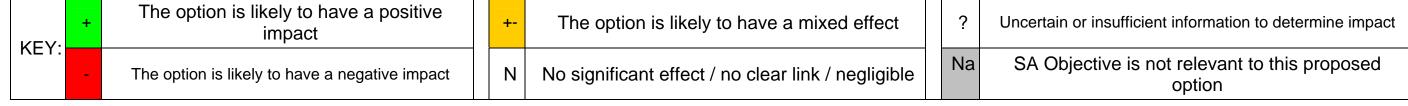
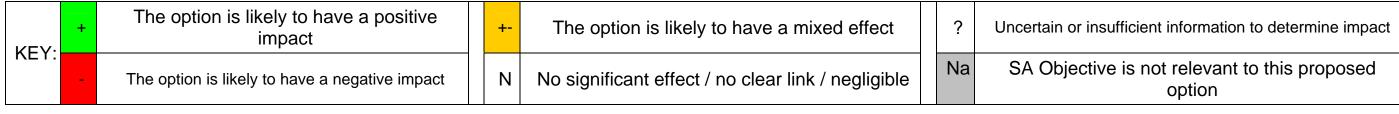
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I&O Report Questions – Options for public consultation	Q29 Opt 3	Q29 Opt 4	Q30	Q31	Q32 A	Q32 B	Q33 A	Q33 B	Q34 A	Q34 B	Q35 A	Q35 B	Q3 5 C	Q36 A	Q36 B	Q3 7	Q38 A	Q38 B	Q38 C	Q38 D	Q38 E	Q39 A	Q3 9 B	Q3 9 C	Q4 0 A	Q4 0 B	Q4 0 C
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I&O Report Questions – Options for public consultation	Q41 Opt1	Q41 Opt2	Q42	Q43 A	Q43 B	Q44 A	Q44 B	Q44 C	Q45 A	Q45 B	Q45 C	Q46 A	Q46 B	Q47 A	Q47 B	Q47 C	Q48 A	Q48 B
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ENV 2	N	N	?	N	?	Na	+-	+										
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ENV 6	N	N	+	+	-	+-	+	-	Na	Na	Na	-	+	+	+	-	+	+
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ENV 8	Na	Na	Na	-	+	?	?	?	Na	Na	Na	Na	Na	?	?	?	+	+
ENV 9	+	-	+	+	+	-	-	-	Na	Na	Na	N	N	?	?	?	+	+
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SOC 3	+	-	+	+	-	+-	+	+-	Na	Na	Na	-	+	Na	Na	Na	+	+
SOC 4	+	+	+	Na	Na	+	+	+	+	+	+	+-	+	Na	Na	Na	+	+
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EC 4	Na	Na	+	+-	+-	N	N	N	Na	Na	Na	Na	Na	+	+	-	+-	+-

KEY:	+	The option is likely to have a positive impact	+-	The option is likely to have a mixed effect	?	Uncertain or insufficient information to determine impact
KET.	-	The option is likely to have a negative impact	N	No significant effect / no clear link / negligible	Na	SA Objective is not relevant to this proposed option

#### <u>Issues and options Report – Questions 1 and 2:</u>

#### The Sustainability of the Spatial Vision and Objectives.

The Joint Core Strategy's draft Spatial Vision proposes to create an area that is well **connected**, environmentally **sustainable** and **inclusive** for all residents, whether in the urban area or in rural settlements.

By targeting growth to the area around Norwich it **improves access** to the main services, jobs and facilities and **reliable transport** links. Development will be encouraged to provide more **community facilities**, including improvements to **education**. The rural countryside will be protected and the **character** of market towns will be **maintained**, particularly if new, efficient public transport schemes can be provided alongside significant residential and employment developments.

Housing developments will be well designed and of a high standard to help minimise contributions to climate change and mitigate against its effects. They will be provided with, or be close to, facilities and provide a mix of tenancies, types and sizes to help create balanced communities that do not lead to residents being socially excluded and that will reduce the fear of crime through promoting inclusiveness. With improved cycling and walking access around residential areas, reliance on the car should be reduced.

Some Greenfield land will be required for new developments, but targeting brownfield land, integrating green infrastructure, and enhancing the character of market towns will protect the environment and landscapes.

**Regeneration** will help to **provide jobs** in the urban area and promote **rural diversification**. New employment will also be provided in the rural area, with a focus on market towns and local employment areas. By providing a mix of business premises, there should also be facilities to retain key workers and **to promote investment** in the area, through self-employment and start-up units.

#### Some Key Effects from the Objectives, compared to the SA Objectives

JCS Objective 1 – Public participation is a vital aspect at the root of sustainable planning, to ensure that all groups are included in the plan to build a sustainable community, with improved identity and integration (SA SOC 5).

JCS Objective 3 – Healthy lifestyles can be promoted by offering improved travel alternatives to the private car, which will also help to reduce the effect of traffic on the environment and improve accessibility to essential services and jobs. (SA ENV 1, SOC 2, 8).

JCS Objective 4 – Allocating enough land for housing will reduce poverty, increase the access to decent suitable and affordable homes, improve social welfare and the areas people live in, and house more of the workforce to support the economy (SA SOC 1, 4, 5, 7, EC 1). It could however cause conflict with environmental preservation (ENV 4, 5).

JCS Objective 5 – Promoting economic growth and diversity and more jobs will help to reduce poverty by providing employment and training opportunities, and improving access to jobs (SOC 1, 3, 6, 8). Whilst economic growth will be maintained, and diversification encouraged (EC 1, 2), there could be direct conflicts with landscape, heritage and environmental protection (ENV 1, 4, 5).

JCS Objective 8 – Protecting and enhancing the natural, built and historic environment will involve minimising the negative effects of traffic, enhancing biodiversity through green infrastructure, preserving the unique heritage of the area, minimising contributions to climate change and avoiding damaging impacts on water resources (ENV 1, 3, 4, 5, 6, 8). Whilst many aspects can help social development through providing areas for recreation and improving the quality of where people live (SOC 2, 7), there could be balances to be achieved when providing employment and encouraging economic investment in rural areas, for example (SOC 6, EC 2).

JCS Objective 12 – Protecting and enhancing Norwich's character and culture will be important for making Norwich and its surroundings an area of national and international importance and attraction. The local environmental amenity and air quality will need to be improved, whilst enhancing the historic core and unique heritage will be crucial in developing the tourism industry and stimulating economic development and jobs growth (ENV 1, 3, 5, SOC 6, 8). Cultural development will be important for reducing social exclusion, improving the health of the population, improving education, building community identity and improving the quality of where people live (SOC 1, 2, 3, 5, 7). The economy can also benefit through the area being a more attractive place for investment (EC 1, 2).

#### JCS Issues and Options Report - Sustainability Appraisal: Question 2 - The effects of the Spatial Planning Objectives.

Assessment of compatibility: Joint Core Strategy objectives and the Sustainability Appraisal objectives.

Key: **GREEN** = Compatible (Plan objectives and SA objectives are complementary)

**GREY** = No effects / not applicable (Plan objectives and SA objectives are not interrelated)

**RED** = Incompatible (Plan objectives and SA objectives are not complementary)

SA																					
Objectives	ENV	SOC	SOC	SOC	SOC	SOC		SOC	SOC	EC	EC	EC	EC								
JCS Plan	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	1	2	3	4
Objectives																					
Obj. 1																					
Obj. 2																					
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#### <u>Issues and Options Report – Questions 3 – 9:</u>

#### Sustainability considerations of the Settlement Hierarchy.

The proposed settlement hierarchy considers that housing development and growth should occur in an order of preferential settlement locations. The hierarchy would direct various scales of growth to the most appropriate locations.

The hierarchy is set out as follows:

- 1. Sites in and around Norwich, then
- 2. Market towns, then
- 3. Key service centres (including larger villages), then
- 4. Secondary rural settlements (to support local needs), and finally
- 5. Limited development elsewhere.

The proposed hierarchy would support sustainable development by focusing the majority of growth on larger centres. This would have the following benefits:

#### **Environmental**

The **effect of traffic** on the environment would be reduced as it would lead to reduced travel distances to reach employment and services and enable more people to use public transport and to walk and cycle within relatively compact settlements. Such encouragement of modal shift should reduce congestion and lead to improvements in air quality and promote **reductions in CO2 emissions**.

In addition, the higher density development characteristic of larger settlements enables the large scale use of **sustainable**, **locally-produced energy**, such as Combined Heat and Power schemes.

By resisting development in rural areas, the hierarchy approach would also **protect** both the quality of **landscapes** and good quality **agricultural land** and enable **improvements to townscapes** through well-designed development. It would also promote the **re-use of brownfield land**, require less **greenfield land** to meet housing and employment needs, and in doing so **protect biodiversity**.

#### Social and Economic

Focussing development on larger settlements will help to address **social exclusion** for the majority of people by providing local access to employment opportunity, education and services. By creating strong economic centres it can encourage **investment and economic growth.** It would enable the establishment of purpose built employment areas adjoining settlements, **easily accessible** by sustainable forms of transport. It also enables other mixed-use employment, which can be located within settlement to provide a **balanced** 

**community** of workers and residents. Rural area growth would be proportional to the area, which could bring jobs and services to key centres and villages.

#### Norwich (Q3 & 4)

Sequential development in Norwich would focus strategic growth towards the city centre, then District centres, then other urban areas with good access. The least preferable areas for new growth are those surrounding areas with poor access.

This would ensure the city is regenerated and can gradually provide a mixed-use environment with homes and services for all parts of the community. District centre viability would continue to serve local populations, so increasing the opportunities for walking and cycling in order to access local facilities. However, it could exacerbate social exclusion in areas of poorer access if there continue to be fewer opportunities for growth and services development in those locations.

#### Market Towns (Q5)

Growth in market towns will need to support a wide catchment and be developed in conjunction with increased access and public transport improvements. Growth will improve the provision of jobs and services and supply housing for local people in need and in doing so will relieve some development pressure from the city. Towns with good transport are suitable locations for education and health.

#### **Key Service Centres (Q6)**

These are important locations for meeting the most important needs of local communities in the rural area. Allowing growth of a scale proportionate to the size of the settlement means that local facilities can still be supported, some local housing needs can be met and access to services can be maintained for local communities. Transport links to local towns are also important for all residents.

#### Secondary Rural Settlements (Q7 & 8)

By defining secondary settlements with a certain range of facilities we can ensure certain local services are available to minimise the need to travel, and to cater for those most basic needs. Including a primary school, for example, will help most families to arrange work and child care arrangements.

Some Secondary Rural Settlements could also be combined to form a clustered community with more local facilities to benefit the wider area. With good public transport links to Market Towns, their complementary functions could still significantly reduce local travel demand and promote community integration.

#### Limiting development elsewhere (Q9)

Some areas in the countryside will contain so few facilities that they are not sustainable and force residents to drive elsewhere for their daily needs. In such places it is proposed that development will be significantly restricted. This approach would minimise the number of isolated homes and protect the countryside from visually intrusive development.

## Joint Core Strategy Issues and Options: Sustainability Appraisal Framework

## Questions 3-9: Effects of the suggested Settlement Hierarchy, assessed against the SA Objectives

 $\odot$  = positive effects  $\odot$  = negative effects N = neutral effects N = mixed effects N = neutral effects

SA Objective	Decision making criteria	Short- Term 0-5 yrs	Medium Term 5-20 yrs	Long- Term 20+ yrs	Comments / Justification Inc. cumulative effects
<b>ENVIRONMENT</b>	AL				
ENV 1 To reduce the effect of traffic on the environment.	Will it reduce traffic volumes, ease the flow of traffic and reduce congestion?  Will it increase the proportion of journeys using modes other than the car?  Will it reduce the effect of HGV traffic on people and the environment?  Will it encourage more benign modes of travel?  Will new development be located such to reduce the need for people to travel?	89	©	©	Traffic flows will be minimised by new development being located closer to existing facilities and public transport links. Cycling and walking would be more feasible if new developments were compact and held integrated links to services and facilities necessary. In the short term, there would be some effects from construction traffic and the new residential areas would need time to become accustomed to using improved public transport links.
ENV 2 To improve the quality of the water environment	Will it improve the quality of the water environment (streams, rivers, lakes etc)?  Will it help to support wetland habitats and species?	☺	©	☺	The developments should be able to utilise existing drainage and water treatment facilities and so reduce the potential for pollution to watercourses.
ENV 3 To improve environmental amenity, including air quality.	Will it improve air quality?  Will it reduce the emission of atmospheric pollutants?	8	80	©	Gradually, as new developments become integrated into the existing residential areas, the initial impacts from heavy construction traffic would be reduced as the need to travel by car is lessened and the air quality can be improved. Rural air quality would also be maintained.

ENV 4 To maintain and enhance biodiversity and geodiversity.	Will it conserve / enhance natural or seminatural habitats, and promote habitat connections?  Is it likely to have a significant effect on sites designated for international, national or local importance?  Will it conserve / enhance species diversity, and in particular avoid harm to protected species?	©	©	©	Resisting development in rural areas helps to avoid impacts on sensitive wildlife sites. Well-designed new urban extensions can also introduce green areas and habitats to existing urban areas, helping to promote biodiversity.
ENV 5 To maintain and enhance the quality of landscapes, townscapes and the historic environment.	Will it protect and enhance the quality of landscapes, townscapes and countryside character, including the character of the Broads and its setting where relevant?  Will it maintain and enhance the distinctiveness of the landscapes/townscapes and heritage?  Will it reduce the amount of derelict, underused land?  Will it protect and enhance features of	©	©	©	Resisting development in rural areas helps to maintain the landscapes and built heritage that make Greater Norwich and the Broads so unique. Innovative designs can ensure that new development is integrated into landscapes and the built form can also be enhanced by new architecture. The distinctiveness of the areas market towns and villages would be easier to preserve if larger developments were more self-contained.
ENV 6 To adapt to and mitigate against the impacts of climate change.	historical, archaeological and cultural value?  Will it reduce emissions of greenhouse gases by reducing energy consumption?  Will it lead to an increased proportion of energy needs being met from renewable sources?  Will it increase the capacity of the area to withstand the effects of climate change?  Will it ensure that the risks to lives, land and property are minimised?	©	☺	©⊗	Large developments could incorporate renewable energy and would minimise greenhouse gas emissions if people could make use of effective public transport. Focussing new developments in existing urban areas could however increase the urban heat island effect unless there were specific green areas included in the designs to ensure areas could 'breathe'.

ENV 7 To avoid, reduce and manage flood risk.	Will it minimise the risk of flooding to people and property?  Can it incorporate new designs to adapt to possible flood risk?  Will it promote the use of sustainable drainage systems to reduce run off?  Will it conserve groundwater resources?	©	©	©	New developments would avoid areas of flood risk, and could even include flood risk resistance measures to benefit an existing urban area. Drainage could be improved for a wider area if new developments included sustainable drainage systems, which would also help to reduce flood risk.  There would be more strain placed on
To provide for sustainable use and sources of water supply.	Will it minimise water consumption?	8	© ©	◎8	existing water supply systems but these could also be improved from new infrastructure investment.
ENV 9 To make the best use of resources, including land and energy, and to minimise waste production.	Will it minimise consumption of materials and resources?  Will it promote the use of land in sustainable locations that has been previously developed?  Will it use land efficiently?  Will it minimise the loss of "greenfield" land?  Will it avoid the loss of good quality agricultural land and preserve soil resources?  Will it minimise energy consumption and promote energy efficiency?  Will it promote the use of renewable energy sources?  Will it lead to less waste being produced?  Will it lead to less waste being disposed, by	©	©	©	Resisting development in rural areas helps to retain good quality agricultural land and reduce Greenfield land use as it would focus developments on previously developed land that would be enhanced.  Land could also be used more efficiently if it was located close to existing urban areas, by using slightly higher densities, for example.  Energy use could also be minimised if large developments could include some forms of renewable energy generation that could benefit the wider urban area.  Although more waste would be produced, the collection methods would become more efficient and there could be more opportunities for including recycling facilities if there were a larger population to cater for.

	promoting more recycling and composting?				
	Will it increase waste recovery for other means eg. energy generation?				
SOCIAL					
SOC 1 To reduce poverty and social exclusion.	Will it reduce poverty and social exclusion in those areas most affected?  Will it help to reduce deprivation levels?  Will it help meet the needs of residents most effectively?	9	©®	©8	New developments in and around existing urban areas would bring new residents closer to existing facilities and essential services. This would reduce social exclusion, increase access and reduce the need to travel, which would help reduce poverty. Rural communities would receive less development, which could lead to existing services being less viable.
SOC 2 To maintain and improve the health of the whole population and promote healthy lifestyles.	Will it improve access to high quality health facilities?  Will it encourage healthy lifestyles? How?  Will it provide adequate health infrastructure for existing and new communities?  Will the links between poorer health and deprivation be addressed?  Will links to the countryside be maintained and enhanced?	©	©⊗	©♡	New developments in and around existing urban areas would bring new residents closer to existing health and recreation facilities. This would increase access and reduce travel distances, and with favourable urban design could increase access to the countryside for more people. Developments closer to services and employment areas would also encourage more cycling and walking and promote healthier lifestyles. People in more rural areas may not receive as much investment in health care though.
SOC 3 To improve education and skills.	Will it improve qualifications and skills for both young people and amongst the workforce?  Will it help to retain key workers and provide more skilled workers from school leavers?  Will adequate education infrastructure be provided for existing and new communities?	©	©(S)	©®	New developments in and around existing urban areas would bring new residents closer to schools, further education and training opportunities. This would increase access and reduce travel distances, and could provide more venues for adult lifelong learning in the community. People in more rural areas may not benefit from improved transport

	Will it promote lifelong learning and skills training?  Will links between lower levels of education and deprivation be addressed?				links to such facilities though.
SOC 4 To provide the opportunity to live in a decent, suitable and affordable home.	Will it reduce the housing need and ensure that housing provision addresses the needs of all?  Will it provide the most appropriate solutions to address the housing requirements needed for creating sustainable communities?  Will it make best use of existing housing stock?	©	©	©	Communities would benefit from improved access to social housing and a larger affordable housing stock in urban areas. There may not be so much housing available in rural areas, but the new housing that is provided would enable its residents to be closer to services, facilities and jobs.
SOC 5 To build community identity, improve social welfare, and reduce crime and anti-social activity.	Will it encourage engagement in community activities?  Will it contribute to the achievement of a mixed and balanced community?  Will it reduce actual levels of crime?  Will it reduce the fear of crime?	☺	©	©	New developments will have to include well designed measures to improve social interaction, reduce crime and build community identity. There could be more opportunities for communities to be self-contained if they were stand-alone from existing urban areas however. Mixed use employment linked to residential areas would also help to improve balanced communities.
SOC 6 To offer more opportunities for rewarding and satisfying employment for all.	Will it reduce unemployment overall?  Will it help to improve earnings?	©	☺	☺	Larger new developments would include the provision of purpose-built employment areas adjacent to, or as part of, the new residential areas. There would be more access to the city centre and existing employment areas with improved transport links if developments are located closer to established urban areas.

SOC 7 To improve the quality of where people live.	Will it improve the quality of dwellings?  Will it improve the quality of local open space?  Will it improve the satisfaction of people with their neighbourhoods?	©	©	☺	These measures are largely design- specific, but links to existing urban areas would have to enhance the areas for existing and new residents. Provision of new facilities and improved access to existing facilities would help to improve the area for all communities.
SOC 8 To improve accessibility to essential services, facilities and jobs.	Will it improve accessibility to key local services and facilities (including health, education, leisure, open space, the countryside and community facilities)?  Will it improve accessibility for all whilst reducing dependency on the private car?  Will it improve access to jobs and services for all?	☺	©(S)	©®	Locating new developments closer to existing urban areas and larger market towns would ensure there are improved links to services and facilities and accessibility would improve. There should also be benefits from new or improved public transport links, although the rural area may not benefit quite so much if the focus of development is urban-based.
ECONOMIC					
EC 1 To encourage sustained economic growth.	Will it assist in strengthening the local economy?  Will it improve business development and enhance competitiveness?  Will it reduce vulnerability to economic shocks?  Will it promote growth in key sectors?  Will it increase vitality & viability of town centres and improve economic diversity?	©	©	©	Strong economic centres would be created if there were improved links to existing business areas and the city. Investment and economic growth would be able to offer more jobs for local people and make employment areas more accessible if most residential development were located closer to urban areas. If more investment arrived in the area it would help to diversify the economy and make the city, market towns and wider area more viable. Business opportunities could also arise in the rural area, particularly for tourism.
EC 2 To encourage and accommodate	Will it encourage indigenous businesses? Will it encourage inward investment?	©	☺	☺	If growth is directed towards urban areas there may also be more opportunities for start-up businesses and employment parks to help smaller-scale investment.

both indigenous and inward investment.	Will it make land and property available for business?  Will it improve economic performance across the Greater Norwich area?  Will it support / encourage rural diversification?  Will it support / encourage small city businesses?				Rural diversification could emerge to help boost the wider economy by providing complementary services.
EC 3 To encourage efficient patterns of movement in support of economic growth.	Will it improve provision of local jobs?  Will it improve accessibility to work, particularly by public transport, walking and cycling?  Will it reduce journey times between key employment areas and key transport interchanges?  Will it improve efficiency and sustainability of freight distribution?  Will it support provision of key communications infrastructure?	☺	☺	©	Economic growth would benefit from improved access and transport links and improved communications if growth were focussed around an existing hub. Business communities and networks could emerge to complement existing services like the Norwich Research Park.
EC 4 To improve the social and environmental performance of the economy.	Will it reduce the impact on the environment from businesses?  Will it reduce the impact on residents from businesses?  Will it attract new investment and skilled workers to the area?  Will it maintain existing business and	©	©	☺	The economy would be accessible to more people and a wider geographical spread if it were linked to efficient transport networks and central locations. The environmental benefits would include more sustainable transport options, less impact on the countryside and rural areas, and possible investments in sustainable tourism. If the scale of economic growth is proportional or appropriate to the

emp	loyment provision?				existing settlement, it could also have less		
					impact on the built heritage of an area.		
	it provide employme						
loca	tions to serve urban	and rural residents?					
Overall Conclus	<mark>ions: What are t</mark>	he main effects of	the policy op	tion as idei	ntified through the sustainability		
			sal process?		,		
		alph. a	our process r				
DOLLOV OD	FIGNIC Consultance	O Fatabliablia		to the manual trans	The seeds of development will come		
			g a settlement	nierarchy.	The scale of development will vary		
		ocation, as follows:					
•	1 - Sites in and	around Norwich, t	hen				
	2 - Market towr	ns, then					
	3 - Kev service	centres (including	larger village	es), then			
		rural settlements (t			and finally		
		elopment elsewhe		ai necusj,	and initially		
				do of provious	by developed lend. The wind areas would		
Environmental					sly developed land. The rural areas would		
					eservation of the existing landscapes and		
Impacts					isting form, but this can involve ortunities for improved waste		
					e biodiversity and reduce flooding.  ure of new developments and ensure that		
Social Impacts					ransport links to new and existing		
Social impacts					ies and increase opportunities.		
					ent, bringing together more business parks		
Economic Impacts					could be established as a rural economic		
Leononne impacts							
	benefit, and access to employment for rural communities would improve if transport links were enhanced as part of larger-scale urban extensions and market town development.						
Overall summary:	larger soule arban				eved for new and existing residents around		
• Impacts					impacts would have to be reduced through		
Possible mitigation measures  enhanced transport links. Accessibility needs to be enhanced in the rural areas, so device.							
Recommende	<u> </u>	will have to be a mixture of residential, employment and facilities in order to maintain community					
research interaction and improve opportunities for local people. C							
Considering cumulative  Sustainable to reduce journey lengths and impacts, offer more facilities and services for new considering cumulative.							
impacts	umulative				ost people across a wider variety of work.		
illipacts	impacts perfect and the second						

#### Joint Core Strategy Issues and Options: Sustainability Appraisal Framework

- Option Appraised: Question 11: Different strategies for locating growth.
  - Option A Adopt a strategy of dispersing the growth across a large number of small scale sites on the edge of the urban area and in surrounding villages.
  - Option B A medium concentration on sites similar to some of the larger estates constructed in recent years (1,500 3,000 residential units).
  - Option C Larger scale urban extensions and new settlements in the range of 5,000 10,000 dwellings.

#### **SCORING SYSTEM PROPOSED:**

SA Objective	Decision making criteria	Short- Term 0-5 yrs	Medium Term 5-20 yrs	Long- Term 20+ yrs	Comments / Justification Inc. cumulative effects
<b>ENVIRONMEN</b>	NTAL				
ENV 1 To reduce the effect of traffic on the	Will it reduce traffic volumes, ease the flow of traffic and reduce congestion? Will it increase the proportion of journeys using modes other than the car?	8	8	8	Option A: Dispersed growth would be less able to support new high quality public transport links, and would mean more car journeys in more areas.
environment.	Will it reduce the effect of HGV traffic on people and the environment? Will it encourage more benign modes of travel? Will new development be located such to reduce the need for people to travel?	80	80	80	Option B: There are fewer sites available, and would still be less able to support high quality public transport.
	people to traver:	☺	☺	☺	Option C: Concentrated, large scale growth provides a large critical mass to support new high quality public transport.
ENV 2 To improve the quality of the	Will it improve the quality of the water environment (streams, rivers, lakes etc)?	8	8	8	Option A: Run-off and pollution would have less site- specific impacts on the water environment, but they would be spread over a wider area.
water environment	Will it help to support wetland habitats and species?	80	80	80	Option B: Effects are dependent on infrastructure.

