions	Effects			Commentary
		Short	Med	Long	
1.1	use natural resources such as water and minerals efficiently, including by incorporating efficiency measures into new land use and developments?		Ø		
	promote the balance of water supply and demand?		Ø		
	reduce the use of primary aggregates?		Ø		
1.2	promote and support the development of high value and low impact new technologies, especially resource-efficient technologies and environmental technology initiatives?		Ø		
	promote the development of technologies to address climate change, eg new energy generators using renewable sources, more efficient industrial technology and processes to minimise or mitigate for the impacts of climate change?		Ø		
	secure improvements to communication infrastructure?		Ø		
1.3	promote and ensure high standards of sustainable resource-efficient design, construction and maintenance of buildings, where possible exceeding the requirements of the Building Regulations?		Ø		
	ensure the adoption of sustainable design and construction practices in all buildings?		Ø		
1.4	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?		Ø		
	promote more sustainable transport patterns in areas suffering from congestion?		Ø		
	promote a shift of freight from road to rail?	+	+	?	The approach to RLSs which offers a genuine modal choice is likely to help promote more rail freight, although an increase in warehousing and logistics activity overall may nevertheless increase the amount of road freight, and the scale of any shift from road to rail is unknown, particularly in the long term. <i>Direct, temporary</i>
	improve the quality of transport infrastructure?	0	?	?	Criteria for identifying sites emphasise the importance of good rail connections. This may promote the future improvement of rail infrastructure although this is not certain. <i>Indirect, permanent</i>
	make best use of existing airport capacity?	?	?	?	There may also be implications for air freight although this is not addressed in the options paper. <i>Indirect, permanence unknown</i>
1.5	ensure development is primarily focused in the major urban areas, makes efficient use of existing physical infrastructure and helps reduce need to travel, especially by private car?	+/-	+/-	+/-	Access to the rail network is identified as an important criterion in choice of location, thus promoting good use of existing infrastructure. However, growth in logistics operations is likely to

RSDF	Appraisal Questions Will the proposal...	Effects			Commentary
		Short	Med	Long	
					promote an increase in transport rather than a reduction. <i>Direct, permanent</i>
	focus development in the major urban areas?		∅		
	reduce the number and length of journeys made by car?		∅		
	reduce the need to travel?		∅		
	promote alternative, more sustainable, modes of transport to the car (including walking and cycling) through location of housing, employment sites, services and facilities, and appropriate infrastructure for sustainable modes of transport?		∅		
1.6	encourage and enable waste minimisation, reuse, recycling and recovery to divert resources away from the waste stream?		∅		
	reduce waste arisings?		∅		
	ensure that sustainable waste management can be carried out in the Region?		∅		
	enable communities to take responsibility for their own waste and meet their own needs (self-sufficiency)?		∅		
1.7	encourage local sourcing of food, goods and materials?	-	-	-	Increasing large-scale distribution is likely to encourage more long-distance transport of goods. Policies PA15 and RR2 promote local sourcing, although this is within the particular contexts of promoting agricultural diversification and the development in the Rural Regeneration Zone. <i>Indirect, permanent</i>
1.8	reward efficient resource use and encourage development of alternative and renewable resources in order to reduce dependence on fossil fuels?		∅		
	See questions under Objectives 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 1.7, 1.9, 2.1, 2.2, 2.3, 3.4 and 4.5				
1.9	encourage corporate social and environmental responsibility, with regional organisations and agencies leading by example?		∅		
	encourage sustainable procurement?		∅		
1.10	encourage a culture of enterprise and innovation, including social enterprise?		∅		
1.11	achieve a strong, stable and sustainable economy and prosperity for the benefit of all the Region's inhabitants?	+	+	+	The options paper foresees an expansion of the logistics sector in the region which will contribute to economic growth, although the scale is not quantifiable <i>Direct, permanent</i>
	narrow the GVA gap between the best and worst performing parts of the Region?	+	+	?	The criteria for identifying suitable RLSs include a focus on areas of employment need which is therefore likely to help support economic growth in areas of low growth. <i>Direct, permanent</i>
	support efficient, competitive, diverse and innovative business, commercial, industrial, retail, tourism and leisure sectors?		∅		

RSDF	Appraisal Questions Will the proposal...	Effects			Commentary
		Short	Med	Long	
2.1	reduce overall energy use through increased energy efficiency?	∅			
	raise energy efficiency to current Building Regulations standards in refurbishments for Decent Homes Standard? (Also see question on EcoHomes standard under issue 5, Housing).	∅			
2.2	increase the proportion of energy generated from renewable and low carbon sources, including by microgeneration, CHP, district heating, and in transportation?	∅			
	promote energy generation from CHP and community heating?	∅			
2.3	minimise the Region's contribution to the causes of climate change by reducing emissions of greenhouse gases from transport, domestic, commercial and industrial sources?	-	-	?	Supporting a growth in warehousing and distribution activity is likely to promote an increase in greenhouse gas emissions from the sector. <i>Direct, permanent</i>
	reduce the Region's contribution to climate change?	-	-	?	See above
2.4	ensure that land use and development takes into account predicted changes in the Region's climate, including flood risk?	∅			
	promote sustainable urban drainage systems?	∅			
	promote the adoption of climate change adaptation and climate proofing principles in planning and design?	∅			
2.5	implement a managed response to the unavoidable impacts of climate change, ensuring that the design and planning process takes account of the predicted changes in the Region's climate?	∅			
	prevent all inappropriate development in areas of flood risk?	∅			
3.1	value, protect, enhance and restore the Region's environmental assets, including the natural, built and historic environment and landscape?	?	?	?	Options paper identifies that provision of new RLSs could result in loss of greenfield land to development which may have a value as open space or adversely affect the landscape or townscape. Although policy PA6 envisages maximum use of recycled land and allows development on greenfield sites only as a last resort, other considerations such as access to the transport network are likely to take precedence. <i>Indirect, permanent</i>
	value, enhance and protect the Region's natural environmental assets (eg Green Belt, parks and open spaces, AONBs etc)?	?	?	?	Options paper identifies that provision of new RLSs could result in loss of greenfield land to development which may have a value as open space. Although policy PA6 envisages maximum use of recycled land and allows development on greenfield sites only as a last resort, other considerations such as access to the transport network are likely to take precedence. <i>Indirect, permanent</i>
	value, enhance and protect the Region's historic environment assets (eg World Heritage Sites, archaeological remains, historic buildings, parks and gardens, and	∅			

RSDF	Appraisal Questions	Effects			Commentary
	Will the proposal...	Short	Med	Long	
	landscapes, and conservation areas, battlefields and other architectural and historically important features and areas, and their settings)?				
	promote heritage-led regeneration?		∅		
	promote the repair and reuse of historic buildings?		∅		
	enhance the amenity value of the countryside, meeting the recreational and leisure needs of communities?	?	?	?	Options paper identifies that provision of new RLSs could result in loss of greenfield land to development which may have amenity value. Although policy PA6 envisages maximum use of recycled land and allows development on greenfield sites only as a last resort, other considerations such as access to the transport network are likely to take precedence. <i>Indirect, permanent</i>
	protect, enhance and manage the character and appearance of the region's landscapes and townscapes, maintaining and strengthening local distinctiveness and sense of place?	?	?	?	Options paper identifies that provision of new RLSs could result in loss of greenfield land to development which may adversely affect the landscape or townscape. Although policy PA6 envisages maximum use of recycled land and allows development on greenfield sites only as a last resort, other considerations such as access to the transport network are likely to take precedence. <i>Indirect, permanent</i>
3.2	value, maintain, restore and re-create regional biodiversity, where possible using approaches that improve the resilience of natural systems such as linking fragmented habitats?	?	?	?	Options paper identifies that provision of new RLSs could result in loss of greenfield land to development which may have adverse effects on biodiversity. Although policy PA6 envisages maximum use of recycled land and allows development on greenfield sites only as a last resort, other considerations such as access to the transport network are likely to take precedence. <i>Indirect, permanent</i>
	value, enhance and protect the Region's designated sites, including sites designated for geodiversity?		∅		
	value, enhance and protect the Region's priority habitats and species, and promote the delivery of regional biodiversity targets?		∅		
	support development that incorporates improvements to wildlife habitats?		∅		
3.3	minimise air, water, soil, light and noise pollution levels, and create good quality air, water and soils?		∅		
	promote more sustainable transport patterns in areas of low air quality?		∅		
	address air quality impacts arising from specific development activities?		∅		
	protect and enhance the quality of watercourses in the Region?		∅		
	reduce the quantity of contaminated land in the Region?		∅		
	prevent noise and light pollution?		∅		
3.4	encourage land use and development that optimises the use of previously developed land and buildings?	?	?	?	The options paper envisages the potential need for greenfield land to accommodate new RLSs. Although policy PA6 envisages

RSDF	Appraisal Questions	Effects			Commentary
	Will the proposal...	Short	Med	Long	
					maximum use of recycled land and allows development on greenfield sites only as a last resort, other considerations such as access to the transport network are likely to take precedence. Scale of likely impacts is dependent on circumstances at specific sites. <i>Direct, permanent</i>
3.5	encourage land use and development that creates and sustains well-designed, high quality built environments that incorporate green space, encourage biodiversity, and promote local distinctiveness and sense of place?		∅		
	require good urban design to create attractive, high quality environments where people will choose to live, work and invest?		∅		
	increase access to good quality green space (eg increase the number of people in towns and cities with accessible greenspace within 300m of their homes)?	?	?	?	Development of greenfield land as envisaged in the options paper may lead to a reduction in access to green space. Although policy PA6 envisages maximum use of recycled land and allows development on greenfield sites only as a last resort, other considerations such as access to the transport network are likely to take precedence. <i>Indirect, permanent</i>
	protect existing and encourage the development of new biodiversity assets in developments?		∅		
3.6	encourage local stewardship of local environments, for example by promoting best practice in agricultural management or enabling communities to improve their neighbourhoods?		∅		
3.7	promote environmental justice, recognising that deprived areas and disadvantaged communities and more likely to be affected by environmental damage and degradation?		∅		
	specifically improve environmental quality in deprived communities?		∅		
4.1	enable communities to influence the decisions that affect their neighbourhoods and quality of life?		∅		
	promote the use of community-based planning tools?		∅		
4.2	ensure easy and equitable access to services, facilities and opportunities, including jobs and learning, regardless of culture, ethnicity, faith, gender, sexuality, age, disability or location?		∅		
	ensure that existing services and opportunities are retained and, where possible, developed?		∅		
	promote compact, mixed-use developments with good accessibility to local facilities and services that reduce the need to travel?		∅		
4.3	address poverty and disadvantage, taking into account the particular difficulties of those facing multiple disadvantage?		∅		

RSDF	Appraisal Questions	Effects			Commentary
	Will the proposal...	Short	Med	Long	
	ensure the provision of employment land in, or accessible to, the most deprived communities in the Region?		Ø		
4.4	improve health and reduce health inequalities by encouraging and enabling healthy active lifestyles and protecting health, as well as providing equitable access to health services?		Ø		
	diminish inequalities in mortality, health and wellbeing across the Region?		Ø		
	ensure that infrastructure for healthcare is provided to meet projected future demand and need?		Ø		
	promote healthy lifestyles and opportunities for exercise (eg through environmental infrastructure and design)?		Ø		
	promote opportunities to participate in sport?		Ø		
4.5	provide decent and affordable housing for all, of the right quantity, type, tenure and affordability for local needs, in clean, safe and pleasant local environments?		Ø		
	deliver genuine 'pathways of housing choice'?		Ø		
	increase the supply of affordable housing?		Ø		
	reduce the percentage of unfit/non-decent homes?		Ø		
	encourage housing development which makes more efficient use of land (between 30 and 50 dwellings per hectare net); and seek greater intensity of development at places with good public transport accessibility (such as city, town, district and local centres or around major nodes along good quality public transport corridors)?		Ø		
	promote the renovation and reuse of existing building stock, rather than the construction of new houses, where appropriate?		Ø		
	ensure the adoption of sustainable design and construction practices in housing?		Ø		
4.6	reduce crime, fear of crime and antisocial behaviour?		Ø		
	promote the reduction of crime rates?		Ø		
	encourage the adoption of principles to 'design out' crime in housing and employment sites?		Ø		
4.7	improve opportunities to participate in the diverse cultural, sport and recreational opportunities the West Midlands can offer locally and in the wider region?		Ø		
	ensure that facilities and locations for cultural activities are protected and provided?		Ø		
	protect and create high quality or valued recreational spaces and avoid erosion of recreational function?		Ø		
4.8	encourage physical development with a better balance of jobs, housing, services and facilities within each part of the Region in order to meet local needs locally and encourage stable and sustainable communities?		Ø		
	focus retail and office development in town centres?		Ø		
	link housing development and employment opportunities?		Ø		

RSDF	Appraisal Questions	Effects			Commentary
	Will the proposal...	Short	Med	Long	
	reverse the pattern of people migrating from metropolitan areas to rural parts of the Region?	∅			
4.9	ensure that the Region's workforce is equipped with the skills to access high quality employment opportunities suited to the changing needs of the Regional economy, whilst recognising the value and contribution of unpaid work?	+	+	?	Criteria for identifying suitable RLS sites emphasise the importance of both qualifications and the ability to improve qualification levels. This indirectly gives support to the objective of skills improvement, although the likely long-term effects on skills development are unclear. <i>Indirect, permanent</i>
	reduce inequalities in employment rates across the Region?	+	+	?	The criteria for identifying suitable RLSs include a focus on areas of employment need which is likely to help address regional inequalities in employment rates. <i>Direct, permanent</i>
	provide employment land near to the potential workforce?	+	+	+	Criteria for identifying suitable RLSs include locating development where there is a potential workforce. <i>Direct, permanent</i>
4.10	promote investment in future prosperity, including ongoing investment and engagement in learning and skills development?	+	+	?	The options paper foresees an expansion of the logistics sector in the region which will promote investment in future prosperity. The criteria for identifying suitable RLSs emphasise the importance of both qualifications and the ability to improve qualification levels. This is likely to promote engagement in skills development. <i>Direct/indirect, permanent</i>
	ensure an appropriate supply of employment sites within the region to support sustainable economic development?	+	+	+	The options paper foresees an expansion of the logistics sector in the region which will help to ensure a supply of employment sites. <i>Direct, permanent</i>
	Encourage investment to develop deprived areas and focusing resources in areas of greatest need	+	+	?	The criteria for identifying suitable RLSs include a focus on areas of employment need which is therefore likely to encourage investment in deprived areas and focus resources in areas of need. <i>Direct, permanent</i>
	ensure that education and skills infrastructure meets projected future demand and need?	+	+	?	The criteria for identifying suitable RLSs emphasise the importance of both qualifications and the ability to improve qualification levels. This may help to encourage the provision of infrastructure to meet future demand for skills development. <i>Indirect, permanent</i>
	reduce inequalities in education and skills across the Region?	∅			
Summary The expansion of the logistics sector in the region will contribute to economic growth, although the scale is not quantifiable. The criteria for identifying suitable RLSs include a focus on areas of employment need which is therefore likely to help support economic growth in areas of low growth and address regional disparities in employment levels. It will also promote the location of sites near to the potential workforce. Criteria also emphasise the importance of both qualifications and the ability to improve qualification levels, which indirectly gives support to the objective of skills improvement.					

RSDF	Appraisal Questions	Effects			Commentary
	Will the proposal...	Short	Med	Long	
	<p>The approach to RLSs which offers a genuine modal choice is likely to help promote more rail freight, although an increase in warehousing and logistics activity overall may nevertheless increase the amount of road freight, and will increase the amount of freight transport overall, thereby promoting an increase in greenhouse gas emissions from the transport sector. The scale of any shift from road to rail is unknown, particularly in the long term. There may also be implications for air freight although this is not addressed in the options paper. The expansion of long-distance transport of goods may undermine efforts to promote local sourcing of food and other goods.</p> <p>The options paper envisages the potential need for greenfield land to accommodate new RLSs. Although RSS policy allows development on greenfield sites only as a last resort, other considerations such as access to the transport network are likely to take precedence. The nature and scale of likely impacts is dependent on circumstances at specific sites.</p>				
	<p>Mitigation</p> <p>Include policy to compensate for loss of significant value from greenfield development.</p> <p>Include an assessment of the potential implications for air freight.</p> <p>Include policy to promote reduction of greenhouse gas emissions from freight transport, and to more actively promote a shift of freight to rail.</p> <p>Include policy to promote local sourcing of food and other goods across the region.</p>				

RSDF	Appraisal Questions	Effects			Commentary
		Short	Med	Long	
1.1	Will the proposal... use natural resources such as water and minerals efficiently, including by incorporating efficiency measures into new land use and developments?		∅		
	promote the balance of water supply and demand?		∅		
	reduce the use of primary aggregates?		∅		
1.2	promote and support the development of high value and low impact new technologies, especially resource-efficient technologies and environmental technology initiatives?		∅		
	promote the development of technologies to address climate change, eg new energy generators using renewable sources, more efficient industrial technology and processes to minimise or mitigate for the impacts of climate change?		∅		
	secure improvements to communication infrastructure?		∅		
1.3	promote and ensure high standards of sustainable resource-efficient design, construction and maintenance of buildings, where possible exceeding the requirements of the Building Regulations?		∅		
	ensure the adoption of sustainable design and construction practices in all buildings?		∅		
1.4	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?	+	++	++	Concentrating development in existing strategic centres will indirectly help to promote the use of public transport to access developments. <i>Indirect, permanent</i>
	promote more sustainable transport patterns in areas suffering from congestion?	-	--	--	As above. However, some of the strategic centres host current congestion black spots, including Birmingham, Solihull, Walsall, Coventry and Sandwell ³ . It is possible that development of these centres will increase congestion without active measures to prioritise the use of public transport in accessing developments. <i>Indirect, permanent</i>
	promote a shift of freight from road to rail?		∅		
	improve the quality of transport infrastructure?		∅		
	make best use of existing airport capacity?		∅		
1.5	ensure development is primarily focused in the major urban areas, makes efficient use of existing physical infrastructure and helps reduce need to travel, especially by private car?	+/?	++/?	++/?	Concentrating development in existing centres may help to promote the use of public transport to access developments and may prevent any increase in travelling which may occur through development outside

³ West Midlands Congestion Management Study, September 2006, West Midlands Metropolitan Authorities and PTA

RSDF	Appraisal Questions	Effects			Commentary
	Will the proposal...	Short	Med	Long	
					strategic centres. However, focusing development in centres where people currently travel away to other more distant centres is only provided as a potential option. Therefore this travel behaviour may continue to be encouraged if this option is not preferred and therefore travel may be increased. <i>Direct, permanent</i>
	focus development in the major urban areas?	?	?	?	All of the MUAs are included within the list of strategic centres although development is also envisaged in strategic centres outside the MUAs. Scales and the balance of development are as yet unclear and dependent on options and the focus these place on different types of strategic centre and levels of development in each. Different mixes of MUAs and non-MUAs are provided in each option. <i>Direct, permanent</i>
	reduce the number and length of journeys made by car?	?	?	?	Focusing development in centres where people currently travel away to other more distant centres is only provided as a potential option. Therefore this travel behaviour, a substantial proportion of which will be by car, may continue to be encouraged if this option is not preferred and therefore travel may be increased. <i>Direct, permanent</i>
	reduce the need to travel?	+/?	++/?	++/?	Concentrating development in existing centres will help to reduce the need to travel. However, focusing development in centres where people currently travel away to other more distant centres is only provided as a potential option. Therefore this travel behaviour may continue to be encouraged if this option is not preferred and therefore travel may be increased. <i>Direct, permanent</i>
	promote alternative, more sustainable, modes of transport to the car (including walking and cycling) through location of housing, employment sites, services and facilities, and appropriate infrastructure for sustainable modes of transport?	+/?	++/?	++/?	Concentrating development in existing centres will help to reduce the need to travel and will help to promote the use of public transport to access developments. However, focusing development in centres where people currently travel away to other more distant centres is only provided as a potential option. Therefore this travel behaviour may continue to be encouraged if this option is not preferred and therefore travel may be increased. <i>Direct, permanent</i>
1.6	encourage and enable waste minimisation, reuse, recycling and recovery to divert resources away from the waste stream?		∅		
	reduce waste arisings?		∅		
	ensure that sustainable waste management can be carried out in the Region?		∅		
	enable communities to take responsibility for their own waste and meet their		∅		