		©	0	©	Option C: Although site-specific impact could be very significant, there is more opportunity to include facilities for water treatment, pollution control and proper drainage.
ENV 3 To improve	Will it improve air quality?	©	()	©	Option A: Instances of local pollution would be less common and the nature of the impacts less severe.
environmental amenity,	Will it reduce the emission of atmospheric pollutants?	©8	© (S	©®	Option B: Mixed effects.
including air quality.		8	33	(3)	Option C: Large developments could bring significant local congestion and noise and air quality problems.
ENV 4 To maintain and	Will it conserve / enhance natural or semi-natural habitats, and promote habitat connections?	80	© ©	8	Option A: More locations make it harder to avoid sites, but less likely to have a large site-specific impact.
enhance biodiversity and geodiversity.	Is it likely to have a significant effect on sites designated for international, national or local importance?	⊗	©	8	Option B: Impacts can be significant and there are fewer sites available from which to avoid sensitive areas.
	Will it conserve / enhance species diversity, and in particular avoid harm to protected species?				Option C: Biodiversity and habitat restoration can be
		⊕8	©	©	integrated into large new developments, or new areas provided if some are damaged.
ENV 5 To maintain and enhance the	Will it protect and enhance the quality of landscapes, townscapes and countryside character, including the character of the Broads and its setting where relevant?	©⊜	©⊗	©®	Option A: Small growth can be more easily integrated into the existing townscapes and less likely to impact on the environment, although it would prompt a
quality of landscapes, townscapes and	Will it maintain and enhance the distinctiveness of the landscapes/townscapes and heritage?				significant change to the character of many small settlements.
the historic environment.	Will it reduce the amount of derelict, underused land?	8	<b>(3)</b>	8	Option B: There are fewer sites available so it would be more likely to significantly impact on an existing
	Will it protect and enhance features of historical, archaeological and cultural value?				area.
		©⊗	©8	©\(\text{\tin}\text{\tetx{\text{\tetx{\text{\text{\texi}\text{\text{\texi}\text{\text{\text{\text{\ti}\}\text{\text{\text{\texi}\text{\texi{\text{\text{\text{\text{\texi}\text{\texi}\text{\text{\texi}\text{\text{\text{\tet	Option C: Although creating significant change to the area, large extensions and new settlements can be designed well with a their own character and can

					include new and innovative architecture.
ENV 6 To adapt to and mitigate against	Will it reduce emissions of greenhouse gases by reducing energy consumption?  Will it lead to an increased proportion of energy needs being met	⊜	⊗	8	Option A: Small developments are less able to support public transport or sustainable energy generation schemes.
the impacts of climate change.	from renewable sources?	⊗	8	8	Option B: Although public transport would be used
	Will it increase the capacity of the area to withstand the effects of climate change?				more, there is still significant car use.
	How can it be ensured that the risks to lives, land and property are minimised?	①	☺	☺	Option C: A new community can be served by high quality public transport, need less car use and can use sustainable energy generation facilities.
ENV 7 To avoid, reduce and	Will it minimise the risk of flooding to people and property?  Can it incorporate new designs to adapt to possible flood risk?				All developments will seek to avoid areas of flood risk and use designs to further mitigate against the effects.
manage flood risk.	Will it promote the use of sustainable drainage systems to reduce run off?	⊗	⊗	⊗	Option A: Developments do not support sustainable drainage systems so easily.
		0	©	☺	Options B and C: Sustainable drainage systems can be integrated into the development designs.
ENV 8 To provide for sustainable use	Will it conserve groundwater resources?  Will it minimise water consumption?	☺	⊗	8	Option A: Dispersed development can bring pressure on pinch points in areas with less infrastructure.
and sources of water supply.		☺	☺	☺	Option B and C: Larger schemes are able to ensure that water supply and treatment facilities can be provided through new developments.
ENV 9	Will it minimise consumption of materials and resources?				Option A: Smaller schemes can avoid areas of
To make the best use of	Will it promote the use of land in sustainable locations that has been previously developed? Will it use land efficiently?	©B	© (S	©8	valuable agricultural land and possibly use more brownfield sites, but waste collection is inefficient.
resources, including land and energy, and to minimise waste	Will it minimise the loss of "greenfield" land? Will it avoid the loss of good quality agricultural land and preserve soil resources? Will it minimise energy consumption and promote energy	©8	©8	©®	Option B: Some schemes can include local waste centres and efficient use of land but there is less ability to provide sustainable energy generation.
production.	efficiency? Will it promote the use of renewable energy sources? Will it lead to less waste being produced? Will it lead to less waste being disposed, by promoting more	☺	☺	☺	Option C: Large schemes can include improved and sustainable energy generation, integrated waste

	recycling and composting?  Will it increase waste recovery for other means eg. energy				treatment and could make more efficient use of land available.
	generation?				
SOCIAL					
SOC 1 To reduce poverty and social	Will it reduce poverty and social exclusion in those areas most affected?  Will it help to reduce deprivation levels?	⊗	8	8	Option A: Dispersed growth would be less likely to be able to support a range of services and facilities, so social exclusion and access deprivation could continue in some communities.
exclusion.					Continue in some communities.
	Will it help meet the needs of residents most effectively?	©8	©®	©8	Option B: Medium concentration that would support some services and facilities in certain areas would help a local population, though it would not bring larger-scale services that may be needed.
		☺	☺	☺	Option C: Large scale developments could bring jobs, services and facilities to cater for a larger population and catchment area.
SOC 2 To maintain and	Will it improve access to high quality health facilities?	8	8	8	Option A: Dispersed growth can not provide new health facilities and would increase the strain on
improve the	Will it encourage healthy lifestyles? How?				existing services.
health of the whole population and	Will it provide adequate health infrastructure for existing and new communities?	80	80	80	Option B: There could be some more facilities provided, such as open space, but these would be
promote healthy lifestyles.	Will the links between poorer health and deprivation be addressed?				unlikely to be able to provide new larger GP surgeries.
·	Will links to the countryside be maintained and enhanced?	(3)	☺	☺	Option C: Large growth areas can provide new GP surgeries, large integrated open space or country parks, and improved cycle and walking routes.
SOC 3 To improve	Will it improve qualifications and skills for both young people and amongst the workforce?	8	8	8	Option A: Dispersed growth could add to the pressures on capacity at local schools. Public
education and skills.	Will it help to retain key workers and provide more skilled workers from school leavers?				transport would be harder to improve, so access to higher education is poor.
	Will adequate education infrastructure be provided for existing	©8	©\(\text{\tin}\text{\te}\tint{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\texi}\text{\text{\text{\text{\text{\text{\text{\text{\text{\ti}}}}\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\texi}\text{\text{\text{\text{\text{\texi}\text{\text{\texi}\text{\text{\text{\text{\text{\text{\text{\texi}\text{\texi}\text{\texi	©8	Option B: Whilst growth could provide and support a new primary school and some transport

	and new communities?  Will it promote lifelong learning and skills training?				improvements, it could put strain on nearby secondary schools.
	Will links between lower levels of education and deprivation be addressed?	☺	☺	☺	Option C: Large growth can provide a primary school and secondary school for the new community, and enhance public transport links to the city and higher education.
SOC 4 To provide the opportunity to live in a decent,	Will it increase the range of types, sizes and affordability of housing for all social groups?  Will it reduce the housing need and ensure that housing provision	©	©	©	Option A: This provides new and affordable homes for those areas of local housing need, but mat not include such a large range of house types.
suitable and affordable home.	addresses the needs of all?  Will it provide the most appropriate solutions to address the housing requirements needed for creating sustainable	☺	☺	☺	Option B: This can provide a range of new homes, and more affordable properties across many areas.
	communities?  Will it make best use of existing housing stock?	©	☺	©	Option C: Large growth areas would not provide housing for so many local areas but it would provide more homes with a greater range of housing stock and affordability.
SOC 5 To build	Will it encourage engagement in community activities?	©	☺	©	Option A: This could help new communities to integrate into the existing local area.
community identity, improve social welfare, and	Will it contribute to the achievement of a mixed and balanced community?  Will it reduce actual levels of crime?	☺	☺	☺	Option B: New communities can be developed that are a little more self-contained.
reduce crime and anti-social activity.	Will it reduce the fear of crime?	☺	☺	☺	Option C: A large new growth area will establish a new community that has its own facilities and services, but it will take a while to establish it.
SOC 6 To offer more opportunities for rewarding and	Will it reduce unemployment overall?  Will it help to improve earnings?	8	₿	8	Option A: There will be fewer employment areas available with poorer public transport links for those without a car.
satisfying employment for all.		©8	©8	©®	Option B: There would be some employment available and sites would be located close to strategic employment areas, but transport may not be so reliable or frequent.

			1	1	
		0	©	☺	Option C: Large scale growth would be located very close to strategic employment areas and improve public transport links to the city and jobs areas.
SOC 7 To improve the	Will it improve the quality of dwellings?  Will it improve the quality of local open space?	©	8	8	Option A: This could bring some problems like congestion to more local areas.
quality of where people live.	Will it improve the satisfaction of people with their neighbourhoods?	©8	©8	©8	Option B: Open space could be added to the area but it could increase local congestion and noise instance.
		© ©	©8	©8	Option C: It could dramatically change the nature of some settlements, but there would be more self-containment of problems and more opportunities to ease some concerns, such as improving public transport to reduce cars.
SOC 8 To improve accessibility to	Will it improve accessibility to key local services and facilities (including health, education, leisure, open space, the countryside and community facilities)?	(3)	(3)	8	Option A: Public transport links would remain poor and fewer services and facilities could be supported with small growth.
essential services, facilities and jobs.	Will it improve accessibility for all whilst reducing dependency on the private car?  Will it improve access to jobs and services for all?	©⊗	©⊗	©\(\text{\tin}\text{\tetx{\text{\tetx{\text{\text{\texi}\text{\text{\texi}\text{\text{\text{\text{\ti}\}\tittt{\text{\texi}\text{\texi}\ti}\\\tittt{\text{\texi}\tex{\text{\texi}\text{\texi}\text{\text{\texi}\ti}\text{\texi	Option B: Some local access could be improved, but there would remain a dependency on larger-scale settlements.
		☺	☺	☺	Option C: Local service provision would increase and be larger in facility size. Public transport links would be more frequent and integrated into the development and so would improve accessibility.
ECONOMIC					
EC 1 To encourage sustained economic	Will it assist in strengthening the local economy?  Will it improve business development and enhance competitiveness?	☺	☺	☺	Option A: There may be some more custom available for local businesses and encourage more rural diversity.
growth.	Will it reduce vulnerability to economic shocks?	☺	☺	☺	Option B: Growth that is connected to employment areas will offer custom for businesses and encourage
	Will it promote growth in key sectors?				some new businesses to develop. It would also help

	Will it increase vitality & viability of town centres and improve economic diversity?	©8	©8	©8	the city and towns to remain viable.  Option C: Large growth could develop its own employment area and include enterprise areas for business development. There would also be better access to existing jobs markets, but larger facilities could serve to attract customers from existing businesses in the local areas.
EC 2 To encourage and	Will it encourage indigenous businesses? Will it encourage inward investment? Will it make land and property available for business?	©	(0)	©	Option A provides support to more local business and encourages rural diversification.
accommodate both indigenous and inward	Will it improve economic performance across the Greater Norwich area? Will it support / encourage rural diversification?	©	©	☺	Option B helps retain the vitality and viability of rural area and market town employment areas and shops.
investment.	Will it support / encourage small city businesses?	©\(\text{\tin}\text{\tetx{\text{\tetx{\text{\text{\texi}\text{\text{\texi}\text{\text{\text{\text{\ti}\}\tittt{\text{\texi}\text{\texi}\ti}\\\tittt{\text{\texi}\tex{\text{\texi}\text{\texi}\text{\texit{\texi}\text{\texi}\t	©8	©\(\text{\tin}\text{\tetx{\text{\tetx{\text{\text{\texi}\text{\text{\texi}\text{\text{\text{\text{\ti}\}\text{\text{\text{\texi}\text{\text{\text{\text{\text{\text{\texi}\text{\text{\texi}\text{\text{\text{\text{\text{\tet	Option C may not support rural diversification or small local businesses in such a way as dispersed growth might do.
EC 3 To encourage efficient patterns of	Will it improve provision of local jobs?  Will it improve accessibility to work, particularly by public transport, walking and cycling?	⊗	⊗	⊜	Option A would increase the commuting and car0-based travel to work as public transport would not be so expansive.
movement in support of economic	Will it reduce journey times between key employment areas and key transport interchanges?	©8	©8	©8	Option B: There would be better public transport but jobs would still not be particularly local and freight transport could impact on the local area.
growth.	Will it improve efficiency and sustainability of freight distribution?  Will it support provision of key communications infrastructure?	©8	©8	©⊗	Option C would bring more freight transport to the area and generate traffic from outside the new growth, but it would be able to encourage far more public transport commuting and jobs creation within or adjacent to the area.
EC 4 To improve the social and environmental performance of	Will it reduce the impact on the environment from businesses?  Will it reduce the impact on residents from businesses?  Will it attract new investment and skilled workers to the area?	©⊜	© ©	©8	Option A: The economy would be more locally- orientated for the established communities, but it would have more environmental concerns from commuting and traffic growth.

the economy.	Will it maintain existing business and employment provision?  Will it provide employment in the best locations to serve urban and rural residents?	©®	©\(\text{\tin}\text{\tetx{\text{\tetx{\text{\text{\texi}\text{\text{\texi}\text{\text{\text{\text{\ti}\}\tittt{\text{\texi}\text{\texi}\text{\text{\text{\texi}\tex{\texit{\texi}\text{\texi}\text{\texit{\texi}\text{\texi}\t	©8	Option B: Workers could live in a larger community but there would still be restricted services available for those who only work in the area.
		☺	☺	☺	Option C: Larger growth can ensure that jobs and services are available in the one location to serve both commuters and residents. Public transport would improve and so be able to reduce the impact of the car and improve the accessibility for people without access to a car.

Overall Conclusions: What are the main effects of the policy option as identified through the sustainability appraisal process?

- POLICY OPTION: Question 11: Different strategies for locating growth.
  - Option A Adopt a strategy of dispersing the growth across a large number of small scale sites on the edge of the urban area and in surrounding villages.
  - Option B A medium concentration on sites similar to some of the larger estates constructed in recent years (1,500 3,000 residential units).
  - Option C Larger scale urban extensions and new settlements in the range of 5,000 10,000 dwellings.

# **Environmental Impacts**

Option A: Very large numbers of sites would be needed, with less ability to support high quality public transport leading to more use of the car. Instances of pollution could be less severe but also less treatable.

Option B: Fewer sites are available and these may not be able to avoid harming habitat or heritage areas.

Option C: Large schemes can provide integrated sustainable drainage solutions, energy generation, improved waste treatment facilities and high quality public transport links in order to effectively reduce the reliance on the private car.

#### **Social Impacts**

Option A: Fewer facilities could be provided and transport links would be less frequent, so accessibility may be poorer for people and social exclusion could remain a problem in some communities. The range of housing available to local communities would increase, but services and facilities could be less easily supported and be pressured from numbers of new residents. Option B: Some new facilities would be added, but large scale services like GPs and secondary schools couldn't, so existing ones would be put under more pressure. A new community could be developed and have more integration around open space and a range of housing types, but there would also be fewer local employment opportunities available for non-car commuters. Option C: More services, larger services and facilities (like a secondary school and GP surgery) could improve local accessibility and reduce deprivation for new the community. However, the benefits of a wider range of new housing and affordability would not be available to so many local housing markets. Growth would be located close to strategic employment areas or include some job opportunities, and would have improved transport links to the city and jobs markets elsewhere.

#### **Economic Impacts**

Option A: Local business and rural diversification could be supported from dispersed growth but the availability of local jobs would be smaller and access to the workplace less easy as public transport links may not be able to be enhanced. Option B: There is more accessibility and better availability of jobs for new residents but the links to employment areas elsewhere may not be so developed if public transport links can't be enhanced significantly.

Option C: A new settlement or community would be located close to strategic employment areas and links to jobs opportunity.

Option C: A new settlement or community would be located close to strategic employment areas and links to jobs opportunities would improve from new public transport enhancement. There would also be more jobs and facilities provided onsite and possibly also opportunities to include business start-up or development facilities. The new settlements would be more self-contained and have larger scale facilities included which may serve to discourage rural diversification and draw custom away from established businesses in local areas.

#### **Overall summary:**

- Impacts
- Possible mitigation measures
- Recommended further research
- Considering cumulative impacts

This is a fundamental aspect of strategic growth as it will change the face of the area and have lasting effects well into the future. It will determine to some extent the viability of even more development after this planning period, so it is crucial that the effects are understood.

Further research would be especially important in this regard to determine the constraints, opportunities and drawbacks from each possible growth location.

A combination of the three strategies could also work quite effectively in the future. This would help to ensure that some aspects of rural communities remain viable in the future whilst new facilities can be provided to serve new communities, or residents in existing areas can benefit from improvements brought about by new development, such as improved ranges of housing, public transport, new jobs provision and cultural attraction.

## JCS Issues & Options Report - Sustainability Appraisal: Question 12 - The effects of the Spatial Growth location options.

Possible locations for major growth: Benefits / constraints assessed against (proposed) Joint Core Strategy objectives.

 Key:
 Positive effects
 Mixed effects
 Negative effects
 No effects / not applicable

Possible growth area JCS Plan Objectives	North East Sector (Inside the NNDR)	North East (Outside the NNDR, vicinity of Rackheath)	East Sector (Outside the NNDR)
Objective 1		tation incorporated throughout the spatial plann	
Obj. 2	These impacts are la	argely influenced by settlement designs and the	•
Obj. 3	Local services encourage walking & cycling.	More opportunity for using public transport.	Good access to the countryside and Broads.
Obj. 4	Provides allocation for at least 7,000 homes.	Provides allocation for 7,000 homes.	Would need in excess of 7,000 houses.
Obj. 5	Closest growth area to city.  Best access to large employment locations.	Well located to existing employment areas and local employment areas.	Very good location for business parks.
Obj. 6	Close to city and employment areas. Supermarket on site & district centre planned. Large enough for new facilities to be included.	Limited existing local services.	Not well served by existing local services, although a District Centre is nearby.
Obj. 7	Sprowston High School is already at capacity.  New secondary school would be needed.	No secondary school nearby, limited capacity elsewhere, new school needed.	No capacity at Thorpe St Andrew High School, so new school would be required.
Obj. 8	Important area for new heathland re-creation here would be lost to development. Restrictions from sensitive environmental assets could require careful mitigation.	Important area for new heathland recreation here would be lost to development.	Could create implications for the River Yare and Broads. High value agricultural land would likely be lost.
Obj. 9	Many radial routes could provide locations for new public transport schemes. Limited existing public transport infrastructure	Possibility for incorporating the use of Salhouse train station, but likely use of NNDR could increase use of the car.	Close to two rail lines, but too peripheral to encourage walking and cycling to it or for freight movements to utilise. No direct access to A47 could create local congestion.
Obj. 10	Area has a district centre planned and growth offers an opportunity to provide a focus for the existing area. Also served by NNDR.	Limited existing infrastructure at present but growth can provide a proper focus and new services for the area. Also served by NNDR	Growth here would provide closer facilities to the large existing population. The area will also be served by the NNDR.
Obj. 11	This area is closest to town and has a large supermarket to minimise need to travel.	This area is further from the city and does not contain so many existing services.	This area is close to Broadland Business Park and the Rackheath employment area but it is quite far from the city centre.
Obj. 12	City's compact character would be eroded.	City's compact character would be retained.	There is less green space between this area and the city (Thorpe St Andrew fringe) but it is separated by Broadland Business Park.

## Possible locations for major growth: Benefits / constraints assessed against (proposed) Joint Core Strategy objectives.

 Key:
 Positive effects
 Mixed effects
 Negative effects
 No effects / not applicable

Possible growth area JCS Plan Objectives	North East (outside the NNDR) and East Combined	South East Sector (Vicinity of Poringland)	South Sector (A11 - A140 outside A47)
Objective 1	Widespread consult	tation incorporated throughout the spatial plann	ing policy process.
Obj. 2	With sites bisected by the A47 and the NNDR could lead to a disjointed community.	These impacts are largely influenced by se	ettlement designs and the facilities provided.
Obj. 3	Walking and cycling could be encouraged as part of a viable rail-based transport hub.	Good access to the countryside and Whitlingham Country Park at Trowse.	Few local facilities and less frequent public transport discourages walking and cycling.
Obj. 4	Would need in excess of 7,000 houses, which could provide a range of new homes.	Stand alone settlement can provide for a range of new homes.	Settlement would need to be in excess of 8,000 homes (linked to new school need).
Obj. 5	Very good location for business parks to the north and east of the city.	Not close to any strategic employment centres, access to city constrained.	Poorly related to the strategic employment sites of the area. Limited bus links on A140.
Obj. 6	Limited existing services outside the NNDR and few services close at hand in the east.	Some existing facilities, but no large retail.	Supermarket is separated from the growth area and there are few other local services.
Obj. 7	No capacity at local high schools, so new secondary school would be needed.	Framingham High School can be more easily expanded and can support smaller levels of growth.	No capacity at Hethersett High or City of Norwich School. Some existing capacity at the Hewitt School but this is far away.
Obj. 8	Important area for new heathland re-creation. Restrictions from sensitive environmental assets could require careful mitigation. Loss of high value agricultural land likely.	No significant environmental constraints (County Wildlife Sites can be avoided). Likely traffic congestion into city could impact on conservation of historic areas.	Development outside the A47 would enable the setting of Norwich to be protected.
Obj. 9	If the rail link were not viable it would be quite a car dependent location.	Likely increase in traffic congestion at entrance to city. Good access to A47.	The less accessible public transport connections would lead to increased car use.
Obj. 10	Growth would provide new facilities for a smaller existing population, but the area will also be served by the NNDR.	Some facilities are available at present for new residents to make use of when they move into the area.	There are no facilities available at present and they would have to be provided as new homes are constructed.
Obj. 11	The area is further from the city but is close to a strategic employment site and a large supermarket.	Lack of options for new high quality public transport infrastructure. There are fewer services, which may lead to more travelling.	The less accessible public transport connections would lead to increased car use. Links to the A11 are difficult from this area.
Obj. 12	Expansion of the fringe/suburb area.	Norwich's character and historic core would be protected, but the character of a local village would change dramatically.	Norwich's character and historic core can be protected, but the countryside landscape may be harmed.

## Possible locations for major growth: Benefits / constraints assessed against (proposed) Joint Core Strategy objectives.

 Key:
 Positive effects
 Mixed effects
 Negative effects
 No effects / not applicable

Possible growth area JCS Plan Objectives	South West Sector (A11 - B1108 outside A47)	West Sector (River Yare to River Wensum)	North West Sector (A1067 – NNDR)
Objective 1	Widespread consult	tation incorporated throughout the spatial planr	ning policy process.
Obj. 2	Residents may be reassured by the proximity of Norfolk police HQ at Wymondham.	These impacts are largely influenced by se	ettlement designs and the facilities provided.
Obj. 3	Fastest public transport links would encourage more inherent walking and cycling.	Close links to River Wensum valley as an open space recreation / nature area.	The area is served by the Marriot's Way cycling and walking path.
Obj. 4	A new settlement of at least 7,000 is possible.	Sites may be constrained to small urban extensions and expanded settlements.	A new school, public transport and some new retail facility would require 8,000 homes.
Obj. 5	Easy access to Norwich Research Park and Gateway 11 or Longwater employment areas.	Easy access to Longwater, Bowthorpe and Norwich Research Park employment areas.	The area near the city is closer to the airport employment area but the rest is distanced.
Obj. 6	No major services in the area, so would need to support large service provision in future.	Supermarket available at Longwater.	The area is not currently well served by large-scale retail facilities.
Obj. 7	If on-site primary school could be relocated and utilised for secondary school expansion, it could support a settlement of 2,000 homes. No capacity at Hethersett High School.	No capacity at Costessey High School and no room to expand.	Taverham High School has no capacity and cannot expand, although there is some capacity at Hellesdon High School.
Obj. 8	The allocation would maintain the green space area around Norwich and the River Yare, although it could impact on the valley.	Sensitive river valleys (River Wensum) could restrict the area of development and be harmed by run-off into the river.	This growth area would be adjacent to the sensitive River Wensum valley area, which provides important landscape, recreation and natural habitat areas for the city.
Obj. 9	More potential corridors for use of express public transport.	It may be possible to add to the existing public transport links.	A current lack of public transport priority or link to the A47 will encourage more car use.
Obj. 10	The existing large community around the Hethersett area would benefit from enhanced service provision as there are limited facilities available at present.	Limited existing infrastructure at present but growth can provide a proper focus and new services for the area.	There are already a range of facilities available, although none are large-scale, which can be enhanced or utilised by new residents to the area.
Obj. 11	Public transport links are quickest here. The area is close to the Norwich Research Park and Longwater strategic employment area.	The area is far from the city, but it does have large employment areas close by. Public transport links may be expanded.	The area is a long way out and has few employment areas available, and the lack of bus priority lanes could inhibit express links.
Obj. 12	Norwich's city fringe and valley area would be maintained if development remained outside the A47 southern bypass.	One of the furthest fringe areas from the city could reduce impact on the city centre, but it may also harm the city's compact nature.	The compact nature of Norwich could be eroded if this growth area continued to add to the current appearance of ribbon growth.

## Possible locations for major growth: Benefits / constraints assessed against (proposed) Joint Core Strategy objectives.

 Key:
 Positive effects
 Mixed effects
 Negative effects
 No effects / not applicable

Possible growth area JCS Plan Objectives	North Sector (North of airport)	Wymondham	Long Stratton							
Objective 1	Widespread consultation incorporated throughout the spatial planning policy process.									
Obj. 2	Impacts are largely influenced by settlement designs and the facilities provided.	Residents may be reassured by the proximity of Norfolk police HQ at Wymondham.	Impacts are largely influenced by settlement designs and the facilities provided.							
Obj. 3	The growth area next to the airport may present noise and a health problem for new residents, especially as the airport expands.	Good public transport links would inherently encourage more walking and cycling, as would the compact nature of the town.	Good access to the countryside. Proximity to local services and facilities will promote walking and cycling.							
Obj. 4	Minimum of 8,000 new homes needed.	An extension of either 3,00 or 8,000 homes could be supported based on school capacity.	A small extension of 1-2,000 homes or a large 8,000 home development is possible.							
Obj. 5	Close to the airport employment area but is distanced from others, although the NNDR connects it to Broadland Business Park.	Good access to Gateway 11 business park, the NRP and Hethel employment areas. Good train links to Norwich and Cambridge.	The area is poorly related to the strategic employment sites around Norwich.							
Obj. 6	Poorly related to existing retail services.	A wide range of services are available and the area would not be dependent on Norwich.	Retail and leisure are available within Long Stratton and would be accessible to all.							
Obj. 7	Poorly related to existing secondary schools and there is no capacity at Sprowston or Taverham high schools, so a new secondary school would be needed.	No current capacity at Wymondham High School or Wymondham College. If their sixth forms were relocated to a new campus, this could leave capacity for 3,000 new homes. A new school for 8,000 homes is also possible.	Long Stratton High School could be expanded to support a new development of up to 2,000 dwellings, or alternatively 8,000 homes could provide a new secondary school.							
Obj. 8	Small river valleys, wildlife designation and some archaeological areas are nearby, but there is potential for healthland re-creation.	This could affect the historic market town character of Wymondham, including more traffic in centre & incongruous developments.	Few environmental designations would constrain development, but more traffic on the A140 could lead to localised pollution.							
Obj. 9	There are no significant public transport priority measures outside the city, and congestion from poor car dispersal to north.	Contributions from car use could be minimised by express bus services, frequent train services and the self-containment.	Without an A140 bypass, congestion and emissions through the village would increase. Few opportunities for bus priority.							
Obj. 10	No facilities are available at present and they would have to be provided as new homes are constructed. New NNDR link.	Many existing facilities are available already, which can be utilised by new residents moving into the area.	Many existing facilities are available already, which can be utilised by new residents moving into the area.							
Obj. 11	Poor public transport and links with the NNDR and A140 could increase car use.	Although furthest away from the city, travel can be reduced with express bus services and the train links. There are more facilities and employment available in Wymondham.	Local access is good but bus priority along the A140 and new train links are implausible. There are no local strategic employment areas available either.							
Obj. 12	As a stand-alone new settlement this could protect Norwich's compact city character.	Norwich would be less affected, as major growth would be less dependent on the city.	Norwich would be less affected, as major growth would be less dependent on the city.							

#### Principles of assessment against certain objectives:

#### JCS Strategic Objective 7 (Providing education facilities):

- A **positive** score was assigned where a school currently offers room for expansion. This means that a residential development does not necessarily have to be of a size large enough to provide a new secondary school (8,000 homes).
- A **neutral or mixed** results score is assigned where schools have existing capacity to cater for new residents. This means that some residents can begin or continue their education whilst a larger, closer or specialist school is being built to serve residents of the new settlement.
- A **negative** score was assigned where there is no capacity or room for expansion, meaning that a new school would have to be provided. Whilst this may be beneficial in the long-term, it would mean the settlement has to number some 8,000 homes at least, so meaning there is less flexibility in the housing allocation process. It could also mean that a school has to be provided at the start of the residential development, which may be difficult to deliver.

#### JCS Strategic Objective 10 (Enhancing [social] infrastructure provision for current and future residents):

- A **positive** score is allocated where development in the area can bring new facilities to a large existing population currently with limited facilities/social infrastructure available.
- A **neutral or mixed** result is allocated where the development can bring new facilities to a smaller existing population or where there are existing services available that new residents can make use of when new homes are provided in the area.
- A **negative** score is allocated when no facilities are available at present. Providing housing in such areas would mean that until local social services are provided for new residents then people would be isolated or have to travel to other locations.

#### JCS Strategic Objective 11 (To reduce the need to travel):

- A **positive** score is assigned where an area is closest to the city or a large proportion of services and facilities, is close or adjacent to strategic employment sites, and has better public transport links.
- A **neutral or mixed** result is assigned when an area may have a good proximity to certain services or facilities but the opportunities for express public transport links to larger centres are more difficult or the area is far from service centres.
- A **negative** score is assigned where an area is isolated from services and facilities, employment areas and has more difficult public transport links.

#### Some key sustainability issues associated with each location.

North East Sector (inside the NNDR) is a large scale urban extension, the closest area to the city centre. Close to three large employment areas via A47 and Northern Distributor Road (NNDR) access. Large district centre is planned for the area. Environmentally sensitive sites exist, although these could be used for habitat recreation and SUDs. No present school capacity. North East Sector (outside the NNDR) would be a stand-alone settlement with good access to close employment locations and a possible rail link from Salhouse. There is no current school capacity at present. Habitat recreation is a possibility for heathland. East Sector (Outside the NNDR) is a stand-alone new settlement separated by the NNDR, with good access to a range of employment areas. Few local services exist at present, schools are full and there is neither any public transport priority measures. North East and East Sectors combined would bring more facilities to an area where few exist at present. It would however create a disjointed community separated by the NNDR and a rail line. It looks unfeasible without excellent railway public transport. **South East Sector (vicinity of Poringland)** is distanced from all existing strategic employment opportunities and there are also no large scale retail facilities in the area. Access to city centre from A146 is poor and would increase congestion, and there are few options available to provide high quality public transport. However, the existing Framingham Earl High School could expand. **South Sector (A11-A140, outside A47)** would be a stand-alone settlement somewhat distanced from strategic employment areas and separated from large scale retail opportunities by the A47. There is no additional capacity at local schools. South West Sector (A11-B1108 outside A47) would be close to the city centre with easy access to 3 strategic employment areas, although there are very few local services available. There is potential for a dedicated bus route along A11. Local schools are at capacity but there is potential to relocate a primary school to create additional capacity at the secondary school. West Sector (River Yare to River Wensum) is located close to sensitive river valleys and a complicated road system which could hinder development. The NNDR allows good access to 3 employment areas and a large retail superstore is also nearby. There are few opportunities to install new bus priority measures into the city centre, and the existing schools are all at capacity. North West Sector (A1067 - NNDR) would be an expanded settlement that could bring large scale retail facilities to the area, but there is limited public transport capacity and the area is distanced from employment areas and the local schools can not expand. North Sector (North of airport) could be close to an expanded employment area at the airport, but it is less well related to existing employment areas and retail opportunities. There is little public transport infrastructure and few schools nearby.

Wymondham is well positioned on the A11 with opportunities for good access to the city via a new express bus route and the existing rail service. There is a strategic employment area in the town and some retail opportunities. Schools are also at capacity.

Long Stratton would be a village extension and provision of a new identity and far more additional services than are available at present. It is poorly related to employment areas and there are few public transport expansion options. The school could expand.

## Strategic Growth locations considered against the Sustainability Appraisal Objectives

Effects:		Pos	sitive effe	ects		Mixed effects			Negative effects			N/a	
Strategic growth locations	North East (Inside the NNDR)	North East (Outside the NNDR)	East Sector (Outside the NNDR)	North East and East Combined	South East	South Sector	South West	West Sector	North West	North	Wymondham	Stratton	Additional comments
SA Objectives	N S	NO N	Eas (Out N	Nor an Co	Sou	Sout	Sou	Wes	Nor	2	Wyn	Long	
ENV 1													
ENV 2													SuDS to mitigate
ENV 3													Congestion etc.
ENV 4													
ENV 5													
ENV 6													
ENV 7	F							-		_	_		velopments.
ENV 8		Impacts of	pinch-poin	ts and the v	iability of t	he use of S	SUDS are	assessed t	hrough the	water cycl	e and infr	astructur	e studies.
ENV 9													
SOC 1													Jobs & facilities.
SOC 2													
SOC 3													
SOC 4													
SOC 5													Safe local access
SOC 6													
SOC 7													Design & facilities
SOC 8													Local transport.
EC 1													
EC 2													Close to job area.
EC 3													
EC 4													Access & impacts

#### **Sustainability Appraisal Objectives:**

- **ENV 1** To reduce the effect of traffic on the environment.
- **ENV 2** To improve the quality of the water environment.
- **ENV 3 -** To improve environmental amenity, including air quality.
- ENV 4 To maintain and enhance biodiversity and geodiversity.
- **ENV 5** To maintain and enhance the quality of landscapes, townscapes and the historic environment.
- ENV 6 To adapt to and mitigate against the impacts of climate change.
- **ENV 7 -** To avoid, reduce and manage flood risk.
- **ENV 8** To provide for sustainable use and sources of water supply.
- **ENV 9** To make the best use of resources, including land and energy, and to minimise waste production.
- **SOC 1** To reduce poverty and social exclusion.
- **SOC 2** To maintain and improve the health of the whole population and promote healthy lifestyles.
- SOC 3 To improve education and skills.
- **SOC 4** To provide the opportunity to live in a decent, suitable and affordable home.
- **SOC 5** To build community identity, improve social welfare, and reduce crime and anti-social activity.
- **SOC 6** To offer more opportunities for rewarding and satisfying employment for all.
- **SOC 7** To improve the quality of where people live.
- **SOC 8** To improve accessibility to essential services, facilities and jobs.
- **EC 1** To encourage sustained economic growth.
- **EC 2** To encourage and accommodate both indigenous and inward investment.
- **EC 3** To encourage efficient patterns of movement in support of economic growth.
- **EC 4** To improve the social and environmental performance of the economy.

#### **Joint Core Strategy Spatial Planning Objectives:**

- **Objective 1** To involve as many people as possible in new planning policy.
- **Objective 2** To be a place where people feel safe in their communities.
- **Objective 3** To encourage the development of healthy and active lifestyles.
- **Objective 4** To allocate enough land for housing, and affordable housing, in the most sustainable settlements.
- Objective 5 To promote economic growth and diversity and provide a wide range of local jobs within Broadland, Norwich and South Norfolk for existing and future residents.
- **Objective 6** To make sure people have ready access to services.
- **Objective 7** To allow people to develop to their full potential by providing educational facilities to support the needs of a growing population.
- Objective 8 To protect, manage and enhance the natural, built and historic environment, including key landscapes, natural resources and areas of natural habitat or nature conservation value.
- **Objective 9** To minimise the contributors to climate change and address its impact.
- **Objective 10-** To enhance infrastructure provision to meet the needs of existing and future populations.
- Objective 11- To reduce the need to travel.
- **Objective 12-** To positively protect and enhance Norwich's individual character and unique cultural infrastructure.

#### Joint Core Strategy Issues and Options: Sustainability Appraisal Framework

- Option Appraised: Question 13 Potential locations for large scale growth: Patterns of large scale growth
  - Option A 3 areas: Concentration on the north-east and south-west of Norwich and at Wymondham
  - Option B 4 areas: As Option A, plus a fourth location for large scale growth
  - Option C 5 areas: As Option A, plus two or more locations for medium scale growth
  - Option D A different combination of major growth options
  - Option E A more dispersed pattern of growth (perhaps an average of 1,500 dwellings in 10 locations)
- Note Sustainability Appraisal methodology principles (Option C is a middle-ground; Option D not covered)
  - Concentrated growth covering Options A and B
  - Dispersed growth covering Option E

#### SCORING SYSTEM PROPOSED:

SA Objective	Decision making criteria	Short- Term 0-5 yrs	Medium Term 5-20 yrs	Long- Term 20+ yrs	Comments / Justification Inc. cumulative effects				
ENVIRONMENTAL									
ENV 1 To reduce the effect of traffic on the environment.	Will it reduce traffic volumes, ease the flow of traffic and reduce congestion?  Will it increase the proportion of journeys using modes other than the car?  Will it reduce the effect of HGV traffic on people and the environment?	89	©	☺	Concentrated: In the short-term there would be construction traffic generation, but eventually these options will be able to include more viable public transport links to serve a larger population more frequently. Walking and cycling would also be more feasible as services would be closer and better networked.				
	Will it encourage more benign modes of travel?  Will new development be located such to reduce the need for people to travel?	8	8	©	Dispersed: Over the long-term, public transport would not be so viable and dispersed housing would also be more distant from services and facilities, so walking and cycling would be less feasible. This would lead to				

					the private car being more dominant.
ENV 2 To improve the quality of the water environment	Will it improve the quality of the water environment (streams, rivers, lakes etc)?  Will it help to support wetland habitats and species?	?	?	?	Concentrated: Growth would be able to provide specific new waste water treatment facilities. There may be more run-off created in the immediate area but there are also more opportunities to implement sustainable drainage systems in designs.
		N	N	N	Dispersal: Would be less likely to provide specific new facilities for water treatment, and more instances of pollution would likely be experienced. There would be few opportunities to provide sustainable drainage systems.
ENV 3 To improve environmental amenity, including air quality.	Will it improve air quality?  Will it reduce the emission of atmospheric pollutants?	©8	©⊗	©®	Concentrated: The impacts from traffic emissions and noise would be more concentrated in fewer areas. However, larger developments would also include employment sites and improved public transport links to minimise car-based travel.
quanty.		☺	☺	☺	Dispersed: Impacts would be less intense, spread over more areas, so would be less noticeable. Without a district centre or supermarket provided there would be more use of the city centre and less use of public transport service.
ENV 4 To maintain and enhance biodiversity and geodiversity.	Will it conserve / enhance natural or semi-natural habitats, and promote habitat connections?  Is it likely to have a significant effect on sites designated for international, national or local importance?	☺	☺	©	Concentrated: Large developments can include new open space provision and habitat improvement or expansion. Although location-specific, there would also be more opportunities to avoid sensitive areas.
	Will it conserve / enhance species diversity, and in particular avoid harm to protected species?	☺	⊗	☺	Dispersed: More gardens could be under pressure from intensification. There could be a larger impact across the areas sensitive sites, fewer green spaces could be provided and new ecological networks may not be so viable.
ENV 5 To maintain and	Will it protect and enhance the quality of landscapes, townscapes and countryside character, including the character of the Broads and its setting where relevant?	©8	©8	©8	Concentrated: Growth would have more impact over the area's landscapes by creating significant areas of

enhance the quality of landscapes, townscapes and the historic environment.	Will it maintain and enhance the distinctiveness of the landscapes/townscapes and heritage?  Will it reduce the amount of derelict, underused land?  Will it protect and enhance features of historical, archaeological and cultural value?	8	⊗	⊗	new development. However, avoiding particularly sensitive areas and creating acceptable designs and layouts to enhance the area's landscapes could mitigate this.  Dispersal: Will impact on far more locations and landscapes. There would be more pressure on towns and villages to accommodate new growth, which may conflict with existing character and setting. Listed buildings and historic parks could also have their settings compromised if without sensitive design.
ENV 6 To adapt to and mitigate against the impacts of climate change.	Will it reduce emissions of greenhouse gases by reducing energy consumption?  Will it lead to an increased proportion of energy needs being met from renewable sources?  Will it increase the capacity of the area to withstand the effects of	☺	☺	☺	Concentrated: Can minimise emissions from transport, although it would increase the urban heat island effect. There are more opportunities for installing renewable energy generation schemes and design methods that minimise the effects felt from climate change.
	climate change?  How can it be ensured that the risks to lives, land and property are minimised?	8	8	☺	Dispersed: Increases the amount of transport emissions, as public transport is less viable, and will not be so successful at integrating renewable energy schemes into developments.
ENV 7 To avoid, reduce and manage flood risk.	Will it minimise the risk of flooding to people and property?  Can it incorporate new designs to adapt to possible flood risk?  Will it promote the use of sustainable drainage systems to reduce run off?	☺	©	©	Concentrated: Development would not be in flood risk areas, but it would be able to incorporate the use of Sustainable Drainage Systems to minimise local flooding.
		<b>©</b>	©	8	Dispersed: Adaptation to flood risk is less feasible on smaller sites where there are fewer economies of scale to include design measures.
ENV 8 To provide for sustainable use and sources of water supply.	Will it conserve groundwater resources? Will it minimise water consumption?	80	80	80	Concentrated: This requires more infrastructure and services to maintain water supplies. There are more opportunities to include water efficiency saving measures in large development, such as grey water recycling or rainwater harvesting. Larger

		©8	©8	©8	developments will undergo greater strategic scrutiny to incorporate sustainable design and construction measures.  Dispersed: Helps to minimise the instances of pollution and could avoid creating 'pinch points' from new development. However, there is less room to include efficiency measures.
ENV 9 To make the best use of resources, including land and energy, and to minimise waste production.	Will it minimise consumption of materials and resources? Will it promote the use of land in sustainable locations that has been previously developed? Will it use land efficiently? Will it minimise the loss of "greenfield" land? Will it avoid the loss of good quality agricultural land and preserve soil resources? Will it minimise energy consumption and promote energy efficiency? Will it promote the use of renewable energy sources? Will it lead to less waste being produced? Will it lead to less waste being disposed, by promoting more recycling and composting? Will it increase waste recovery for other means eg. energy generation?	© 8	© 8	© ©	Concentrated: Makes best use of available land and allows better efficiency of the land available by offering higher densities and including employment areas, for example. There are more opportunities to include renewable energy schemes, such as combined heat and power, but there is more pressure on existing infrastructure. Waste collection would be easier from one location, and improved local recycling facilities could also be installed.  Dispersed: There is less pressure on existing infrastructure, and would enable more sites of previously developed land to be utilised across the whole area, though it may also require more Greenfield land use. There is less likelihood of including renewable energy generation schemes, and waste collection and treatment may not be so easily integrated or efficient.
SOCIAL					
SOC 1 To reduce poverty and social exclusion.	Will it reduce poverty and social exclusion in those areas most affected?  Will it help to reduce deprivation levels?  Will it help meet the needs of residents most effectively?	©	٥	(1)	Concentrated: This improves access to jobs by offering the best means for public transport into the city's jobs market, and could offer some on-site employment if new services emerge to cater for the households and new populations. Improved access to local services would help to reduce exclusion.
		8	8	⊗	Dispersal: There will be less access to the main city

					jobs market for those reliant on public transport. There may be fewer services arising to serve the new households. Vulnerable groups may not benefit from additional services brought to the area as might be the case if concentrated development took place.
SOC 2 To maintain and improve the health of the whole population and	Will it improve access to high quality health facilities?  Will it encourage healthy lifestyles? How?  Will it provide adequate health infrastructure for existing and new communities?	©	©	©	Concentrated: Larger developments are more likely to be able to include new green infrastructure, cycle routes and open space to encourage healthy lifestyles. New health facilities such as GP surgeries, and access to them would also be included.
promote healthy lifestyles.	Will the links between poorer health and deprivation be addressed?  Will links to the countryside be maintained and enhanced?	88	88	88	Dispersed: Smaller developments are less likely to be able to include health centres, green infrastructure or cycle routes. There would however be better access to the countryside.
SOC 3 To improve education and skills.	Will it improve qualifications and skills for both young people and amongst the workforce?  Will it help to retain key workers and provide more skilled workers from school leavers?  Will adequate education infrastructure be provided for existing and new communities?	٥	<u>©</u>	©	Concentrated: Large growth over a certain threshold can often provide new schooling facilities, and community centres for adult life skills. There would also be better public transport links to further education facilities and employment areas for vocational training.
	Will it promote lifelong learning and skills training? Will links between lower levels of education and deprivation be addressed?	8	8	☺	Dispersal: Smaller, scattered growth cannot provide schooling so effectively and it is harder for new schools to be established, or could result in overcrowding of existing facilities. Further education, which is dependent on good transport links to encourage young people to attend, would also not be as accessible.
SOC 4 To provide the opportunity to live in a decent, suitable and affordable	Will it increase the range of types, sizes and affordability of housing for all social groups?  Will it reduce the housing need and ensure that housing provision addresses the needs of all?  Will it provide the most appropriate solutions to address the	٥	©	☺	Concentrated: Large growth can include a larger proportion of affordable homes close to existing services and facilites, helping to reduce the need to travel. It could also offer better opportunity to gain a more varied mix of housing types to suit more families.

home.	housing requirements needed for creating sustainable communities?  Will it make best use of existing housing stock?	8©	8©	80	Dispersed: Smaller sites would have a smaller range of housing types. However, it can improve the housing stock for local areas and quicken the delivery of homes, whilst providing more opportunities for people to remain living in areas closer to their families.
SOC 5 To build community identity, improve social welfare, and	Will it encourage engagement in community activities?  Will it contribute to the achievement of a mixed and balanced community?  Will it reduce actual levels of crime?	☺	☺	©	Concentrated: There are more opportunities to provide community facilities and design measures to minimise crime. There would be more housing types and a wider range of people occupying the homes, thus creating balanced communities.
reduce crime and anti-social activity.	Will it reduce the fear of crime?	©®	©8	©®	Dispersal: Communities may be more integrated if they are smaller and households are more local to the area or if growth has been incremental. It could be harder to provide new facilities and features to promote community interaction.
SOC 6 To offer more opportunities for rewarding and	Will it reduce unemployment overall?  Will it help to improve earnings?	☺	☺	☺	Concentrated: Better access by public transport to the city is possible, and local employment could also be generated to serve new populations.
satisfying employment for all.		©8	©8	©8	Dispersal: Access to jobs may be harder, but the location of housing can help provide workers for local businesses.
To improve the quality of where	Will it improve the quality of dwellings?  Will it improve the quality of local open space?	©	©	©	Concentrated: Larger developments can include more open space, play facilities, innovative designs and a 'fresh start' for all residents in the new area.
people live.	Will it improve the satisfaction of people with their neighbourhoods?	©8	©8	©8	Dispersed: Perceptions of the neighbourhood would differ between existing and new communities. There may be less room for new features to be included from the outset.
SOC 8 To improve	Will it improve accessibility to key local services and facilities (including health, education, leisure, open space, the countryside and community facilities)?	©	©	☺	Concentrated: Access via public transport, walking and cycling would improved through new designs and

Will it improve access to jobs and services for all?	8	©	<b>③</b>	Dispersal: Access may be more reliant on the car if there are few local facilities, and poorer public transport links.
		'		
Will it assist in strengthening the local economy?  Will it improve business development and enhance competitiveness?	?	?	?	The effects are largely location-specific, and there may be some local differences.  Concentration may enable some mixed-use employment / residential development.
Will it reduce vulnerability to economic shocks?  Will it promote growth in key sectors?  Will it increase vitality & viability of town centres and improve economic diversity?				Dispersal may help to support the local economy in market towns and villages, although they would most likely still look to Norwich for their services. More district centres could be supported but the net gain would be slim overall.
Will it encourage indigenous businesses? Will it encourage inward investment? Will it make land and property available for business? Will it improve economic performance across the Greater Norwich	©	©	©	Concentrated: Development is likely to make business land available as part of a sustainable community, and could include more provision for start-up units and home-working studios.
will it support / encourage rural diversification? Will it support / encourage small city businesses?	©\(\text{\text{\$\pi}}\)	©®	©8	Dispersal: More likely to be able to support rural diversification, though there may be too small a critical mass to support local services unless there was an even spread of development to existing local business centres.
Will it improve provision of local jobs? Will it improve accessibility to work, particularly by public transport, walking and cycling? Will it reduce journey times between key employment areas and key transport interchanges? Will it improve efficiency and sustainability of freight distribution? Will it support provision of key communications infrastructure?	© 8	© ⊗	© ©	Concentrated: This could lead to better efficiency in commuting if there are more viable public transport links.  Dispersal: This could result in more transport movements to access jobs markets and services and freight to new businesses.
\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Will it assist in strengthening the local economy?  Will it improve business development and enhance competitiveness?  Will it reduce vulnerability to economic shocks?  Will it promote growth in key sectors?  Will it increase vitality & viability of town centres and improve economic diversity?  Will it encourage indigenous businesses?  Will it encourage inward investment?  Will it make land and property available for business?  Will it improve economic performance across the Greater Norwich area?  Will it support / encourage rural diversification?  Will it support / encourage small city businesses?  Will it improve provision of local jobs?  Will it improve accessibility to work, particularly by public transport, walking and cycling?  Will it reduce journey times between key employment areas and key transport interchanges?  Will it improve efficiency and sustainability of freight distribution?	Will it assist in strengthening the local economy?  Will it improve business development and enhance competitiveness?  Will it reduce vulnerability to economic shocks?  Will it promote growth in key sectors?  Will it increase vitality & viability of town centres and improve economic diversity?  Will it encourage indigenous businesses?  Will it encourage inward investment?  Will it make land and property available for business?  Will it improve economic performance across the Greater Norwich area?  Will it support / encourage rural diversification?  Will it support / encourage small city businesses?  Will it improve provision of local jobs?  Will it improve accessibility to work, particularly by public transport, valking and cycling?  Will it reduce journey times between key employment areas and key transport interchanges?  Will it improve efficiency and sustainability of freight distribution?	Will it improve business development and enhance competitiveness?  Will it improve business development and enhance competitiveness?  Will it promote growth in key sectors?  Will it promote growth in key sectors?  Will it increase vitality & viability of town centres and improve acconomic diversity?  Will it encourage indigenous businesses?  Will it encourage invard investment?  Will it make land and property available for business?  Will it improve economic performance across the Greater Norwich area?  Will it support / encourage rural diversification?  Will it support / encourage small city businesses?  Will it improve provision of local jobs?  Will it improve accessibility to work, particularly by public transport, valking and cycling?  Will it reduce journey times between key employment areas and tey transport interchanges?  Will it improve efficiency and sustainability of freight distribution?	Will it assist in strengthening the local economy?  Will it improve business development and enhance competitiveness?  Will it reduce vulnerability to economic shocks?  Will it promote growth in key sectors?  Will it increase vitality & viability of town centres and improve economic diversity?  Will it encourage indigenous businesses?  Will it encourage inward investment?  Will it make land and property available for business?  Will it improve economic performance across the Greater Norwich area?  Will it support / encourage rural diversification?  Will it support / encourage small city businesses?  Will it improve provision of local jobs?  Will it improve accessibility to work, particularly by public transport, walking and cycling?  Will it reduce journey times between key employment areas and teey transport interchanges?  Will it improve efficiency and sustainability of freight distribution?

	EC 4 To improve the social and environmental	Will it reduce the impact on the environment from businesses? Will it reduce the impact on residents from businesses? Will it attract new investment and skilled workers to the area? Will it maintain existing business and employment provision?	☺	☺	☺	Concentrated: New settlements may include health facilities and recreational services, with a wider range of housing for local people.
ı	performance of the economy.	Will it provide employment in the best locations to serve urban and rural residents?	©8	©8	©8	Dispersal: There will be less accessibility to jobs, but more local housing and improved access to the countryside.

Overall Conclusions: What are the main effects of the policy option as identified through the sustainability appraisal process?

- POLICY OPTION: Question 13 Potential locations for large scale growth: Patterns of large scale growth
  - Option A 3 areas: Concentration on the north-east and south-west of Norwich and at Wymondham
  - Option B 4 areas: As Option A, plus a fourth location for large scale growth
  - Option C 5 areas: As Option A, plus two or more locations for medium scale growth
  - Option D A different combination of major growth options
  - Option E A more dispersed pattern of growth (perhaps an average of 1,500 dwellings in 10 locations)
- Note Sustainability Appraisal methodology principles (Option C is a middle-ground; Option D not covered)
  - Concentrated growth covering Options A and B
  - Dispersed growth covering Option E

# Environmental Impacts

Concentrated growth locations provide more opportunities for improvements to public transport service viability by serving a larger number of households in one or two areas. This would minimise impacts on the city and reduce emissions. Larger developments can include renewable energy schemes, green infrastructure, water efficiency measures and sustainable drainage systems. Dispersed patterns of growth could lead to more pressure on towns and villages and would also increase the travelling distances to work, facilities and services. Larger developments will undergo greater strategic scrutiny and so are more likely to incorporate sustainable design and construction measures.

# **Social Impacts**

Accessibility is inherently part of a large settlement's designs as walking, cycling, public transport links and local service provision would be integral to a large new development. Health facilities, open space and leisure pursuits could also be included, as would educational facilities and possibly also some employment areas. Dispersal can create more difficulties for people in accessing their local facilities, but it can lead to better integration of communities and can provide more housing for local people to remain in the area they grew up in or work in.

# **Economic Impacts**

Concentration improves peoples' access to the main jobs market and helps service delivery. The efficiency of peoples' commuting is also increased if there are better public transport and more local facilities. Dispersed growth may be able to offer more support to local services and market town facilities.