RSDF	Appraisal Questions Will the proposal...	Effects			Commentary
		Short	Med	Long	
	own needs (self-sufficiency)?				
1.7	encourage local sourcing of food, goods and materials?		∅		
1.8	reward efficient resource use and encourage development of alternative and renewable resources in order to reduce dependence on fossil fuels?	?	?	0	There is potential for promoting the reuse of buildings although the proposals appear to focus on provision of new space. However, policy QE2 encourages local authorities and others to promote the reuse of buildings in development plans and other strategies.
	See questions under Objectives 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 1.7, 1.9, 2.1, 2.2, 2.3, 3.4 and 4.5				
1.9	encourage corporate social and environmental responsibility, with regional organisations and agencies leading by example?		∅		
	encourage sustainable procurement?		∅		
1.10	encourage a culture of enterprise and innovation, including social enterprise?		∅		
1.11	achieve a strong, stable and sustainable economy and prosperity for the benefit of all the Region's inhabitants?	+/0	++/0	++/0	Development of centres will help to promote economic growth although this will be focused in the urban areas and other areas are unlikely to benefit. <i>Direct, permanent</i>
	narrow the GVA gap between the best and worst performing parts of the Region?	?	?	?	One option is to focus development on strategic centres in need of regeneration, although another option is to focus on areas exhibiting strength. Therefore the compatibility with growth objectives is uncertain. <i>Direct, permanent</i>
	support efficient, competitive, diverse and innovative business, commercial, industrial, retail, tourism and leisure sectors?		∅		
2.1	reduce overall energy use through increased energy efficiency?		∅		
	raise energy efficiency to current Building Regulations standards in refurbishments for Decent Homes Standard? (Also see question on EcoHomes standard under issue 5, Housing).		∅		
2.2	increase the proportion of energy generated from renewable and low carbon sources, including by microgeneration, CHP, district heating, and in transportation?		∅		
	promote energy generation from CHP and community heating?		∅		

RSDF	Appraisal Questions	Effects			Commentary
	Will the proposal...	Short	Med	Long	
2.3	minimise the Region's contribution to the causes of climate change by reducing emissions of greenhouse gases from transport, domestic, commercial and industrial sources?	?	?	?	Concentrating development in existing centres may help to promote the use of public transport to access developments and may prevent any increase in travelling which may occur through development outside strategic centres. However, focusing development in centres where people currently travel away to other more distant centres is only provided as a potential option. Therefore this travel behaviour may continue to be encouraged if this option is not preferred and therefore travel may be increased. The proposals will therefore have implications for transport patterns depending on the options which are chosen, which may also have consequences for the contribution of transport to climate change. Greenhouse gas emissions will also arise from construction and use of retail developments. <i>Indirect, permanent</i>
	reduce the Region's contribution to climate change?	?	?	?	As above
2.4	ensure that land use and development takes into account predicted changes in the Region's climate, including flood risk?		∅		
	promote sustainable urban drainage systems?		∅		
	promote the adoption of climate change adaptation and climate proofing principles in planning and design?		∅		
2.5	implement a managed response to the unavoidable impacts of climate change, ensuring that the design and planning process takes account of the predicted changes in the Region's climate?		∅		
	prevent all inappropriate development in areas of flood risk?		∅		
3.1	value, protect, enhance and restore the Region's environmental assets, including the natural, built and historic environment and landscape?	+	+	0	Focusing development in the strategic centres will help to protect natural assets and landscape. Impacts on the built and historic environment within strategic centres are possible, but dependent on specific locations. There is potential for the reuse of buildings, including historic buildings, although the proposals focus on provision of new space. However, policy QE2 encourages local authorities and others to promote the reuse of buildings in development plans and other strategies. <i>Indirect, permanent</i>
	value, enhance and protect the Region's natural environmental assets (eg Green Belt, parks and open spaces, AONBs etc)?	+	+	0	Focusing development in the strategic centres will help to protect natural assets and landscape. <i>Indirect, permanent</i>
	value, enhance and protect the Region's historic environment assets (eg World Heritage Sites, archaeological remains, historic buildings, parks and gardens, and landscapes, and conservation areas, battlefields and other architectural and historically important features and areas, and their settings)?		∅		Impacts on the historic environment within strategic centres are possible, but dependent on specific locations.
	promote heritage-led regeneration?		∅		

RSDF	Appraisal Questions	Effects			Commentary
	Will the proposal...	Short	Med	Long	
	promote the repair and reuse of historic buildings?	0	0	0	There is potential for the reuse of buildings, including historic buildings, although the proposals focus on provision of new space. However, policy QE2 encourages local authorities and others to promote the reuse of buildings in development plans and other strategies. <i>Indirect, permanent</i>
	enhance the amenity value of the countryside, meeting the recreational and leisure needs of communities?			Ø	
	protect, enhance and manage the character and appearance of the region's landscapes and townscapes, maintaining and strengthening local distinctiveness and sense of place?	+	+	0/+	Focusing development in the strategic centres will help to protect natural landscapes. Impacts on the built environment within strategic centres are possible, but dependent on specific locations. Policy UR3 requires development strategies to promote local distinctiveness. <i>Indirect, permanent</i>
3.2	value, maintain, restore and re-create regional biodiversity, where possible using approaches that improve the resilience of natural systems such as linking fragmented habitats?	+	+	0	Focusing development in the strategic centres will help to protect the natural environment and thus will help to avoid increasing pressure on biodiversity. Impacts on biodiversity within strategic centres are less likely, but dependent on specific locations. <i>Indirect, permanent</i>
	value, enhance and protect the Region's designated sites, including sites designated for geodiversity?		Ø		
	value, enhance and protect the Region's priority habitats and species, and promote the delivery of regional biodiversity targets?		Ø		
	support development that incorporates improvements to wildlife habitats?		Ø		
3.3	minimise air, water, soil, light and noise pollution levels, and create good quality air, water and soils?		Ø		
	promote more sustainable transport patterns in areas of low air quality?	?	?	?	Developments in strategic centres should take account of potential air quality issues, particularly from the effects of development on transport levels. Currently there are AQMAs in Birmingham (covering the whole city), Coventry, Hereford, Rugby (whole urban area), Shrewsbury, Stoke on Trent, Walsall, Wolverhampton (whole city). Developments in these centres should have a particular focus on promoting sustainable transport and assessing the likely impacts of developments on air quality. <i>Indirect, permanent</i>
	address air quality impacts arising from specific development activities?	?	?	?	As above
	protect and enhance the quality of watercourses in the Region?		Ø		
	reduce the quantity of contaminated land in the Region?		Ø		
	prevent noise and light pollution?		Ø		
3.4	encourage land use and development that optimises the use of previously developed land and buildings?	+	+	?	Focusing development in strategic centres is likely to help optimise the use of previously developed land, as it is more likely that this will arise in the more urbanised areas. Furthermore, policy PA6 envisages maximum

RSDF	Appraisal Questions	Effects			Commentary
	Will the proposal...	Short	Med	Long	
					use of recycled land and allows development on greenfield sites only as a last resort. There is potential for the reuse of buildings, including historic buildings, although the proposals focus on provision of new space. However, policy QE2 encourages local authorities and others to promote the reuse of buildings in development plans and other strategies. <i>Indirect, permanent</i>
3.5	encourage land use and development that creates and sustains well-designed, high quality built environments that incorporate green space, encourage biodiversity, and promote local distinctiveness and sense of place?		∅		
	require good urban design to create attractive, high quality environments where people will choose to live, work and invest?		∅		
	increase access to good quality green space (eg increase the number of people in towns and cities with accessible greenspace within 300m of their homes)?	?	?	?	Developments may take place on urban green spaces, depending on the particular sites. Development control policy should include consideration of potential loss of accessible green space within urban areas in assessing locations for development. <i>Direct, permanent</i>
	protect existing and encourage the development of new biodiversity assets in developments?		∅		
3.6	encourage local stewardship of local environments, for example by promoting best practice in agricultural management or enabling communities to improve their neighbourhoods?		∅		
3.7	promote environmental justice, recognising that deprived areas and disadvantaged communities and more likely to be affected by environmental damage and degradation?		∅		
	specifically improve environmental quality in deprived communities?		∅		
4.1	enable communities to influence the decisions that affect their neighbourhoods and quality of life?		∅		
	promote the use of community-based planning tools?			∅	
4.2	ensure easy and equitable access to services, facilities and opportunities, including jobs and learning, regardless of culture, ethnicity, faith, gender, sexuality, age, disability or location?	?	?	?	One option recognises the importance of improving access to facilities and employment in strategic centres where people currently travel away to access retail facilities and related employment. <i>Direct, permanent</i>
	ensure that existing services and opportunities are retained and, where possible, developed?		∅		Investment appears to be focused on new sites rather than on renewal of existing facilities. However, policy UR3 emphasises the importance of developments in all centres including strategic centres providing facilities and services for their local communities.
	promote compact, mixed-use developments with good accessibility to local facilities and services that reduce the need to travel?		∅		

RSDF	Appraisal Questions Will the proposal...	Effects			Commentary
		Short	Med	Long	
4.3	address poverty and disadvantage, taking into account the particular difficulties of those facing multiple disadvantage?	∅			Deprivation was considered as an important issue in the Strategic Centres Study, and 9 of the 12 Local Regeneration Areas contain strategic centres. Furthermore, policy UR2 encourages local authorities and other agencies to develop regeneration strategies and to improve access between concentrations of local deprivation within the LRA towns and areas of economic opportunity. <i>Direct, permanent</i>
	ensure the provision of employment land in, or accessible to, the most deprived communities in the Region?	+	+	+	
4.4	improve health and reduce health inequalities by encouraging and enabling healthy active lifestyles and protecting health, as well as providing equitable access to health services?	∅			
	diminish inequalities in mortality, health and wellbeing across the Region?	∅			
	ensure that infrastructure for healthcare is provided to meet projected future demand and need?	∅			
	promote healthy lifestyles and opportunities for exercise (eg through environmental infrastructure and design)?	∅			
	promote opportunities to participate in sport?	∅			
4.5	provide decent and affordable housing for all, of the right quantity, type, tenure and affordability for local needs, in clean, safe and pleasant local environments?	∅			
	deliver genuine 'pathways of housing choice'?	∅			
	increase the supply of affordable housing?	∅			
	reduce the percentage of unfit/non-decent homes?	∅			
	encourage housing development which makes more efficient use of land (between 30 and 50 dwellings per hectare net); and seek greater intensity of development at places with good public transport accessibility (such as city, town, district and local centres or around major nodes along good quality public transport corridors)?	∅			
	promote the renovation and reuse of existing building stock, rather than the construction of new houses, where appropriate?	∅			
	ensure the adoption of sustainable design and construction practices in housing?	∅			
4.6	reduce crime, fear of crime and antisocial behaviour?	∅			
	promote the reduction of crime rates?	∅			
	encourage the adoption of principles to 'design out' crime in housing and employment sites?	∅			
4.7	improve opportunities to participate in the diverse cultural, sport and recreational opportunities the West Midlands can offer locally and in the wider region?	∅			

RSDF	Appraisal Questions	Effects			Commentary
	Will the proposal...	Short	Med	Long	
	ensure that facilities and locations for cultural activities are protected and provided?		∅		
	protect and create high quality or valued recreational spaces and avoid erosion of recreational function?		∅		
4.8	encourage physical development with a better balance of jobs, housing, services and facilities within each part of the Region in order to meet local needs locally and encourage stable and sustainable communities?	+	+	+	Development of strategic centres will be linked to housing projections, and regional foci are all included in the network of strategic centres. The options paper identifies that the scale of population growth will need to be reflected in the amount of retail and leisure provision. <i>Direct, permanent</i>
	focus retail and office development in town centres?	+	+	+	Retail development will be focused in the main urban areas of the region, and will follow the sequential approach to identifying suitable locations set out in PPS6. <i>Direct, permanent</i>
	link housing development and employment opportunities?	+	+	+	Investment needs will be linked to housing projections. <i>Direct, permanent</i>
	reverse the pattern of people migrating from metropolitan areas to rural parts of the Region?		∅		
4.9	ensure that the Region's workforce is equipped with the skills to access high quality employment opportunities suited to the changing needs of the Regional economy, whilst recognising the value and contribution of unpaid work?		∅		
	reduce inequalities in employment rates across the Region?	?	?	?	Economic activity rates and employment growth were considered in the Regional Centres Study. The strategic centres cover 9 of the 12 areas with the lowest employment rates, although the balance of envisaged retail space is about evenly split between those centres of above average employment rates and those of below average. It is therefore possible that the approach to strategic centres may have little effect on inequalities in employment rates across the region, although the option to focus on areas in need of regeneration would target those areas with the lowest unemployment rates. Warwick, not included as a strategic centre, has an employment rate just below the regional average. <i>Direct/indirect (depending on option), permanent</i>
	provide employment land near to the potential workforce?	+	+	+	Focusing development in strategic centres will provide employment near to the potential workforce. <i>Indirect, permanent</i>
4.10	promote investment in future prosperity, including ongoing investment and engagement in learning and skills development?	+	++	++	Investment in future prosperity will be promoted by new retail development. <i>Direct, permanent</i>
	ensure an appropriate supply of employment sites within the region to support	+	+	+	New retail development will help to ensure a supply of employment sites.

RSDF	Appraisal Questions	Effects			Commentary
	Will the proposal...	Short	Med	Long	
	sustainable economic development?				<i>Direct, permanent</i>
	Encourage investment to develop deprived areas and focusing resources in areas of greatest need	+	+	?	Deprivation was considered as part of the Regional Centres Study, and all areas suffering the worst deprivation are included in the list of strategic centres. One option is to focus investment in areas exhibiting signs of weakness whereas another is to take the opposite approach, although both include areas suffering multiple deprivation in their focus. <i>Direct, permanent</i>
	ensure that education and skills infrastructure meets projected future demand and need?		∅		
	reduce inequalities in education and skills across the Region?		∅		
	<p>Summary</p> <p>Development of centres will help to promote economic growth although this will be focused in the urban areas and other areas are unlikely to benefit. However, deprivation was considered as part of the Regional Centres Study, and all areas suffering the worst deprivation are included in the list of strategic centres. The link to employment rates is less clear, and varies according to the potential preferred option. The option to focus on areas in need of regeneration would target those areas with the lowest unemployment rates. Different mixes of MUAs and non-MUAs are provided in each option. Focusing development in strategic centres will help to optimise the use of previously developed land, to protect natural assets and landscapes in other areas and to avoid increasing pressure on biodiversity. Impacts on biodiversity within strategic centres are less likely, but dependent on specific locations. Developments will also be linked to housing projections, helping to ensure a balanced development and provision of employment near to the potential workforce. Concentrating development in existing strategic centres according to the sequential approach of PPS6 will indirectly help to promote the use of public transport to access developments and may prevent any increase in travelling which may occur through development outside strategic centres, although some of the centres host current congestion black spots and therefore will require active measures to prioritise the use of public transport in accessing developments, as will those in or near to AQMAs. However, focusing development in centres where people currently travel away to other more distant centres is only provided as a potential option. Therefore this travel behaviour may increase if this option is not preferred.</p> <p>Changing transport patterns will also affect the contribution of transport to climate change, and this could be positive or negative depending on the options and also on the overall amount of travel generated by developments. Greenhouse gas emissions will also arise from construction and use of retail developments.</p>				
	<p>Mitigation</p> <p>The paper should include employment need as an issue in focusing resources between strategic centres, with a preference for the option with a focus on areas of regeneration need. The paper should give a stronger emphasis to the potential transport impacts of development of strategic centres and underline the importance of minimising travel and promoting greater use of public transport in accessing developments.</p> <p>Accompanying policy should emphasise the opportunities to minimise and offset greenhouse gas emissions from construction and use of developments in strategic centres.</p>				

RSDF	Appraisal Questions	Effects			Commentary
		Short	Med	Long	
1.1	Will the proposal... use natural resources such as water and minerals efficiently, including by incorporating efficiency measures into new land use and developments?		∅		
	promote the balance of water supply and demand?		∅		
	reduce the use of primary aggregates?		∅		
1.2	promote and support the development of high value and low impact new technologies, especially resource-efficient technologies and environmental technology initiatives?		∅		
	promote the development of technologies to address climate change, eg new energy generators using renewable sources, more efficient industrial technology and processes to minimise or mitigate for the impacts of climate change?		∅		
	secure improvements to communication infrastructure?		∅		
1.3	promote and ensure high standards of sustainable resource-efficient design, construction and maintenance of buildings, where possible exceeding the requirements of the Building Regulations?		∅		
	ensure the adoption of sustainable design and construction practices in all buildings?		∅		
1.4	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?	+	++	++	The sequential approach of PPS6 will focus development in existing centres which will indirectly help to promote the use of public transport to access office developments. <i>Indirect, permanent</i>
	promote more sustainable transport patterns in areas suffering from congestion?	?	?	?	The impacts on congestion are unclear, as the locations of office developments are unknown but spread throughout the region. <i>Indirect, permanent</i>
	promote a shift of freight from road to rail?		∅		
	improve the quality of transport infrastructure?		∅		
	make best use of existing airport capacity?		∅		
1.5	ensure development is primarily focused in the major urban areas, makes efficient use of existing physical infrastructure and helps reduce need to travel, especially by private car?	+	++	++	The MUAs have about 60% of the regional allocation for office development. Concentrating development in centres through the sequential approach may help to promote the use of public transport to access office developments. <i>Direct, permanent</i>
	focus development in the major urban areas?	+	++	++	The MUAs have about 60% of the regional allocation for office development.

RSDF	Appraisal Questions	Effects			Commentary
	Will the proposal...	Short	Med	Long	
					<i>Direct, permanent</i>
	reduce the number and length of journeys made by car?	+	++	++	Concentrating development in centres through the sequential approach may help to promote the use of public transport to access office development and reduce both the number and length of car journeys. <i>Direct, permanent</i>
	reduce the need to travel?	+	++	++	Focusing office development in the MUAs may help to reduce the need to travel by providing employment in proximity to the main areas of population. <i>Direct, permanent</i>
	promote alternative, more sustainable, modes of transport to the car (including walking and cycling) through location of housing, employment sites, services and facilities, and appropriate infrastructure for sustainable modes of transport?	+	++	++	Concentrating office development in MUAs and in town centres will help to promote the use of public transport to access developments. <i>Direct, permanent</i>
1.6	encourage and enable waste minimisation, reuse, recycling and recovery to divert resources away from the waste stream?		∅		
	reduce waste arisings?		∅		
	ensure that sustainable waste management can be carried out in the Region?		∅		
	enable communities to take responsibility for their own waste and meet their own needs (self-sufficiency)?		∅		
1.7	encourage local sourcing of food, goods and materials?		∅		
1.8	reward efficient resource use and encourage development of alternative and renewable resources in order to reduce dependence on fossil fuels?	0	0	0	There is potential for promoting the reuse of buildings as office developments. This would help to reduce resource consumption and may also help to favour urban locations but would also support some suitable rural locations, although the proposals appear to focus on provision of new space. However, policy QE2 encourages local authorities and others to promote the reuse of buildings in development plans and other strategies.
	See questions under Objectives 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 1.7, 1.9, 2.1, 2.2, 2.3, 3.4 and 4.5				
1.9	encourage corporate social and environmental responsibility, with regional organisations and agencies leading by example?		∅		
	encourage sustainable procurement?		∅		
1.10	encourage a culture of enterprise and innovation, including social enterprise?		∅		
1.11	achieve a strong, stable and sustainable economy and prosperity for the benefit of all the Region's inhabitants?	+	++	++	Provision of new office space spread throughout the region will help to support economic growth and promote prosperity. Inclusion of the reuse of buildings would help to promote office provision in some suitable rural locations. <i>Direct, permanent</i>

RSDF	Appraisal Questions Will the proposal...	Effects			Commentary
		Short	Med	Long	
	narrow the GVA gap between the best and worst performing parts of the Region?	-	-	-	Coventry, Birmingham and Solihull are the best performing sub-region for GVA and Herefordshire, Staffordshire and Shropshire are the worst. Concentrating the majority of new office development in the MUAs is therefore unlikely to help significantly to reduce the GVA gap. <i>Direct, permanent</i>
	support efficient, competitive, diverse and innovative business, commercial, industrial, retail, tourism and leisure sectors?		∅		
2.1	reduce overall energy use through increased energy efficiency?		∅		
	raise energy efficiency to current Building Regulations standards in refurbishments for Decent Homes Standard? (Also see question on EcoHomes standard under issue 5, Housing).		∅		
2.2	increase the proportion of energy generated from renewable and low carbon sources, including by microgeneration, CHP, district heating, and in transportation?		∅		
	promote energy generation from CHP and community heating?		∅		
2.3	minimise the Region's contribution to the causes of climate change by reducing emissions of greenhouse gases from transport, domestic, commercial and industrial sources?	?	?	?	Concentrating development in centres through the sequential approach and in MUAs through floorspace allocation may help to promote the use of public transport to access office developments and therefore reduce the potential growth in greenhouse gas emissions from travel to work. However, greenhouse gas emissions will also arise from construction and occupation of offices. The overall balance of effects is unknown. <i>Indirect, permanent</i>
	reduce the Region's contribution to climate change?	?	?	?	As above
2.4	ensure that land use and development takes into account predicted changes in the Region's climate, including flood risk?		∅		
	promote sustainable urban drainage systems?		∅		
	promote the adoption of climate change adaptation and climate proofing principles in planning and design?		∅		
2.5	implement a managed response to the unavoidable impacts of climate change, ensuring that the design and planning process takes account of the predicted changes in the Region's climate?		∅		
	prevent all inappropriate development in areas of flood risk?		∅		

RSDF	Appraisal Questions	Effects			Commentary
	Will the proposal...	Short	Med	Long	
3.1	value, protect, enhance and restore the Region's environmental assets, including the natural, built and historic environment and landscape?	+	+	0	Focusing development in town centres through the sequential approach will help to protect natural assets and landscape. Impacts on the built and historic environment within town centres are possible, but dependent on specific locations. There is potential for the reuse of buildings, including historic buildings, although the proposals focus on provision of new space. However, policy QE2 encourages local authorities and others to promote the reuse of buildings in development plans and other strategies. <i>Indirect, permanent</i>
	value, enhance and protect the Region's natural environmental assets (eg Green Belt, parks and open spaces, AONBs etc)?	+	+	0	Focusing development in town centres will help to protect natural assets and landscape. <i>Indirect, permanent</i>
	value, enhance and protect the Region's historic environment assets (eg World Heritage Sites, archaeological remains, historic buildings, parks and gardens, and landscapes, and conservation areas, battlefields and other architectural and historically important features and areas, and their settings)?	Ø			Impacts on the historic environment within town centres are possible, but dependent on specific locations.
	promote heritage-led regeneration?	Ø			
	promote the repair and reuse of historic buildings?	0	0	0	There is potential for the reuse of buildings, including historic buildings, although the proposals focus on provision of new space. However, policy QE2 encourages local authorities and others to promote the reuse of buildings in development plans and other strategies. <i>Indirect, permanent</i>
	enhance the amenity value of the countryside, meeting the recreational and leisure needs of communities?	Ø			
	protect, enhance and manage the character and appearance of the region's landscapes and townscapes, maintaining and strengthening local distinctiveness and sense of place?	+	+	0/+	Focusing development town centres will help to protect natural landscapes. Impacts on the built environment within strategic centres are possible, but dependent on specific locations. Policy UR3 requires development strategies to promote local distinctiveness. <i>Indirect, permanent</i>
3.2	value, maintain, restore and re-create regional biodiversity, where possible using approaches that improve the resilience of natural systems such as linking fragmented habitats?	+	+	0	Focusing development in town centres will help to protect the natural environment and thus will help to avoid increasing pressure on biodiversity. Impacts on biodiversity within town centres are less likely, but dependent on specific locations. <i>Indirect, permanent</i>
	value, enhance and protect the Region's designated sites, including sites designated for geodiversity?	Ø			
	value, enhance and protect the Region's priority habitats and species, and promote the delivery of regional biodiversity targets?	Ø			
	support development that incorporates improvements to wildlife habitats?	Ø			
3.3	minimise air, water, soil, light and noise pollution levels, and create good	Ø			

RSDF	Appraisal Questions	Effects			Commentary
	Will the proposal...	Short	Med	Long	
	quality air, water and soils?				
	promote more sustainable transport patterns in areas of low air quality?	?	?	?	There are AQMAs in a number of places in the region, including in urban centres. Developments in these centres and in other areas of poor air quality should have a particular focus on promoting sustainable transport and assessing the likely impacts of developments on air quality. <i>Indirect, permanent</i>
	address air quality impacts arising from specific development activities?	?	?	?	As above
	protect and enhance the quality of watercourses in the Region?		∅		
	reduce the quantity of contaminated land in the Region?		∅		
	prevent noise and light pollution?		∅		
3.4	encourage land use and development that optimises the use of previously developed land and buildings?	+	+	?	Focusing development in town centres is likely to help optimise the use of previously developed land, as it is more likely that this will arise in the more urbanised areas. Furthermore, policy PA6 envisages maximum use of recycled land and allows development on greenfield sites only as a last resort. There is potential for the reuse of buildings, including historic buildings, although the proposals focus on provision of new space. However, policy QE2 encourages local authorities and others to promote the reuse of buildings in development plans and other strategies. <i>Indirect, permanent</i>
3.5	encourage land use and development that creates and sustains well-designed, high quality built environments that incorporate green space, encourage biodiversity, and promote local distinctiveness and sense of place?		∅		
	require good urban design to create attractive, high quality environments where people will choose to live, work and invest?		∅		
	increase access to good quality green space (eg increase the number of people in towns and cities with accessible greenspace within 300m of their homes)?	?	?	?	Developments may take place on urban green spaces, depending on the particular sites. Development control policy should include consideration of potential loss of accessible green space within urban areas in assessing locations for development. Developments in out-of-centre locations could potentially reduce access to green space, but again this is site-dependent. <i>Direct, permanent</i>
	protect existing and encourage the development of new biodiversity assets in developments?		∅		
3.6	encourage local stewardship of local environments, for example by promoting best practice in agricultural management or enabling communities to improve their neighbourhoods?		∅		
3.7	promote environmental justice, recognising that deprived areas and disadvantaged communities and more likely to be affected by		∅		

RSDF	Appraisal Questions Will the proposal...	Effects			Commentary
		Short	Med	Long	
	environmental damage and degradation?				
	specifically improve environmental quality in deprived communities?		Ø		
4.1	enable communities to influence the decisions that affect their neighbourhoods and quality of life?		Ø		
	promote the use of community-based planning tools?		Ø		
4.2	ensure easy and equitable access to services, facilities and opportunities, including jobs and learning, regardless of culture, ethnicity, faith, gender, sexuality, age, disability or location?	+	++	++	Allocating targets for new office space provision across the region will help to provide job opportunities regardless of location. In addition, focusing office development in town centres will help to provide employment in accessible locations. <i>Direct, permanent</i>
	ensure that existing services and opportunities are retained and, where possible, developed?		Ø		
	promote compact, mixed-use developments with good accessibility to local facilities and services that reduce the need to travel?		Ø		
4.3	address poverty and disadvantage, taking into account the particular difficulties of those facing multiple disadvantage?		Ø		
	ensure the provision of employment land in, or accessible to, the most deprived communities in the Region?	+	+	+	Deprivation was considered as an important issue in the Strategic Centres Study. Areas of employment deprivation identified in the SA Scoping Report are all covered by new office space allocation. <i>Direct, permanent</i>
4.4	improve health and reduce health inequalities by encouraging and enabling healthy active lifestyles and protecting health, as well as providing equitable access to health services?		Ø		
	diminish inequalities in mortality, health and wellbeing across the Region?		Ø		
	ensure that infrastructure for healthcare is provided to meet projected future demand and need?		Ø		
	promote healthy lifestyles and opportunities for exercise (eg through environmental infrastructure and design)?		Ø		
	promote opportunities to participate in sport?		Ø		
4.5	provide decent and affordable housing for all, of the right quantity, type, tenure and affordability for local needs, in clean, safe and pleasant local environments?		Ø		
	deliver genuine 'pathways of housing choice'?		Ø		
	increase the supply of affordable housing?		Ø		
	reduce the percentage of unfit/non-decent homes?		Ø		
	encourage housing development which makes more efficient use of land (between 30 and 50 dwellings per hectare net); and seek greater intensity of development at places with good public transport accessibility (such as city, town, district and local centres or around major nodes along good quality		Ø		

RSDF	Appraisal Questions Will the proposal...	Effects			Commentary
		Short	Med	Long	
	public transport corridors)?				
	promote the renovation and reuse of existing building stock, rather than the construction of new houses, where appropriate?		∅		
	ensure the adoption of sustainable design and construction practices in housing?		∅		
4.6	reduce crime, fear of crime and antisocial behaviour?		∅		
	promote the reduction of crime rates?		∅		
	encourage the adoption of principles to 'design out' crime in housing and employment sites?		∅		
4.7	improve opportunities to participate in the diverse cultural, sport and recreational opportunities the West Midlands can offer locally and in the wider region?		∅		
	ensure that facilities and locations for cultural activities are protected and provided?		∅		
	protect and create high quality or valued recreational spaces and avoid erosion of recreational function?		∅		
4.8	encourage physical development with a better balance of jobs, housing, services and facilities within each part of the Region in order to meet local needs locally and encourage stable and sustainable communities?	+	+	+	Allocation of new office development space broadly follows population distribution across the region, although on that basis the allocations for Newcastle under Lyme, South Staffordshire and Nuneaton and Bedworth appear relatively low. The options paper also recognises the importance of taking account of housing projections, although it is not clear what effect that might have on allocations. <i>Direct, permanent</i>
	focus retail and office development in town centres?	+/?	+/?	+/?	Office development will follow the sequential approach to identifying suitable locations set out in PPS6 with priority given to town centres. However, there is also provision for out-of-centre offices although it is not clear how the proposed options for approaches to out-of-centre provision may affect the balance of office provision in or out of town centres. <i>Direct, permanent</i>
	link housing development and employment opportunities?	?	?	?	The options paper recognises the importance of taking account of housing projections, although it is not clear what effect that might have on allocations. <i>Direct, permanent</i>
	reverse the pattern of people migrating from metropolitan areas to rural parts of the Region?		∅		
4.9	ensure that the Region's workforce is equipped with the skills to access high quality employment opportunities suited to the changing needs of the Regional economy, whilst recognising the value and contribution of unpaid work?		∅		

RSDF	Appraisal Questions	Effects			Commentary
	Will the proposal...	Short	Med	Long	
	reduce inequalities in employment rates across the Region?	0	0	0	Economic activity rates and employment growth were considered in the Regional Centres Study. However, the allocations of office space do not appear to bear a strong correlation to employment rates in local authority areas. The allocation of office space may have little effect on inequalities in employment rates across the region.
	provide employment land near to the potential workforce?	+	++	++	Focusing office development in the MUAs will provide employment land near to the largest areas of potential workforce. <i>Indirect, permanent</i>
4.10	promote investment in future prosperity, including ongoing investment and engagement in learning and skills development?	+	++	++	Investment in future prosperity will be promoted by new office space provision. <i>Direct, permanent</i>
	ensure an appropriate supply of employment sites within the region to support sustainable economic development?	+	+	+	Provision for new office development will help to ensure a supply of employment sites. <i>Direct, permanent</i>
	Encourage investment to develop deprived areas and focusing resources in areas of greatest need	+	+	?	The areas suffering the greatest multiple deprivation are primarily urban, particularly significant areas of Birmingham and Coventry which also top the list for office space provision, but also areas in Stoke-on-Trent, Wolverhampton, Sandwell and Walsall, which are also reasonably well-allocated for office space. Deprivation was also considered as part of the Regional Centres Study. <i>Direct, permanent</i>
	ensure that education and skills infrastructure meets projected future demand and need?		∅		
	reduce inequalities in education and skills across the Region?		∅		
<p>Summary</p> <p>Provision of new office space spread throughout the region will help to support widespread economic growth and promote prosperity. Although concentrating the majority of new office development in the MUAs is unlikely to help significantly to reduce regional disparities in GVA or employment, the worst areas of employment deprivation are all covered by new office space allocation. Focusing development in the MUAs and in town centres through the sequential approach will also help to provide employment in accessible locations. However, there is also likely to be provision for out-of-centre offices, although it is not clear how the proposed options for approaches to out-of-centre provision may affect the balance of office provision in or out of town centres.</p> <p>The allocation of new office development space broadly follows population distribution across the region, providing most new space near to the largest areas of potential workforce. The options paper also recognises the importance of taking account of housing projections, although it is not clear what effect that might have on allocations.</p> <p>Concentrating new office space in the MUAs and in town centres will help to promote the use of public transport to access office developments and reduce both the number and length of car journeys. Concentration in the MUAs will also help to reduce travel distances by providing employment in proximity to the main areas of population. This will help to reduce the potential growth in greenhouse gas emissions, although emissions will also arise from construction and occupation of offices and the overall balance of effects is unknown. There is potential for promoting the reuse of buildings as office developments, which would help to reduce resource consumption and may also help to favour urban locations and some sustainable rural locations, although the proposals appear to focus on provision of new space.</p> <p>Focusing development in town centres will help to optimise the use of previously developed land, as it is more likely that this will arise in the more urbanised areas. It will also protect natural assets and landscape and thus will help to avoid increasing pressure on biodiversity. Impacts on biodiversity within town centres are less likely, but dependent on specific locations. Impacts on the built and historic environment within urban centres are possible, but dependent on specific locations.</p>					

RSDF	Appraisal Questions	Effects			Commentary
	Will the proposal...	Short	Med	Long	
	<p>Mitigation</p> <p>The policy approach should give a clearer focus to employment need as a factor in allocating office space provision, particularly as the need to capture economic development opportunities is identified as a reason for allowing the provision of out-of-centre office space.</p> <p>The options paper would be improved by clarification of the expected impact of the different options for approaches to out-of-centre provision on the balance of provision in or out of town centres.</p> <p>The paper should give a stronger emphasis to the potential transport impacts of office development. Policy should underline the importance of minimising travel arising from new developments and promoting greater use of public transport in travelling to offices.</p> <p>Accompanying policy should emphasise the opportunities to minimise and offset greenhouse gas emissions from construction and use of offices.</p> <p>The options paper would be improved by a clearer explanation of how allocations will be affected by housing growth projections.</p> <p>Accompanying policy should promote the reuse of buildings for offices.</p>				

RSDF	Appraisal Questions	Effects			Commentary
		Short	Med	Long	
1.1	Will the proposal... use natural resources such as water and minerals efficiently, including by incorporating efficiency measures into new land use and developments?		∅		
	promote the balance of water supply and demand?		∅		
	reduce the use of primary aggregates?		∅		
1.2	promote and support the development of high value and low impact new technologies, especially resource-efficient technologies and environmental technology initiatives?		∅		
	promote the development of technologies to address climate change, eg new energy generators using renewable sources, more efficient industrial technology and processes to minimise or mitigate for the impacts of climate change?		∅		
	secure improvements to communication infrastructure?		∅		
1.3	promote and ensure high standards of sustainable resource-efficient design, construction and maintenance of buildings, where possible exceeding the requirements of the Building Regulations?		∅		
	ensure the adoption of sustainable design and construction practices in all buildings?		∅		
1.4	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?	?	?	?	Casinos are likely to generate large additional amounts of traffic movement. Depending on the criteria chosen for deciding on location, there may or may not be scope for promoting alternatives to the car. Development will need to consider the potential impact on road congestion and pollution and promoting the use of public transport to reach casinos. <i>Direct, both temporary and permanent effects</i>
	promote more sustainable transport patterns in areas suffering from congestion?	?	?	?	As above
	promote a shift of freight from road to rail?		∅		
	improve the quality of transport infrastructure?		∅		
	make best use of existing airport capacity?		∅		
1.5	ensure development is primarily focused in the major urban areas, makes efficient use of existing physical infrastructure and helps reduce need to travel, especially by private car?	+/?	+/?	+/?	The options paper states that any new regional casino will be located in the MUAs. Depending on the criteria chosen for deciding on location, casinos may or may not make efficient use of existing infrastructure, although PPG13 requires major generators of travel demand to be focused in urban centres and near to major public transport interchanges.

RSDF	Appraisal Questions	Effects			Commentary
	Will the proposal...	Short	Med	Long	
					Casinos are likely to generate large additional amounts of traffic movement and therefore will not reduce the need to travel. The options paper appears to offer a departure from PPG13. Potential criteria for location are unknown but could include existing physical infrastructure. <i>Both direct and indirect effects, permanent</i>
	focus development in the major urban areas?	+/?	+/?	+/?	The options paper states that any new regional casino will be located in the MUAs. The options paper suggests that both regional and large casinos could be required to promote urban renaissance, in which case both would be located within MUAs. However, the paper also appears to offer a departure from PPG13 requiring priority to be given to urban centres. Potential criteria for location are unknown but could include existing physical infrastructure. <i>Both direct and indirect effects, permanent</i>
	reduce the number and length of journeys made by car?	-	--	--	Casinos are likely to generate large additional amounts of traffic movement and it is likely that many of these will be car journeys. <i>Indirect, permanent</i>
	reduce the need to travel?	-	--	--	Casinos are likely to generate large additional amounts of traffic movement and therefore will not reduce the need to travel. <i>Indirect, permanent</i>
	promote alternative, more sustainable, modes of transport to the car (including walking and cycling) through location of housing, employment sites, services and facilities, and appropriate infrastructure for sustainable modes of transport?	?	?	?	PPG13 requires major generators of travel demand to be focused in urban centres and near to major public transport interchanges. However, the options paper appears to offer a departure from PPG13, by giving an option on locating casinos in urban centres in the first instance. Promotion of sustainable transport and alternatives to the car could be included as a criteria for the location of development or for planning applications. <i>Both direct and indirect effects, permanent</i>
1.6	encourage and enable waste minimisation, reuse, recycling and recovery to divert resources away from the waste stream?		∅		
	reduce waste arisings?		∅		
	ensure that sustainable waste management can be carried out in the Region?		∅		
	enable communities to take responsibility for their own waste and meet their own needs (self-sufficiency)?		∅		
1.7	encourage local sourcing of food, goods and materials?		∅		
1.8	reward efficient resource use and encourage development of alternative and renewable resources in order to reduce dependence on fossil fuels?		∅		
	See questions under Objectives 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 1.7, 1.9, 2.1, 2.2, 2.3, 3.4 and 4.5				
1.9	encourage corporate social and environmental responsibility, with		∅		

RSDF	Appraisal Questions	Effects			Commentary
		Short	Med	Long	
	Will the proposal... regional organisations and agencies leading by example?				
	encourage sustainable procurement?		∅		
1.10	encourage a culture of enterprise and innovation, including social enterprise?		∅		
1.11	achieve a strong, stable and sustainable economy and prosperity for the benefit of all the Region's inhabitants?	?	?	?	It is unclear what impact casinos might have on growth and sustainable economic development, and particularly what impact they may have on regional disparities in GVA. The economic case needs to be more clearly made. The Regional Centres Study is not persuaded of an overall economic gain, but rather of offsetting other spend or reducing savings. It is not clear to what extent developments might draw business away from existing casinos and leisure facilities rather than generate new business. <i>Effects could be direct or indirect, temporary or permanent</i>
	narrow the GVA gap between the best and worst performing parts of the Region?	?	?	?	Choice of location may affect regional GVA disparities, although it is not known how location may be decided and whether local GVA will be considered. <i>Direct or indirect, permanent</i>
	support efficient, competitive, diverse and innovative business, commercial, industrial, retail, tourism and leisure sectors?	+	+	+	Development of casinos should encourage competitiveness among businesses involved in leisure, hotel and conference provision but it is unclear to what extent might they draw business away from other facilities rather than generate new business. <i>Indirect, permanent</i>
2.1	reduce overall energy use through increased energy efficiency?		∅		
	raise energy efficiency to current Building Regulations standards in refurbishments for Decent Homes Standard? (Also see question on EcoHomes standard under issue 5, Housing).		∅		
2.2	increase the proportion of energy generated from renewable and low carbon sources, including by microgeneration, CHP, district heating, and in transportation?		∅		
	promote energy generation from CHP and community heating?		∅		
2.3	minimise the Region's contribution to the causes of climate change by reducing emissions of greenhouse gases from transport, domestic, commercial and industrial sources?	-	--	--	Casinos could generate large additional amounts of traffic movement, particularly regional casinos which are intended to be nationally significant, although large casinos may be on a regionally-significant scale and may therefore also generate significant amounts of traffic. This will increase the region's contribution to climate change. <i>Indirect, permanent</i>
	reduce the Region's contribution to climate change?	-	--	--	As above
2.4	ensure that land use and development takes into account predicted changes in the Region's climate, including flood risk?		∅		
	promote sustainable urban drainage systems?		∅		