### **Overall summary:**

- Impacts
- Possible mitigation measures
- · Recommended further research
- Considering cumulative impacts

These are a complicated set of options because so many effects are dependent on the local circumstances of areas that could be considered for growth. The main benefits of a concentrated approach are that, with attention to design, local features can be added into a development and public transport and other services become more viable if they can serve a larger critical mass of households. Dispersed growth may be easier to integrate into the existing landscape and established society, but it could bring strain to health and education facilities, and could leave those dependent on public transport more vulnerable to social exclusion. Environmental effects are hard to quantify, and further research could benefit from water cycle studies and infrastructure capacity assessments. Cumulatively, more dispersed growth could have a gradual effect of changing the landscape and character of an area over time, whereas concentrated growth could help to maintain some characteristics and provide opportunities for integrated and environmentally-friendly designs.

Option Appraised: Question 14 – HOUSING: Increasing the delivery of affordable housing.

There are a number of approaches that could be taken to help make sure everyone has access to a decent home they can afford:

- Option A Seeking financial contributions for affordable homes from commercial as well as housing development.
- Option B Set the minimum size of site required to provide affordable housing below 15 dwellings so more development sites will contribute.
- Option C Graduate the percentage of affordable housing provided in new housing developments ranging from a smaller proportion on smaller sites, to a larger proportion on large sites. (eg. 20% on sites of 1-2- homes; 30% for 21-50 homes and 40% on sites over 51 homes).
- Option D Widen the scope for affordable housing by encouraging private sector alternatives to affordable housing being provided and managed by housing associations.

#### **SCORING SYSTEM PROPOSED:**

SA Objective	Decision making criteria	Short- Term 0-5 yrs	Medium Term 5-20 yrs	Long- Term 20+ yrs	Comments / Justification Inc. cumulative effects
<b>ENVIRONMEN</b>	NTAL				
ENV 1 To reduce the effect of traffic on the environment.	Will it reduce traffic volumes, ease the flow of traffic and reduce congestion? Will it increase the proportion of journeys using modes other than the car? Will it reduce the effect of HGV traffic on people and the environment? Will it encourage more benign modes of travel? Will new development be located such to reduce the need for people to travel?	N/a	N/a	N/a	N/a
ENV 2 To improve the quality of the	Will it improve the quality of the water environment (streams, rivers, lakes etc)? Will it help to support wetland habitats and species?	N/a	N/a	N/a	N/a

Will it reduce the emission of atmospheric pollutants?  Will it reduce the emission of atmospheric pollutants?  Will it conserve / enhance natural or semi-natural habitats, and promote habitat connections?  ENV 4  To maintain and enhance blodiversity and geodiversity.  ENV 5  To maintain and enhance the quality of landscapes, townscapes and controlled tham to protected species?  ENV 5  ENV 5  ENV 6  I will it protect and enhance the quality of landscapes, townscapes and controlled the historic and its setting where relevant?  Will it midtain and enhance the distinctiveness of the landscapes, townscapes and cultural value?  ENV 6  To adapt to and mitigate against the impacts of climate changes of climate changes of climate changes?  Will it reduce emissions of greenhouse gases by reducing energy consumption?  Will it reduce emissions of greenhouse gases by reducing energy consumption?  Will it reduce emissions of greenhouse gases by reducing energy consumption?  Will it reduce emissions of greenhouse gases by reducing energy consumption?  Will it reduce emissions of greenhouse gases by reducing energy consumption?  Will it reduce emissions of greenhouse gases by reducing energy consumption?  Will it reduce emissions of greenhouse gases by reducing energy consumption?  Will it reduce emissions of greenhouse gases by reducing energy consumption?  Will it reduce emissions of greenhouse gases by reducing energy consumption?  Will it reduce emissions of greenhouse gases by reducing energy consumption?  Will it reduce emissions of greenhouse gases by reducing energy consumption?  Will it reduce the amount of derelict, undervised land to an increased proportion of energy needs being met from renewable sources?  ENV 7  To avoid, reduce and manage flood risk.  Will it minimise the risk of flooding to people and property?  Can it incorporate new designs to adapt to possible flood risk?  Will it promote the use of sustainable drainage systems to reduce run off?  Will it minimise the risk of flooding to people and property?	water					
ENV 3 To improve environmental amenity, including air quality.  ENV 4 To maintain and enhance biodiversity and geodiversity.  ENV 5 To maintain and enhance the quality of landscapes, townscapes and heniance the full the bistoric environment.  ENV 6 To adapt to and mittain and enhance the finance the improver of landscapes, townscapes and the listoric environment.  ENV 6 To adapt to and mittain and enhance the improver of landscapes and enhance the filt the listoric environment.  ENV 7 To avoid, or it is ensured that the risks to lives, land and property are minimised?  ENV 7 To avoid, or its of the filt of the						
To improve environmental manufactural properties of environments are environmental menity, including air quality.  ENV 4 To maintain and enhance biodiversity and geodiversity and geodiversity and enhance entered species?  ENV 5 To maintain and enhance the quality of landscapes, townscapes and the historic environment.  ENV 6 To adapt to and mitigate against the impacts of climate change?  Will it reduce the emission of atmospheric pollutants?  N/a  N/a  N/a  N/a  N/a  N/a  N/a  N/		Will it improve air quality?				
ENV 4 To maintain and enhance biodiversity and geodiversity.  ENV 5 To maintain and enhance the quality of landscapes denance releases of landscapes, townscapes and enhance the quality of landscapes, townscapes and enhance the fellowing will it reduce the amount of derelicit, underused landscapes, townscapes and countryside character, including the character of the Broads and its setting where relevant?  Will it reduce the amount of derelicit, underused land? Will it it reduce the amount of derelicit, underused land? Will it it	To improve environmental amenity,		N/a	N/a	N/a	N/a
ENV 4 To maintain and enhance biodiversity and geodiversity.  ENV 5 To maintain and enhance the quality of landscapes denance releases of landscapes, townscapes and enhance the quality of landscapes, townscapes and enhance the fellowing will it reduce the amount of derelicit, underused landscapes, townscapes and countryside character, including the character of the Broads and its setting where relevant?  Will it reduce the amount of derelicit, underused land? Will it it reduce the amount of derelicit, underused land? Will it it	quality.					
To maintain and enhance the quality of landscapes, townscapes and the historic environment.  ENV 6 To adapt to and mitigate against the impacts of climate change.  Will it reduce the area to withstand the effects of climate change.  Will it increase the capacity of the area to withstand the effects of climate change.  ENV 7 To avoid, reduce and manage flood risk.  Will it minimise the risk of flooding to people and property?  Can it incorporate new designs to adapt to possible flood risk.  N/a  N/a  N/a  N/a  N/a  Options B and C: For both options the design of new developments and their integration into existing communities will have to ensure sensitivity to the character of local design.  N/a  N/a  N/a  N/a  N/a  N/a  N/a  N/	ENV 4 To maintain and enhance biodiversity and	promote habitat connections? Is it likely to have a significant effect on sites designated for international, national or local importance? Will it conserve / enhance species diversity, and in particular avoid	N/a	N/a	N/a	N/a
landscapes, townscapes and heritage? Will it reduce the amount of derelict, underused land? Will it protect and enhance features of historical, archaeological and cultural value?  ENV 6 To adapt to and mitigate against the impacts of climate change.  Will it lead to an increased proportion of energy needs being met from renewable sources? How can it be ensured that the risks to lives, land and property are minimised?  ENV 7 To avoid, reduce and manage flood risk.  Indicate the amount of derelict, underused land? Will it reduce the amount of derelict, underused land? Will it reduce the amount of derelict, underused land? Will it reduce the amount of derelict, underused land? Will it reduce the amount of derelict, underused land? Will it reduce and manage flood risk.  Indicate the amount of derelict, underused land?  Pro both options the design of new developments and their integration into existing communities will have to ensure sensitivity to the character of local design.  N/a  N/a  N/a  N/a  N/a  N/a  N/a  N/	To maintain and enhance the	and countryside character, including the character of the Broads and its setting where relevant?	N/a	N/a	N/a	N/a
To adapt to and mitigate against the impacts of climate change.  Will it lead to an increased proportion of energy needs being met from renewable sources? Will it increase the capacity of the area to withstand the effects of climate change? How can it be ensured that the risks to lives, land and property are minimised?  PAN 7 To avoid, reduce and manage flood risk.  Will it minimise the risk of flooding to people and property? Can it incorporate new designs to adapt to possible flood risk? Will it minimise the risk of flooding to people and property?  N/a  N/a  Options B and C: For both options the design of new developments will have to ensure that its contributions to climate change are minimised and that adaptation to climate change is included in the designs.  N/a  N/a  N/a  N/a  N/a	landscapes, townscapes and the historic	landscapes/townscapes and heritage? Will it reduce the amount of derelict, underused land? Will it protect and enhance features of historical, archaeological and	?	?	?	For both options the design of new developments and their integration into existing communities will have to ensure sensitivity to the character of local
Climate change.  Will it increase the capacity of the area to withstand the effects of climate change? How can it be ensured that the risks to lives, land and property are minimised?  Will it minimise the risk of flooding to people and property? To avoid, reduce and manage flood risk.  Will it minimise the use of sustainable drainage systems to reduce run off?  Ye for both options the design of new developments will have to ensure that its contributions to climate change are minimised and that adaptation to climate change is included in the designs.  N/a  N/a  N/a  N/A	To adapt to and mitigate against	consumption? Will it lead to an increased proportion of energy needs being met	N/a	N/a	N/a	N/a
To avoid, reduce and manage flood risk.  Can it incorporate new designs to adapt to possible flood risk?  Will it promote the use of sustainable drainage systems to reduce run off?  N/a  N/a  N/a  N/a	climate change.	Will it increase the capacity of the area to withstand the effects of climate change?  How can it be ensured that the risks to lives, land and property are minimised?	?	?	?	For both options the design of new developments will have to ensure that its contributions to climate change are minimised and that adaptation to climate
ENV 8 Will it conserve groundwater resources?	To avoid, reduce and manage flood	Can it incorporate new designs to adapt to possible flood risk? Will it promote the use of sustainable drainage systems to reduce	N/a	N/a	N/a	N/a
	ENV 8	Will it conserve groundwater resources?				

	T				Laur
To provide for	NACH it minimine and the name of the O	N/a	N/a	N/a	N/a
sustainable use	Will it minimise water consumption?				
and sources of					
water supply.					
ENV 9	Will it minimise consumption of materials and resources?				
To make the	Will it promote the use of land in sustainable locations that has	N/a	N/a	N/a	N/a
best use of	been previously developed?	IV/a	IN/a	I Wa	
resources.	Will it use land efficiently?				
including land	Will it minimise the loss of "greenfield" land?				
and energy, and	Will it avoid the loss of good quality agricultural land and preserve				
to minimise	soil resources?				
waste	Will it minimise energy consumption and promote energy				
	efficiency?				
production.	Will it promote the use of renewable energy sources? Will it lead to less waste being produced?				
	Will it lead to less waste being produced?  Will it lead to less waste being disposed, by promoting more				
	recycling and composting?				
	Will it increase waste recovery for other means eg. energy				
	generation?				
SOCIAL				<u>I</u>	
SOC 1	Will it reduce poverty and social exclusion in those areas most				This would have significant benefits for reducing
To reduce	affected?				social exclusion.
	directed.	$\odot$	$\odot$	☺	Social exclusion.
poverty and	Will it help to reduce deprivation levels?				la conserva the conservat of affected by bourses will
social	This is not to to a control of the c				Increasing the amount of affordable housing will
exclusion.	Will it help meet the needs of residents most effectively?				benefit those with lower incomes and help
	,				households to reduce deprivation.
					Option B - A threshold lower than 15 dwellings could
					provide more affordable housing than would be the
					case if the threshold were 15 dwellings as that could
					miss out on providing affordable units in smaller
					developments. Questions remain as to the short-
					term likelihood and viability of providing affordable
					units from smaller sites.
					Option C - A graduated proportion would be able to
					secure more affordable housing on a larger number

SOC 2	Will it improve access to high quality health facilities?				of sites, of different sizes. It would also secure a higher net total of affordable housing from larger development sites.  More affordable houses would increase the standard
To maintain and improve the health of the whole population and promote healthy lifestyles.	Will it encourage healthy lifestyles? How?  Will it provide adequate health infrastructure for existing and new communities?  Will the links between poorer health and deprivation be addressed?  Will links to the countryside be maintained and enhanced?	©	©	©	of affordable housing overall, and so create healthier households. If located closer to facilities and services such as health centres, it would improve lifestyles and encourage walking and cycling. It would raise the standard of housing and enable homeless people to live in homes. Location-specific measures can improve access to the country and open space.  Option B could miss out on providing sites in smaller developments.  Option C would be able to secure more affordable
					housing on a larger number of sites, of different sizes so benefit more people.
SOC 3 To improve education and skills.	Will it improve qualifications and skills for both young people and amongst the workforce?  Will it help to retain key workers and provide more skilled workers from school leavers?  Will adequate education infrastructure be provided for existing and new communities?  Will it promote lifelong learning and skills training?  Will links between lower levels of education and deprivation be addressed?	(1)	(3)	©	Overall, this would have a beneficial and positive effect by helping to bring more affordable housing to locations where retaining key workers is important. If there are more new affordable homes these would provide a better standard of housing for their residents and subsequently help to improve educational attainment.  All options would improve education by increasing access to schools, providing a settled address and enabling people to be involved in learning initiatives.  Option B could miss out on providing sites in smaller developments.
					Option C would be able to secure more affordable

					housing on a larger number of sites, of different sizes so benefit more people.
SOC 4 To provide the opportunity to live in a decent, suitable and	Will it increase the range of types, sizes and affordability of housing for all social groups?  Will it reduce the housing need and ensure that housing provision addresses the needs of all?	©⊗/?	٥	☺	This would see a very considerable benefit from increasing the provision of affordable housing as more affordable housing would benefit all sections of the community.
affordable home.	Will it provide the most appropriate solutions to address the housing requirements needed for creating sustainable communities?  Will it make best use of existing housing stock?				Option B would provide more affordable homes from smaller sites, but it could mean that schemes do not come forward and are difficult to implement as they could become financially unviable. It would affect more settlements, however, including smaller development sites in the rural areas where local housing is needed.
					Option C would be able to secure more affordable housing on a larger number of sites, of different sizes and of different types, so it would benefit more communities. It would ensure there is always a good mix of affordable and market housing, no matter what the size of development.
SOC 5 To build community identity,	Will it encourage engagement in community activities?  Will it contribute to the achievement of a mixed and balanced community?	(()	(()	©	Increasing the proportion of affordable housing would be able to promote sustainable communities and more involvement in community activities.
improve social welfare, and	Will it reduce actual levels of crime?				The graduated approach of Option C in particular would secure more mixed communities.
reduce crime and anti-social activity.	Will it reduce the fear of crime?				The effects on crime rates are unknown.
SOC 6 To offer more opportunities for rewarding and satisfying	Will it reduce unemployment overall?  Will it help to improve earnings?	٥	٥	©	Providing more affordable housing would help those in housing need to secure job opportunities, and so raise income levels and more key workers could also be retained in local areas.

SOC 7 To improve the quality of where people live.	Will it improve the quality of dwellings?  Will it improve the quality of local open space?  Will it improve the satisfaction of people with their neighbourhoods?	©	©	©	Option B could miss out on providing sites in smaller developments.  Option C would be able to secure more affordable housing on a larger number of sites, of different sizes, to benefit more people.  The standard of dwellings for those in housing need would be improved dramatically if more affordable homes could be provided. Standards of housing could be improved by design, such as better energy efficiency. Overall, more affordable housing could help to build more sustainable and mixed communities and it would increase the satisfaction of people with their neighbourhoods.  Under Option C, more social housing would be required to be built to the standards of the Code for Sustainable Homes, because there is a minimum standard introduced for social housing to reach certain levels.
To improve accessibility to essential services, facilities and jobs.	Will it improve accessibility to key local services and facilities (including health, education, leisure, open space, the countryside and community facilities)? Will it improve accessibility for all whilst reducing dependency on the private car? Will it improve access to jobs and services for all?	©	©	©	Overall, having a settled address would help those in housing need to gain access to health facilities, jobs and schools.
ECONOMIC					
EC 1 To encourage sustained economic	Will it assist in strengthening the local economy?  Will it improve business development and enhance competitiveness?	☺	©	©	Providing more affordable housing would help more local residents remain in their local area and retain key workers and help people to develop businesses.
growth.	Will it reduce vulnerability to economic shocks?  Will it promote growth in key sectors?				There would be some impact felt by developers who have to provide more affordable housing, especially for the less conventional method of finance under

	Will it increase vitality & viability of town centres and improve economic diversity?				option A, and for lower thresholds of Option B.  With a settled home, there could be more self-employed business opportunities. There may also be jobs created in constructing the new homes.
EC 2 To encourage and accommodate both indigenous and inward investment.	Will it encourage indigenous businesses? Will it encourage inward investment? Will it make land and property available for business? Will it improve economic performance across the Greater Norwich area? Will it support / encourage rural diversification? Will it support / encourage small city businesses?	٥	©	©	Providing a settled home address may help new entrepreneurs to develop their own new and innovative businesses.  There would be some impact felt by developers who have to provide more affordable housing, especially for the less conventional method of finance under option A, and for lower thresholds of Option B.
EC 3 To encourage efficient patterns of movement in support of economic growth.	Will it improve provision of local jobs? Will it improve accessibility to work, particularly by public transport, walking and cycling? Will it reduce journey times between key employment areas and key transport interchanges? Will it improve efficiency and sustainability of freight distribution? Will it support provision of key communications infrastructure?	٥	©	©	More affordable housing provision enables more people to live and work locally, such as key workers, who may be able to access their workplace by alternatives to the car, which would help mitigate the overall likely increase in commuting that would arise from providing more housing.
EC 4 To improve the social and environmental performance of the economy.	Will it reduce the impact on the environment from businesses?  Will it reduce the impact on residents from businesses?  Will it attract new investment and skilled workers to the area?  Will it maintain existing business and employment provision?  Will it provide employment in the best locations to serve urban and rural residents?	©	©	©	More affordable housing provision enables more people to live and work locally, such as key workers, and may promote alternatives to car-based commuting to work.  A permanent address would enable better accessibility, education and access to jobs, health services and facilities, and could also help promote home-working amongst some sections of the community.  A higher proportion of affordable housing would help to promote a more mixed local economy.

	Private developers and the commercial sector (under Option A), being part of the economy, could improve their social performance by providing more affordable housing.
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Overall Conclusions: What are the main effects of the policy option as identified through the sustainability appraisal process? POLICY OPTION: Question 14 – HOUSING: Increasing the delivery of affordable housing.

There are a number of approaches that could be taken to help make sure everyone has access to a decent home they can afford:

- Option A Seeking financial contributions for affordable homes from commercial as well as housing development.
- Option B Set the minimum size of site required to provide affordable housing below 15 dwellings so more development sites will contribute.
- Option C Graduate the percentage of affordable housing provided in new housing developments ranging from a smaller proportion on smaller sites, to a larger proportion on large sites. (eg. 20% on sites of 1-2- homes; 30% for 21-50 homes and 40% on sites over 51 homes).
- Option D Widen the scope for affordable housing by encouraging private sector alternatives to affordable housing being provided and managed by housing associations.

Environmental Impacts	Using mechanisms to help increase the provision of affordable housing does not, on its own, create many environmental impacts although any increase in overall housing numbers could potentially result in negative effects. The design of new developments and their integration into existing communities will have to ensure sensitivity to the character of local design and optimise the potential to reduce contributions to climate change and include designs for adaptation to the effects of a future changing climate.
Social Impacts	These options would improve accessibility to a permanent address for those in housing need and so improve chances of gaining employment, access to GPs, schools and other services. Increasing the proportion of affordable housing would also lead to a larger number of affordable homes built to a high standard, which would improve the health of residents and create better environments for study and home working, and encourage the development of balanced and mixed communities.

Option B could however miss out on providing sites in smaller developments because sites may not come forward if they are less viable to develop and a ceiling figure could effectively not optimise its potential to provide affordable housing and balanced communities. Option C would be able to secure more affordable housing on a larger number of sites, of different sizes, so it would benefit more people. This option would ensure there is always a good mix of affordable and market housing, no matter what the size of development.

## **Economic Impacts**

More local and key workers would be able to stay in the area and remain in their community, and live close to work or increase home-working, and local businesses could retain their existing custom. People can also gain employment by having a fixed address. An overall increase in housing would be likely to increase the amount of commuting, but affordable units could also assist new entrepreneurs in meeting the cost of setting up a new business, and encourage innovation in new communities and reduce any feeling that people may have to move elsewhere for an affordable means of housing.

There would be some impact felt by developers who have to provide more affordable housing, especially for the less conventional method of finance under option A, and for lower thresholds of Option B.

### **Overall summary:**

- Impacts
- Possible mitigation measures
- Recommended further research
- Considering cumulative impacts

It would increase access to an affordable home for those in housing need, improve the health of occupants and increase access to the jobs market, health facilities and local services by having a settled address. Improving accessibility for residents relies on new affordable housing being located close links to public transport routes and the workplace.

These options aim to create an improvement in affordable housing provision and would be suited to strategic growth options that aim to address housing need in areas of identified shortage.

Option B would be less effectual in that it only applies to development sites of 15 new houses or more, could include a ceiling figure of affordable housing provision, and would only be applied in larger settlements.

Option C would include all settlements, including more in the rural areas, it would affect smaller sites as well, and the graduated proportion of affordable homes provision would also create more balanced communities.

- Option Appraised: Question 15 Housing: Providing permanent sites for Gypsies and Travellers Highway corridors.
  - Option Are there any particular highway corridors where we should focus our search for transit sits to best meet the needs of the travelling community? (e.g. A11; A140 south; A140 north; A47).

## **SCORING SYSTEM PROPOSED:**

SA Objective	Decision making criteria	Short- Term 0-5 yrs	Medium Term 5-20 yrs	Long- Term 20+ yrs	Comments / Justification Inc. cumulative effects
<b>ENVIRONMEN</b>	NTAL				
ENV 1 To reduce the effect of traffic on the	Will it reduce traffic volumes, ease the flow of traffic and reduce congestion? Will it increase the proportion of journeys using modes other than the car? Will it reduce the effect of HGV traffic on people and the	©	☺	©	All the site highway corridors would help to reduce the need to travel between sites simply by locating fixed sites for traveller occupation.
environment.	environment?  Will it encourage more benign modes of travel?  Will new development be located such to reduce the need for people to travel?				This option would improve ease of access for site residents and provide most opportunity to use public transport.
ENV 2 To improve the quality of the water environment	Will it improve the quality of the water environment (streams, rivers, lakes etc)?  Will it help to support wetland habitats and species?	☺	☺	☺	All forms of traveller sites would involve proper sanitation facilities and so could be likely to involve less pollution.
ENV 3 To improve environmental amenity, including air quality.	Will it improve air quality?  Will it reduce the emission of atmospheric pollutants?	N	N	N	There may be some additional emissions that are related to transport movements, but these could be reduced if the settled locations provided better access to public transport these could be minimised.

ENV 4 To maintain and enhance biodiversity and geodiversity.	Will it conserve / enhance natural or semi-natural habitats, and promote habitat connections? Is it likely to have a significant effect on sites designated for international, national or local importance? Will it conserve / enhance species diversity, and in particular avoid harm to protected species?	☺	©	©	These benefits would be location-specific, but in general providing all forms of fixed traveller site would help to avoid damage to natural habitats through careful location and site management, which would be likely to involve less pollution.
ENV 5 To maintain and enhance the quality of landscapes, townscapes and the historic environment.	Will it protect and enhance the quality of landscapes, townscapes and countryside character, including the character of the Broads and its setting where relevant?  Will it maintain and enhance the distinctiveness of the landscapes/townscapes and heritage?  Will it reduce the amount of derelict, underused land?  Will it protect and enhance features of historical, archaeological and cultural value?	©	٥	©	The benefits would be location-specific, but in general providing all forms of fixed traveller sites would help to reduce the impact on landscapes and the setting of the built environment. Design measures may need to include screening and sensitive design, but waste management and designated residency areas would help to protect the character of the area.
ENV 6 To adapt to and mitigate against the impacts of climate change.	Will it reduce emissions of greenhouse gases by reducing energy consumption? Will it lead to an increased proportion of energy needs being met from renewable sources? Will it increase the capacity of the area to withstand the effects of climate change? How can it be ensured that the risks to lives, land and property are minimised?	©	©	٥	All site highway corridors would help to reduce contributions to climate change by reducing the amount of vehicle emissions travelling between temporary, unallocated sites.  New sites could also include localised energy generation measures.
ENV 7 To avoid, reduce and manage flood risk.	Will it minimise the risk of flooding to people and property?  Can it incorporate new designs to adapt to possible flood risk?  Will it promote the use of sustainable drainage systems to reduce run off?	©	©	☺	Flood risk would be avoided by locating fixed sites in areas that are not prone to flooding, and help travellers to move away from flood plains.
ENV 8 To provide for sustainable use and sources of water supply.	Will it conserve groundwater resources? Will it minimise water consumption?	©	©	☺	Fixed traveller sites would provide safe and reliable supplies of water, and help to manage supplies. Permanent sanitation facilities would also reduce watercourse pollution.
ENV 9 To make the best use of resources, including land	Will it minimise consumption of materials and resources? Will it promote the use of land in sustainable locations that has been previously developed? Will it use land efficiently? Will it minimise the loss of "greenfield" land?	☺	☺	☺	Fixed transit sites would minimise waste by providing means of waste collection and disposal, recycling and recovery.  Renewable energy schemes could be used to reduce

and energy, and to minimise waste production.	Will it avoid the loss of good quality agricultural land and preserve soil resources? Will it minimise energy consumption and promote energy efficiency? Will it promote the use of renewable energy sources? Will it lead to less waste being produced? Will it lead to less waste being disposed, by promoting more recycling and composting? Will it increase waste recovery for other means eg. energy generation?				energy consumption.
SOCIAL					
SOC 1 To reduce poverty and social exclusion.	Will it reduce poverty and social exclusion in those areas most affected?  Will it help to reduce deprivation levels?  Will it help meet the needs of residents most effectively?	☺	©	<b>©</b>	With each option, allocating fixed traveller sites will help to reduce deprivation by providing travelling communities with a fixed address for finding jobs and using health, education and social services. It would also reduce expenses involved in travelling.
	The holp most the hoods of regidente most enectively.				These corridors would provide better access to employment areas.
To maintain and improve the health of the whole population and promote healthy lifestyles.	Will it improve access to high quality health facilities?  Will it encourage healthy lifestyles? How?  Will it provide adequate health infrastructure for existing and new communities?  Will the links between poorer health and deprivation be addressed?  Will links to the countryside be maintained and enhanced?	☺	©	©	All highway corridors would help to reduce the stress of having to move between unauthorised sites. They would also promote healthier lifestyles if sites were located close to facilities where walking and cycling were feasible. With a fixed address, travelling groups can also gain access to health services.
SOC 3 To improve education and skills.	Will it improve qualifications and skills for both young people and amongst the workforce? Will it help to retain key workers and provide more skilled workers from school leavers? Will adequate education infrastructure be provided for existing and new communities? Will it promote lifelong learning and skills training? Will links between lower levels of education and deprivation be addressed?	☺	©	©	All highway sites would help to improve access to permanent education through enrolment at local schools. By providing settled locations they would improve access to further education and opportunities for vocational training opportunities.  This strategy would offer best access for public transport connections to vocational training and further education.