RSDF	Appraisal Questions	Effects			Commentary
	Will the proposal...	Short	Med	Long	
	promote the adoption of climate change adaptation and climate proofing principles in planning and design?		∅		
2.5	implement a managed response to the unavoidable impacts of climate change, ensuring that the design and planning process takes account of the predicted changes in the Region's climate?		∅		
	prevent all inappropriate development in areas of flood risk?		∅		
3.1	value, protect, enhance and restore the Region's environmental assets, including the natural, built and historic environment and landscape?	?	?	?	Promoting town centre locations for large casinos will reduce the likelihood of greenfield development, although the issue of location is being considered in the options. Regional casinos may not be prioritised in town centre locations but may follow general government guidance on the location of development. Greenfield development is therefore possible for either type of casino, and may result in the loss of open space of value for recreation. This may also have consequences for landscape and sense of place. <i>Direct, permanent</i>
	value, enhance and protect the Region's natural environmental assets (eg Green Belt, parks and open spaces, AONBs etc)?	?	?	?	See above
	value, enhance and protect the Region's historic environment assets (eg World Heritage Sites, archaeological remains, historic buildings, parks and gardens, and landscapes, and conservation areas, battlefields and other architectural and historically important features and areas, and their settings)?		∅		
	promote heritage-led regeneration?		∅		
	promote the repair and reuse of historic buildings?		∅		
	enhance the amenity value of the countryside, meeting the recreational and leisure needs of communities?	?	?	?	See above
	protect, enhance and manage the character and appearance of the region's landscapes and townscape, maintaining and strengthening local distinctiveness and sense of place?	?	?	?	See above
3.2	value, maintain, restore and re-create regional biodiversity, where possible using approaches that improve the resilience of natural systems such as linking fragmented habitats?	?	?	?	The possibility of greenfield development may result in adverse impacts on biodiversity, although the nature and likelihood of impacts is dependent on specific locations. <i>Indirect, permanent</i>
	value, enhance and protect the Region's designated sites, including sites designated for geodiversity?		∅		
	value, enhance and protect the Region's priority habitats and species, and promote the delivery of regional biodiversity targets?		∅		
	support development that incorporates improvements to wildlife habitats?		∅		
3.3	minimise air, water, soil, light and noise pollution levels, and create good quality air, water and soils?	?	?	?	Casinos could generate large additional amounts of traffic movement, particularly regional casinos which are intended to be nationally

RSDF	Appraisal Questions	Effects			Commentary
	Will the proposal...	Short	Med	Long	
					significant, although large casinos may be on a regionally-significant scale and may therefore also generate significant amounts of traffic. This could have consequences for air quality. It may also be important to consider issues of noise and light pollution, particularly as casinos may generate most of their business at night. The likelihood and significance of impacts is dependent on location and therefore should be considered in development control decisions. Sustainable transport should be promoted by both locational choices and in development control. <i>Indirect, permanent</i>
	promote more sustainable transport patterns in areas of low air quality?	?	?	?	See above
	address air quality impacts arising from specific development activities?	?	?	?	See above
	protect and enhance the quality of watercourses in the Region?	Ø			
	reduce the quantity of contaminated land in the Region?	?	?	?	It is possible that casino development may provide an opportunity to remediate contaminated land although this is not addressed in the options paper. This could be considered as a locational criterion. <i>Indirect, permanent</i>
	prevent noise and light pollution?	?	?	?	Casinos could generate considerable noise and light pollution, particularly as casinos they may generate most of their business at night. Development control should take account of these issues. <i>Indirect, permanent</i>
3.4	encourage land use and development that optimises the use of previously developed land and buildings?	?	?	?	Promoting town centre locations for large casinos will reduce the likelihood of greenfield development, although the issue of location is being considered in the options. Regional casinos may not be prioritised in town centre locations but may follow general government guidance on the location of development. The approach to location could therefore have an effect on the potential to reuse previously developed land and greenfield land may be used for development. Optimising the use of previously developed land could be included as a locational criterion. <i>Direct, permanent</i>
3.5	encourage land use and development that creates and sustains well-designed, high quality built environments that incorporate green space, encourage biodiversity, and promote local distinctiveness and sense of place?	Ø			
	require good urban design to create attractive, high quality environments where people will choose to live, work and invest?	Ø			
	increase access to good quality green space (eg increase the number of people in towns and cities with accessible greenspace within 300m of their homes)?	?	?	?	Development could involve loss of accessible green space either in urban centres or in out-of-centre locations. Planning consent could require compensation for loss of accessible green space. <i>Indirect, permanent</i>

RSDF	Appraisal Questions Will the proposal...	Effects			Commentary
		Short	Med	Long	
	protect existing and encourage the development of new biodiversity assets in developments?		∅		
3.6	encourage local stewardship of local environments, for example by promoting best practice in agricultural management or enabling communities to improve their neighbourhoods?		∅		
3.7	promote environmental justice, recognising that deprived areas and disadvantaged communities and more likely to be affected by environmental damage and degradation?		∅		
	specifically improve environmental quality in deprived communities?		∅		
4.1	enable communities to influence the decisions that affect their neighbourhoods and quality of life?	+	+	?	Decisions on casino locations will be devolved to local authority level where the public will have additional opportunities to participate in debates. <i>Indirect, temporary</i>
	promote the use of community-based planning tools?		∅		
4.2	ensure easy and equitable access to services, facilities and opportunities, including jobs and learning, regardless of culture, ethnicity, faith, gender, sexuality, age, disability or location?		∅		
	ensure that existing services and opportunities are retained and, where possible, developed?		∅		
	promote compact, mixed-use developments with good accessibility to local facilities and services that reduce the need to travel?		∅		
4.3	address poverty and disadvantage, taking into account the particular difficulties of those facing multiple disadvantage?		∅		
	ensure the provision of employment land in, or accessible to, the most deprived communities in the Region?	?	?	?	Criteria for location could include proximity to areas of deprivation in order to increase employment opportunities. However, the Regional Centres Study recommends caution on locating casinos in low-income catchments because of the uncertainty over impacts. It is not known how location may be decided and whether local GVA will be considered, although the potential of casinos for assisting regeneration is identified in the options paper. <i>Direct/indirect, permanent</i>
4.4	improve health and reduce health inequalities by encouraging and enabling healthy active lifestyles and protecting health, as well as providing equitable access to health services?		∅		
	diminish inequalities in mortality, health and wellbeing across the Region?		∅		
	ensure that infrastructure for healthcare is provided to meet projected future demand and need?		∅		
	promote healthy lifestyles and opportunities for exercise (eg through environmental infrastructure and design)?		∅		

RSDF	Appraisal Questions Will the proposal...	Effects			Commentary
		Short	Med	Long	
	promote opportunities to participate in sport?		∅		
4.5	provide decent and affordable housing for all, of the right quantity, type, tenure and affordability for local needs, in clean, safe and pleasant local environments?		∅		
	deliver genuine 'pathways of housing choice'?		∅		
	increase the supply of affordable housing?		∅		
	reduce the percentage of unfit/non-decent homes?		∅		
	encourage housing development which makes more efficient use of land (between 30 and 50 dwellings per hectare net); and seek greater intensity of development at places with good public transport accessibility (such as city, town, district and local centres or around major nodes along good quality public transport corridors)?		∅		
	promote the renovation and reuse of existing building stock, rather than the construction of new houses, where appropriate?		∅		
	ensure the adoption of sustainable design and construction practices in housing?		∅		
4.6	reduce crime, fear of crime and antisocial behaviour?		∅		
	promote the reduction of crime rates?		∅		
	encourage the adoption of principles to 'design out' crime in housing and employment sites?		∅		
4.7	improve opportunities to participate in the diverse cultural, sport and recreational opportunities the West Midlands can offer locally and in the wider region?	+	+	+	Casinos will provide new leisure facilities, although the Regional Centres Study identifies that the region is already well-served by casinos therefore any improvement in opportunities to participate is likely to be small. <i>Direct, permanent</i>
	ensure that facilities and locations for cultural activities are protected and provided?		∅		
	protect and create high quality or valued recreational spaces and avoid erosion of recreational function?	?	?	?	Promoting town centre locations for large casinos will reduce the likelihood of greenfield development, although the issue of location is being considered in the options. Regional casinos may not be prioritised in town centre locations but may follow general government guidance on the location of development. Greenfield development may result in the loss of open space of value for recreation, but the significance of impact is dependent on location. Compensation could be required in planning permission for any loss of recreational function. <i>Direct, permanent</i>
4.8	encourage physical development with a better balance of jobs, housing, services and facilities within each part of the Region in order to meet local needs locally and encourage stable and sustainable communities?		∅		
	focus retail and office development in town centres?		∅		

RSDF	Appraisal Questions	Effects			Commentary
	Will the proposal...	Short	Med	Long	
	link housing development and employment opportunities?	∅			
	reverse the pattern of people migrating from metropolitan areas to rural parts of the Region?	∅			
4.9	ensure that the Region's workforce is equipped with the skills to access high quality employment opportunities suited to the changing needs of the Regional economy, whilst recognising the value and contribution of unpaid work?	∅			
	reduce inequalities in employment rates across the Region?	?	?	?	It is not apparent that inequalities in employment rates will be addressed by the location of casinos, although their potential for assisting regeneration is identified in the options paper. Areas of employment need could be included as a criterion for choosing casino location. <i>Indirect, permanent</i>
	provide employment land near to the potential workforce?	?	?	?	Promoting town centre locations for large casinos may support the creation of employment near to the potential workforce, although the issue of location is being considered in the options. Regional casinos may not be prioritised in town centre locations but may follow general government guidance on the location of development. Proximity to the potential workforce could be a criterion for choice of location although not currently addressed in the options paper. <i>Indirect, permanent</i>
4.10	promote investment in future prosperity, including ongoing investment and engagement in learning and skills development?	?	?	?	The options paper identifies the potential role of casinos in promoting major investment and economic regeneration. However, the Regional Centres Study questions the overall economic benefit of casinos, predicting diversion of consumer spend from other areas or from savings with little gain in expenditure for the region as a whole. <i>Direct, potential for both temporary and permanent effects.</i>
	ensure an appropriate supply of employment sites within the region to support sustainable economic development?	+	+	+	Development of casinos will provide new employment sites. <i>Direct, permanent</i>
	Encourage investment to develop deprived areas and focusing resources in areas of greatest need	?	?	?	Criteria for location could include proximity to areas of deprivation in order to focus resources in areas of need. However, the Regional Centres Study recommends caution on locating casinos in low-income catchments because of the uncertainty over impacts. It is not known how location may be decided and whether local GVA will be considered, although the potential of casinos for assisting regeneration is identified in the options paper. <i>Direct/indirect, permanent</i>
	ensure that education and skills infrastructure meets projected future demand and need?	∅			
	reduce inequalities in education and skills across the Region?	∅			

RSDF	Appraisal Questions	Effects			Commentary
	Will the proposal...	Short	Med	Long	
	<p>Summary</p> <p>Casinos are likely to generate large additional amounts of traffic movement and therefore will increase travel, potentially longer-distance travel. This will also increase greenhouse gas emissions from transport. Depending on the criteria chosen for deciding on location, there may or may not be scope for promoting alternatives to the car. PPG13 requires major generators of travel demand to be focused in urban centres and near to major public transport interchanges, although the options paper appears to offer a departure from PPG13 by suggesting urban centres may not be a stated priority for locating casinos. Conversely, a requirement to promote urban renaissance is also proposed as an option.</p> <p>It is unclear what impact casinos might have on growth and sustainable economic development. The options paper identifies the potential role of casinos in promoting major investment and economic regeneration, and they clearly provide new employment. However, the Regional Centres Study questions the overall economic benefit of casinos, predicting diversion of consumer spend from other areas or from savings with little gain in expenditure for the region as a whole. It is also not clear to what extent developments might draw business away from existing casinos and leisure facilities rather than generate new business. While regeneration potential is identified as a benefit of casinos, it is not clear whether local economic need will be included as a criterion for location, and if so, what impacts might be expected.</p> <p>Promoting town centre locations for large casinos will reduce the likelihood of greenfield development, although the issue of location is being considered in the options. Regional casinos may not be prioritised in town centre locations but may follow general government guidance on the location of development. Greenfield development is therefore possible for either type of casino, and may result in the loss of valued open space or impacts on landscape and biodiversity. Conversely, town centre locations may affect the townscape and local sense of place. However, the nature and likelihood of impacts is dependent on specific locations.</p>				
	<p>Mitigation</p> <p>Development will need to consider the potential impact on road congestion and pollution and promoting the use of public transport to reach casinos.</p> <p>Promotion of sustainable transport and alternatives to the car could be included as a criteria for the location of development or for planning applications. The generation of noise and light should also be considered in development control decisions.</p> <p>Optimising the use of previously developed land could be included as a locational criterion, as well as requiring compensation for features lost such as amenity value and accessible green space in planning consent.</p> <p>Areas of employment need and proximity to the potential workforce could be included as a criterion for choosing casino location. Choice of location could also include proximity to areas of deprivation to maximise the regeneration potential, although it is debatable whether it is desirable to locate casinos in areas of deprivation because of the uncertainty of impacts. The economic case needs to be more clearly made.</p>				

RSDF	Appraisal Questions	Effects			Commentary
	Will the proposal...	Short	Med	Long	
1.1	use natural resources such as water and minerals efficiently, including by incorporating efficiency measures into new land use and developments?	+	++	++	The options paper proposes that development projects and construction and demolition projects should be required to produce Site Waste Management Plans to set out arrangements for managing waste. This may help to encourage the recycling of C&D waste by projects. The paper also proposes requiring new developments to incorporate facilities for segregating waste, which will help to facilitate increased recycling and recovery of resources. The paper further suggests that waste developments could also be required to move waste up the hierarchy although no proposals are made for this. <i>Direct, permanent</i>
	promote the balance of water supply and demand?	Ø			
	reduce the use of primary aggregates?	+	++	++	Encouraging C&D waste recycling by promoting on-site recycling and urban quarries, and by requiring construction, demolition and development projects to produce SWMPs, will help to reduce the expected growth in primary aggregate use. <i>Indirect, temporary/permanent</i>
1.2	promote and support the development of high value and low impact new technologies, especially resource-efficient technologies and environmental technology initiatives?	+	++	++	Increasing the amount of waste to be diverted from landfill will require the development of new technologies to manage the waste, in turn contributing to greater reuse of resources by the region. It is unlikely however that these will be either high value or low impact. <i>Indirect, permanent</i>
	promote the development of technologies to address climate change, eg new energy generators using renewable sources, more efficient industrial technology and processes to minimise or mitigate for the impacts of climate change?	Ø			Recovery of value will be promoted for MSW and C&I waste, part of which will be energy recovery although only a proportion of this energy is likely to be renewable and will depend on the waste technologies used. <i>Direct, permanent</i>
	secure improvements to communication infrastructure?	Ø			
1.3	promote and ensure high standards of sustainable resource-efficient design, construction and maintenance of buildings, where possible exceeding the requirements of the Building Regulations?	Ø			
	ensure the adoption of sustainable design and construction practices in all buildings?	Ø			
1.4	increase use of public transport, cycling and walking as a proportion of total travel in order to reduce road traffic congestion, pollution and	Ø			

RSDF	Appraisal Questions	Effects			Commentary
	Will the proposal...	Short	Med	Long	
	accidents, and improve health through increased physical activity?				
	promote more sustainable transport patterns in areas suffering from congestion?		∅		
	promote a shift of freight from road to rail?	0	+	+	The paper proposes an option to require WPAs to include good rail (and water) connections as a criterion for site identification where possible. This may help to promote a shift of freight from road, although the possibilities are likely to be limited. <i>Direct, permanent</i>
	improve the quality of transport infrastructure?		∅		
	make best use of existing airport capacity?		∅		
1.5	ensure development is primarily focused in the major urban areas, makes efficient use of existing physical infrastructure and helps reduce need to travel, especially by private car?	?	?	?	Increased recycling is likely to lead to greater waste transport distances. Conversely, there is an option to require each Waste Planning Authority to ensure enough facilities to deal with the equivalent of waste arising within its own area and for good accessibility from the urban areas or major planned development. Both of these factors should help to promote the minimisation of waste transport distances wherever possible, but the balance of impacts on waste transport is unknown. Promotion of on-site and urban C&D waste recycling will also help to reduce transport distances for C&D waste and reduce need for transport of primary aggregates. Requiring hazardous waste facilities in the MUAs and agricultural waste facilities in the non-MUAs will encourage management of these wastes closer to where they are produced than might otherwise happen. Overall impacts on waste transport distances are not known. <i>Direct, permanent</i>
	focus development in the major urban areas?	+	++	++	The paper proposes an option to require each WPA to deal with the equivalent of waste arising in its own area, which would require a majority of waste management capacity to be within the MUAs. <i>Direct, permanent</i>
	reduce the number and length of journeys made by car?		∅		
	reduce the need to travel?	?	?	?	Increased recycling is likely to lead to greater waste transport distances. Conversely, there is an option to require each Waste Planning Authority to ensure enough facilities to deal with the equivalent of waste arising within its own area and for good accessibility from the urban areas or major planned development. Both of these factors should help to promote the minimisation of waste transport distances wherever possible, but the balance of impacts on waste transport is unknown. Promotion of on-site and urban C&D waste recycling will also help to reduce transport distances for C&D waste and reduce need for transport of primary aggregates. Requiring hazardous

RSDF	Appraisal Questions	Effects			Commentary
	Will the proposal...	Short	Med	Long	
					waste facilities in the MUAs and agricultural waste facilities in the non-MUAs will encourage management of these wastes closer to where they are produced than might otherwise happen. Overall impacts on waste transport distances are not known. <i>Direct, permanent</i>
	promote alternative, more sustainable, modes of transport to the car (including walking and cycling) through location of housing, employment sites, services and facilities, and appropriate infrastructure for sustainable modes of transport?	Ø			
1.6	encourage and enable waste minimisation, reuse, recycling and recovery to divert resources away from the waste stream?	0/+	0/++	0/++	The options paper does not address waste minimisation as an objective. It does propose promoting recycling of C&D waste, but not explicitly of MSW or C&I waste. Recovery of resources, including value, from C&I and MSW is promoted through setting target percentages/capacities for reduction of landfill of these waste streams, and by proposing an option to require all developments to include facilities for the segregation of waste. The paper also proposes an option to restrict the granting of permissions for new landfill, which will contribute to promoting the diversion of resources away from the waste stream. The options paper suggests the possibility of requiring waste facilities to move the management of waste up the waste hierarchy although this is not proposed as an option. <i>Direct, permanent</i>
	reduce waste arisings?	0	0	0	The options paper does not address waste minimisation as an objective.
	ensure that sustainable waste management can be carried out in the Region?	+/?	+/?	+/?	The options paper proposes approaches to waste management which generally accord with many of the objectives for sustainable waste management, including diversion from landfill, recovery of resources, communities taking more responsibility for their waste and meeting their own needs and managing waste near to its source. However, the paper does not promote waste minimisation, nor is recycling and reuse of MSW and C&I waste clearly promoted. The compatibility of the approach to green belt with sustainable waste management principles as set out in PPS10 is not clear. <i>Direct, permanent/temporary</i>
	enable communities to take responsibility for their own waste and meet their own needs (self-sufficiency)?	+/-	++/-	++/-	Self-sufficiency will be promoted by requiring each Waste Disposal Authority to provide sufficient facilities to deal with an equivalent of waste arising within its area. The options paper also proposes requiring MUAs to give priority to identifying hazardous waste management sites and non-MUAs to identify sites for management of agricultural waste. This will also support the concept of areas taking responsibility for their own waste and meeting their own needs. However, requiring non-

RSDF	Appraisal Questions	Effects			Commentary
	Will the proposal...	Short	Med	Long	
					MUAs to provide hazardous landfill capacity would not support this objective. <i>Direct, permanent</i>
1.7	encourage local sourcing of food, goods and materials?	0	0	0	There may be an opportunity for the RSS revision to promote public sector sustainable procurement to support local recycling and composting markets, although this is not addressed in the options paper.
1.8	reward efficient resource use and encourage development of alternative and renewable resources in order to reduce dependence on fossil fuels?	+	++	++	By promoting recycling of C&D waste the options paper supports more efficient use of resources, although there is no clear support for increasing recycling for MSW and C&I waste. However, recovery of value will be promoted for those waste streams, part of which will be energy recovery, thereby reducing dependence on fossil fuels. Only a proportion of this energy is likely to be renewable but this is dependent on the treatment technologies used. <i>Direct, permanent</i>
	See questions under Objectives 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 1.7, 1.9, 2.1, 2.2, 2.3, 3.4 and 4.5				
1.9	encourage corporate social and environmental responsibility, with regional organisations and agencies leading by example?	+/0	+/0	+/0	The options paper proposes requiring developers and those intending construction and demolition projects to produce Site Waste Management Plans, thereby promoting greater corporate environmental responsibility for those companies involved. There may be an opportunity for the RSS revision to promote public sector sustainable procurement to support local recycling and composting markets, although this is not addressed in the options paper. <i>Direct, temporary</i>
	encourage sustainable procurement?	0	0	0	There may be an opportunity for the RSS revision to promote public sector sustainable procurement to support local recycling and composting markets, although this is not addressed in the options paper.
1.10	encourage a culture of enterprise and innovation, including social enterprise?	+/0	++/0	++/0	By requiring the diversion of increasing amounts of waste from landfill, the RSS revision will promote more innovation in waste management methods and technologies. The options paper does not address the potential role of social enterprise in waste management. <i>Indirect, permanent</i>
1.11	achieve a strong, stable and sustainable economy and prosperity for the benefit of all the Region's inhabitants?	?	?	?	The waste sector is expected to grow in size and to develop more innovative technologies, thereby strengthening and diversifying the sector and increasing its contribution to the economy. However, reducing reliance on landfill is likely to mean that the costs of waste management will rise and will need to be paid for by householders. The

RSDF	Appraisal Questions	Effects			Commentary
	Will the proposal...	Short	Med	Long	
					overall balance on the economy and individual prosperity is unknown. <i>Direct/indirect, temporary/permanent</i>
	narrow the GVA gap between the best and worst performing parts of the Region?	∅			
	support efficient, competitive, diverse and innovative business, commercial, industrial, retail, tourism and leisure sectors?	+	++	++	By requiring the diversion of increasing amounts of waste from landfill, the RSS revision will promote more innovation in waste management methods and technologies. <i>Indirect, permanent</i>
2.1	reduce overall energy use through increased energy efficiency?	∅			The consumption of energy by waste management facilities depends largely on waste management methods which are not addressed by the revision.
	raise energy efficiency to current Building Regulations standards in refurbishments for Decent Homes Standard? (Also see question on EcoHomes standard under issue 5, Housing).	∅			
2.2	increase the proportion of energy generated from renewable and low carbon sources, including by microgeneration, CHP, district heating, and in transportation?	?	?	?	By requiring the diversion of increasing amounts of MSW and C&I waste from landfill, the RSS revision is likely to promote the increased use of waste for energy generation. However, the extent to which this is renewable depends on waste management methods which are not addressed by the revision. <i>Indirect, permanent</i>
	promote energy generation from CHP and community heating?	∅			
2.3	minimise the Region's contribution to the causes of climate change by reducing emissions of greenhouse gases from transport, domestic, commercial and industrial sources?	?	?	?	The options paper proposes that facilities should be in proximity to, or with good access from, the source of the waste. It further proposes allowing green belt development where this would fulfil the proximity principle. Both of these factors will help to minimise the transport of waste and the associated greenhouse gas emissions. Requiring net self-sufficiency will also help to minimise waste transport. However, it is likely that recycling levels overall will increase, thereby encouraging an increase in waste transport, although a corresponding reduction in landfill of biodegradable waste will help to reduce the potential future growth in methane emissions. The level of greenhouse gas emissions also depends on specific waste management methods which are not addressed by the revision. The overall balance of effects on greenhouse gas emissions is not known.
	reduce the Region's contribution to climate change?	?	?	?	As above
2.4	ensure that land use and development takes into account predicted changes in the Region's climate, including flood risk?	∅			
	promote sustainable urban drainage systems?	∅			
	promote the adoption of climate change adaptation and climate proofing	∅			

RSDF	Appraisal Questions	Effects			Commentary
		Short	Med	Long	
	principles in planning and design?				
2.5	implement a managed response to the unavoidable impacts of climate change, ensuring that the design and planning process takes account of the predicted changes in the Region's climate?		∅		
	prevent all inappropriate development in areas of flood risk?		∅		
3.1	value, protect, enhance and restore the Region's environmental assets, including the natural, built and historic environment and landscape?		∅		
	value, enhance and protect the Region's natural environmental assets (eg Green Belt, parks and open spaces, AONBs etc)?	-/+	-/++	-/++	The options paper proposes permitting waste development in the green belt. It also proposes permitting waste development on open land. However, promoting increased recycling of C&D waste through the various options proposed will help to reduce the growth in demand for primary aggregates which may contribute to reducing the pressure on natural assets from the effects of quarrying. <i>Direct/indirect, permanent/temporary</i>
	value, enhance and protect the Region's historic environment assets (eg World Heritage Sites, archaeological remains, historic buildings, parks and gardens, and landscapes, and conservation areas, battlefields and other architectural and historically important features and areas, and their settings)?		∅		
	promote heritage-led regeneration?		∅		
	promote the repair and reuse of historic buildings?		∅		
	enhance the amenity value of the countryside, meeting the recreational and leisure needs of communities?	?	?	?	May have adverse consequences for preserving the amenity of the countryside if open land and green belt are lost to waste development. The likelihood and significance of any impacts on amenity value is dependent on local circumstances however. <i>Direct, permanent</i>
	protect, enhance and manage the character and appearance of the region's landscapes and townscape, maintaining and strengthening local distinctiveness and sense of place?	?	?	?	Developments may have adverse effects on landscapes and townscape. The likelihood and significance of any impacts is dependent on local circumstances however, and the subject of development control. <i>Direct, permanent</i>
3.2	value, maintain, restore and re-create regional biodiversity, where possible using approaches that improve the resilience of natural systems such as linking fragmented habitats?		∅		
	value, enhance and protect the Region's designated sites, including sites designated for geodiversity?		∅		
	value, enhance and protect the Region's priority habitats and species, and promote the delivery of regional biodiversity targets?		∅		
	support development that incorporates improvements to wildlife habitats?		∅		
3.3	minimise air, water, soil, light and noise pollution levels, and create good	+/?	++/?	++/?	Reducing reliance on landfill may help to reduce soil and water pollution

RSDF	Appraisal Questions	Effects			Commentary
	Will the proposal...	Short	Med	Long	
	quality air, water and soils?				by reducing the risk of pollution incidents. The impact on air quality is partly dependent on waste management methods which are not addressed by the RSS revision. Air quality impacts are also dependent on the effect on levels of waste transport which are not known (see 1.5). <i>Indirect, permanent</i>
	promote more sustainable transport patterns in areas of low air quality?		Ø		
	address air quality impacts arising from specific development activities?		Ø		The relevance of air quality issues depends on waste management methods which are not dealt with by the revision.
	protect and enhance the quality of watercourses in the Region?	+	++	++	Reducing reliance on landfill may help to reduce water pollution by reducing the risk of pollution incidents. <i>Indirect, permanent</i>
	reduce the quantity of contaminated land in the Region?	?/+	?/+	?	By reducing reliance on landfill, the RSS revision may increase the need for hazardous waste disposal depending on the residual waste treatment methods employed, potentially increasing the amount of contaminated land in the region. However, the level of generation of hazardous waste is dependent on waste treatment methods which are not dealt with by the revision. The options paper also identifies the existence of contaminated land as a potential criterion for locating waste-related development, which may support its reclamation and reuse. <i>Indirect/direct, permanent</i>
	prevent noise and light pollution?		Ø		
3.4	encourage land use and development that optimises the use of previously developed land and buildings?	+/-	+/-	?	The options paper proposes some types of previously developed land as potential criteria for locating waste-related development, thereby encouraging its reuse. Conversely, the paper also proposes the use of open land, including that within the green belt, for waste facilities, which may undermine this objective. <i>Direct, permanent</i>
3.5	encourage land use and development that creates and sustains well-designed, high quality built environments that incorporate green space, encourage biodiversity, and promote local distinctiveness and sense of place?		Ø		
	require good urban design to create attractive, high quality environments where people will choose to live, work and invest?		Ø		
	increase access to good quality green space (eg increase the number of people in towns and cities with accessible greenspace within 300m of their homes)?	?	?	?	Developments on open land may have adverse effects on access to good quality green space. The likelihood and significance of any impacts is dependent on local circumstances however, and the subject of development control.

RSDF	Appraisal Questions Will the proposal...	Effects			Commentary
		Short	Med	Long	
	protect existing and encourage the development of new biodiversity assets in developments?		∅		<i>Direct, permanent</i>
3.6	encourage local stewardship of local environments, for example by promoting best practice in agricultural management or enabling communities to improve their neighbourhoods?	+	+	?	Decisions on location and technologies will be a matter for local authorities, encouraging local accountability for environmental stewardship. <i>Indirect, temporary</i>
3.7	promote environmental justice, recognising that deprived areas and disadvantaged communities and more likely to be affected by environmental damage and degradation?		∅		
	specifically improve environmental quality in deprived communities?		∅		
4.1	enable communities to influence the decisions that affect their neighbourhoods and quality of life?	+	+	?	Decisions on waste management methods will be taken at local authority level and therefore ensure that there will be further opportunities for communities to participate in those decisions. <i>Indirect, temporary</i>
	promote the use of community-based planning tools?		∅		
4.2	ensure easy and equitable access to services, facilities and opportunities, including jobs and learning, regardless of culture, ethnicity, faith, gender, sexuality, age, disability or location?	+	++	++	The options paper proposes requiring all new developments to incorporate facilities for the segregation of waste, which will increase the ability of people on the development to use recycling/separating facilities. <i>Direct, permanent</i>
	ensure that existing services and opportunities are retained and, where possible, developed?	+	+	?	The options paper proposes that existing waste management sites should be safeguarded in local plans. <i>Direct, temporary</i>
	promote compact, mixed-use developments with good accessibility to local facilities and services that reduce the need to travel?		∅		
4.3	address poverty and disadvantage, taking into account the particular difficulties of those facing multiple disadvantage?		∅		
	ensure the provision of employment land in, or accessible to, the most deprived communities in the Region?		∅		
4.4	improve health and reduce health inequalities by encouraging and enabling healthy active lifestyles and protecting health, as well as providing equitable access to health services?		∅		
	diminish inequalities in mortality, health and wellbeing across the Region?		∅		
	ensure that infrastructure for healthcare is provided to meet projected future demand and need?		∅		
	promote healthy lifestyles and opportunities for exercise (eg through environmental infrastructure and design)?		∅		
	promote opportunities to participate in sport?		∅		

RSDF	Appraisal Questions Will the proposal...	Effects			Commentary
		Short	Med	Long	
4.5	provide decent and affordable housing for all, of the right quantity, type, tenure and affordability for local needs, in clean, safe and pleasant local environments?		∅		
	deliver genuine 'pathways of housing choice'?		∅		
	increase the supply of affordable housing?		∅		
	reduce the percentage of unfit/non-decent homes?		∅		
	encourage housing development which makes more efficient use of land (between 30 and 50 dwellings per hectare net); and seek greater intensity of development at places with good public transport accessibility (such as city, town, district and local centres or around major nodes along good quality public transport corridors)?		∅		
	promote the renovation and reuse of existing building stock, rather than the construction of new houses, where appropriate?		∅		
	ensure the adoption of sustainable design and construction practices in housing?	+	+	+	The options paper proposes requiring developers and those undertaking construction projects to produce Site Waste Management Plans. This can help to encourage more sustainable practices in site waste management, including more recycling and potentially the reuse of recycled demolition waste on site. Requiring the on-site recycling of C&D waste through policy can also help to promote this objective. <i>Indirect, temporary</i>
4.6	reduce crime, fear of crime and antisocial behaviour?		∅		
	promote the reduction of crime rates?		∅		
	encourage the adoption of principles to 'design out' crime in housing and employment sites?		∅		
4.7	improve opportunities to participate in the diverse cultural, sport and recreational opportunities the West Midlands can offer locally and in the wider region?		∅		
	ensure that facilities and locations for cultural activities are protected and provided?		∅		
	protect and create high quality or valued recreational spaces and avoid erosion of recreational function?		∅		
4.8	encourage physical development with a better balance of jobs, housing, services and facilities within each part of the Region in order to meet local needs locally and encourage stable and sustainable communities?	+	++	++	Requiring each Waste Planning Authority to ensure enough facilities to deal with the equivalent of waste arising within its area and requiring implementation of the proximity principle will help to encourage the provision of facilities to meet local needs locally to the extent that it is practicable. The options paper also proposes requiring MUAs to give priority to identifying hazardous waste management sites and non-MUAs to identify sites for management of agricultural waste. This will also support the concept of areas taking responsibility for their own

RSDf	Appraisal Questions	Effects			Commentary
	Will the proposal...	Short	Med	Long	
					waste and meeting their own needs locally. However, requiring non-MUAs to provide hazardous landfill capacity would not support this objective. <i>Direct, permanent</i>
	focus retail and office development in town centres?		∅		
	link housing development and employment opportunities?		∅		
	reverse the pattern of people migrating from metropolitan areas to rural parts of the Region?		∅		
4.9	ensure that the Region's workforce is equipped with the skills to access high quality employment opportunities suited to the changing needs of the Regional economy, whilst recognising the value and contribution of unpaid work?		∅		
	reduce inequalities in employment rates across the Region?		∅		
	provide employment land near to the potential workforce?		∅		
4.10	promote investment in future prosperity, including ongoing investment and engagement in learning and skills development?	?	?	?	The waste sector is expected to grow in size and to develop more innovative technologies, thereby increasing employment, including in more highly-skilled jobs than current jobs in waste. However, reducing reliance on landfill is likely to mean that the costs of waste management will rise and will need to be paid for by householders. The overall balance on prosperity is unknown. <i>Direct/indirect, temporary/permanent</i>
	ensure an appropriate supply of employment sites within the region to support sustainable economic development?		∅		
	Encourage investment to develop deprived areas and focusing resources in areas of greatest need?		∅		
	ensure that education and skills infrastructure meets projected future demand and need?		∅		
	reduce inequalities in education and skills across the Region?		∅		
	<p>Summary</p> <p>The RSS revision will promote greater recovery and reuse of resources from waste, although increased recycling is not an explicit objective for MSW or C&I waste. The options paper does not address waste minimisation as an objective. Recovery of resources and value will be promoted for MSW and C&I waste, through setting target percentages/capacities for reduction of landfill of these waste streams, and by proposing an option to require all developments to include facilities for the segregation of waste. The paper also proposes an option to restrict the granting of permissions for new landfill, which will contribute to promoting the diversion of resources away from the waste stream. The options paper suggests the possibility of requiring waste facilities to move the management of waste up the waste hierarchy although this is not proposed as an option. The paper also proposes requiring new developments to incorporate facilities for segregating waste, which will help to facilitate increased recycling and recovery of resources by improving people's access to facilities. Part of the recovery of resources from waste will be through energy recovery. This will help to displace fossil fuel use, although only a proportion of this energy is likely to be renewable and will depend on the waste technologies used. The consumption of energy by waste management facilities and the effect on energy efficiency depends largely on waste management methods which are not addressed by the revision.</p> <p>New technologies will be required to manage the waste, which may lead to more innovation within the sector. It is unlikely however that these will be either high value or low impact. The waste sector is also expected to grow in size, thereby leading to a strengthening and diversification of the sector and increasing its contribution to the economy. However,</p>				

RSDF	Appraisal Questions	Effects			Commentary
	Will the proposal...	Short	Med	Long	
	<p>reducing reliance on landfill is likely to mean that the costs of waste management will rise and this will need to be paid for by householders. The overall balance on the economy and individual prosperity is unknown.</p> <p>Encouraging C&D waste recycling by promoting on-site recycling and urban quarries, and by requiring construction, demolition and development projects to produce Site Waste Management Plans, will help to encourage the recycling of C&D waste by projects and to reduce the expected growth in primary aggregate use.</p> <p>Overall impacts on waste transport distances, and therefore the associated greenhouse gas emissions, are not known. In general, increased recycling is likely to lead to greater waste transport distances. However, there are a number of measures proposed to minimise waste transport distances, including the option to require each Waste Planning Authority to ensure enough facilities to deal with the equivalent of waste arising within its own area, for managing waste in proximity to its source, and for good accessibility from the urban areas or major planned development. Promotion of on-site and urban C&D waste recycling will also help to reduce transport distances for C&D waste and reduce need for transport of primary aggregates. Requiring hazardous waste facilities in the MUA's and agricultural waste facilities in the non-MUA's will encourage management of these wastes closer to where they are produced than might otherwise happen. These options will also contribute to greater self-sufficiency, taking responsibility for waste and meeting local needs locally. However, requiring non-MUA's to provide hazardous landfill capacity would not support these objectives.</p> <p>Greenhouse gas emissions will also be affected by choices of waste management methods as well as waste transport. The landfill of biodegradable waste will help to reduce the potential future growth in methane emissions. The level of greenhouse gas emissions also depends on specific waste management methods but these are not addressed by the revision. The overall balance of effects on greenhouse gas emissions is not known.</p> <p>Corporate responsibility may be promoted for parts of the private sector, although opportunities in the public sector are missed. The options paper proposes requiring developers and those intending construction and demolition projects to produce Site Waste Management Plans, thereby promoting greater corporate environmental responsibility for those companies involved and encouraging more sustainable practices in site waste management and potentially more sustainable construction techniques. Requiring the on-site recycling of C&D waste through policy can also help to promote this objective. There may be an opportunity for the RSS revision to promote public sector sustainable procurement to support local recycling and composting markets, although this is not addressed in the options paper.</p> <p>The options paper proposes permitting waste development in the green belt. It also proposes permitting waste development on open land. Both of these may have adverse consequences for preserving openness and natural assets, and potentially also affect amenity value. However, promoting increased recycling of C&D waste through the various options proposed will help to reduce the growth in demand for primary aggregates which may contribute to reducing the pressure on natural assets from the effects of quarrying. Furthermore, the options paper proposes some types of previously developed land as potential criteria for locating waste-related development, thereby encouraging its reuse.</p> <p>Reducing reliance on landfill may help to reduce soil and water pollution by reducing the risk of pollution incidents. The impact on air quality is partly dependent on waste management methods which are not addressed by the RSS revision. Air quality impacts are also dependent on the effect on levels of waste transport which are not known.</p>				
	<p>Mitigation</p> <p>Include a specific objective to promote waste minimisation.</p> <p>Include a specific objective to move waste up the waste hierarchy and to maximise reuse and recycling for all waste streams.</p> <p>Include a requirement to minimise greenhouse gas emissions from waste management activities, including from transport.</p> <p>Include a commitment to support local/regional processing of recyclate and markets for recycled materials.</p> <p>Clarify the objective of requiring non-MUA's to provide hazardous landfill capacity.</p> <p>Include a commitment to promoting public sector sustainable procurement to support local recycling and composting markets.</p>				

RSDF	Appraisal Questions Will the proposal...	Effects			Commentary
		Short	Med	Long	
1.1	use natural resources such as water and minerals efficiently, including by incorporating efficiency measures into new land use and developments?		∅		
	promote the balance of water supply and demand?		∅		
	reduce the use of primary aggregates?		∅		
1.2	promote and support the development of high value and low impact new technologies, especially resource-efficient technologies and environmental technology initiatives?		∅		
	promote the development of technologies to address climate change, eg new energy generators using renewable sources, more efficient industrial technology and processes to minimise or mitigate for the impacts of climate change?		∅		
	secure improvements to communication infrastructure?		∅		
1.3	promote and ensure high standards of sustainable resource-efficient design, construction and maintenance of buildings, where possible exceeding the requirements of the Building Regulations?		∅		
	ensure the adoption of sustainable design and construction practices in all buildings?		∅		
1.4	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?	+/?	+/?	+/?	Will improve transport infrastructure by providing new public transport services, and this will help to increase the proportion of people travelling by public transport. However, it is not clear that this will actually reduce road traffic levels rather than increase travel by alternative means. Other measures are required in tandem with park and ride to reduce traffic levels, as promoted by RSS policy T7. <i>Direct, temporary</i>
	promote more sustainable transport patterns in areas suffering from congestion?	+	+	?	Will promote public transport in centres served by park and ride facilities, which are likely to be among those suffering from congestion. <i>Direct, temporary</i>
	promote a shift of freight from road to rail?		∅		
	improve the quality of transport infrastructure?	+	+	?	Will improve transport infrastructure by providing new public transport services. <i>Direct, temporary</i>
	make best use of existing airport capacity?		∅		
1.5	ensure development is primarily focused in the major urban areas,	?	?	?	Provides alternatives to travelling by car to centres served by park and