SOC 4 To provide the opportunity to live in a decent, suitable and affordable home.	Will it increase the range of types, sizes and affordability of housing for all social groups? Will it reduce the housing need and ensure that housing provision addresses the needs of all? Will it provide the most appropriate solutions to address the housing requirements needed for creating sustainable communities? Will it make best use of existing housing stock?	٥	©	<b>©</b>	This strategy would offer a better opportunity to live in surroundings that are designed to improve the standard of living for the travelling community.
SOC 5 To build community identity, improve social welfare, and reduce crime and anti-social activity.	Will it encourage engagement in community activities?  Will it contribute to the achievement of a mixed and balanced community?  Will it reduce actual levels of crime?  Will it reduce the fear of crime?	©®	©⊝	©	Over the short-term, finding fixed transit sites alongside or within the settled community could create anguish for all groups, and could increase the fear of crime, for example. Eventually, such concerns would reduce as acceptance grows and communities become more integrated, such as by becoming involved in local activities and schooling.  Presently, many illegal sites have been anti-social, so this would be reduced if fixed locations were provided
SOC 6 To offer more opportunities for rewarding and satisfying employment for all.	Will it reduce unemployment overall? Will it help to improve earnings?	©	©	☺	with sensitive management.  This strategy would increase travellers' access to jobs by providing a fixed address. Careful site design could also include on-site working areas. Over the long-term, improved and regular attendance in schools will help children to develop skills and secure jobs.  This would offer the best access for travellers to reach employment areas, particularly by public transport.
SOC 7 To improve the quality of where people live.	Will it improve the quality of dwellings?  Will it improve the quality of local open space?  Will it improve the satisfaction of people with their neighbourhoods?	©®	©⊗	☺	Although not affecting the dwellings themselves, this would be able to provide improved site environments and surroundings.  There would however likely be a mixed reception in this sense from the settled community where sites are located.
SOC 8	Will it improve accessibility to key local services and facilities				For this issue, allocating fixed transit sites will help to

To improve accessibility to essential services, facilities and jobs.	(including health, education, leisure, open space, the countryside and community facilities)?  Will it improve accessibility for all whilst reducing dependency on the private car?  Will it improve access to jobs and services for all?	©	☺	©	improve accessibility to services and facilities by providing a fixed address for finding jobs and using health, education and social services.  This strategy provides better access to public transport.
ECONOMIC	TYTH ICHINDROVO GOODOO to Jobo and Golvidoo for all.				
EC 1 To encourage sustained economic growth.	Will it assist in strengthening the local economy? Will it improve business development and enhance competitiveness? Will it reduce vulnerability to economic shocks? Will it promote growth in key sectors? Will it increase vitality & viability of town centres and improve economic diversity?	©	©	☺	This strategy would help to provide the local economy with more permanent workers and an improved range of business services. A fixed address and careful site design could help local businesses to develop and start-up on-site.  Fixed sites provide better access to employment
EC 2 To encourage and accommodate both indigenous and inward investment.	Will it encourage indigenous businesses? Will it encourage inward investment? Will it make land and property available for business? Will it improve economic performance across the Greater Norwich area? Will it support / encourage rural diversification? Will it support / encourage small city businesses?	©	©	©	areas.  Fixed sites would help to provide the local economy with more permanent workers and an improved range of business services. A fixed address and careful site design could help local businesses to develop and start-up on-site.  This strategy provides better access to employment areas.
EC 3 To encourage efficient patterns of movement in support of economic growth.	Will it improve provision of local jobs? Will it improve accessibility to work, particularly by public transport, walking and cycling? Will it reduce journey times between key employment areas and key transport interchanges? Will it improve efficiency and sustainability of freight distribution? Will it support provision of key communications infrastructure?	©	☺	©	The effects are marginal but there would be improved access to local employment areas by public transport.
EC 4 To improve the social and environmental	Will it reduce the impact on the environment from businesses? Will it reduce the impact on residents from businesses? Will it attract new investment and skilled workers to the area? Will it maintain existing business and employment provision?	☺	©	☺	The effects are marginal but all options would offer the chance to improve the environmental performance of Gypsy and Traveller businesses by reducing extensive commuting and providing better waste

performance of the economy.	Will it provide employment in the best locations to serve urban and rural residents?	collection, for example.						
Overall	Conclusions: What are the main effects of the policy option as i	dentified through the sustainability appraisal process?						
- POLICY OF	PTION: Question 15 – Housing: Providing permanent sites fo	or Gypsies and Travellers – Highway corridors.						
	The state of the s	are opposed and marcher of might be made of						
_	Ontion – Are there any particular highway corridors where	we should focus our search for transit sits to best meet the						
	needs of the travelling community? (e.g. A11; A140 south; A1							
		on will help to minimise the use of cars by reducing the need and						
Environmental		omoting opportunities for walking and cycling. Providing carefully						
Impacts		located sites will minimise potential impacts on the natural environment, landscapes and the character of local settlements.						
•	Careful management can provide waste collection, sanitation	Careful management can provide waste collection, sanitation and water supply and disposal facilities that will further minimise						
	impacts on the environment.							
	This option in particular could reduce the need for private trans	sport by being close to public transport routes.						
	This strategy will serve to promote better access to jobs, healt	h facilities, local services and education for the Gypsy and						
Social Impacts	Traveller communities by providing a suitable location for sites	s and a fixed address. With means of accessing public transport						
•	routes and being located close to existing facilities, or through	integration with new communities, there will be more incentive for						
	walking and cycling and leading healthier lifestyles, which will							

This strategy offers the best access to local facilities and public transport.

# Overall summary:

**Economic Impacts** 

- Impacts
- Possible mitigation measures
- Recommended further research
- · Considering cumulative impacts

This strategy offers the best access for residents to public transport and employment areas.

The major short-term advantage of finding permanent sites includes reduced stress for travelling communities if they don't have to move between unauthorised and temporary sites, although this could also apply to settled communities close to new sites. Long-term improvements would also be brought to health, education and deprivation. This strategy is likely to be most successful if included in combination with integrated settlement designs where access to services is in walking distance and public transport offers links to further education and other services within larger centres.

Economic advantages are less prominent, but permanent sites could increase the range of business services available in the

area. Careful site designs could also include provision for workspaces on site, which could help businesses to develop.

- Option Appraised: Question 16 – Housing: Permanent Gypsies and Travellers sites - Within new developments.

Option - In the longer term should an element of land for long stay sites for Gypsies and Travellers be included in each large new development?

## **SCORING SYSTEM PROPOSED:**

SA Objective	Decision making criteria	Short- Term 0-5 yrs	Medium Term 5-20 yrs	Long- Term 20+ yrs	Comments / Justification Inc. cumulative effects
<b>ENVIRONMEN</b>	NTAL				
ENV 1 To reduce the effect of traffic on the	Will it reduce traffic volumes, ease the flow of traffic and reduce congestion? Will it increase the proportion of journeys using modes other than the car?	©	©	©	This strategy would help to reduce the need to travel between sites simply by locating permanent sites for traveller occupation.
environment.	Will it reduce the effect of HGV traffic on people and the environment? Will it encourage more benign modes of travel? Will new development be located such to reduce the need for people to travel?				This option would improve access to services and facilities, further reducing the need to travel and promoting walking and cycling.
ENV 2 To improve the quality of the water	Will it improve the quality of the water environment (streams, rivers, lakes etc)?  Will it help to support wetland habitats and species?	©	☺	()	All forms of permanent sites would involve proper sanitation facilities and so could be likely to involve less pollution.
environment ENV 3	Will it improve air quality?	NI/a	NI/a	NI/a	N/o
To improve environmental	Will it reduce the emission of atmospheric pollutants?	N/a	N/a	N/a	N/a
amenity, including air quality.					

ENV 4 To maintain and enhance biodiversity and geodiversity.	Will it conserve / enhance natural or semi-natural habitats, and promote habitat connections? Is it likely to have a significant effect on sites designated for international, national or local importance? Will it conserve / enhance species diversity, and in particular avoid harm to protected species?	☺	©	☺	These benefits would be location-specific, but in general providing all forms of permanent site would help to avoid damage to natural habitats through careful location and site management, which would be likely to involve less pollution.
ENV 5 To maintain and enhance the quality of landscapes, townscapes and the historic environment.	Will it protect and enhance the quality of landscapes, townscapes and countryside character, including the character of the Broads and its setting where relevant?  Will it maintain and enhance the distinctiveness of the landscapes/townscapes and heritage?  Will it reduce the amount of derelict, underused land?  Will it protect and enhance features of historical, archaeological and cultural value?	©	٥	©	These benefits would be location-specific, but in general providing all forms of permanent site would help to reduce the impact on landscapes and the setting of the built environment. Design measures may need to include screening and sensitive design, but waste management and designated residency areas would help to protect the character of the area.  This option enables site designs to be integrated into a new development.
ENV 6 To adapt to and mitigate against the impacts of climate change.	Will it reduce emissions of greenhouse gases by reducing energy consumption? Will it lead to an increased proportion of energy needs being met from renewable sources? Will it increase the capacity of the area to withstand the effects of climate change? How can it be ensured that the risks to lives, land and property are minimised?	☺	☺	©	This strategy would help to reduce contributions to climate change by reducing the amount of vehicle emissions travelling between temporary sites.  New sites could also include localised energy generation measures.
ENV 7 To avoid, reduce and manage flood risk.	Will it minimise the risk of flooding to people and property?  Can it incorporate new designs to adapt to possible flood risk?  Will it promote the use of sustainable drainage systems to reduce run off?	☺	©	©	Flood risk would be avoided by locating permanent sites in areas that are not prone to flooding, and help travellers to move away from flood plains.
ENV 8 To provide for sustainable use and sources of water supply.	Will it conserve groundwater resources?  Will it minimise water consumption?	☺	©	©	Permanent sites would provide safe and reliable supplies of water, and help to manage supplies. Permanent sanitation facilities would also reduce watercourse pollution.
ENV 9 To make the best use of	Will it minimise consumption of materials and resources? Will it promote the use of land in sustainable locations that has been previously developed?	©	©	©	Permanent sites would minimise waste by providing means of waste collection and disposal, recycling and recovery.

resources, including land and energy, and to minimise waste production.	Will it use land efficiently? Will it minimise the loss of "greenfield" land? Will it avoid the loss of good quality agricultural land and preserve soil resources? Will it minimise energy consumption and promote energy efficiency? Will it promote the use of renewable energy sources? Will it lead to less waste being produced? Will it lead to less waste being disposed, by promoting more recycling and composting? Will it increase waste recovery for other means eg. energy generation?				Renewable energy schemes could be used to reduce energy consumption.  Although location-specific, this option may provide an opportunity to use previously developed land in some new developments.
SOCIAL					
SOC 1 To reduce poverty and social exclusion.	Will it reduce poverty and social exclusion in those areas most affected?  Will it help to reduce deprivation levels?  Will it help meet the needs of residents most effectively?	☺	☺	☺	With this option, allocating permanent sites will help to reduce deprivation by providing travelling communities with a fixed address for finding jobs and using health, education and social services. It would also reduce expenses involved in travelling.
					This option offers the best access to local facilities and services in order to reduce isolation.
SOC 2 To maintain and improve the health of the whole population and promote healthy lifestyles.	Will it improve access to high quality health facilities? Will it encourage healthy lifestyles? How? Will it provide adequate health infrastructure for existing and new communities? Will the links between poorer health and deprivation be addressed? Will links to the countryside be maintained and enhanced?	9	9	©	This strategy would help to reduce the stress of having to move between illegal and temporary accommodation. They would also promote healthier lifestyles if sites were located close to facilities where walking and cycling were feasible. With a fixed address, travelling groups can also gain access to health services.
SOC 3 To improve education and skills.	Will it improve qualifications and skills for both young people and amongst the workforce? Will it help to retain key workers and provide more skilled workers from school leavers? Will adequate education infrastructure be provided for existing and new communities? Will it promote lifelong learning and skills training? Will links between lower levels of education and deprivation be	©	☺	☺	This strategy would help to improve access to permanent education through enrolment at local schools. By providing settled locations they would improve access to further education and opportunities for vocational training opportunities.  This strategy would integrate communities into new

	addressed?				schooling facilities.
SOC 4 To provide the opportunity to live in a decent, suitable and affordable home.	Will it increase the range of types, sizes and affordability of housing for all social groups? Will it reduce the housing need and ensure that housing provision addresses the needs of all? Will it provide the most appropriate solutions to address the housing requirements needed for creating sustainable communities? Will it make best use of existing housing stock?	©	©	©	This strategy would offer a better opportunity to live in surroundings that are designed to improve the standard of living for the travelling community.  This option offers the best means of building a mixed and balanced community.
SOC 5 To build community identity, improve social welfare, and reduce crime and anti-social activity.	Will it encourage engagement in community activities?  Will it contribute to the achievement of a mixed and balanced community?  Will it reduce actual levels of crime?  Will it reduce the fear of crime?	©	©	©	Over the short-term, finding permanent sites alongside or within the settled community could create anguish for all groups, and could increase the fear of crime, for example. Eventually, such concerns would reduce as acceptance grows and communities become more integrated, such as by becoming involved in local activities and schooling.  Presently, many illegal sites have been anti-social, so this would be reduced if permanent locations were provided with sensitive management.  This option would offer the most opportunities to integrate communities and build acceptance over the long-term.
SOC 6 To offer more opportunities for rewarding and satisfying employment for all.	Will it reduce unemployment overall? Will it help to improve earnings?	©	٥	©	This strategy would increase the access to jobs by providing a fixed address. Careful site design could also include on-site working areas. Over the long-term, improved and regular attendance in schools will help children to develop skills and secure jobs.
SOC 7 To improve the quality of where people live.	Will it improve the quality of dwellings?  Will it improve the quality of local open space?  Will it improve the satisfaction of people with their neighbourhoods?	©⊗	©8	©	Although not affecting the dwellings themselves, this would be able to provide an improved site environment and surroundings.  There would however likely be a mixed reception in

SOC 8 To improve accessibility to essential services, facilities and jobs.	Will it improve accessibility to key local services and facilities (including health, education, leisure, open space, the countryside and community facilities)?  Will it improve accessibility for all whilst reducing dependency on the private car?  Will it improve access to jobs and services for all?	©	©	☺	this sense from the settled community where sites are located.  This strategy could foster the most acceptance from settled communities over time.  For this option, allocating permanent sites will help to improve accessibility to services and facilities by providing a fixed address for finding jobs and using health, education and social services.  This option would offer the best access to new local facilities and services.
ECONOMIC					
EC 1 To encourage sustained economic growth.	Will it assist in strengthening the local economy? Will it improve business development and enhance competitiveness? Will it reduce vulnerability to economic shocks? Will it promote growth in key sectors? Will it increase vitality & viability of town centres and improve economic diversity?	☺	٥	☺	This option would help to provide the local economy with more permanent workers and an improved range of business services. A fixed address and careful site design could help local businesses to develop and start-up on-site.
To encourage and accommodate both indigenous and inward investment.	Will it encourage indigenous businesses? Will it encourage inward investment? Will it make land and property available for business? Will it improve economic performance across the Greater Norwich area? Will it support / encourage rural diversification? Will it support / encourage small city businesses?	©	٥	©	This strategy would help to provide the local economy with more permanent workers and an improved range of business services. A fixed address and careful site design could help local businesses to develop and start-up on-site.
EC 3 To encourage efficient patterns of movement in support of economic growth.	Will it improve provision of local jobs? Will it improve accessibility to work, particularly by public transport, walking and cycling? Will it reduce journey times between key employment areas and key transport interchanges? Will it improve efficiency and sustainability of freight distribution? Will it support provision of key communications infrastructure?	☺	٥	©	The effects are marginal but there would be improved access to local employment areas by public transport.

EC 4 To improve the social and environmental performance of the economy.	Will it reduce the impact on the environment from businesses? Will it reduce the impact on residents from businesses? Will it attract new investment and skilled workers to the area? Will it maintain existing business and employment provision? Will it provide employment in the best locations to serve urban and rural residents?	©	©	☺	The effects are marginal but this option would offer the chance to improve the environmental performance of Gypsy and Traveller businesses by reducing extensive commuting and providing better waste collection, for example.
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Overall Conclusions: What are the main effects of the policy option as identified through the sustainability appraisal process? ■ POLICY OPTION: Question 16 – Housing: Permanent Gypsies and Travellers sites - Within new developments. Option - In the longer term should an element of land for long stay sites for Gypsies and Travellers be included in each large new development? This option will help to minimise the use of cars by reducing the need and distances involved in travelling to accessing local facilities and promoting opportunities for walking and cycling. Providing carefully located sites will minimise potential impacts on Environmental the natural environment, landscapes and the character of local settlements. Careful management can provide waste collection, **Impacts** sanitation and water supply and disposal facilities that will further minimise impacts on the environment. This option encourages walking and cycling and use of local facilities, and promotes integrated site designs within settlements. This strategy will serve to promote better access to jobs, health facilities, local services and education for the Gypsy and **Social Impacts** Traveller communities by providing a suitable location for sites and a fixed address. With means of accessing public transport routes and being located close to existing facilities, or through integration with new communities, there will be more incentive for walking and cycling and leading healthier lifestyles, which will improve other aspects such as educational attainment. Economic advantages are less prominent, but permanent sites could increase the range of business services available in the **Economic Impacts** area. Careful site designs could also include provision for workspaces on site, which could help businesses to develop. **Overall summary:** 

- Impacts
- Possible mitigation measures
- Recommended further research
- Considering cumulative impacts

The major short-term advantage of finding permanent sites include reduced stress for travelling communities if they don't have to move between temporary sites, although this could also apply to settled communities close to new sites. Long-term improvements would also be brought to health, education and deprivation.

This option in particular offers the most opportunities to create balanced communities where integration is most likely to be successful over the long-term. This is likely to be most successful if included in combination with integrated settlement designs where access to services is in walking distance and public transport offers links to further education and other services within larger centres.

- Option Appraised: Question 17 – Housing: Providing Gypsies and Travellers sites – Fewer large or more small sites?

Option - Should a larger number of small sites (up to 15 pitches) be developed rather than fewer larger sites in each large new development?

## **SCORING SYSTEM PROPOSED:**

SA Objective	Decision making criteria	Short- Term 0-5 yrs	Medium Term 5-20 yrs	Long- Term 20+ yrs	Comments / Justification Inc. cumulative effects
<b>ENVIRONMEN</b>	NTAL				
ENV 1 To reduce the effect of traffic on the	Will it reduce traffic volumes, ease the flow of traffic and reduce congestion?  Will it increase the proportion of journeys using modes other than	©	©	©	Both the options would help to reduce the need to travel between sites simply by locating permanent sites for traveller occupation.
environment.	the car? Will it reduce the effect of HGV traffic on people and the environment?				This option would involve more travelling if smaller sites were more dispersed from services.
	Will it encourage more benign modes of travel?  Will new development be located such to reduce the need for				Smaller sites would be able to be less restricted in where they can locate, so they can avoid more sensitive areas. Large sites may find it more difficult
	people to travel?				to avoid sensitive aspects.
ENV 2 To improve the quality of the	Will it improve the quality of the water environment (streams, rivers, lakes etc)?	©	©	©	All forms of permanent sites would involve proper sanitation facilities and so could be likely to involve less pollution.
water environment	Will it help to support wetland habitats and species?				
ENV 3	Will it improve air quality?				
To improve environmental	Will it reduce the emission of atmospheric pollutants?	N/a	N/a	N/a	N/a

amenity, including air quality.					
ENV 4 To maintain and enhance biodiversity and geodiversity.	Will it conserve / enhance natural or semi-natural habitats, and promote habitat connections?  Is it likely to have a significant effect on sites designated for international, national or local importance?  Will it conserve / enhance species diversity, and in particular avoid harm to protected species?	☺	©	☺	These benefits would be location-specific, but in general providing all forms of permanent site would help to avoid damage to natural habitats through careful location and site management, which would be likely to involve less pollution.
ENV 5 To maintain and enhance the quality of landscapes, townscapes and the historic environment.	Will it protect and enhance the quality of landscapes, townscapes and countryside character, including the character of the Broads and its setting where relevant? Will it maintain and enhance the distinctiveness of the landscapes/townscapes and heritage? Will it reduce the amount of derelict, underused land? Will it protect and enhance features of historical, archaeological and cultural value?	☺	☺	☺	These benefits would be location-specific, but in general providing all forms of permanent site would help to reduce the impact on landscapes and the setting of the built environment. Design measures may need to include screening and sensitive design, but waste management and designated residency areas would help to protect the character of the area.
ENV 6 To adapt to and mitigate against the impacts of	Will it reduce emissions of greenhouse gases by reducing energy consumption? Will it lead to an increased proportion of energy needs being met from renewable sources?	©	(()	<b>©</b>	Both options would help to reduce contributions to climate change by reducing the amount of vehicle emissions travelling between temporary sites.
climate change.	Will it increase the capacity of the area to withstand the effects of climate change?  How can it be ensured that the risks to lives, land and property are minimised?				New sites could also include localised energy generation measures. The feasibility of renewable energy generation would depend on the size of he site, so there would be less likelihood of success on smaller sites than larger ones.
ENV 7 To avoid, reduce and manage flood risk.	Will it minimise the risk of flooding to people and property? Can it incorporate new designs to adapt to possible flood risk? Will it promote the use of sustainable drainage systems to reduce run off?	©	©	©	Flood risk would be avoided by locating permanent sites in areas that are not prone to flooding, and help travellers to move away from flood plains.
ENV 8 To provide for sustainable use and sources of water supply.	Will it conserve groundwater resources? Will it minimise water consumption?	©	©	☺	Permanent sites would provide safe and reliable supplies of water, and help to manage supplies. Permanent sanitation facilities would also reduce watercourse pollution.

ENV 9 To make the best use of resources, including land and energy, and to minimise waste production.	Will it minimise consumption of materials and resources? Will it promote the use of land in sustainable locations that has been previously developed? Will it use land efficiently? Will it minimise the loss of "greenfield" land? Will it avoid the loss of good quality agricultural land and preserve soil resources? Will it minimise energy consumption and promote energy efficiency? Will it promote the use of renewable energy sources? Will it lead to less waste being produced? Will it lead to less waste being disposed, by promoting more recycling and composting? Will it increase waste recovery for other means eg. energy generation?	☺	©	©	Permanent sites would minimise waste by providing means of waste collection and disposal, recycling and recovery.  Renewable energy schemes could be used to reduce energy consumption, but the feasibility of renewable energy generation would depend on the size of he site, so there would be less likelihood of success on smaller sites than larger ones.
SOCIAL					
SOC 1 To reduce poverty and social exclusion.	Will it reduce poverty and social exclusion in those areas most affected? Will it help to reduce deprivation levels? Will it help meet the needs of residents most effectively?	©	©	☺	With both options, allocating permanent sites will help to reduce deprivation by providing travelling communities with a fixed address for finding jobs and using health, education and social services. It would also reduce expenses involved in travelling.
To maintain and improve the health of the whole population and promote healthy lifestyles.	Will it improve access to high quality health facilities? Will it encourage healthy lifestyles? How? Will it provide adequate health infrastructure for existing and new communities? Will the links between poorer health and deprivation be addressed? Will links to the countryside be maintained and enhanced?	©	©	☺	Both options would help to reduce the stress of having to move between illegal and temporary accommodation. They would also promote healthier lifestyles if sites were located close to facilities where walking and cycling were feasible. With a fixed address, travelling groups can also gain access to health services.
SOC 3 To improve education and skills.	Will it improve qualifications and skills for both young people and amongst the workforce? Will it help to retain key workers and provide more skilled workers from school leavers? Will adequate education infrastructure be provided for existing and new communities? Will it promote lifelong learning and skills training? Will links between lower levels of education and deprivation be addressed?	©	©	©	Both options would help to improve access to permanent education through enrolment at local schools. By providing settled locations they would improve access to further education and opportunities for vocational training opportunities.  This strategy could have less impact on existing educational services if smaller sites provided smaller

					numbers of pupils in localised areas.
SOC 4 To provide the opportunity to live in a decent, suitable and affordable home.	Will it increase the range of types, sizes and affordability of housing for all social groups? Will it reduce the housing need and ensure that housing provision addresses the needs of all? Will it provide the most appropriate solutions to address the housing requirements needed for creating sustainable communities? Will it make best use of existing housing stock?	©	©	©	Both options would offer a better opportunity to live in surroundings that are designed to improve the standard of living for the travelling community.
SOC 5 To build community identity, improve social welfare, and reduce crime and anti-social activity.	Will it encourage engagement in community activities?  Will it contribute to the achievement of a mixed and balanced community?  Will it reduce actual levels of crime?  Will it reduce the fear of crime?	©⊗	©⊗	©	Over the short-term, finding permanent sites alongside or within the settled community could create anguish for all groups, and could increase the fear of crime, for example. Eventually, such concerns would reduce as acceptance grows and communities become more integrated, such as by becoming involved in local activities and schooling.  Presently, many illegal sites have been anti-social, so this would be reduced if permanent locations were provided with sensitive management.
SOC 6 To offer more opportunities for rewarding and satisfying employment for all.	Will it reduce unemployment overall?  Will it help to improve earnings?	©	©	☺	Both options would increase the access to jobs by providing a fixed address. Careful site design could also include on-site working areas. Over the long-term, improved and regular attendance in schools will help children to develop skills and secure jobs.
SOC 7 To improve the quality of where people live.	Will it improve the quality of dwellings?  Will it improve the quality of local open space?  Will it improve the satisfaction of people with their neighbourhoods?	©⊗	©⊗	©	Although not affecting the dwellings themselves, both options would be able to provide an improved site environment and surroundings.  There would however likely be a mixed reception in this sense from the settled community where sites are located. This strategy has the potential to affect most settled communities.