RSDF	Appraisal Questions Will the proposal...	Effects			Commentary
		Short	Med	Long	
	makes efficient use of existing physical infrastructure and helps reduce need to travel, especially by private car?				ride facilities, although it may promote increased travel to served centres and may not reduce car travel. <i>Direct, temporary</i>
	focus development in the major urban areas?		∅		
	reduce the number and length of journeys made by car?	?	?	?	As above
	reduce the need to travel?	0/-	0/-	?	Will not reduce the need to travel and may promote increased travel to centres served by park and ride facilities. <i>Indirect, temporary</i>
	promote alternative, more sustainable, modes of transport to the car (including walking and cycling) through location of housing, employment sites, services and facilities, and appropriate infrastructure for sustainable modes of transport?	+	+	?	Provides alternatives to travelling by car to centres served by park and ride facilities. <i>Direct, temporary</i>
1.6	encourage and enable waste minimisation, reuse, recycling and recovery to divert resources away from the waste stream?		∅		
	reduce waste arisings?		∅		
	ensure that sustainable waste management can be carried out in the Region?		∅		
	enable communities to take responsibility for their own waste and meet their own needs (self-sufficiency)?		∅		
1.7	encourage local sourcing of food, goods and materials?		∅		
1.8	reward efficient resource use and encourage development of alternative and renewable resources in order to reduce dependence on fossil fuels?		∅		
	See questions under Objectives 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 1.7, 1.9, 2.1, 2.2, 2.3, 3.4 and 4.5				
1.9	encourage corporate social and environmental responsibility, with regional organisations and agencies leading by example?		∅		
	encourage sustainable procurement?		∅		
1.10	encourage a culture of enterprise and innovation, including social enterprise?		∅		
1.11	achieve a strong, stable and sustainable economy and prosperity for the benefit of all the Region's inhabitants?		∅		
	narrow the GVA gap between the best and worst performing parts of the Region?		∅		
	support efficient, competitive, diverse and innovative business, commercial, industrial, retail, tourism and leisure sectors?		∅		

RSDF	Appraisal Questions	Effects			Commentary
	Will the proposal...	Short	Med	Long	
2.1	reduce overall energy use through increased energy efficiency?	?	?	?	Should increase energy efficiency by increasing the proportion of people travelling by public transport as opposed to the private car. However, could increase energy consumption by transport if the overall effect is to encourage increased numbers of people travelling to centres served by park and ride. <i>Direct, temporary</i>
	raise energy efficiency to current Building Regulations standards in refurbishments for Decent Homes Standard? (Also see question on EcoHomes standard under issue 5, Housing).		∅		
2.2	increase the proportion of energy generated from renewable and low carbon sources, including by microgeneration, CHP, district heating, and in transportation?		∅		
	promote energy generation from CHP and community heating?		∅		
2.3	minimise the Region's contribution to the causes of climate change by reducing emissions of greenhouse gases from transport, domestic, commercial and industrial sources?	?	?	?	It is unclear whether the provision of Park and Ride will reduce congestion and car use or increase the number of people travelling to served centres. The overall effect on greenhouse gas emissions is unclear. The contribution to climate change may not be reduced but park and ride facilities may help to reduce potential future increases. <i>Direct, temporary</i>
	reduce the Region's contribution to climate change?	?	?	?	As above
2.4	ensure that land use and development takes into account predicted changes in the Region's climate, including flood risk?		∅		
	promote sustainable urban drainage systems?		∅		
	promote the adoption of climate change adaptation and climate proofing principles in planning and design?		∅		
2.5	implement a managed response to the unavoidable impacts of climate change, ensuring that the design and planning process takes account of the predicted changes in the Region's climate?		∅		
	prevent all inappropriate development in areas of flood risk?		∅		
3.1	value, protect, enhance and restore the Region's environmental assets, including the natural, built and historic environment and landscape?	+/?	+/?	?	May help to protect built, natural and historic assets by reducing the potential growth in car use, although may also have adverse impacts on natural assets depending on the choice of location for the car parks. <i>Indirect and temporary or direct and permanent</i>
	value, enhance and protect the Region's natural environmental assets (eg Green Belt, parks and open spaces, AONBs etc)?	?	?	?	Impacts on open spaces may be negative depending on choice of location for car parks. <i>Direct, permanent</i>
	value, enhance and protect the Region's historic environment assets (eg World Heritage Sites, archaeological remains, historic buildings, parks and gardens, and landscapes, and conservation areas, battlefields and other	+	+	+	Can help to protect historic assets and their settings in urban areas by relieving car transport pressure. <i>Direct, temporary</i>

RSDF	Appraisal Questions Will the proposal...	Effects			Commentary
		Short	Med	Long	
	architectural and historically important features and areas, and their settings)?				
	promote heritage-led regeneration?		∅		
	promote the repair and reuse of historic buildings?		∅		
	enhance the amenity value of the countryside, meeting the recreational and leisure needs of communities?	?	?	?	There may be negative impacts on countryside with amenity value depending on choice of location for car parks. <i>Direct, permanent</i>
	protect, enhance and manage the character and appearance of the region's landscapes and townscapes, maintaining and strengthening local distinctiveness and sense of place?	-/+	-/+	-/?	Impacts on landscapes may be negative depending on choice of location for car parks. Impacts on townscapes may be positive by helping to reduce the growth in car numbers in major centres. <i>Direct, permanent and temporary</i>
3.2	value, maintain, restore and re-create regional biodiversity, where possible using approaches that improve the resilience of natural systems such as linking fragmented habitats?	?	?	?	Could have adverse effects on biodiversity if greenfield locations are used for car parks. Likelihood and significance of impacts are dependent on specific locations. <i>Direct, permanent</i>
	value, enhance and protect the Region's designated sites, including sites designated for geodiversity?		∅		
	value, enhance and protect the Region's priority habitats and species, and promote the delivery of regional biodiversity targets?		∅		
	support development that incorporates improvements to wildlife habitats?		∅		
3.3	minimise air, water, soil, light and noise pollution levels, and create good quality air, water and soils?	?	?	?	It is unclear whether the provision of Park and Ride will reduce congestion and car use or increase the number of people and vehicles travelling to served centres and distances travelled. The effect on air quality and noise could be positive or not significant overall. <i>Direct, temporary</i>
	promote more sustainable transport patterns in areas of low air quality?	?	?	?	As above
	address air quality impacts arising from specific development activities?		∅		
	protect and enhance the quality of watercourses in the Region?		∅		
	reduce the quantity of contaminated land in the Region?		∅		
	prevent noise and light pollution?		∅		
3.4	encourage land use and development that optimises the use of previously developed land and buildings?	?	?	?	The potential extent of use of previously developed land is not known, but dependent on specific locations. Although the RSS contains policy to prioritise previously developed land, other criteria are likely to take precedence. <i>Direct, permanent</i>
3.5	encourage land use and development that creates and sustains well-designed, high quality built environments that incorporate green space, encourage biodiversity, and promote local distinctiveness and sense of place?	?	?	?	Good design could incorporate green space and encourage biodiversity in car park developments. This could be promoted in development control policy. <i>Indirect, permanent</i>
	require good urban design to create attractive, high quality environments		∅		

RSDF	Appraisal Questions	Effects			Commentary
	Will the proposal...	Short	Med	Long	
	where people will choose to live, work and invest?				
	increase access to good quality green space (eg increase the number of people in towns and cities with accessible greenspace within 300m of their homes)?	?	?	?	Greenfield locations could potentially reduce access to green space, although this is dependent on issues at specific locations. <i>Direct, permanent</i>
	protect existing and encourage the development of new biodiversity assets in developments?	?	?	?	Good design could incorporate inclusion of biodiversity benefits in car park developments. This could be promoted in development control policy. <i>Indirect, permanent</i>
3.6	encourage local stewardship of local environments, for example by promoting best practice in agricultural management or enabling communities to improve their neighbourhoods?		∅		
3.7	promote environmental justice, recognising that deprived areas and disadvantaged communities and more likely to be affected by environmental damage and degradation?		∅		
	specifically improve environmental quality in deprived communities?		∅		
4.1	enable communities to influence the decisions that affect their neighbourhoods and quality of life?		∅		
	promote the use of community-based planning tools?		∅		
4.2	ensure easy and equitable access to services, facilities and opportunities, including jobs and learning, regardless of culture, ethnicity, faith, gender, sexuality, age, disability or location?	+/0	+/0	+/0	Objective may help to improve ease of accessibility to services in centres that are served by Strategic Park and Ride sites, although it will do little to affect equality of access by continuing to require the use of the private car. <i>Direct, temporary</i>
	ensure that existing services and opportunities are retained and, where possible, developed?		∅		
	promote compact, mixed-use developments with good accessibility to local facilities and services that reduce the need to travel?		∅		
4.3	address poverty and disadvantage, taking into account the particular difficulties of those facing multiple disadvantage?		∅		
	ensure the provision of employment land in, or accessible to, the most deprived communities in the Region?		∅		
4.4	improve health and reduce health inequalities by encouraging and enabling healthy active lifestyles and protecting health, as well as providing equitable access to health services?		∅		
	diminish inequalities in mortality, health and wellbeing across the Region?		∅		
	ensure that infrastructure for healthcare is provided to meet projected future demand and need?		∅		
	promote healthy lifestyles and opportunities for exercise (eg through environmental infrastructure and design)?		∅		

RSDF	Appraisal Questions Will the proposal...	Effects			Commentary
		Short	Med	Long	
	promote opportunities to participate in sport?		∅		
4.5	provide decent and affordable housing for all, of the right quantity, type, tenure and affordability for local needs, in clean, safe and pleasant local environments?		∅		
	deliver genuine 'pathways of housing choice'?		∅		
	increase the supply of affordable housing?		∅		
	reduce the percentage of unfit/non-decent homes?		∅		
	encourage housing development which makes more efficient use of land (between 30 and 50 dwellings per hectare net); and seek greater intensity of development at places with good public transport accessibility (such as city, town, district and local centres or around major nodes along good quality public transport corridors)?		∅		
	promote the renovation and reuse of existing building stock, rather than the construction of new houses, where appropriate?		∅		
	ensure the adoption of sustainable design and construction practices in housing?		∅		
4.6	reduce crime, fear of crime and antisocial behaviour?		∅		
	promote the reduction of crime rates?			∅	
	encourage the adoption of principles to 'design out' crime in housing and employment sites?		∅		
4.7	improve opportunities to participate in the diverse cultural, sport and recreational opportunities the West Midlands can offer locally and in the wider region?	+	+	?	Will help to improve accessibility of cultural facilities in centres served by park and ride. <i>Direct, temporary</i>
	ensure that facilities and locations for cultural activities are protected and provided?		∅		
	protect and create high quality or valued recreational spaces and avoid erosion of recreational function?		∅		
4.8	encourage physical development with a better balance of jobs, housing, services and facilities within each part of the Region in order to meet local needs locally and encourage stable and sustainable communities?		∅		
	focus retail and office development in town centres?		∅		
	link housing development and employment opportunities?		∅		
	reverse the pattern of people migrating from metropolitan areas to rural parts of the Region?		∅		
4.9	ensure that the Region's workforce is equipped with the skills to access high quality employment opportunities suited to the changing needs of the Regional economy, whilst recognising the value and contribution of unpaid work?		∅		
	reduce inequalities in employment rates across the Region?		∅		

RSDF	Appraisal Questions	Effects			Commentary
	Will the proposal...	Short	Med	Long	
	provide employment land near to the potential workforce?	∅			
4.10	promote investment in future prosperity, including ongoing investment and engagement in learning and skills development?	+	+	?	Park and ride can help increase economic vitality in centres by increasing shopper numbers without increasing congestion. <i>Direct, temporary</i>
	ensure an appropriate supply of employment sites within the region to support sustainable economic development?	∅			
	Encourage investment to develop deprived areas and focusing resources in areas of greatest need	∅			
	ensure that education and skills infrastructure meets projected future demand and need?	∅			
	reduce inequalities in education and skills across the Region?	∅			
	<p>Summary</p> <p>Park and ride schemes will improve transport infrastructure by providing new public transport services, and this will help to increase the proportion of people travelling by public transport. However, while these are likely to be in areas suffering congestion, it is not clear that park and ride will actually reduce road traffic levels rather than increase travel by alternative means. Other measures are required in tandem with park and ride to reduce traffic levels.</p> <p>Park and ride can have economic and social benefits. They can help increase economic vitality in centres by increasing shopper numbers without increasing congestion. They can also help to improve the accessibility of services and facilities, including cultural facilities, in centres that are served by Strategic Park and Ride sites, although they will do little to affect equality of access by continuing to require the use of the private car.</p> <p>Park and ride schemes should increase energy efficiency by increasing the proportion of people travelling by public transport as opposed to the private car. However, they could increase energy consumption by transport if the overall effect is to encourage increased numbers of people travelling to centres served by park and ride. The overall effects on greenhouse gas emissions, air quality and noise are similarly unclear, although schemes may help to reduce potential future increases.</p> <p>Park and ride may also help to protect built, natural and historic assets by reducing the potential growth in car use and pressure on assets in urban areas, although schemes may also have adverse impacts on natural assets depending on the choice of location for the car parks. Impacts depend on particular locations and should be controlled and compensated if necessary in development control policy. The potential extent of use of previously developed land is not known, but dependent on specific locations. Although the RSS contains policy to prioritise previously developed land, other criteria are likely to take precedence.</p>				
	<p>Mitigation</p> <p>Criteria for location of car parks should continue to include environmental criteria, particularly the potential for impacts on natural and historic assets and including the effects of loss of open space and greenfield land. If necessary, loss of value should be required to be compensated for in development control policy.</p> <p>To maximise the potential for park and ride schemes to contribute to a reduction in traffic levels, other measures to restrict traffic growth are required in tandem with park and ride such as those encouraged by policy T7.</p>				

RSDF	Appraisal Questions	Effects			Commentary
		Short	Med	Long	
1.1	use natural resources such as water and minerals efficiently, including by incorporating efficiency measures into new land use and developments?		Ø		
	promote the balance of water supply and demand?		Ø		
	reduce the use of primary aggregates?		Ø		
1.2	promote and support the development of high value and low impact new technologies, especially resource-efficient technologies and environmental technology initiatives?		Ø		
	promote the development of technologies to address climate change, eg new energy generators using renewable sources, more efficient industrial technology and processes to minimise or mitigate for the impacts of climate change?		Ø		
	secure improvements to communication infrastructure?		Ø		
1.3	promote and ensure high standards of sustainable resource-efficient design, construction and maintenance of buildings, where possible exceeding the requirements of the Building Regulations?		Ø		
	ensure the adoption of sustainable design and construction practices in all buildings?		Ø		
1.4	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?	0	+	++	Will help to promote a greater proportion of public transport use although may not reduce current levels of road traffic congestion in the short term as focus is on some types of new development only. <i>Indirect, permanent</i>
	promote more sustainable transport patterns in areas suffering from congestion?	?	?	?	Congestion is only one factor in one of the options for an approach to parking standards. <i>Direct, permanent</i>
	promote a shift of freight from road to rail?		Ø		
	improve the quality of transport infrastructure?		Ø		
	make best use of existing airport capacity?		Ø		
1.5	ensure development is primarily focused in the major urban areas, makes efficient use of existing physical infrastructure and helps reduce need to travel, especially by private car?	+	++	++	Restricting new parking provision in developments will help to encourage use of existing public transport infrastructure and discourage use of the private car. <i>Direct, permanent</i>
	focus development in the major urban areas?		Ø		
	reduce the number and length of journeys made by car?	0	+	++	Although restricting new parking provision in developments will help to reduce the growth of car use, it will not reduce car use per se in the short term. In the medium to longer term, as new developments replace existing ones, the effects may be more significant.
	reduce the need to travel?		Ø		
	promote alternative, more sustainable, modes of transport to the car (including		Ø		

RSDF	Appraisal Questions Will the proposal...	Effects			Commentary
		Short	Med	Long	
	walking and cycling) through location of housing, employment sites, services and facilities, and appropriate infrastructure for sustainable modes of transport?				
1.6	encourage and enable waste minimisation, reuse, recycling and recovery to divert resources away from the waste stream?		∅		
	reduce waste arisings?		∅		
	ensure that sustainable waste management can be carried out in the Region?		∅		
	enable communities to take responsibility for their own waste and meet their own needs (self-sufficiency)?		∅		
1.7	encourage local sourcing of food, goods and materials?		∅		
1.8	reward efficient resource use and encourage development of alternative and renewable resources in order to reduce dependence on fossil fuels?		∅		
	See questions under Objectives 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 1.7, 1.9, 2.1, 2.2, 2.3, 3.4 and 4.5				
1.9	encourage corporate social and environmental responsibility, with regional organisations and agencies leading by example?		∅		
	encourage sustainable procurement?		∅		
1.10	encourage a culture of enterprise and innovation, including social enterprise?		∅		
1.11	achieve a strong, stable and sustainable economy and prosperity for the benefit of all the Region's inhabitants?	?	?	?	Parking provision is identified in the options paper as a factor in the economic vitality of town and city centres, although it is not clear whether generating more car use is expected to have a negative or positive impact on vitality. Note that PPG13 does not identify economic need or impact as an issue to be factored in parking provision. <i>Indirect, temporary</i>
	narrow the GVA gap between the best and worst performing parts of the Region?	?	?	?	Only one option addresses economic need as a factor in differential parking standards, although it is not clear from the options paper whether economic need would imply less parking provision or more. <i>Indirect, temporary</i>
	support efficient, competitive, diverse and innovative business, commercial, industrial, retail, tourism and leisure sectors?		∅		
2.1	reduce overall energy use through increased energy efficiency?	0	0	0	Although restricting new parking provision in developments will help to reduce the growth of car use, it will not reduce car use per se and therefore energy use by transport will not be reduced. <i>Indirect, temporary</i>
	raise energy efficiency to current Building Regulations standards in refurbishments for Decent Homes Standard? (Also see question on EcoHomes standard under issue 5, Housing).		∅		

RSDF	Appraisal Questions Will the proposal...	Effects			Commentary
		Short	Med	Long	
2.2	increase the proportion of energy generated from renewable and low carbon sources, including by microgeneration, CHP, district heating, and in transportation?		∅		
	promote energy generation from CHP and community heating?		∅		
2.3	minimise the Region's contribution to the causes of climate change by reducing emissions of greenhouse gases from transport, domestic, commercial and industrial sources?	0	+	++	Emissions from transport are unlikely to be reduced in the short term as standards will only apply to new developments. In the medium and longer term the policy may have a more noticeable impact although standards will not apply to all developments and therefore the impact is unlikely to be significant. <i>Direct, temporary</i>
	reduce the Region's contribution to climate change?	0	+	++	As above
2.4	ensure that land use and development takes into account predicted changes in the Region's climate, including flood risk?		∅		
	promote sustainable urban drainage systems?		∅		
	promote the adoption of climate change adaptation and climate proofing principles in planning and design?		∅		
2.5	implement a managed response to the unavoidable impacts of climate change, ensuring that the design and planning process takes account of the predicted changes in the Region's climate?		∅		
	prevent all inappropriate development in areas of flood risk?		∅		
3.1	value, protect, enhance and restore the Region's environmental assets, including the natural, built and historic environment and landscape?		∅		
	value, enhance and protect the Region's natural environmental assets (eg Green Belt, parks and open spaces, AONBs etc)?		∅		
	value, enhance and protect the Region's historic environment assets (eg World Heritage Sites, archaeological remains, historic buildings, parks and gardens, and landscapes, and conservation areas, battlefields and other architectural and historically important features and areas, and their settings)?	?	?	?	One of the aims of RSS policy T7 is to protect heritage areas by restricting parking, although it is not clear that the options paper addresses this aspect in discussing possible approaches to standards. <i>Direct, permanent</i>
	promote heritage-led regeneration?		∅		
	promote the repair and reuse of historic buildings?		∅		
	enhance the amenity value of the countryside, meeting the recreational and leisure needs of communities?		∅		
	protect, enhance and manage the character and appearance of the region's landscapes and townscape, maintaining and strengthening local distinctiveness and sense of place?	0	0	0	Restricting parking provision could help to reduce traffic in town centres and so help to create more pleasant urban environments and townscape. This issue is not addressed in the options paper.
	value, maintain, restore and re-create regional biodiversity, where possible using approaches that improve the resilience of natural systems such as linking fragmented habitats?		∅		
value, enhance and protect the Region's designated sites, including sites designated		∅			

RSDF	Appraisal Questions	Effects			Commentary
		Short	Med	Long	
	Will the proposal... for geodiversity?				
	value, enhance and protect the Region's priority habitats and species, and promote the delivery of regional biodiversity targets?		Ø		
	support development that incorporates improvements to wildlife habitats?		Ø		
3.3	minimise air, water, soil, light and noise pollution levels, and create good quality air, water and soils?	0	+	++	Restricting parking space will help to reduce growth of car use and so to reduce the potential future increase in noise and air emissions. Benefits are only likely in the medium to longer term as the standards will apply only to certain developments. <i>Direct, temporary</i>
	promote more sustainable transport patterns in areas of low air quality?	0	+	++	As above
	address air quality impacts arising from specific development activities?	0	+	++	As above
	protect and enhance the quality of watercourses in the Region?		Ø		
	reduce the quantity of contaminated land in the Region?		Ø		
	prevent noise and light pollution?	0	+	++	As above
3.4	encourage land use and development that optimises the use of previously developed land and buildings?		Ø		
3.5	encourage land use and development that creates and sustains well-designed, high quality built environments that incorporate green space, encourage biodiversity, and promote local distinctiveness and sense of place?		Ø		
	require good urban design to create attractive, high quality environments where people will choose to live, work and invest?		Ø		
	increase access to good quality green space (eg increase the number of people in towns and cities with accessible greenspace within 300m of their homes)?		Ø		
	protect existing and encourage the development of new biodiversity assets in developments?		Ø		
3.6	encourage local stewardship of local environments, for example by promoting best practice in agricultural management or enabling communities to improve their neighbourhoods?		Ø		
3.7	promote environmental justice, recognising that deprived areas and disadvantaged communities and more likely to be affected by environmental damage and degradation?	?	?	?	See below.
	specifically improve environmental quality in deprived communities?	?	?	?	Economic and social need are identified as possible criteria in the option of a criteria-based approach to parking standards. However, it is not clear whether economic and social need would restrict or relax parking standards and therefore whether the aim would be to tackle congestion in deprived communities or to allow increased traffic levels. <i>Direct, temporary</i>
4.1	enable communities to influence the decisions that affect their neighbourhoods and quality of life?		Ø		

RSDF	Appraisal Questions Will the proposal...	Effects			Commentary
		Short	Med	Long	
	promote the use of community-based planning tools?		∅		
4.2	ensure easy and equitable access to services, facilities and opportunities, including jobs and learning, regardless of culture, ethnicity, faith, gender, sexuality, age, disability or location?	?	?	?	It is not clear what the potential impact may be on ease and equality of access to services and facilities. Restricting parking with new developments may favour or discriminate against certain groups. Social need is identified as a criterion for one possible option for approaches to parking standards, although it is not clear how this might be defined and in what way it might affect parking provision. <i>Direct, permanent</i>
	ensure that existing services and opportunities are retained and, where possible, developed?		∅		
	promote compact, mixed-use developments with good accessibility to local facilities and services that reduce the need to travel?		∅		
4.3	address poverty and disadvantage, taking into account the particular difficulties of those facing multiple disadvantage?		∅		
	ensure the provision of employment land in, or accessible to, the most deprived communities in the Region?		∅		
4.4	improve health and reduce health inequalities by encouraging and enabling healthy active lifestyles and protecting health, as well as providing equitable access to health services?		∅		
	diminish inequalities in mortality, health and wellbeing across the Region?		∅		
	ensure that infrastructure for healthcare is provided to meet projected future demand and need?		∅		
	promote healthy lifestyles and opportunities for exercise (eg through environmental infrastructure and design)?		∅		
	promote opportunities to participate in sport?		∅		
4.5	provide decent and affordable housing for all, of the right quantity, type, tenure and affordability for local needs, in clean, safe and pleasant local environments?		∅		
	deliver genuine 'pathways of housing choice'?		∅		
	increase the supply of affordable housing?		∅		
	reduce the percentage of unfit/non-decent homes?			∅	
	encourage housing development which makes more efficient use of land (between 30 and 50 dwellings per hectare net); and seek greater intensity of development at places with good public transport accessibility (such as city, town, district and local centres or around major nodes along good quality public transport corridors)?	+	++	++	Options paper explicitly seeks to restrict parking provision in areas with good public transport access, thereby allowing greater housing density. <i>Direct, permanent</i>
	promote the renovation and reuse of existing building stock, rather than the construction of new houses, where appropriate?		∅		
	ensure the adoption of sustainable design and construction practices in housing?		∅		
4.6	reduce crime, fear of crime and antisocial behaviour?		∅		

RSDF	Appraisal Questions	Effects			Commentary
	Will the proposal...	Short	Med	Long	
	promote the reduction of crime rates?		∅		
	encourage the adoption of principles to 'design out' crime in housing and employment sites?		∅		
4.7	improve opportunities to participate in the diverse cultural, sport and recreational opportunities the West Midlands can offer locally and in the wider region?		∅		
	ensure that facilities and locations for cultural activities are protected and provided?		∅		
	protect and create high quality or valued recreational spaces and avoid erosion of recreational function?		∅		
4.8	encourage physical development with a better balance of jobs, housing, services and facilities within each part of the Region in order to meet local needs locally and encourage stable and sustainable communities?		∅		
	focus retail and office development in town centres?		∅		
	link housing development and employment opportunities?		∅		
	reverse the pattern of people migrating from metropolitan areas to rural parts of the Region?		∅		
4.9	ensure that the Region's workforce is equipped with the skills to access high quality employment opportunities suited to the changing needs of the Regional economy, whilst recognising the value and contribution of unpaid work?		∅		
	reduce inequalities in employment rates across the Region?		∅		
	provide employment land near to the potential workforce?		∅		
4.10	promote investment in future prosperity, including ongoing investment and engagement in learning and skills development?	?	?	?	Parking provision is identified in the options paper as a factor in the economic vitality of town and city centres, although it is not clear whether generating more car use is expected to have a negative or positive impact on vitality. Note that PPG13 does not identify economic need or impact as an issue to be factored in parking provision. <i>Indirect, temporary</i>
	ensure an appropriate supply of employment sites within the region to support sustainable economic development?		∅		
	Encourage investment to develop deprived areas and focusing resources in areas of greatest need	?	?	?	Parking provision is identified in the options paper as a factor in the economic vitality of town and city centres, although it is not clear whether generating more car use is expected to have a negative or positive impact on vitality. Note that PPG13 does not identify economic need or impact as an issue to be factored in parking provision. <i>Indirect, temporary</i>
	ensure that education and skills infrastructure meets projected future demand and need?		∅		
	reduce inequalities in education and skills across the Region?		∅		

RSDF	Appraisal Questions	Effects			Commentary
	Will the proposal...	Short	Med	Long	
	<p>Summary</p> <p>Will help to promote a greater proportion of public transport use and discourage use of the private car, although it is unlikely to affect levels of road traffic in the short term as focus is on some types of new development only. In the medium to longer term, as new developments replace existing ones, the effects may be more significant. The benefits of reduced air emissions, noise, congestion and energy use are only likely to be gained in the medium to longer term. Restricting parking provision will also allow greater housing density particularly in urban areas where public transport access is likely to be better.</p> <p>Parking provision is identified in the options paper as a factor in the economic vitality of town and city centres, although it is not clear whether generating more car use is expected to have a negative or positive impact on vitality. Note that PPG13 does not identify economic need or impact as an issue to be factored in parking provision. Economic and social need are identified as possible criteria in the option of a criteria-based approach to parking standards. However, it is not clear whether economic and social need would restrict or relax parking standards nor how social need might be defined and how it might affect parking provision.</p> <p>Heritage areas can be protected by restricting parking, although it is not clear that the options paper addresses this aspect in discussing possible approaches to standards. The improvement of urban environments and townscapes more generally could be a benefit of restricting parking provision although this is not addressed in the options paper.</p>				
	<p>Mitigation</p> <p>The options paper should be clearer on the role of economic and social need as factors in determining the levels of parking provision, how these might be defined, what effect they might have on parking standards and what benefits are expected. The need to protect heritage areas and improve townscapes and the urban environment more generally should be included as a factor in determining parking standards.</p>				

RSDF	Appraisal Questions Will the proposal...	Effects			Commentary
		Short	Med	Long	
1.1	use natural resources such as water and minerals efficiently, including by incorporating efficiency measures into new land use and developments?		∅		
	promote the balance of water supply and demand?		∅		
	reduce the use of primary aggregates?		∅		
1.2	promote and support the development of high value and low impact new technologies, especially resource-efficient technologies and environmental technology initiatives?		∅		
	promote the development of technologies to address climate change, eg new energy generators using renewable sources, more efficient industrial technology and processes to minimise or mitigate for the impacts of climate change?		∅		
	secure improvements to communication infrastructure?		∅		
1.3	promote and ensure high standards of sustainable resource-efficient design, construction and maintenance of buildings, where possible exceeding the requirements of the Building Regulations?		∅		
	ensure the adoption of sustainable design and construction practices in all buildings?		∅		
1.4	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?	?	?	?	Potential impacts on public transport use are unclear as policy options and approaches are undefined.
	promote more sustainable transport patterns in areas suffering from congestion?	?	?	?	Potential impacts on congestion by increasing the proportion of public transport use are unclear as policy options and approaches are undefined.
	promote a shift of freight from road to rail?	?	?	?	Potential impacts on promoting a shift of freight from road to rail are unclear as policy options and approaches are undefined.
	improve the quality of transport infrastructure?		∅		
	make best use of existing airport capacity?		∅		
1.5	ensure development is primarily focused in the major urban areas, makes efficient use of existing physical infrastructure and helps reduce need to travel, especially by private car?	?	?	?	See below
	focus development in the major urban areas?	?	?	?	The options paper identifies that there are links between congestion charging policy and the policy on housing and employment land distribution, although those links are not clear.
	reduce the number and length of journeys made by car?	?	?	?	Potential impacts on use of the private car are unclear as policy options and approaches are undefined.
	reduce the need to travel?		∅		

RSDF	Appraisal Questions Will the proposal...	Effects			Commentary
		Short	Med	Long	
	promote alternative, more sustainable, modes of transport to the car (including walking and cycling) through location of housing, employment sites, services and facilities, and appropriate infrastructure for sustainable modes of transport?		∅		
1.6	encourage and enable waste minimisation, reuse, recycling and recovery to divert resources away from the waste stream?		∅		
	reduce waste arisings?		∅		
	ensure that sustainable waste management can be carried out in the Region?		∅		
	enable communities to take responsibility for their own waste and meet their own needs (self-sufficiency)?		∅		
1.7	encourage local sourcing of food, goods and materials?		∅		
1.8	reward efficient resource use and encourage development of alternative and renewable resources in order to reduce dependence on fossil fuels?		∅		
	See questions under Objectives 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 1.7, 1.9, 2.1, 2.2, 2.3, 3.4 and 4.5				
1.9	encourage corporate social and environmental responsibility, with regional organisations and agencies leading by example?		∅		
	encourage sustainable procurement?		∅		
1.10	encourage a culture of enterprise and innovation, including social enterprise?		∅		
1.11	achieve a strong, stable and sustainable economy and prosperity for the benefit of all the Region's inhabitants?	?	?	?	RSS policy T8 identifies the impact on the economy as a potential factor in decisions on congestion charging. However, it is not clear whether this might be expected to have a positive impact through reducing the costs of congestion or negative impacts through increased charges or reduced commercial activity within city centres.
	narrow the GVA gap between the best and worst performing parts of the Region?		∅		
	support efficient, competitive, diverse and innovative business, commercial, industrial, retail, tourism and leisure sectors?		∅		
2.1	reduce overall energy use through increased energy efficiency?	?	?	?	Potential impacts on transport energy use are unclear as policy options and approaches are undefined.
	raise energy efficiency to current Building Regulations standards in refurbishments for Decent Homes Standard? (Also see question on EcoHomes standard under issue 5, Housing).		∅		
2.2	increase the proportion of energy generated from renewable and low carbon sources, including by microgeneration, CHP, district heating, and in transportation?		∅		
	promote energy generation from CHP and community heating?		∅		
2.3	minimise the Region's contribution to the causes of climate change by reducing emissions of greenhouse gases from transport, domestic, commercial and industrial sources?	?	?	?	Potential impacts on the region's contribution to climate change are unclear as policy options and approaches are undefined.

RSDF	Appraisal Questions Will the proposal...	Effects			Commentary
		Short	Med	Long	
	reduce the Region's contribution to climate change?	?	?	?	As above
2.4	ensure that land use and development takes into account predicted changes in the Region's climate, including flood risk?		∅		
	promote sustainable urban drainage systems?		∅		
	promote the adoption of climate change adaptation and climate proofing principles in planning and design?		∅		
2.5	implement a managed response to the unavoidable impacts of climate change, ensuring that the design and planning process takes account of the predicted changes in the Region's climate?		∅		
	prevent all inappropriate development in areas of flood risk?		∅		
3.1	value, protect, enhance and restore the Region's environmental assets, including the natural, built and historic environment and landscape?	?	?	?	Potential impacts on the built environment are unclear as policy options and approaches are undefined.
	value, enhance and protect the Region's natural environmental assets (eg Green Belt, parks and open spaces, AONBs etc)?		∅		
	value, enhance and protect the Region's historic environment assets (eg World Heritage Sites, archaeological remains, historic buildings, parks and gardens, and landscapes, and conservation areas, battlefields and other architectural and historically important features and areas, and their settings)?		∅		
	promote heritage-led regeneration?		∅		
	promote the repair and reuse of historic buildings?		∅		
	enhance the amenity value of the countryside, meeting the recreational and leisure needs of communities?		∅		
	protect, enhance and manage the character and appearance of the region's landscapes and townscapes, maintaining and strengthening local distinctiveness and sense of place?	?	?	?	Potential impacts on townscapes are unclear as policy options and approaches are undefined.
	value, maintain, restore and re-create regional biodiversity, where possible using approaches that improve the resilience of natural systems such as linking fragmented habitats?		∅		
3.2	value, enhance and protect the Region's designated sites, including sites designated for geodiversity?		∅		
	value, enhance and protect the Region's priority habitats and species, and promote the delivery of regional biodiversity targets?		∅		
	support development that incorporates improvements to wildlife habitats?		∅		
	minimise air, water, soil, light and noise pollution levels, and create good quality air, water and soils?	?	?	?	Potential impacts on air and noise pollution are unclear as policy options and approaches are undefined.
3.3	promote more sustainable transport patterns in areas of low air quality?	?	?	?	See above
	address air quality impacts arising from specific development activities?		∅		
	protect and enhance the quality of watercourses in the Region?		∅		
	reduce the quantity of contaminated land in the Region?		∅		

RSDF	Appraisal Questions	Effects			Commentary
		Short	Med	Long	
	Will the proposal... prevent noise and light pollution?	?	?	?	See above
3.4	encourage land use and development that optimises the use of previously developed land and buildings?		∅		
3.5	encourage land use and development that creates and sustains well-designed, high quality built environments that incorporate green space, encourage biodiversity, and promote local distinctiveness and sense of place?		∅		
	require good urban design to create attractive, high quality environments where people will choose to live, work and invest?		∅		
	increase access to good quality green space (eg increase the number of people in towns and cities with accessible greenspace within 300m of their homes)?		∅		
	protect existing and encourage the development of new biodiversity assets in developments?		∅		
3.6	encourage local stewardship of local environments, for example by promoting best practice in agricultural management or enabling communities to improve their neighbourhoods?		∅		
3.7	promote environmental justice, recognising that deprived areas and disadvantaged communities and more likely to be affected by environmental damage and degradation?		∅		
	specifically improve environmental quality in deprived communities?		∅		
4.1	enable communities to influence the decisions that affect their neighbourhoods and quality of life?		∅		
	promote the use of community-based planning tools?		∅		
4.2	ensure easy and equitable access to services, facilities and opportunities, including jobs and learning, regardless of culture, ethnicity, faith, gender, sexuality, age, disability or location?	?	?	?	There are potential implications for access to services, and particularly benefits from reduced congestion for those who use public transport, but also potential negative impacts of charging on low-income households. However, the likelihood of significant impacts is unclear as potential policy approaches are undefined.
	ensure that existing services and opportunities are retained and, where possible, developed?		∅		
	promote compact, mixed-use developments with good accessibility to local facilities and services that reduce the need to travel?		∅		
4.3	address poverty and disadvantage, taking into account the particular difficulties of those facing multiple disadvantage?		∅		
	ensure the provision of employment land in, or accessible to, the most deprived communities in the Region?		∅		
4.4	improve health and reduce health inequalities by encouraging and enabling healthy active lifestyles and protecting health, as well as providing equitable access to health services?		∅		

RSDF	Appraisal Questions	Effects			Commentary
		Short	Med	Long	
	Will the proposal...				
	diminish inequalities in mortality, health and wellbeing across the Region?		∅		
	ensure that infrastructure for healthcare is provided to meet projected future demand and need?		∅		
	promote healthy lifestyles and opportunities for exercise (eg through environmental infrastructure and design)?		∅		
	promote opportunities to participate in sport?		∅		
4.5	provide decent and affordable housing for all, of the right quantity, type, tenure and affordability for local needs, in clean, safe and pleasant local environments?		∅		
	deliver genuine 'pathways of housing choice'?		∅		
	increase the supply of affordable housing?		∅		
	reduce the percentage of unfit/non-decent homes?		∅		
	encourage housing development which makes more efficient use of land (between 30 and 50 dwellings per hectare net); and seek greater intensity of development at places with good public transport accessibility (such as city, town, district and local centres or around major nodes along good quality public transport corridors)?		∅		
	promote the renovation and reuse of existing building stock, rather than the construction of new houses, where appropriate?		∅		
	ensure the adoption of sustainable design and construction practices in housing?		∅		
4.6	reduce crime, fear of crime and antisocial behaviour?		∅		
	promote the reduction of crime rates?		∅		
	encourage the adoption of principles to 'design out' crime in housing and employment sites?		∅		
4.7	improve opportunities to participate in the diverse cultural, sport and recreational opportunities the West Midlands can offer locally and in the wider region?		∅		
	ensure that facilities and locations for cultural activities are protected and provided?		∅		
	protect and create high quality or valued recreational spaces and avoid erosion of recreational function?		∅		
4.8	encourage physical development with a better balance of jobs, housing, services and facilities within each part of the Region in order to meet local needs locally and encourage stable and sustainable communities?	?	?	?	The options paper identifies that there are links between congestion charging policy and the policy on housing and employment land distribution, although those links are not clear.
	focus retail and office development in town centres?		∅		
	link housing development and employment opportunities?		∅		
	reverse the pattern of people migrating from metropolitan areas to rural parts of the Region?	?	?	?	The options paper identifies that there are potential knock-on effects on rural areas, although it is unclear what those effects might be.
4.9	ensure that the Region's workforce is equipped with the skills to access		∅		

RSDF	Appraisal Questions Will the proposal...	Effects			Commentary
		Short	Med	Long	
	high quality employment opportunities suited to the changing needs of the Regional economy, whilst recognising the value and contribution of unpaid work?				
	reduce inequalities in employment rates across the Region?		Ø		
	provide employment land near to the potential workforce?		Ø		
4.10	promote investment in future prosperity, including ongoing investment and engagement in learning and skills development?		Ø		
	ensure an appropriate supply of employment sites within the region to support sustainable economic development?		Ø		
	Encourage investment to develop deprived areas and focusing resources in areas of greatest need		Ø		
	ensure that education and skills infrastructure meets projected future demand and need?		Ø		
	reduce inequalities in education and skills across the Region?		Ø		
<p>Summary</p> <p>The introduction of congestion charging schemes has the potential for a range of impacts depending on the approach, the types of scheme and any supporting measures such as investment in public transport infrastructure. However, it is not possible to assess the likelihood of significant impacts because the potential policy options and approaches are undefined.</p> <p>There are environmental benefits to be gained from reduced congestion, such as improved air quality, reduced traffic noise, less energy consumption, reduced greenhouse gas emissions, improvements to the urban environment and reduced impacts on buildings and other infrastructure. However, the environmental impacts of traffic may to an extent be displaced to other areas.</p> <p>The increase in public transport use and the significance of any shift away from road freight may depend to a large extent on the existence and scope of any accompanying infrastructure investment. There may be implications for access to services, and particularly benefits from reduced congestion for those who use public transport, but also potential negative social impacts of charging on low-income households. The economy is identified in RSS policy as a potential factor in decisions on congestion charging. However, it is not clear whether this might be expected to have a positive impact through reducing the costs of congestion or negative impacts through increased charges or reduced commercial activity within city centres.</p> <p>The options paper identifies that there are links between congestion charging policy and the policy on housing and employment land distribution, and potential knock-on effects on rural areas, although those links are not clear.</p>					
<p>Mitigation</p> <p>The options paper should clarify the potential policy options and possible approaches to congestion charging policy, including any supporting measures such as investment in public transport infrastructure.</p> <p>The links between congestion charging and policies on housing and employment land distribution should be clarified.</p> <p>The potential for knock-on effects in rural areas should be clarified.</p>					