SOC 8 To improve accessibility to essential services, facilities and jobs.	Will it improve accessibility to key local services and facilities (including health, education, leisure, open space, the countryside and community facilities)?  Will it improve accessibility for all whilst reducing dependency on the private car?  Will it improve access to jobs and services for all?	☺	☺	☺	For both options, allocating permanent sites will help to improve accessibility to services and facilities by providing a fixed address for finding jobs and using health, education and social services.  This option could involve less strain on existing facilities.
ECONOMIC					
EC 1 To encourage sustained economic growth.	Will it assist in strengthening the local economy? Will it improve business development and enhance competitiveness? Will it reduce vulnerability to economic shocks? Will it promote growth in key sectors? Will it increase vitality & viability of town centres and improve economic diversity?	٥	©	٥	Both options would help to provide the local economy with more permanent workers and an improved range of business services. A fixed address and careful site design could help local businesses to develop and start-up on-site.
EC 2 To encourage and accommodate both indigenous and inward investment.	Will it encourage indigenous businesses? Will it encourage inward investment? Will it make land and property available for business? Will it improve economic performance across the Greater Norwich area? Will it support / encourage rural diversification? Will it support / encourage small city businesses?	©	©	©	Both options would help to provide the local economy with more permanent workers and an improved range of business services. A fixed address and careful site design could help local businesses to develop and start-up on-site.
EC 3 To encourage efficient patterns of movement in support of economic growth.	Will it improve provision of local jobs? Will it improve accessibility to work, particularly by public transport, walking and cycling? Will it reduce journey times between key employment areas and key transport interchanges? Will it improve efficiency and sustainability of freight distribution? Will it support provision of key communications infrastructure?	©	©	©	The effects are marginal but there would be improved access to local employment areas by public transport.
EC 4 To improve the social and environmental performance of the economy.	Will it reduce the impact on the environment from businesses? Will it reduce the impact on residents from businesses? Will it attract new investment and skilled workers to the area? Will it maintain existing business and employment provision? Will it provide employment in the best locations to serve urban and rural residents?	©	©	©	The effects are marginal but all options would offer the chance to improve the environmental performance of Gypsy and Traveller businesses by reducing extensive commuting and providing better waste collection, for example.

Overall Conclusions: What are the main effects of the policy option as identified through the sustainability appraisal process?

POLICY OPTION: Question 17 – Housing: Providing Gypsies and Travellers sites – Fewer large or more small sites?

Option - Should a larger number of small sites (up to 15 pitches) be developed rather than fewer larger sites in each large new development?

Environmental Impacts	Both options will help to minimise the use of cars by reducing the need and distances involved in travelling to accessing local facilities and promoting opportunities for walking and cycling. Providing carefully located sites will minimise potential impacts on the natural environment, landscapes and the character of local settlements. Careful management can provide waste collection, sanitation and water supply and disposal facilities that will further minimise impacts on the environment.
Social Impacts	Both options will serve to promote better access to jobs, health facilities, local services and education for the Gypsy and Traveller communities by providing a suitable location for sites and a fixed address. With means of accessing public transport routes and being located close to existing facilities, or through integration with new communities, there will be more incentive for walking and cycling and leading healthier lifestyles, which will improve other aspects such as educational attainment. It is possible that this option could affect more settled communities, and so require more integration measures.
Economic Impacts	Economic advantages are less prominent, but permanent sites could increase the range of business services available in the area. Careful site designs could also include provision for workspaces on site, which could help businesses to develop.

## **Overall summary:**

- Impacts
- Possible mitigation measures
- Recommended further research
- Considering cumulative impacts

The major short-term advantage of finding permanent sites includes reduced stress for travelling communities if they don't have to move between temporary sites, although this could also apply to settled communities close to new sites. Long-term improvements would also be brought to health, education and deprivation. If an option can include Gypsy and Traveller site provision from the outset of a development, it will offer the most opportunity to create balanced communities where integration is most likely to be successful over the long-term. This would be most successful if included in combination with integrated settlement designs where access to services is in walking distance and public transport offers links to further education and other services within larger centres.

More smaller sites could possibly also help integration and building sustainable communities if they were planned and provided for from the outset, and would have less overall impact on provision of services because there would be fewer children joining local schools, for example. However, there may also be a more gradual change to landscapes and more impacts arising from more dispersed travelling from using more smaller sites.

Option Appraised: Question 19: Education, skills innovation and the knowledge economy.

- Option A To promote appropriate training and learning establishments and innovation / incubator centres in appropriate locations across the area.
- Option B To encourage the co-location of education and skills training with related businesses.
- Option C To ensure opportunities are accessible to all, taking particular account of the needs of deprived communities and disadvantaged groups in both urban and rural areas and providing the underpinning for a culture of lifelong learning.

### **SCORING SYSTEM PROPOSED:**

SA Objective	Decision making criteria	Short- Term 0-5 yrs	Medium Term 5-20 yrs	Long- Term 20+ yrs	Comments / Justification Inc. cumulative effects				
<b>ENVIRONMEN</b>	ENVIRONMENTAL								
ENV 1 To reduce the effect of traffic on the environment.	Will it reduce traffic volumes, ease the flow of traffic and reduce congestion? Will it increase the proportion of journeys using modes other than the car? Will it reduce the effect of HGV traffic on people and the environment? Will it encourage more benign modes of travel? Will new development be located such to reduce the need for people to travel?	?	?	?	Effects will depend on where locations can be promoted in terms of being in close proximity to businesses, users of higher education and on good public transport routes.				
ENV 2 To improve the quality of the water environment	Will it improve the quality of the water environment (streams, rivers, lakes etc)?  Will it help to support wetland habitats and species?	N/a	N/a	N/a	N/a				
ENV 3 To improve	Will it improve air quality?  Will it reduce the emission of atmospheric pollutants?	?	?	?	The possible locations of strategic growth and				

environmental amenity, including air quality.					employment sites will differ and this may affect transport movement and therefore air quality.
ENV 4 To maintain and enhance biodiversity and geodiversity.	Will it conserve / enhance natural or semi-natural habitats, and promote habitat connections? Is it likely to have a significant effect on sites designated for international, national or local importance? Will it conserve / enhance species diversity, and in particular avoid harm to protected species?	N/a	N/a	N/a	N/a
ENV 5 To maintain and enhance the quality of landscapes, townscapes and the historic environment.	Will it protect and enhance the quality of landscapes, townscapes and countryside character, including the character of the Broads and its setting where relevant?  Will it maintain and enhance the distinctiveness of the landscapes/townscapes and heritage?  Will it reduce the amount of derelict, underused land?  Will it protect and enhance features of historical, archaeological and cultural value?	?	?	?	The possible locations of strategic growth and employment sites will differ and this may affect landscape and townscape and heritage differently, such as from the co-location of new educational establishments and business.
ENV 6 To adapt to and mitigate against the impacts of climate change.	Will it reduce emissions of greenhouse gases by reducing energy consumption? Will it lead to an increased proportion of energy needs being met from renewable sources? Will it increase the capacity of the area to withstand the effects of climate change? How can it be ensured that the risks to lives, land and property are minimised?	N/a	N/a	N/a	N/a
ENV 7 To avoid, reduce and manage flood risk.	Will it minimise the risk of flooding to people and property?  Can it incorporate new designs to adapt to possible flood risk?  Will it promote the use of sustainable drainage systems to reduce run off?	N/a	N/a	N/a	N/a
ENV 8 To provide for sustainable use and sources of water supply.	Will it conserve groundwater resources? Will it minimise water consumption?	N/a	N/a	N/a	N/a

ENV 9 To make the best use of resources, including land and energy, and to minimise waste production.	Will it minimise consumption of materials and resources? Will it promote the use of land in sustainable locations that has been previously developed? Will it use land efficiently? Will it minimise the loss of "greenfield" land? Will it avoid the loss of good quality agricultural land and preserve soil resources? Will it minimise energy consumption and promote energy efficiency? Will it promote the use of renewable energy sources? Will it lead to less waste being produced? Will it lead to less waste being disposed, by promoting more recycling and composting? Will it increase waste recovery for other means eg. energy generation?	N/a	N/a	N/a	N/a
SOCIAL					
SOC 1 To reduce poverty and social exclusion.	Will it reduce poverty and social exclusion in those areas most affected?  Will it help to reduce deprivation levels?  Will it help meet the needs of residents most effectively?	©	©	©	Promoting the training and further education sectors will lead to jobs and training, particularly if these are targeted towards disadvantaged areas and deprived communities, i.e. Option C.  Option B would particularly help to promote small businesses and give support to local entrepreneurs.
SOC 2 To maintain and improve the health of the whole population and promote healthy lifestyles.	Will it improve access to high quality health facilities? Will it encourage healthy lifestyles? How? Will it provide adequate health infrastructure for existing and new communities? Will the links between poorer health and deprivation be addressed? Will links to the countryside be maintained and enhanced?	N/a	N/a	N/a	N/a
SOC 3 To improve education and skills.	Will it improve qualifications and skills for both young people and amongst the workforce?  Will it help to retain key workers and provide more skilled workers from school leavers?	9	©	©	All options would benefit community skills development and improve education across Greater Norwich's different sectors of the community. They would increase the opportunities for further education and provide more accessibility to higher education.

	Will adequate education infrastructure be provided for existing and new communities?  Will it promote lifelong learning and skills training?  Will links between lower levels of education and deprivation be addressed?				Option A would help develop professional and business skills in new enterprises. Option B would be particularly effective in developing vocational training as education and skills training can be linked to businesses in the same complex. Option C would help disadvantaged areas and deprived communities to develop lifelong skills training.
SOC 4 To provide the opportunity to live in a decent, suitable and affordable home.	Will it increase the range of types, sizes and affordability of housing for all social groups? Will it reduce the housing need and ensure that housing provision addresses the needs of all? Will it provide the most appropriate solutions to address the housing requirements needed for creating sustainable communities? Will it make best use of existing housing stock?	N/a	N/a	N/a	N/a
SOC 5 To build community identity, improve social welfare, and reduce crime and anti-social activity.	Will it encourage engagement in community activities?  Will it contribute to the achievement of a mixed and balanced community?  Will it reduce actual levels of crime?  Will it reduce the fear of crime?	©	©	©	In general, improved education will help provide better access to jobs and so reduce deprivation. Community-based training will also help to build community identity.
SOC 6 To offer more opportunities for rewarding and satisfying employment for all.	Will it reduce unemployment overall? Will it help to improve earnings?	©	©	©	In general, improved education will help provide better access to jobs. There will also be more jobs created through developing the education and training sector, and through business development.
SOC 7 To improve the quality of where people live.	Will it improve the quality of dwellings? Will it improve the quality of local open space? Will it improve the satisfaction of people with their neighbourhoods?	N/a	N/a	N/a	N/a

SOC 8 To improve accessibility to essential services, facilities and jobs.	Will it improve accessibility to key local services and facilities (including health, education, leisure, open space, the countryside and community facilities)? Will it improve accessibility for all whilst reducing dependency on the private car? Will it improve access to jobs and services for all?	☺	☺	©	These options will improve access to educational services.
ECONOMIC		<u> </u>			
EC 1 To encourage sustained economic growth.	Will it assist in strengthening the local economy? Will it improve business development and enhance competitiveness? Will it reduce vulnerability to economic shocks? Will it promote growth in key sectors? Will it increase vitality & viability of town centres and improve economic diversity?	٥	☺	©	In general, promoting education will improve the skills of the workforce. It will also help to develop businesses through initiatives such as Incubator Centres.
EC 2 To encourage and accommodate both indigenous and inward investment.	Will it encourage indigenous businesses? Will it encourage inward investment? Will it make land and property available for business? Will it improve economic performance across the Greater Norwich area? Will it support / encourage rural diversification? Will it support / encourage small city businesses?	☺	☺	©	In general, promoting education will improve the skills of the workforce. It will also help to develop businesses through initiatives such as Incubator Centres. A highly skilled workforce will also help to attract inward investment.
EC 3 To encourage efficient patterns of movement in support of economic growth.	Will it improve provision of local jobs? Will it improve accessibility to work, particularly by public transport, walking and cycling? Will it reduce journey times between key employment areas and key transport interchanges? Will it improve efficiency and sustainability of freight distribution? Will it support provision of key communications infrastructure?	?	?	?	Effects will depend on where locations can be promoted in terms of being in close proximity to businesses, users of higher education and on good public transport routes.
EC 4 To improve the social and environmental performance of the economy.	Will it reduce the impact on the environment from businesses? Will it reduce the impact on residents from businesses? Will it attract new investment and skilled workers to the area? Will it maintain existing business and employment provision? Will it provide employment in the best locations to serve urban and rural residents?	٥	©	©	Socially, the economy should benefit through being able to offer vocational training and improve the skills standards of the workforce.  Environmentally, the effects will depend on the nature of specific proposals.

Overall Conclusions: What are the main effects of the policy option as identified through the sustainability appraisal process?

POLICY OPTION: Question 19: Education, skills innovation and the knowledge economy.

- Option A To promote appropriate training and learning establishments and innovation / incubator centres in appropriate locations across the area.
- Option B To encourage the co-location of education and skills training with related businesses.
- Option C To ensure opportunities are accessible to all, taking particular account of the needs of deprived communities and disadvantaged groups in both urban and rural areas and providing the underpinning for a culture of lifelong learning.

Environmental	Environmentally, the effects will depend on the nature of specific proposals.
Impacts	
Social Impacts	Socially, these will offer more opportunities for learning, which will have benefits for all sectors of the community. In particular, opportunities for education and skills development will help the workforce to gain higher-paid jobs and so reduce deprivation and social exclusion. Vocational training and business skills development will help local entrepreneurs to establish new businesses. In general, improved education will help provide better access to jobs.
Economic Impacts	The economy should benefit from vocational training and the improved skill standards of the workforce.

## **Overall summary:**

- Impacts
- Possible mitigation measures
- Recommended further research
- Considering cumulative impacts

These options are good initiatives to encourage learning and skills development through out the community. In tandem with rural development strategies they can ensure that education and training can be brought to local areas and those areas where it is more difficult to access existing facilities. In the long-term, it may help to retain skilled workers and promote local business development.

Option Appraised: Question 20 – Economy: Locations for employment growth – Options for small scale growth.

The strategy could encourage small scale and local employment opportunities by:

- Option A Requiring all new larger housing developments to include employment uses and/or encouraging a flexible approach to residential units such as specific live/work units.
- Option B Ensuring smaller employment sites are available, particularly to support smaller business and start-ups in identified settlements or, for example, through conversion of rural buildings.
- Option C Ensuring that there is adequate provision for managed workspace, 'growing-on' units and low cost areas for more marginal businesses across the city and the wider area.

### **SCORING SYSTEM PROPOSED:**

SA Objective	Decision making criteria	Short- Term 0-5 yrs	Medium Term 5-20 yrs	Long- Term 20+ yrs	Comments / Justification Inc. cumulative effects
<b>ENVIRONMEN</b>	NTAL	,			
ENV 1 To reduce the effect of traffic on the environment.	Will it reduce traffic volumes, ease the flow of traffic and reduce congestion?  Will it increase the proportion of journeys using modes other than the car?  Will it reduce the effect of HGV traffic on people and the	☺	©	©	Option A: Mixed-use developments (residential sites with employment uses) should reduce traffic, dependent on how many people in the residential area were to work in the employment area or within specific live/work units.
	environment?  Will it encourage more benign modes of travel?	?	?	?	Option B: Uncertain effects, dependent on location and ease of access by walking, cycling and public transport.
	Will new development be located such to reduce the need for people to travel?	80	80	80	Option C: Spreading new business development areas around

					the city will cause an increase in commuting and traffic generation, but it could make employment available to more people, as well as providing bus links to strategic sites.
ENV 2 To improve the quality of the water environment	Will it improve the quality of the water environment (streams, rivers, lakes etc)?  Will it help to support wetland habitats and species?	?	?	?	Uncertain effects because some employment uses could affect the water quality depending on the location.
ENV 3 To improve environmental amenity, including air quality.	Will it improve air quality?  Will it reduce the emission of atmospheric pollutants?	See ENV 1	See ENV 1	See ENV 1	See ENV 1, as air quality will be specifically linked to vehicle emissions in this regard.
ENV 4 To maintain and enhance biodiversity and geodiversity.	Will it conserve / enhance natural or semi-natural habitats, and promote habitat connections? Is it likely to have a significant effect on sites designated for international, national or local importance? Will it conserve / enhance species diversity, and in particular avoid harm to protected species?	?	?	?	Uncertain effects because some employment uses could affect the water quality depending on the location.
ENV 5 To maintain and enhance the quality of landscapes, townscapes and the historic environment.	Will it protect and enhance the quality of landscapes, townscapes and countryside character, including the character of the Broads and its setting where relevant?  Will it maintain and enhance the distinctiveness of the landscapes/townscapes and heritage?  Will it reduce the amount of derelict, underused land?  Will it protect and enhance features of historical, archaeological and cultural value?	See ENV 1	See ENV 1	See ENV 1	See ENV 1, as impacts on landscape and heritage will be specifically linked to vehicular movements and the effects of vibrations and the impact of vehicles on the street scene and open landscapes, for example.
ENV 6 To adapt to and mitigate against the impacts of climate change.	Will it reduce emissions of greenhouse gases by reducing energy consumption? Will it lead to an increased proportion of energy needs being met from renewable sources? Will it increase the capacity of the area to withstand the effects of climate change? How can it be ensured that the risks to lives, land and property are minimised?	See ENV 1	See ENV 1	See ENV 1	See ENV 1

ENV 7 To avoid, reduce and manage flood risk.	Will it minimise the risk of flooding to people and property?  Can it incorporate new designs to adapt to possible flood risk?  Will it promote the use of sustainable drainage systems to reduce run off?	N/a	N/a	N/a	N/a
ENV 8 To provide for sustainable use and sources of water supply.	Will it conserve groundwater resources? Will it minimise water consumption?	N/a	N/a	N/a	N/a
ENV 9 To make the best use of resources, including land and energy, and to minimise waste production.	Will it minimise consumption of materials and resources? Will it promote the use of land in sustainable locations that has been previously developed? Will it use land efficiently? Will it minimise the loss of "greenfield" land? Will it avoid the loss of good quality agricultural land and preserve soil resources? Will it minimise energy consumption and promote energy efficiency? Will it promote the use of renewable energy sources? Will it lead to less waste being produced? Will it lead to less waste being disposed, by promoting more recycling and composting? Will it increase waste recovery for other means eg. energy generation?	N/a	N/a	N/a	N/a
SOCIAL					
To reduce poverty and social	Will it reduce poverty and social exclusion in those areas most affected?  Will it help to reduce deprivation levels?	©	☺	☺	Option A: Providing more local jobs may help certain sectors of the community (e.g. those with children) by improving access to the workplace.
exclusion.	Will it help meet the needs of residents most effectively?	☺	☺	☺	Option B: Providing more smaller employment sites will help start-up businesses and home workers to expand into larger premises. It will help provide local business communities.

		☺	©	©	Option C: New and marginal businesses will be able to develop and grow into more prosperous enterprises, offering jobs to more people in the area.
To maintain and improve the health of the whole population and promote healthy lifestyles.	Will it improve access to high quality health facilities? Will it encourage healthy lifestyles? How? Will it provide adequate health infrastructure for existing and new communities? Will the links between poorer health and deprivation be addressed? Will links to the countryside be maintained and enhanced?	©	©	©	All options will help to provide more jobs and expand existing businesses, which will help tackle deprivation, which itself can be linked to poor health. Local employment may also encourage walking and cycling to work.
SOC 3 To improve education and skills.	Will it improve qualifications and skills for both young people and amongst the workforce? Will it help to retain key workers and provide more skilled workers from school leavers? Will adequate education infrastructure be provided for existing and new communities? Will it promote lifelong learning and skills training? Will links between lower levels of education and deprivation be addressed?	©	©	©	All options will help to provide more jobs and offer training opportunities for those who are not at school or who are taking part in vocational further education. They will also help to develop skilled trades in the area.
SOC 4 To provide the opportunity to live in a decent, suitable and affordable	Will it increase the range of types, sizes and affordability of housing for all social groups? Will it reduce the housing need and ensure that housing provision addresses the needs of all? Will it provide the most appropriate solutions to address the housing requirements needed for creating sustainable communities?	☺	©	©	Option A: Providing more live-work units will improve the suitability of home and increase the range of homes that are available, enabling economic benefits for start-up businesses.
home.	Will it make best use of existing housing stock?	N/a	N/a	N/a	Options B and C: N/a
SOC 5 To build community identity, improve social	Will it encourage engagement in community activities?  Will it contribute to the achievement of a mixed and balanced community?	☺	☺	©	Option A: Community identity would develop as an area of local enterprise and pride in new business development. Residential areas would be occupied throughout the day and so be less vulnerable to crime.
welfare, and reduce crime	Will it reduce actual levels of crime?  Will it reduce the fear of crime?	N/a	N/a	N/a	Options B and C:

and anti-social activity.					N/a
SOC 6 To offer more opportunities for rewarding and satisfying employment for all.	Will it reduce unemployment overall? Will it help to improve earnings?	©	©	©	All options would increase employment opportunities, particularly for new business start-ups and smaller enterprises.
SOC 7 To improve the quality of where people live.	Will it improve the quality of dwellings?  Will it improve the quality of local open space?  Will it improve the satisfaction of people with their neighbourhoods?	©®	©®	©8	Option A: Effects could be positive by creating better working environments, but it could compromise residential amenity through developing mixed-use sites.
		©8	©⊗	© (S	Options B and C: As for Option A, but it depends on the location of the site.
SOC 8 To improve accessibility to essential services, facilities and jobs.	Will it improve accessibility to key local services and facilities (including health, education, leisure, open space, the countryside and community facilities)?  Will it improve accessibility for all whilst reducing dependency on the private car?  Will it improve access to jobs and services for all?	©	©	©	All options would increase access to employment. Option B in particular can benefit the rural areas whilst Option C will be able to provide new businesses in areas where they may not be available at present.
ECONOMIC	TYTH ICHTIPTOTO GOODGO to Joseph and Gottleed for all.				
EC 1 To encourage sustained economic growth.	Will it assist in strengthening the local economy? Will it improve business development and enhance competitiveness? Will it reduce vulnerability to economic shocks? Will it promote growth in key sectors? Will it increase vitality & viability of town centres and improve economic diversity?	☺	☺	☺	All options will increase employment and assist and strengthen the local economy. They will promote growth in the small business economy and widen the range of the economy.
EC 2 To encourage and accommodate	Will it encourage indigenous businesses? Will it encourage inward investment? Will it make land and property available for business? Will it improve economic performance across the Greater Norwich	©	☺	☺	All options will increase employment and assist and strengthen the local economy. They will promote small business opportunities and start-ups. Options B and C could be particularly appropriate for rural

both indigenous and inward investment.	area? Will it support / encourage rural diversification? Will it support / encourage small city businesses?				diversification.
EC 3 To encourage efficient patterns of	Will it improve provision of local jobs? Will it improve accessibility to work, particularly by public transport, walking and cycling? Will it reduce journey times between key employment areas and	©	©	©	Option A: This would improve the provision of local jobs related to population areas.
movement in support of economic growth.	key transport interchanges? Will it improve efficiency and sustainability of freight distribution? Will it support provision of key communications infrastructure?	?	?	?	Options B and C: The benefits are dependent on the specific location.
EC 4 To improve the social and environmental performance of the economy.	Will it reduce the impact on the environment from businesses? Will it reduce the impact on residents from businesses? Will it attract new investment and skilled workers to the area? Will it maintain existing business and employment provision? Will it provide employment in the best locations to serve urban and rural residents?	©	0	©	All options could maintain existing businesses and attract more skilled workers to the area. Social benefits would include providing jobs for local people and encouraging new enterprises to develop that could serve local communities. The environmental impacts would depend on the scale, design and location of the proposals.

Overall Conclusions: What are the main effects of the policy option as identified through the sustainability appraisal process?						
POLICY OPTION: Q	POLICY OPTION: Question 20 – Economy: Locations for employment growth – Options for small scale growth.  The strategy could encourage small scale and local employment opportunities by:					
•	Option A – Requiring all new larger housing developments to include employment uses and/or encouraging a flexible approach to residential units such as specific live/work units.					
•	Option B – Ensuring smaller employment sites are available, particularly to support smaller business and start-ups in identified settlements or, for example, through conversion of rural buildings.					
•	Option C - Ensuring that there is adequate provision for managed workspace, 'growing-on' units and low cost areas for more marginal businesses across the city and the wider area.					
Environmental Impacts	Mixed-use developments (residential sites with employment uses) within Option A should reduce traffic, dependent on how many people in the residential area were to work in the employment area or within specific live/work units (an important sustainability issue that could be crucial to the success of the whole development area. The environmental impacts of these options would otherwise depend on the scale, design and location of the proposal.					
Social Impacts	Option A can help to provide more local jobs, which will help certain sectors of the community (e.g. those with children) access the workplace. Option B can provide more smaller employment sites, which will help start-up businesses and home workers to expand into larger premises and help provide local business communities with the necessary facilities. Option C will support, in particular, those businesses who may be struggling to establish themselves. All options would provide more jobs for local people, particularly for those people who wish to set up new businesses. In general, the provision of employment can contribute to reducing deprivation, which can in turn help to reduce poor health.					
Economic Impacts	All options will increase employment and assist and strengthen the local economy. They will promote small business opportunities and start-ups, which could be particularly appropriate for rural diversification. Opportunities would include encouraging new enterprises to develop that could serve local communities.  Creating more employment opportunities will benefit all sectors of the community, and local jobs development					

# **Overall summary:**

- Impacts
- Possible mitigation measures
- Recommended further research
- Considering cumulative impacts

Creating more employment opportunities will benefit all sectors of the community, and local jobs development would help people to access the workplace from closer to home, so assisting those who need more flexible patterns of work.

Small employment sites and 'growing on' units could be particularly beneficial for encouraging rural diversification and maintaining jobs in local communities. Mixed use developments would also promote community integration in large new residential areas by providing assistance to people who can provide important services for their local area.

Option Appraised: Question 21 – Options for locating large scale office development could focus on:

- Option A New development in the city centre growth and restrict further growth of office development on out-of-centre sites.
- Option B City centre development with no restriction on further growth of office developments on out-of-centre sites.
- Option C All of the city centre, accessible District Centres and allocated out-of-centre sites.