SUSTAINABILITY APPRAISAL OF SECTIONS ON 'ROLE OF THE REGION'S AIRPORTS', FROM SPATIAL OPTIONS PAPER (27 SEPTEMBER 2006)

RSDF	Appraisal Questions Will the proposal...	Effects			Commentary
		Short	Med	Long	
1.1	use natural resources such as water and minerals efficiently, including by incorporating efficiency measures into new land use and developments?		∅		
	promote the balance of water supply and demand?		∅		
	reduce the use of primary aggregates?		∅		
1.2	promote and support the development of high value and low impact new technologies, especially resource-efficient technologies and environmental technology initiatives?		∅		
	promote the development of technologies to address climate change, eg new energy generators using renewable sources, more efficient industrial technology and processes to minimise or mitigate for the impacts of climate change?		∅		
	secure improvements to communication infrastructure?		∅		
1.3	promote and ensure high standards of sustainable resource-efficient design, construction and maintenance of buildings, where possible exceeding the requirements of the Building Regulations?		∅		
	ensure the adoption of sustainable design and construction practices in all buildings?		∅		
1.4	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?	+/-/?	+/- -/?	+/- -/?	Amending the modal split for BIA could require an increase in the modal share of public transport, although overall car use is likely to increase as a result of airport development. The share in 2000 was 13%, therefore to achieve the suggested 25% modal share would require an 800% increase in public transport capacities above 2000 levels to keep pace with the fourfold increase in passenger numbers. The impact on congestion is unclear but road improvement and expansion is likely to be required to deal with increased congestion and the potential 350% increase in car numbers accessing the airport. <i>Direct, permanent and temporary</i>
	promote more sustainable transport patterns in areas suffering from congestion?	-	--	--	Road improvement and expansion is likely to be required to deal with increased congestion, for example from the estimated 350% increase in numbers of cars accessing BIA. <i>Direct, permanent</i>
	promote a shift of freight from road to rail?		∅		There may be opportunities to promote rail freight in conjunction with airports, but this is not addressed in the options paper.
	improve the quality of transport infrastructure?	+	++	++	Airport expansion will improve transport infrastructure. New rail

RSDF	Appraisal Questions	Effects			Commentary
	Will the proposal...	Short	Med	Long	
					facilities to support increased passenger numbers are identified in the options paper. Although airport expansion is likely to increase congestion, road improvement and expansion is expected to deal with this. <i>Direct, permanent</i>
	make best use of existing airport capacity?	?	?	?	BIA passenger numbers are forecast to increase beyond current capacity, and the capacity of Coventry may be increased as a result of the current Enquiry. Current capacity is therefore unlikely to meet future demand, although it is unclear to what extent expansion will also fuel demand. Providing air services to attract passengers away from Heathrow and Manchester may not represent best use of existing capacity, nor is it clear what effect this will have on surface transport. <i>Direct, permanent</i>
1.5	ensure development is primarily focused in the major urban areas, makes efficient use of existing physical infrastructure and helps reduce need to travel, especially by private car?	+/-	++/- -	++/- - -	Focusing airport development on BIA will help to promote use of existing rail infrastructure and a change in the share of surface access by public transport may promote more sustainable alternatives to the use of the car. However, airport development will nevertheless increase travel and increase use of the car to access airports. <i>Direct, permanent and temporary</i>
	focus development in the major urban areas?	∅			
	reduce the number and length of journeys made by car?	-	--	---	Increasing passenger numbers will increase the number of car journeys to and from airports. <i>Direct, temporary</i>
	reduce the need to travel?	-	--	---	Airport expansion and related economic activity will promote more travel, both in the air and on the surface. <i>Direct, permanent</i>
	promote alternative, more sustainable, modes of transport to the car (including walking and cycling) through location of housing, employment sites, services and facilities, and appropriate infrastructure for sustainable modes of transport?	+	++	++	Focusing airport development on BIA will help to promote use of rail. The options paper recognises the importance of increasing the percentage access by public transport to 25%, and identifies new rail infrastructure improvements for access to BIA. The options paper also asks for suggestions on surface access modal splits for each airport which may promote more use of alternatives to the car, although it is not clear whether this relates only to BIA or to each airport. <i>Direct, temporary and permanent</i>
1.6	encourage and enable waste minimisation, reuse, recycling and recovery to divert resources away from the waste stream?	∅			
	reduce waste arisings?	∅			
	ensure that sustainable waste management can be carried out in the Region?	∅			
	enable communities to take responsibility for their own waste and meet their	∅			

RSDF	Appraisal Questions	Effects			Commentary
	Will the proposal...	Short	Med	Long	
	own needs (self-sufficiency)?				
1.7	encourage local sourcing of food, goods and materials?	-	--	---	Airport expansion is likely to increase import and export of goods and materials. <i>Indirect, permanent</i>
1.8	reward efficient resource use and encourage development of alternative and renewable resources in order to reduce dependence on fossil fuels?		∅		
	See questions under Objectives 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 1.7, 1.9, 2.1, 2.2, 2.3, 3.4 and 4.5				
1.9	encourage corporate social and environmental responsibility, with regional organisations and agencies leading by example?		∅		
	encourage sustainable procurement?		∅		
1.10	encourage a culture of enterprise and innovation, including social enterprise?		∅		
1.11	achieve a strong, stable and sustainable economy and prosperity for the benefit of all the Region's inhabitants?	-/+	--/++	-- -/+++	Airport expansion could have both positive and negative impacts on the regional economy. The York Aviation study identified the potential for impacts on other economic activity through diversion of resources away from more productive activity, for increased costs of congestion and for loss of jobs and tourism overseas, although this needs to be balanced against the economic benefits of increased trade, inward tourism and investment. The likely balance of effects is not known. <i>Direct and indirect, permanent and temporary</i>
	narrow the GVA gap between the best and worst performing parts of the Region?	0	0	0	The York Aviation study identifies that there is a need to ensure the employment opportunities associated with airport expansion are available to areas of employment need through suitable access strategies.
	support efficient, competitive, diverse and innovative business, commercial, industrial, retail, tourism and leisure sectors?	+/-/0	++/- -/0	+++/- - -/0	Airport expansion can promote the business, commercial, industrial, retail and tourism sectors, although it may also have disadvantages as stated above and has no impact on efficiency or innovation. <i>Direct, permanent and temporary</i>
2.1	reduce overall energy use through increased energy efficiency?	-	--	---	Aviation energy use will increase significantly. Energy use for surface access will also increase. <i>Direct, permanent</i>
	raise energy efficiency to current Building Regulations standards in refurbishments for Decent Homes Standard? (Also see question on EcoHomes standard under issue 5, Housing).		∅		
2.2	increase the proportion of energy generated from renewable and low carbon sources, including by microgeneration, CHP, district heating, and in transportation?		∅		
	promote energy generation from CHP and community heating?		∅		

RSDF	Appraisal Questions Will the proposal...	Effects			Commentary
		Short	Med	Long	
2.3	minimise the Region's contribution to the causes of climate change by reducing emissions of greenhouse gases from transport, domestic, commercial and industrial sources?	-	--	---	Greenhouse gas emissions from aviation will increase significantly. Air transport in 2000 accounted for 5% (28.5m tonnes) of all UK CO ₂ emissions ⁴ , and the West Midlands has approximately 5% of the total passenger numbers (or 1.4m tonnes of CO ₂). By 2030, the region will account for up to 8% of projected UK passenger numbers ⁵ with CO ₂ emissions possibly rising to an estimated 5.7m tonnes. <i>Direct, permanent</i>
	reduce the Region's contribution to climate change?	-	--	---	As above
2.4	ensure that land use and development takes into account predicted changes in the Region's climate, including flood risk?		∅		
	promote sustainable urban drainage systems?		∅		
	promote the adoption of climate change adaptation and climate proofing principles in planning and design?		∅		
2.5	implement a managed response to the unavoidable impacts of climate change, ensuring that the design and planning process takes account of the predicted changes in the Region's climate?		∅		
	prevent all inappropriate development in areas of flood risk?		∅		
3.1	value, protect, enhance and restore the Region's environmental assets, including the natural, built and historic environment and landscape?	-/?	-/?	-/?	Green belt is likely to be lost by airport expansion and possibly by the generation of other new economic activity close to airports. All four airports are within the green belt. Landscape impacts are also possible, particularly at Cosford, but uncertain. <i>Direct, permanent</i>
	value, enhance and protect the Region's natural environmental assets (eg Green Belt, parks and open spaces, AONBs etc)?	-	--	--	Green belt is likely to be lost at BIA and possibly also at Coventry. Airport expansion is likely to encourage new economic activity close to airports which may have additional impacts on green belt. All four airports are within the green belt. <i>Direct, permanent</i>
	value, enhance and protect the Region's historic environment assets (eg World Heritage Sites, archaeological remains, historic buildings, parks and gardens, and landscapes, and conservation areas, battlefields and other architectural and historically important features and areas, and their settings)?	?	?	?	Potential impact on historic assets are unknown.
	promote heritage-led regeneration?		∅		
	promote the repair and reuse of historic buildings?		∅		
	enhance the amenity value of the countryside, meeting the recreational and leisure needs of communities?		∅		
	protect, enhance and manage the character and appearance of the region's	?	?	?	Landscape is a potential issue at Cosford, although potential

⁴ National Atmospheric Emissions Inventory, <http://www.aeat.co.uk/netcen/airqual/statbase/emissions/ipcc00.html>

⁵ *The Future of Air Transport*, http://www.dft.gov.uk/stellent/groups/dft_aviation/documents/page/dft_aviation_031507.hcsp

RSDF	Appraisal Questions Will the proposal...	Effects			Commentary
		Short	Med	Long	
	landscapes and townscapes, maintaining and strengthening local distinctiveness and sense of place?				proposals for Cosford are unknown at this stage. Airport expansion is likely to encourage new economic activity close to airports which may have additional impacts on landscapes. The likelihood and significance of any impacts are unknown, but impacts on openness may be an issue in the green belt. <i>Direct, permanent</i>
3.2	value, maintain, restore and re-create regional biodiversity, where possible using approaches that improve the resilience of natural systems such as linking fragmented habitats?	?	?	?	Increase in air emissions, noise and additional land take from air travel and surface activity may have adverse consequences for biodiversity. The likelihood and significance of any impacts are unknown. <i>Direct and Indirect, permanent</i>
	value, enhance and protect the Region's designated sites, including sites designated for geodiversity?	?	?	?	Impacts are possible on an SSSI at BIA. <i>Direct, permanent</i>
	value, enhance and protect the Region's priority habitats and species, and promote the delivery of regional biodiversity targets?	∅			
	support development that incorporates improvements to wildlife habitats?	∅			
3.3	minimise air, water, soil, light and noise pollution levels, and create good quality air, water and soils?	?	?	?	Increased air emissions and noise are likely from airport development, although the significance of any impacts is unknown. <i>Direct, permanent</i>
	promote more sustainable transport patterns in areas of low air quality?	∅			
	address air quality impacts arising from specific development activities?	?	?	?	Air emissions will increase through airport expansion, both from air transport and surface access and other surface activities. Amending the modal share of public transport may help to address air quality impacts from surface access, although it is not clear what the overall impact on air quality is likely to be, and whether emissions modelling which showed NO ₂ to be within the standard took account of surface activity as well as air travel. <i>Direct, permanent</i>
	protect and enhance the quality of watercourses in the Region?	∅			
	reduce the quantity of contaminated land in the Region?	∅			
	prevent noise and light pollution?	?	?	?	Noise is considered as an issue in the options paper, although it is not clear whether noise would be prevented by the proposed limits. Light pollution is not addressed. <i>Direct, permanent</i>
3.4	encourage land use and development that optimises the use of previously developed land and buildings?	∅			
3.5	encourage land use and development that creates and sustains well-designed, high quality built environments that incorporate green space, encourage biodiversity, and promote local distinctiveness and sense of place?	∅			
	require good urban design to create attractive, high quality environments where people will choose to live, work and invest?	∅			

RSDF	Appraisal Questions	Effects			Commentary
	Will the proposal...	Short	Med	Long	
	increase access to good quality green space (eg increase the number of people in towns and cities with accessible greenspace within 300m of their homes)?	?	?	?	Airport development could potentially reduce access to green space, both through airport expansion and encouragement of new economic activity close to airports. The significance is dependent on local land use which is unknown. <i>Direct, permanent</i>
	protect existing and encourage the development of new biodiversity assets in developments?		∅		
3.6	encourage local stewardship of local environments, for example by promoting best practice in agricultural management or enabling communities to improve their neighbourhoods?		∅		
3.7	promote environmental justice, recognising that deprived areas and disadvantaged communities and more likely to be affected by environmental damage and degradation?		∅		
	specifically improve environmental quality in deprived communities?		∅		
4.1	enable communities to influence the decisions that affect their neighbourhoods and quality of life?	?	?	?	Requiring all airports to produce masterplans may help to inform local communities about the potential impacts of airport development, although it is not clear that this will enable communities to influence airport development. The options paper envisages that the masterplans will inform Local Development Frameworks and Transport Plans, but this needs to be a two-way process. <i>Indirect, temporary</i>
	promote the use of community-based planning tools?		∅		
4.2	ensure easy and equitable access to services, facilities and opportunities, including jobs and learning, regardless of culture, ethnicity, faith, gender, sexuality, age, disability or location?		∅		
	ensure that existing services and opportunities are retained and, where possible, developed?		∅		
	promote compact, mixed-use developments with good accessibility to local facilities and services that reduce the need to travel?		∅		
4.3	address poverty and disadvantage, taking into account the particular difficulties of those facing multiple disadvantage?		∅		
	ensure the provision of employment land in, or accessible to, the most deprived communities in the Region?		∅		
4.4	improve health and reduce health inequalities by encouraging and enabling healthy active lifestyles and protecting health, as well as providing equitable access to health services?		∅		
	diminish inequalities in mortality, health and wellbeing across the Region?		∅		
	ensure that infrastructure for healthcare is provided to meet projected future demand and need?		∅		

RSDF	Appraisal Questions Will the proposal...	Effects			Commentary
		Short	Med	Long	
	promote healthy lifestyles and opportunities for exercise (eg through environmental infrastructure and design)?		∅		
	promote opportunities to participate in sport?		∅		
4.5	provide decent and affordable housing for all, of the right quantity, type, tenure and affordability for local needs, in clean, safe and pleasant local environments?		∅		
	deliver genuine 'pathways of housing choice'?		∅		
	increase the supply of affordable housing?		∅		
	reduce the percentage of unfit/non-decent homes?		∅		
	encourage housing development which makes more efficient use of land (between 30 and 50 dwellings per hectare net); and seek greater intensity of development at places with good public transport accessibility (such as city, town, district and local centres or around major nodes along good quality public transport corridors)?		∅		
	promote the renovation and reuse of existing building stock, rather than the construction of new houses, where appropriate?		∅		
	ensure the adoption of sustainable design and construction practices in housing?		∅		
4.6	reduce crime, fear of crime and antisocial behaviour?		∅		
	promote the reduction of crime rates?		∅		
	encourage the adoption of principles to 'design out' crime in housing and employment sites?		∅		
4.7	improve opportunities to participate in the diverse cultural, sport and recreational opportunities the West Midlands can offer locally and in the wider region?		∅		
	ensure that facilities and locations for cultural activities are protected and provided?		∅		
	protect and create high quality or valued recreational spaces and avoid erosion of recreational function?		∅		
4.8	encourage physical development with a better balance of jobs, housing, services and facilities within each part of the Region in order to meet local needs locally and encourage stable and sustainable communities?		∅		
	focus retail and office development in town centres?		∅		
	link housing development and employment opportunities?		∅		
	reverse the pattern of people migrating from metropolitan areas to rural parts of the Region?		∅		
4.9	ensure that the Region's workforce is equipped with the skills to access high quality employment opportunities suited to the changing		∅		

RSDF	Appraisal Questions	Effects			Commentary
	Will the proposal...	Short	Med	Long	
	needs of the Regional economy, whilst recognising the value and contribution of unpaid work?				
	reduce inequalities in employment rates across the Region?	0	0	0	The York Aviation study identifies that there is a need to ensure the employment opportunities associated with airport expansion are available to areas of employment need through suitable access strategies.
	provide employment land near to the potential workforce?	+	+	+	All four airports are in reasonable proximity to the major urban areas and therefore reasonably near to areas of potential workforce. <i>Indirect, permanent</i>
4.10	promote investment in future prosperity, including ongoing investment and engagement in learning and skills development?	?	?	?	Airport expansion aims to encourage inward investment, however the York Aviation study notes that many of the wider economic impacts of airport development are difficult or impossible to quantify e.g. the potential consequences of outward investment exceeding inward investment, the regional element of the UK tourism deficit or the extent to which improved connectivity delivers increased investment and trade independent of other attraction factors. <i>Direct and indirect, permanent and temporary</i>
	ensure an appropriate supply of employment sites within the region to support sustainable economic development?	+	++	+++	Expansion of airports and promotion of associated economic activity will provide new employment sites. <i>Direct, permanent</i>
	Encourage investment to develop deprived areas and focusing resources in areas of greatest need	?	?	?	The potential impacts on areas of need is unclear. It is possible that encouraging investment around airports will divert investment from areas of greater need. <i>Indirect, temporary</i>
	ensure that education and skills infrastructure meets projected future demand and need?		∅		
	reduce inequalities in education and skills across the Region?		∅		
	<p>Summary</p> <p>The demand for air travel will increase significantly and surface travel will also increase. Current capacity is unlikely to meet future demand, although it is unclear to what extent expansion will also fuel demand. Airport expansion will make a direct contribution to improving transport infrastructure, both air and surface, particularly with development concentrated at Birmingham International Airport. New rail facilities to support increased passenger numbers are identified in the options paper. New modal split targets should increase in the share of public transport for airport access, although overall car use is likely to increase as a result of airport development. Public transport capacities to BIA would have to increase by an estimated 800% to meet the long term 25% modal share target. Road improvement and expansion is likely to be required to deal with increased congestion, for example from the estimated 350% increase in car numbers accessing BIA. There may be opportunities to promote rail freight in conjunction with airports, but this is not addressed in the options paper. Providing air services to attract passengers away from Heathrow and Manchester may not represent best use of existing capacity, nor is it clear what effect this will have on surface transport.</p> <p>Other impacts are potentially significant but in many cases unquantified. Airport expansion could have both positive and negative impacts on the regional economy. Airport expansion can promote the business, commercial, industrial, retail and tourism sectors. There will be benefits from increased employment, trade, inward tourism and investment, but this needs to be balanced with the potential for impacts on other economic activity through diversion of resources away from more productive activity, for increased costs of congestion and for loss of jobs, tourism and investment overseas. There are no particular benefits apparent for economic efficiency or innovation. Many of the wider economic impacts of airport development are difficult or impossible to quantify e.g. the potential consequences of outward investment exceeding inward investment, the regional element of the UK tourism deficit or the extent to which improved connectivity delivers increased investment and trade independent of other attraction factors. All four airports are in reasonable</p>				

RSDF	Appraisal Questions	Effects			Commentary
	Will the proposal...	Short	Med	Long	
	<p>proximity to the major urban areas and therefore reasonably near to areas of potential workforce, although there is a need to ensure the employment opportunities are available to areas of employment need through suitable access strategies.</p> <p>Energy use and greenhouse gas emissions from aviation and surface activity will increase significantly. Noise levels and other air emissions are also likely to increase although these may be within acceptable limits. There is the potential for light pollution although the significance is dependent on local circumstances. Increase in air emissions, noise and additional land take from air travel and surface activity may have adverse consequences for biodiversity. The likelihood and significance of any impacts are unknown, although impacts are possible on an SSSI at BIA. Green belt is likely to be lost by airport expansion and possibly by the generation of other new economic activity close to airports. All four airports are within the green belt.</p>				
	<p>Mitigation</p> <p>It is not clear from the options paper what aspects of airport development are non-negotiable and what is an option. The paper would benefit from clarification of whether there are alternative options to that proposed in the options paper under the suggested revisions to T11.</p> <p>The options paper would benefit from greater clarity on the predicted economic impacts, both the benefits and the disadvantages. There should be some reference to ensuring that opportunities are available to areas of employment need.</p> <p>The options paper would benefit from a clearer statement of the potential surface access issues and impacts on car use, public transport and the road network. It should be clarified whether targets for surface access modal splits apply only to BIA or to each airport.</p>				