### **SCORING SYSTEM PROPOSED:**

SA Objective	Decision making criteria	Short- Term 0-5 yrs	Medium Term 5-20 yrs	Long- Term 20+ yrs	Comments / Justification Inc. cumulative effects
<b>ENVIRONMEN</b>	NTAL				
ENV 1 To reduce the effect of traffic on the environment.	Will it reduce traffic volumes, ease the flow of traffic and reduce congestion?  Will it increase the proportion of journeys using modes other than the car?	☺	☺	☺	Option A: locating offices in City centre would be most accessible for public transport and in proximity to a large population which should encourage walking and cycling.
Civil Cilii Cili.	Will it reduce the effect of HGV traffic on people and the environment?	8	8	8	Option B: allowing development out-of centre would have lower levels of accessibility, encouraging car use.
	Will it encourage more benign modes of travel?  Will new development be located such to reduce the need for people to travel?	©8	©®	◎⊗	Option C: restricting development to identified accessible locations would have similar benefits to A, but of a lesser scale. However, this option still promotes centres that are out of town and which may be less accessible by public transport, leading to more car journeys.
ENV 2 To improve the	Will it improve the quality of the water environment (streams, rivers, lakes etc)?	N/a	N/a	N/a	N/a

quality of the water environment	Will it help to support wetland habitats and species?				
ENV 3 To improve environmental amenity, including air quality.	Will it improve air quality?  Will it reduce the emission of atmospheric pollutants?	See ENV1	See ENV1	See ENV1	See ENV1, because the majority of the impacts would arise from vehicular emissions that could lead to poorer air quality.
ENV 4 To maintain and enhance biodiversity and geodiversity.	Will it conserve / enhance natural or semi-natural habitats, and promote habitat connections? Is it likely to have a significant effect on sites designated for international, national or local importance? Will it conserve / enhance species diversity, and in particular avoid harm to protected species?	N/a	N/a	N/a	N/a
ENV 5 To maintain and enhance the quality of landscapes, townscapes and the historic environment.	Will it protect and enhance the quality of landscapes, townscapes and countryside character, including the character of the Broads and its setting where relevant? Will it maintain and enhance the distinctiveness of the landscapes/townscapes and heritage? Will it reduce the amount of derelict, underused land? Will it protect and enhance features of historical, archaeological and cultural value?	?	?	?	For all options the impact would depend on factors such as design and specific location. Particular difficulties could apply to promoting development in the city centre and the potential impact on its historic character.
ENV 6 To adapt to and mitigate against the impacts of climate change.	Will it reduce emissions of greenhouse gases by reducing energy consumption? Will it lead to an increased proportion of energy needs being met from renewable sources? Will it increase the capacity of the area to withstand the effects of climate change? Will the risks to lives, land and property be minimised?	See ENV1	See ENV1	See ENV1	See ENV1, because the vehicular emissions from travelling to district centres and less accessible out of centre sites would cause an increased level of greenhouse gas emissions.
ENV 7 To avoid, reduce and manage flood risk.	Will it minimise the risk of flooding to people and property?  Can it incorporate new designs to adapt to possible flood risk?  Will it promote the use of sustainable drainage systems to reduce run off?	N/a	N/a	N/a	N/a
ENV 8 To provide for	Will it conserve groundwater resources? Will it minimise water consumption?	N/a	N/a	N/a	N/a

sustainable use and sources of water supply.					
ENV 9 To make the best use of resources, including land and energy, and to minimise waste production.	Will it minimise consumption of materials and resources? Will it promote the use of land in sustainable locations that has been previously developed? Will it use land efficiently? Will it minimise the loss of "greenfield" land? Will it avoid the loss of good quality agricultural land and preserve soil resources? Will it minimise energy consumption and promote energy efficiency? Will it promote the use of renewable energy sources?	© ®	© ⊗	© ®	Option A has more benefits from being able to focus developments on the re-use of existing buildings and previously developed land.  Options B and C, which promote out-of-centre development would involve the loss of more Greenfield / agricultural land.
	Will it lead to less waste being produced? Will it lead to less waste being disposed, by promoting more recycling and composting? Will it increase waste recovery for other means eg. energy generation?				
SOCIAL					
SOC 1 To reduce poverty and social exclusion.	Will it reduce poverty and social exclusion in those areas most affected?  Will it help to reduce deprivation levels?  Will it help meet the needs of residents most effectively?	©	© (	©	For all options increased jobs would contribute to reducing poverty. Locations with most accessibility (Options A and C) would likely be of most benefit.  However, whilst promoting the city centre is beneficial
	will it help meet the needs of residents most electively:	©8	© ©	©8	for most of the population, Options B and C do promote out-of-centre development that would be inaccessible to many potential employees if they were reliant on public transport.
SOC 2 To maintain and improve the health of the whole population and promote healthy lifestyles.	Will it improve access to high quality health facilities? Will it encourage healthy lifestyles? How? Will it provide adequate health infrastructure for existing and new communities? Will the links between poorer health and deprivation be addressed? Will links to the countryside be maintained and enhanced?	N/a	N/a	N/a	N/a

SOC 3 To improve education and skills.	Will it improve qualifications and skills for both young people and amongst the workforce? Will it help to retain key workers and provide more skilled workers from school leavers? Will adequate education infrastructure be provided for existing and new communities? Will it promote lifelong learning and skills training? Will links between lower levels of education and deprivation be addressed?	N/a	N/a	N/a	N/a
SOC 4 To provide the opportunity to live in a decent, suitable and affordable home.	Will it increase the range of types, sizes and affordability of housing for all social groups? Will it reduce the housing need and ensure that housing provision addresses the needs of all? Will it provide the most appropriate solutions to address the housing requirements needed for creating sustainable communities? Will it make best use of existing housing stock?	N/a	N/a	N/a	N/a
SOC 5 To build community identity, improve social welfare, and reduce crime and anti-social activity.	Will it encourage engagement in community activities?  Will it contribute to the achievement of a mixed and balanced community?  Will it reduce actual levels of crime?  Will it reduce the fear of crime?	N/a	N/a	N/a	N/a
SOC 6 To offer more opportunities for rewarding and satisfying employment for all.	Will it reduce unemployment overall? Will it help to improve earnings?	©	©	©	All options would improve job opportunities
SOC 7 To improve the quality of where people live.	Will it improve the quality of dwellings? Will it improve the quality of local open space? Will it improve the satisfaction of people with their neighbourhoods?	N/a	N/a	N/a	N/a

SOC 8 To improve accessibility to essential services, facilities and jobs.	Will it improve accessibility to key local services and facilities (including health, education, leisure, open space, the countryside and community facilities)? Will it improve accessibility for all whilst reducing dependency on the private car? Will it improve access to jobs and services for all?	See ENV1	See ENV1	See ENV1	See ENV1
<b>ECONOMIC</b>					
EC 1 To encourage sustained economic growth.	Will it assist in strengthening the local economy? Will it improve business development and enhance competitiveness? Will it reduce vulnerability to economic shocks? Will it promote growth in key sectors? Will it increase vitality & viability of town centres and improve economic diversity?	٥	©	٥	All options would assist the local economy. Out of centre locations are likely to be more attractive to relocating businesses seeking larger sites, and provide more easily developable sites.
EC 2 To encourage and accommodate both indigenous and inward investment.	Will it encourage indigenous businesses? Will it encourage inward investment? Will it make land and property available for business? Will it improve economic performance across the Greater Norwich area? Will it support / encourage rural diversification? Will it support / encourage small city businesses?	©	☺	©	All options would assist the local economy. Out of centre locations are likely to be more attractive to relocating businesses seeking larger sites, and provide more easily developable sites.
EC 3 To encourage efficient patterns of movement in support of economic growth.	Will it improve provision of local jobs? Will it improve accessibility to work, particularly by public transport, walking and cycling? Will it reduce journey times between key employment areas and key transport interchanges? Will it improve efficiency and sustainability of freight distribution? Will it support provision of key communications infrastructure?	See ENV1	See ENV1	See ENV1	See ENV1
EC 4 To improve the social and environmental performance of the economy.	Will it reduce the impact on the environment from businesses? Will it reduce the impact on residents from businesses? Will it attract new investment and skilled workers to the area? Will it maintain existing business and employment provision? Will it provide employment in the best locations to serve urban and rural residents?	See ENV1 And SOC1	See ENV1 And SOC1	See ENV1 And SOC1	See ENV1 And SOC1

Overall Conclusions: What are the main effects of the policy option as identified through the sustainability appraisal process?  POLICY OPTION: Question 21 – Options for locating large scale office development could focus on:  Option A – New development in the city centre growth and restrict further growth of office development on out-of-centre sites.  Option B - City centre development with no restriction on further growth of office developments on out-of-centre sites.						
	<ul> <li>Option C – A</li> </ul>	All of the city centre, accessible District Centres and allocated out-of-centre sites.				
Environmental Impacts	Option A: locating offices in City centre would have least impacts arising from traffic generation because of its accessibility for public transport and walking and cycling, followed by Option C. Promoting development in the City Centre (all options but primarily Option A) could have impacts on historic character of the city centre. Out of centre development could have Greenfield / agricultural land impacts.					
Social Impacts	For all options increased jobs would contribute to reducing poverty. Locations with most accessibility (Options A and C) would likely be of most benefit.					
Economic Impacts	All options would assist the local economy. Out of centre locations are likely to be more attractive to relocating businesses seeking larger sites, and provide more easily developable sites.					
Impacts     Possible mitigation measures     Recommended further research     Considering cumulative impacts		Provision for office development will assist an important element of the local economy. Out of centre locations may be more attractive for some potential users. The more accessible locations, City Centre and identified accessible locations, have distinct environmental benefits. Impacts on historic character could arise from City centre development, and loss of Greenfield / agricultural land could occur with out-of centre development.				

Option Appraised: Question 22 – Economy: Strategic Employment Sites.

- Option A Identify additional strategic employment locations
- Option B Concentrate on bringing forward mixed-use regeneration sites in the city
- Option C Relax the restrictions on types of employment use at current employment sites

### **SCORING SYSTEM PROPOSED:**

SA Objective	Decision making criteria	Short- Term 0-5 yrs	Medium Term 5-20 yrs	Long- Term 20+ yrs	Comments / Justification Inc. cumulative effects					
<b>ENVIRONMEI</b>	ENVIRONMENTAL									
ENV 1 To reduce the effect of traffic on the environment.	Will it reduce traffic volumes, ease the flow of traffic and reduce congestion? Will it increase the proportion of journeys using modes other than the car? Will it reduce the effect of HGV traffic on people and the environment? Will it encourage more benign modes of travel? Will new development be located such to reduce the need for people to travel?	©®	©8	©8	Traffic effects would depend on the location and nature of a development. The higher accessibility implied under Option B will help to reduce traffic generation overall, though there may be local impacts for specific sites. Option C would allow more uses at employment sites outside the city, so increasing the volume of traffic.					
ENV 2 To improve the quality of the water environment	Will it improve the quality of the water environment (streams, rivers, lakes etc)?  Will it help to support wetland habitats and species?	N	N	N	There will be some effects on water quality from the traffic accessing the employment sites, but until more specific locations and volume of traffic is known, this can not be determined in full.					
ENV 3 To improve environmental amenity, including air quality.	Will it improve air quality?  Will it reduce the emission of atmospheric pollutants?	See ENV1	See ENV1	See ENV1	See ENV1, re traffic generation and its effects on air quality and noise, for example.					

ENV 4 To maintain and enhance biodiversity and geodiversity.	Will it conserve / enhance natural or semi-natural habitats, and promote habitat connections?  Is it likely to have a significant effect on sites designated for international, national or local importance?  Will it conserve / enhance species diversity, and in particular avoid harm to protected species?	N	N	N	There will be some effects on biodiversity from the traffic and roads needed to access the employment sites, but until more specific locations and volume of traffic is known, this can not be determined in full.
ENV 5 To maintain and enhance the quality of landscapes, townscapes and the historic environment.	Will it protect and enhance the quality of landscapes, townscapes and countryside character, including the character of the Broads and its setting where relevant? Will it maintain and enhance the distinctiveness of the landscapes/townscapes and heritage? Will it reduce the amount of derelict, underused land? Will it protect and enhance features of historical, archaeological and cultural value?	?	?	?	For all options the impact would depend on factors such as design and specific location.
ENV 6 To adapt to and mitigate against the impacts of climate change.	Will it reduce emissions of greenhouse gases by reducing energy consumption? Will it lead to an increased proportion of energy needs being met from renewable sources? Will it increase the capacity of the area to withstand the effects of climate change? Will the risks to lives, land and property be minimised?	See ENV1	See ENV1	See ENV1	See ENV1 re traffic generation
ENV 7 To avoid, reduce and manage flood risk.	Will it minimise the risk of flooding to people and property?  Can it incorporate new designs to adapt to possible flood risk?  Will it promote the use of sustainable drainage systems to reduce run off?	N	N	N	New developments will lead to some increased surface run off and affect flood risk, but until specific sites are known the extent is difficult to determine.
ENV 8 To provide for sustainable use and sources of water supply.	Will it conserve groundwater resources? Will it minimise water consumption?	N/a	N/a	N/a	N/a
ENV 9 To make the best use of resources, including land and energy, and	Will it minimise consumption of materials and resources? Will it promote the use of land in sustainable locations that has been previously developed? Will it use land efficiently? Will it minimise the loss of "greenfield" land? Will it avoid the loss of good quality agricultural land and preserve	?	?	?	For all options the use of resources etc would depend on the nature of a specific development.  Options A and C could involve the loss of Greenfield / agricultural land, whereas Option B and, in some cases, Option C are likely to have more opportunity to make use of previously developed land.

to minimise waste production.	soil resources? Will it minimise energy consumption and promote energy efficiency? Will it promote the use of renewable energy sources? Will it lead to less waste being produced? Will it lead to less waste being disposed, by promoting more recycling and composting? Will it increase waste recovery for other means e.g. energy generation?				
SOCIAL					
SOC 1 To reduce poverty and social exclusion.	Will it reduce poverty and social exclusion in those areas most affected? Will it help to reduce deprivation levels? Will it help meet the needs of residents most effectively?	©	©	©	For all options increased jobs would contribute to reducing poverty. Locations with most accessibility (Options B) would likely be of most benefit.
SOC 2 To maintain and improve the	Will it improve access to high quality health facilities? Will it encourage healthy lifestyles? How? Will it provide adequate health infrastructure for existing and new	©	©	©	Option B will encourage more walking and cycling as part of accessing jobs in the city.
health of the whole population and promote healthy lifestyles.	communities? Will the links between poorer health and deprivation be addressed? Will links to the countryside be maintained and enhanced?	8	©	8	Options A and C could promote sites in less accessible locations and so discourage walking and cycling.
SOC 3 To improve education and skills.	Will it improve qualifications and skills for both young people and amongst the workforce? Will it help to retain key workers and provide more skilled workers from school leavers? Will adequate education infrastructure be provided for existing and new communities? Will it promote lifelong learning and skills training? Will links between lower levels of education and deprivation be addressed?	N/a	N/a	N/a	N/a
SOC 4 To provide the opportunity to live in a decent, suitable and	Will it increase the range of types, sizes and affordability of housing for all social groups? Will it reduce the housing need and ensure that housing provision addresses the needs of all? Will it provide the most appropriate solutions to address the housing requirements needed for creating sustainable	N/a	N/a	N/a	N/a

affordable	communities?				
home.	Will it make best use of existing housing stock?				
SOC 5 To build community identity, improve social	Will it encourage engagement in community activities?  Will it contribute to the achievement of a mixed and balanced community?  Will it reduce actual levels of crime?	N/a	N/a	N/a	N/a
welfare, and reduce crime and anti-social activity.	Will it reduce the fear of crime?				
SOC 6 To offer more opportunities for rewarding and satisfying employment for all.	Will it reduce unemployment overall? Will it help to improve earnings?	©	©	©	All options would improve job opportunities, although Options A and C could promote jobs in locations that are less accessible to those without a car.
SOC 7 To improve the quality of where people live.	Will it improve the quality of dwellings? Will it improve the quality of local open space? Will it improve the satisfaction of people with their neighbourhoods?	N/a	N/a	N/a	N/a
SOC 8 To improve accessibility to essential services, facilities and jobs.	Will it improve accessibility to key local services and facilities (including health, education, leisure, open space, the countryside and community facilities)? Will it improve accessibility for all whilst reducing dependency on the private car? Will it improve access to jobs and services for all?	See ENV1	See ENV1	See ENV1	See ENV1
ECONOMIC					
EC 1 To encourage sustained economic growth.	Will it assist in strengthening the local economy? Will it improve business development and enhance competitiveness? Will it reduce vulnerability to economic shocks? Will it promote growth in key sectors? Will it increase vitality & viability of town centres and improve	☺	☺	☺	All options would assist the local economy. Option B (regeneration sites) may not be attractive to relocating businesses seeking larger and easily developable sites.

	economic diversity?				
EC 2 To encourage and accommodate both indigenous and inward investment.	Will it encourage indigenous businesses? Will it encourage inward investment? Will it make land and property available for business? Will it improve economic performance across the Greater Norwich area? Will it support / encourage rural diversification? Will it support / encourage small city businesses?	©	©	©	All options would assist the local economy. Option B (regeneration sites) may not be attractive to relocating businesses seeking larger and easily developable sites.
EC 3 To encourage efficient patterns of movement in support of economic growth.	Will it improve provision of local jobs? Will it improve accessibility to work, particularly by public transport, walking and cycling? Will it reduce journey times between key employment areas and key transport interchanges? Will it improve efficiency and sustainability of freight distribution? Will it support provision of key communications infrastructure?	See ENV1	See ENV1	See ENV1	See ENV1
EC 4 To improve the social and environmental performance of the economy.	Will it reduce the impact on the environment from businesses? Will it reduce the impact on residents from businesses? Will it attract new investment and skilled workers to the area? Will it maintain existing business and employment provision? Will it provide employment in the best locations to serve urban and rural residents?	See ENV1 And SOC1	See ENV1 And SOC1	See ENV1 And SOC1	See ENV1 And SOC1

Overall Conclusions: What are the main effects of the policy option as identified through the sustainability appraisal process?

**POLICY OPTION: Question 22 – Economy: Strategic Employment Sites.** 

- Option A Identify additional strategic employment locations
- Option B Concentrate on bringing forward mixed-use regeneration sites in the city
- Option C Relax the restrictions on types of employment use at current employment sites

# **Environmental Impacts**

There is a high degree of uncertainty as the environmental impacts would largely depend on the specific locations chosen and factors such as scale, design etc. More accessible locations, such as in the city (Option B) would likely have the least overall impacts in terms of traffic generation. Locations outside the city would likely result in the loss of Greenfield / agricultural land.

Social Impacts	For all options inc benefit.	For all options increased jobs would contribute to reducing poverty. Locations with most accessibility (eg Option B) would likely be of most penefit.				
Economic Impacts		options would assist the local economy. Out of centre locations (e.g. Options A and C) are likely to be more attractive to relocating inesses seeking larger sites, and provide more easily developable sites.				
<ul> <li>Overall summary:</li> <li>Impacts</li> <li>Possible mitigati</li> <li>Recommended for the considering cum</li> </ul>	urther research	Identification of strategic employment locations will assist in providing for economic growth. Out of centre locations may be more attractive for some potential users. The more accessible locations have distinct environmental benefits related to traffic generation. Choice of locations should have regard to accessibility and potential for improvements, and minimising other environmental impacts such as loss of Greenfield / agricultural land.				

Option Appraised: Question 24 – Economy: Employment in Rural Areas

Having focussed rural employment growth on the market towns we could:

- Option A Seek small scale employment allocations in villages identified as key service centres, allow for suitable small scale growth in other villages, encourage the reuse for employment of existing buildings (such as barns) in the wider countryside.
- Option B Be less encouraging by allowing for employment development in villages identified as service centres, but not allocate land, and allow the reuse of existing buildings but not encourage employment in other villages and rural areas.

#### **SCORING SYSTEM PROPOSED:**

SA Objective	Decision making criteria	Short- Term 0-5 yrs	Medium Term 5-20 yrs	Long- Term 20+ yrs	Comments / Justification Inc. cumulative effects
ENVIRONME	NTAL				
ENV 1 To reduce the effect of traffic on the environment.	Will it reduce traffic volumes, ease the flow of traffic and reduce congestion? Will it increase the proportion of journeys using modes other than the car? Will it reduce the effect of HGV traffic on people and the environment? Will it encourage more benign modes of travel? Will new development be located such to reduce the need for people to travel?	8	© ©	© ©	Option A would allow more widespread employment development across rural areas. Although it may lead to more localised employment growth and access, it would likely increase traffic impacts.  Option B would help to ensure that rural employment was of a smaller scale and restricted to service centres with good transport links, so reducing the need to use the car.
ENV 2 To improve the quality of the water environment	Will it improve the quality of the water environment (streams, rivers, lakes etc)?  Will it help to support wetland habitats and species?	N	N	N	There would be some impacts from development on the quality of the water environment, but until specific locations are known, this will be difficult to determine.

ENV 3 To improve environmental amenity,	Will it improve air quality?  Will it reduce the emission of atmospheric pollutants?	See ENV1	See ENV1	See ENV1	See ENV1, re the effects from traffic generation on air quality and noise.
including air quality.					
ENV 4 To maintain and enhance biodiversity and geodiversity.	Will it conserve / enhance natural or semi-natural habitats, and promote habitat connections? Is it likely to have a significant effect on sites designated for international, national or local importance? Will it conserve / enhance species diversity, and in particular avoid harm to protected species?	N	N	N	There would be some impacts from development on biodiversity and habitats, especially if allocations under Option A meant use of Greenfield sites, but until specific locations are known, this will be difficult to determine.
ENV 5 To maintain and enhance the quality of landscapes,	Will it protect and enhance the quality of landscapes, townscapes and countryside character, including the character of the Broads and its setting where relevant?  Will it maintain and enhance the distinctiveness of the landscapes/townscapes and heritage?	8	©	8	Option A would allow more widespread employment development across rural areas, which would be harder to integrate into the landscapes and character of rural settlements.
townscapes and the historic environment.	Will it reduce the amount of derelict, underused land? Will it protect and enhance features of historical, archaeological and cultural value?	☺	©	©	Option B restricts rural employment to a smaller scale within existing service centres where impacts on the landscape and townscape would perhaps be felt less.
ENV 6 To adapt to and mitigate against the impacts of climate change.	Will it reduce emissions of greenhouse gases by reducing energy consumption? Will it lead to an increased proportion of energy needs being met from renewable sources? Will it increase the capacity of the area to withstand the effects of climate change? Will the risks to lives, land and property be minimised?	See ENV1	See ENV1	See ENV1	See ENV1 re traffic generation as contributions to climate change.
ENV 7 To avoid, reduce and manage flood risk.	Will it minimise the risk of flooding to people and property?  Can it incorporate new designs to adapt to possible flood risk?  Will it promote the use of sustainable drainage systems to reduce run off?	N	Ζ	N	Some employment development would contribute to increased flood risk from surface run-off, although the effects are location specific and so can not be determined until they are more definite.
ENV 8 To provide for sustainable use and sources of water supply.	Will it conserve groundwater resources? Will it minimise water consumption?	N	N	N	Some employment development would contribute to increased water resource use, although the effects are location specific and so can not be determined until they are more definite.

ENV 9 To make the best use of resources, including land and energy, and to minimise waste production.	Will it minimise consumption of materials and resources? Will it promote the use of land in sustainable locations that has been previously developed? Will it use land efficiently? Will it minimise the loss of "greenfield" land? Will it avoid the loss of good quality agricultural land and preserve soil resources? Will it minimise energy consumption and promote energy efficiency? Will it promote the use of renewable energy sources? Will it lead to less waste being produced?	80	80	8© ©	For all options the use of resources etc would depend on the nature of a specific development.  Option A could possibly lead to more use of Greenfield sites through new allocations in key service centres. This option does however promote the re-use of existing buildings in the wider countryside.  Option B would be more likely to force employment
	Will it lead to less waste being disposed, by promoting more recycling and composting? Will it increase waste recovery for other means eg. energy generation?	<b>①</b>	©	9	development to make better use of previously developed land within service centres. There is slightly less emphasis on the re-use of existing farm buildings in the countryside.
SOCIAL					
SOC 1 To reduce poverty and social exclusion.	Will it reduce poverty and social exclusion in those areas most affected?  Will it help to reduce deprivation levels?  Will it help meet the needs of residents most effectively?	©	©	☺	For both options increased jobs would contribute to reducing poverty. Locations with most accessibility (broadly Option A) would likely be of most benefit. Both options can maintain rural lifestyles and combat rural deprivation and isolation from employment opportunities.
For a maintain and improve the health of the whole population and promote healthy lifestyles.	Will it improve access to high quality health facilities? Will it encourage healthy lifestyles? How? Will it provide adequate health infrastructure for existing and new communities? Will the links between poorer health and deprivation be addressed? Will links to the countryside be maintained and enhanced?	©	٥	☺	Both options would increase the likelihood of local people in villages and key service centres being able to walk to employment areas. Option A would allow this more than Option B, although B would encourage more use of public transport whereas option A could lead to more isolated employment sites.
SOC 3 To improve education and skills.	Will it improve qualifications and skills for both young people and amongst the workforce? Will it help to retain key workers and provide more skilled workers from school leavers? Will adequate education infrastructure be provided for existing and new communities? Will it promote lifelong learning and skills training?	©	☺	☺	Both options could lead to more local employment- based training in the rural areas and an up-skilling of the rural workforce.

	Will links between lower levels of education and deprivation be addressed?				
SOC 4 To provide the opportunity to live in a decent, suitable and affordable home.	Will it increase the range of types, sizes and affordability of housing for all social groups? Will it reduce the housing need and ensure that housing provision addresses the needs of all? Will it provide the most appropriate solutions to address the housing requirements needed for creating sustainable communities? Will it make best use of existing housing stock?	N/a	N/a	N/a	N/a
SOC 5 To build community identity, improve social welfare, and reduce crime and anti-social activity.	Will it encourage engagement in community activities?  Will it contribute to the achievement of a mixed and balanced community?  Will it reduce actual levels of crime?  Will it reduce the fear of crime?	©	<b>:</b>	<b>©</b>	Both options could lead to more local key workers and trades being retained in the rural areas, although this would depend on the type of employment that takes residence.
SOC 6 To offer more opportunities for rewarding and satisfying employment for all.	Will it reduce unemployment overall?  Will it help to improve earnings?	©	©	©	Both options would improve job opportunities. Option A would allow more diversity and widespread employment than Option B which is more restrictive.
To improve the quality of where people live.	Will it improve the quality of dwellings? Will it improve the quality of local open space? Will it improve the satisfaction of people with their neighbourhoods?	©	9	©	Both options could lead to more local key workers and trades being retained in the rural areas, and increasing job opportunities could bring more facilities to the area.
To improve accessibility to essential services, facilities & jobs.	Will it improve accessibility to key local services and facilities (including health, education, leisure, open space, the countryside and community facilities)? Will it improve accessibility for all whilst reducing dependency on the private car? Will it improve access to jobs and services for all?	☺	©	©	Both options could lead to more local key workers and trades being retained in the rural areas. This could in turn lead to an increase in job opportunities and more community facilities and services being brought to the area.

<b>ECONOMIC</b>	ECONOMIC								
EC 1 To encourage sustained economic growth.	Will it assist in strengthening the local economy? Will it improve business development and enhance competitiveness? Will it reduce vulnerability to economic shocks? Will it promote growth in key sectors? Will it increase vitality & viability of town centres and improve economic diversity?	©	©	©	Both options would assist the local economy and help to increase rural diversification by offering the means to establish new start-up units for example.				
EC 2 To encourage and accommodate both indigenous and inward investment.	Will it encourage indigenous businesses? Will it encourage inward investment? Will it make land and property available for business? Will it improve economic performance across the Greater Norwich area? Will it support / encourage rural diversification? Will it support / encourage small city businesses?	©	©	©	Both options would assist the local economy and help to increase rural diversification by offering the means to establish new start-up units for example.  Option A would allow more opportunities for employment development in a wider area and possibly at different scales.				
EC 3 To encourage efficient patterns of movement in support of economic growth.	Will it improve provision of local jobs? Will it improve accessibility to work, particularly by public transport, walking and cycling? Will it reduce journey times between key employment areas and key transport interchanges? Will it improve efficiency and sustainability of freight distribution? Will it support provision of key communications infrastructure?	See ENV1	See ENV1	See ENV1	See ENV1				
To improve the social and environmental performance of the economy.	Will it reduce the impact on the environment from businesses? Will it reduce the impact on residents from businesses? Will it attract new investment and skilled workers to the area? Will it maintain existing business and employment provision? Will it provide employment in the best locations to serve urban and rural residents?	See ENV1 And SOC1	See ENV1 And SOC1	See ENV1 And SOC1	See ENV1 And SOC1				

Overall Conclusions: What are the main effects of the policy option as identified through the sustainability appraisal process?

## POLICY OPTION: Question 24 – Economy: Employment in Rural Areas

Having focussed rural employment growth on the market towns we could:

- Option A Seek small scale employment allocations in villages identified as key service centres, allow for suitable small scale growth in other villages, encourage the reuse for employment of existing buildings (such as barns) in the wider countryside.
- Option B Be less encouraging by allowing for employment development in villages identified as service centres, but not allocate land, and allow the reuse of existing buildings but not encourage employment in other villages and rural areas.

Environmental Impacts	Traffic effects would depend on the location and nature of a development. More accessible locations will help to reduce traffic generation overall, but Option A could promote more employment in areas isolated from public transport whereas Option B would focus limited rural development to key service centres with better public transport links. Other environmental impacts would depend on the location, scale design etc of a specific proposal, but the impacts from option A would be more widespread than option B. Both options do however promote the re-use of existing buildings in the wider countryside.
Social Impacts	For both options increased jobs would contribute to reducing poverty. Both options can maintain rural lifestyles and combat rural deprivation and isolation from employment opportunities. Locations with better accessibility by public transport would likely be of most benefit, but option A could lead to more employment development in isolated areas.
Economic Impacts	Both options would assist the local economy and help to increase rural diversification, by offering the means to establish new start-up units for example, particularly option A, which could help employment development in more widespread locations.

## **Overall summary:**

- Impacts
- Possible mitigation measures
- Recommended further research
- Considering cumulative impacts

Option A, which encourages development in more villages across the rural area, has some potential advantages over Option B in terms of accessibility to jobs and economic diversification, although Option B is more sensitive to the environment.

Option Appraised: Question 25 – Economy: Town Centre Hierarchy. Do you agree with the proposed retail hierarchy?:

Proposal: 1 - City Centre; 2 – Town and large district centres; 3 – Large village and district centres; 4 –

Smaller village centres and local centres.

## **SCORING SYSTEM PROPOSED:**

SA Objective	Decision making criteria	Short- Term 0-5 yrs	Medium Term 5-20 yrs	Long- Term 20+ yrs	Comments / Justification Inc. cumulative effects
<b>ENVIRONMEI</b>	NTAL				
ENV 1 To reduce the effect of traffic on the environment.	Will it reduce traffic volumes, ease the flow of traffic and reduce congestion? Will it increase the proportion of journeys using modes other than the car? Will it reduce the effect of HGV traffic on people and the environment? Will it encourage more benign modes of travel? Will new development be located such to reduce the need for people to travel?	☺	©	©	Over time the priority of retail towards established centres should encourage more use of public transport proportionate to the size of the development and the settlement. This proposed hierarchy would minimise the impact of traffic.
ENV 2 To improve the quality of the water environment	Will it improve the quality of the water environment (streams, rivers, lakes etc)?  Will it help to support wetland habitats and species?	N	N	N	There would be some impacts felt from new developments but these are location and site-dependent. This hierarchy would direct most retail growth towards established settlements with water treatment areas.
ENV 3 To improve environmental amenity, including air quality.	Will it improve air quality?  Will it reduce the emission of atmospheric pollutants?	☺	©	©	See ENV 1, re the impact of traffic on air quality and noise.
ENV 4	Will it conserve / enhance natural or semi-natural habitats, and promote habitat connections?				There would be some impacts felt from new

To maintain and enhance biodiversity and geodiversity.	Is it likely to have a significant effect on sites designated for international, national or local importance? Will it conserve / enhance species diversity, and in particular avoid harm to protected species?	N	N	N	developments but these are location and site- dependent. This hierarchy would direct most retail growth towards established settlements where habitats may not be affected so much.
ENV 5 To maintain and enhance the quality of landscapes, townscapes and the historic environment.	Will it protect and enhance the quality of landscapes, townscapes and countryside character, including the character of the Broads and its setting where relevant? Will it maintain and enhance the distinctiveness of the landscapes/townscapes and heritage? Will it reduce the amount of derelict, underused land? Will it protect and enhance features of historical, archaeological and cultural value?	©	(3)	©	There would be some impacts felt from new developments but these are location and site-dependent. This hierarchy would direct most retail growth towards established settlements where brownfield land is available and could be improved and where the impacts would be proportional to the scale of developments.
ENV 6 To adapt to and mitigate against the impacts of climate change.	Will it reduce emissions of greenhouse gases by reducing energy consumption? Will it lead to an increased proportion of energy needs being met from renewable sources? Will it increase the capacity of the area to withstand the effects of climate change? Will the risks to lives, land and property be minimised?	☺	©	©	See ENV 1, re the impact of traffic on greenhouse gas emissions and contributions to climate change.
ENV 7 To avoid, reduce and manage flood risk.	Will it minimise the risk of flooding to people and property?  Can it incorporate new designs to adapt to possible flood risk?  Will it promote the use of sustainable drainage systems to reduce run off?	N	N	N	There would be some impacts felt from new developments but these are location and site-dependent. This hierarchy would direct most retail growth towards established settlements where flood defences and mitigation measures are in place already.
ENV 8 To provide for sustainable use and sources of water supply.	Will it conserve groundwater resources? Will it minimise water consumption?	N	N	N	There would be some impacts felt from new developments but these are location and site-dependent. This hierarchy would direct most retail growth towards established settlements with adequate water supply facilities in place.
ENV 9 To make the best use of resources, including land and energy, and	Will it minimise consumption of materials and resources? Will it promote the use of land in sustainable locations that has been previously developed? Will it use land efficiently? Will it minimise the loss of "greenfield" land? Will it avoid the loss of good quality agricultural land and preserve soil resources?	©	☺	☺	The proposed retail hierarchy would enable larger retail developments to be directed towards the city and large town centres where opportunities exist for making use of brownfield sites and reducing the need for greenfield sites or agricultural land.

to minimise waste production.	Will it minimise energy consumption and promote energy efficiency? Will it promote the use of renewable energy sources? Will it lead to less waste being produced? Will it lead to less waste being disposed, by promoting more recycling and composting? Will it increase waste recovery for other means eg. energy generation?				
SOCIAL		•			
SOC 1 To reduce poverty and social exclusion.	Will it reduce poverty and social exclusion in those areas most affected?  Will it help to reduce deprivation levels?  Will it help meet the needs of residents most effectively?	©	☺	©	The priority of retail towards established centres should encourage more use of public transport proportionate to the size of the development and the settlement. This proposed hierarchy would increase the accessibility of retail opportunities via good public transport links. However, it would mean that a large centre would not be allowed in the rural area to serve those populations.
SOC 2 To maintain and improve the health of the whole population and promote healthy lifestyles.	Will it improve access to high quality health facilities? Will it encourage healthy lifestyles? How? Will it provide adequate health infrastructure for existing and new communities? Will the links between poorer health and deprivation be addressed? Will links to the countryside be maintained and enhanced?	©	©	©	The priority of retail towards established centres should encourage more use of public transport proportionate to the size of the development and the settlement and hence discourage the need to use the private car and so promote more walking and cycling.
SOC 3 To improve education and skills.	Will it improve qualifications and skills for both young people and amongst the workforce? Will it help to retain key workers and provide more skilled workers from school leavers? Will adequate education infrastructure be provided for existing and new communities? Will it promote lifelong learning and skills training? Will links between lower levels of education and deprivation be addressed?	N/a	N/a	N/a	N/a
SOC 4 To provide the opportunity to live in a decent,	Will it increase the range of types, sizes and affordability of housing for all social groups? Will it reduce the housing need and ensure that housing provision addresses the needs of all?	N/a	N/a	N/a	N/a

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suitable and	Will it provide the most appropriate solutions to address the housing				
affordable	requirements needed for creating sustainable communities?				
home.	Will it make best use of existing housing stock?				
SOC 5	Will it encourage engagement in community activities?				New retail facilities can encourage more community
To build		•	<b>•</b>		interaction and more opportunities for local
community	Will it contribute to the achievement of a mixed and balanced	$\odot$	$\odot$	$\odot$	communities to interact.
identity,	community?				
improve social	MCH 's I compared to the compa				
welfare, and	Will it reduce actual levels of crime?				
reduce crime	Will it reduce the fear of crime?				
and anti-social	will it reduce the real of chine?				
activity.					
SOC 6	Will it reduce unemployment overall?				New retail services will also provide more
To offer more	This is readed differnity from everally.	_	_	_	employment opportunities for local people,
opportunities for	Will it help to improve earnings?	$\odot$	$\odot$	$\odot$	particularly more accessible work for less skilled
rewarding and					and part-time employees.
satisfying					and part-time employees.
employment for					
all.	Will it improve the quality of dwellings?				Non-setal facilities and incorporation and incorporation
	Will it improve the quality of local open space?				New retail facilities can improve the services
To improve the	Will it improve the quality of local open space?  Will it improve the satisfaction of people with their neighbourhoods?	$\odot$	$\odot$	$\odot$	available to local people and improve the feeling of
quality of where	will it improve the satisfaction of people with their neighbourhoods:	)			living in a self-sufficient community.
people live.					
SOC 8	Will it improve accessibility to key local services and facilities				New retail services will also provide more
To improve	(including health, education, leisure, open space, the countryside and	$\odot$	$\odot$	$\odot$	employment opportunities for people, and with it
accessibility to	community facilities)? Will it improve accessibility for all whilst reducing dependency on the	9	9		encourage more businesses, services and facilities
essential	private car?				for local communities.
services,	Will it improve access to jobs and services for all?				
facilities and	will it improve access to jobs and services for all:				
jobs.					
ECONOMIC					
EC 1	Will it assist in strengthening the local economy?				New retail services will be attracted to an
To encourage	Will it improve business development and enhance competitiveness?				established business area and larger catchment
sustained	Will it reduce vulnerability to economic shocks?	$\odot$	$\odot$	$\odot$	population, such as in the city centre and larger
economic	Will it promote growth in key sectors?				market towns, which in turn attract more continued
33311011110	Will it increase vitality & viability of town centres and improve				

growth.	economic diversity?				footfall. At the other end of the scale, farm shops and smaller businesses will be encouraged to serve local communities.
EC 2 To encourage and accommodate both indigenous and inward investment.	Will it encourage indigenous businesses? Will it encourage inward investment? Will it make land and property available for business? Will it improve economic performance across the Greater Norwich area? Will it support / encourage rural diversification? Will it support / encourage small city businesses?	©	☺	☺	Farm shops, markets and smaller businesses will be encouraged to serve local communities as part of rural diversification.
EC 3 To encourage efficient patterns of movement in support of economic growth.	Will it improve provision of local jobs? Will it improve accessibility to work, particularly by public transport, walking and cycling? Will it reduce journey times between key employment areas and key transport interchanges? Will it improve efficiency and sustainability of freight distribution? Will it support provision of key communications infrastructure?	©	©	©	Under the proposed hierarchy, delivery services would be encouraged to use the main trunk highways and make multiplier journeys, rather than freight being dispersed around the countryside.
EC 4 To improve the social and environmental performance of the economy.	Will it reduce the impact on the environment from businesses? Will it reduce the impact on residents from businesses? Will it attract new investment and skilled workers to the area? Will it maintain existing business and employment provision? Will it provide employment in the best locations to serve urban and rural residents?	©	©	☺	This proposed hierarchy would minimise the impact of traffic by offering more options for people to use public transport, and ensure that customers have better access to the main retail centres for shopping and jobs.

Overall Conclusions: What are the main effects of the policy option as identified through the sustainability appraisal process?							
POLICY OPTION: Question 25 – Economy: Town Centre Hierarchy. Do you agree with the proposed retail hierarchy?:  Proposal: 1 - City Centre; 2 – Town and large district centres; 3 – Large village and district centres; 4 –  Smaller village centres and local centres.							
Environmental Impacts	This proposed hierarchy would minimise the impact of traffic on congestion, air quality, noise and contributions to climate change. It would enable larger retail developments to be directed towards the city and large town centres where opportunities exist for making use of brownfield sites and reducing the need for greenfield sites or agricultural land.						
Social Impacts	This proposed hierarchy would increase the accessibility of retail opportunities via good public transport links and some walking and cycling to local centres. Jobs would also be created, including some opportunities for local workers in local-scale retail developments. New services could also be introduced to serve the local area.						
Economic Impacts	The proposed hierarchy would be able to attract large retailers to existing large retail centres and increase footfall to those business centres. There would also be opportunities for new retail of a proportionate scale in the rural area, which might help rural diversification and the establishment of rural services. The hierarchy would also direct the						
Overall summary:  Impacts Possible mitigation measures Recommended further research Considering cumulative impacts		retail freight and deliveries to the established larger centres and main trunk highway network.  The proposed hierarchy offers a proportional scale of retail development to provide services for a larger population in main centres which perhaps have more resistance to the environmental effects. It would also help to introduce smaller, community scale retail operation in rural areas, which could promote self-employment and rural diversification.					

Option Appraised: Question 26 – Economy: Significant retail centres

Having concentrated as much of the comparison shopping growth as possible in the city centre, should we:

- Option A Seek further significant growth in an accessible location in the urban area
- Option B Seek significant development to provide one or more new town centres as part of new large scale housing developments
- Option C Promote both options A and B.

### **SCORING SYSTEM PROPOSED:**

SA Objective	Decision making criteria	Short- Term 0-5 yrs	Medium Term 5-20 yrs	Long- Term 20+ yrs	Comments / Justification Inc. cumulative effects				
ENVIRONMENTAL									
ENV 1 To reduce the effect of traffic on the environment.	Will it reduce traffic volumes, ease the flow of traffic and reduce congestion? Will it increase the proportion of journeys using modes other than the car? Will it reduce the effect of HGV traffic on people and the environment? Will it encourage more benign modes of travel? Will new development be located such to reduce the need for people to travel?	© ©	© ©	© ©	Option A would mean more people could access retail through public transport links to reduce the impact of traffic.  Option B would also bring local retail services to the new developments and large new population areas, so being able to promote walking and cycling and reduce car use.				
ENV 2 To improve the quality of the water environment	Will it improve the quality of the water environment (streams, rivers, lakes etc)?  Will it help to support wetland habitats and species?	N	N	N	There would be some impacts on the quality of the water environment arising from new developments. The impacts would be largely location-specific.				
ENV 3 To improve environmental amenity,	Will it improve air quality?  Will it reduce the emission of atmospheric pollutants?	See ENV1	See ENV1	See ENV1	See ENV1, re traffic generation and its impacts on air quality and noise.				

including air quality.					
ENV 4 To maintain and enhance biodiversity and geodiversity.	Will it conserve / enhance natural or semi-natural habitats, and promote habitat connections? Is it likely to have a significant effect on sites designated for international, national or local importance? Will it conserve / enhance species diversity, and in particular avoid harm to protected species?	Z	Z	Ν	There would be some impacts on the quality of habitats and wildlife arising from new developments. The impacts would be largely location-specific.
ENV 5 To maintain and enhance the quality of	Will it protect and enhance the quality of landscapes, townscapes and countryside character, including the character of the Broads and its setting where relevant?				Impacts on landscape, heritage and townscapes would depend on the location and degree of accessibility.
landscapes, townscapes and	Will it maintain and enhance the distinctiveness of the landscapes/townscapes and heritage?	©	©	☺	Option A could bring more pressure on the historic core of Norwich and market towns.
the historic environment.	Will it reduce the amount of derelict, underused land?  Will it protect and enhance features of historical, archaeological and cultural value?	٥	٥	©	Option B could offer an opportunity to enhance the new housing developments and provide a focal point and modern identity to significant newly-built communities.
ENV 6 To adapt to and mitigate against the impacts of climate change.	Will it reduce emissions of greenhouse gases by reducing energy consumption? Will it lead to an increased proportion of energy needs being met from renewable sources? Will it increase the capacity of the area to withstand the effects of climate change? Will the risks to lives, land and property be minimised?	See ENV1	See ENV1	See ENV1	See ENV1 re traffic generation and the contributions to climate change through greenhouse gas emissions.
ENV 7 To avoid, reduce and manage flood risk.	Will it minimise the risk of flooding to people and property?  Can it incorporate new designs to adapt to possible flood risk?  Will it promote the use of sustainable drainage systems to reduce run off?	N	N	N	Although the impacts would be largely location- specific, there would be some increased risk of flooding arising from new developments increasing surface water run-off.
ENV 8 To provide for sustainable use and sources of water supply.	Will it conserve groundwater resources? Will it minimise water consumption?	N	N	N	There would be some impacts on the supply of water resources for new developments, but the impacts would be largely location-specific.

ENV 9 To make the best use of resources, including land and energy, and to minimise waste production.	Will it minimise consumption of materials and resources? Will it promote the use of land in sustainable locations that has been previously developed? Will it use land efficiently? Will it minimise the loss of "greenfield" land? Will it avoid the loss of good quality agricultural land and preserve soil resources? Will it minimise energy consumption and promote energy efficiency? Will it promote the use of renewable energy sources? Will it lead to less waste being produced? Will it lead to less waste being disposed, by promoting more recycling and composting?	© ©	© ©	© 8	For all options the use of resources etc would depend on the nature of a specific development.  Option A would be able to increase opportunities to make use of previously developed land.  Options B and C would likely involve the loss of Greenfield / agricultural land, but it could counteract that by improving the local access to shops and services.
SOCIAL					
SOC 1 To reduce poverty and social exclusion.	Will it reduce poverty and social exclusion in those areas most affected?  Will it help to reduce deprivation levels?  Will it help meet the needs of residents most effectively?	©	©	©	For all options increasing the retail offer would provide opportunities for jobs, which would contribute to reducing poverty. Locations with most accessibility would likely be of most benefit in providing improved retail services for more people.  Option A would be accessible via public transport, and Option B would be more likely to encourage local cycling and walking to integrated facilities.
SOC 2 To maintain and improve the health of the whole population and promote healthy lifestyles.	Will it improve access to high quality health facilities? Will it encourage healthy lifestyles? How? Will it provide adequate health infrastructure for existing and new communities? Will the links between poorer health and deprivation be addressed? Will links to the countryside be maintained and enhanced?	<b>(i)</b>	٥	©	Option A would be accessible via public transport, and Option B would be more likely to encourage local cycling and walking to integrated facilities, which will in turn have health benefits for the local population.
SOC 3 To improve education and skills.	Will it improve qualifications and skills for both young people and amongst the workforce? Will it help to retain key workers and provide more skilled workers from school leavers? Will adequate education infrastructure be provided for existing and new communities? Will it promote lifelong learning and skills training?	N/a	N/a	N/a	N/a

	Will links between lower levels of education and deprivation be addressed?				
SOC 4 To provide the opportunity to live in a decent, suitable and affordable home.	Will it increase the range of types, sizes and affordability of housing for all social groups? Will it reduce the housing need and ensure that housing provision addresses the needs of all? Will it provide the most appropriate solutions to address the housing requirements needed for creating sustainable communities? Will it make best use of existing housing stock?	N/a	N/a	N/a	N/a
SOC 5	Will it encourage engagement in community activities?	N	N	N	Option A would have less noticeable effects.
To build community identity,	Will it contribute to the achievement of a mixed and balanced community?	<b>©</b>	☺	☺	Option B and C would provide a sense of place and provide a focal point to new developments if
improve social welfare, and	Will it reduce actual levels of crime?				there were integrated retail centres.
reduce crime and anti-social activity.	Will it reduce the fear of crime?				
SOC 6	Will it reduce unemployment overall?	$\odot$	$\odot$	$\odot$	All options would improve job opportunities in a
To offer more opportunities for rewarding and satisfying employment for all.	Will it help to improve earnings?				locality.
SOC 7 To improve the quality of where people live.	Will it improve the quality of dwellings? Will it improve the quality of local open space? Will it improve the satisfaction of people with their neighbourhoods?	©	(1)	☺	Option B: The new local community would be improved if there were more facilities available to the local people.
SOC 8 To improve accessibility to essential	Will it improve accessibility to key local services and facilities (including health, education, leisure, open space, the countryside and community facilities)?  Will it improve accessibility for all whilst reducing dependency on the	©	©	©	Option A would mean more people could access retail through public transport links to reduce the impact of traffic.
services, facilities and jobs.	private car? Will it improve access to jobs and services for all?	©	©	☺	Option B would also bring local retail services to the new developments and large new population areas, so being able to promote walking and

					cycling and reduce car use.
ECONOMIC					
EC 1 To encourage sustained economic	Will it assist in strengthening the local economy? Will it improve business development and enhance competitiveness? Will it reduce vulnerability to economic shocks?	©	©	©	All options could assist the local economy. Option A could help support the existing retail centres and offer more jobs in the city centre.
growth.	Will it promote growth in key sectors? Will it increase vitality & viability of town centres and improve economic diversity?	©8	© (S)	©®	Option B would provide an economic focus to the new developments and offer local jobs, but it could draw custom away from the existing centres.
To encourage and accommodate both indigenous	Will it encourage indigenous businesses?  Will it encourage inward investment?  Will it make land and property available for business?	©	©	©	All options could assist the local economy.  Option A could help support the existing retail centres and offer more jobs in the city centre, leaving opportunities for smaller businesses to establish to serve the new developments.
and inward investment.	Will it improve economic performance across the Greater Norwich area?  Will it support / encourage rural diversification?  Will it support / encourage small city businesses?	©8	©8	©®	Option B would provide an economic focus to the new developments and offer local jobs. Although it could draw custom away from the existing centres, it could also serve to increase the appeal of the area to incoming businesses.
EC 3 To encourage efficient patterns of	Will it improve provision of local jobs?  Will it improve accessibility to work, particularly by public transport, walking and cycling?	©	©	☺	Option A would mean more people could access retail through public transport links to reduce the impact of traffic.
movement in support of economic growth.	Will it reduce journey times between key employment areas and key transport interchanges?  Will it improve efficiency and sustainability of freight distribution?	©	©	☺	Option B would also bring local retail services to the new developments and large new population areas, so being able to promote walking and cycling and reduce car use.
	Will it support provision of key communications infrastructure?				Impacts could be lessened if there are opportunities for joined-up and linked delivery trips between new centres and existing retail centres.
EC 4 To improve the social and	Will it reduce the impact on the environment from businesses? Will it reduce the impact on residents from businesses? Will it attract new investment and skilled workers to the area? Will it maintain existing business and employment provision?	See ENV1 And	See ENV1 And	See ENV1 And	See ENV1 And SOC1

performance of		t provide employment in the best locations to serve urban and residents?	SOC1	SOC1	SOC1	
the economy.	onomanoo o					

Overall Conclusions: What are the main effects of the policy option as identified through the sustainability appraisal process? POLICY OPTION: Question 26 – Economy: Significant retail centres Having concentrated as much of the comparison shopping growth as possible in the city centre, should we: • Option A – Seek further significant growth in an accessible location in the urban area • Option B – Seek significant development to provide one or more new town centres as part of new large scale housing developments Option C – Promote both options A and B. There is a high degree of uncertainty as the environmental impacts would largely depend on the specific locations chosen and **Environmental** factors such as scale, design etc. More accessible locations would likely have the least overall impacts in terms of traffic generation. Option A would help to regenerate the existing retail centres and make use of brownfield land, and offer better **Impacts** public transport links. Locations outside the urban area (Options B and C) would likely result in the loss of Greenfield / agricultural land, but they would encourage more localised cycling and walking from the new housing developments. For all options increased jobs would contribute to reducing poverty. Locations with most accessibility would likely be of most **Social Impacts** benefit in providing retail services for a wider population. Option B would be able to provide jobs for new residents in the new developments. All options would improve job opportunities in a locality and assist the local economy. Option A would be able to support and **Economic Impacts** promote new investment in the existing retail centres, but options B and C could involve competition from the new developments' integrated retail services that could threaten the viability of the existing retail centres.

### **Overall summary:**

- Impacts
- Possible mitigation measures
- Recommended further research
- Considering cumulative impacts

Provision for new retail centres could assist in providing for economic growth and jobs, and improve retail service provision in certain localities. The more accessible locations have distinct environmental benefits related to traffic generation, although any new centres within development would have to optimise the potential for cycling and walking opportunities. Choice of locations would have to reduce environmental impact and ensure that new competition would not be a threat to the viability of existing retail centres, and instead strengthen the attraction of the retail offer for the wider area by promoting the opportunities for partnerships, linked retail visits and economic business investment.

- Option Appraised: Question 28 Environment: Protection of landscapes and biodiversity. The strategy could:
  - Ensure that growth is directed away from areas where it would cause most harm, using nationally and locally designated landscape and conservation sites; and
  - o Identify additional specific areas and policy criteria based on Landscape Character Assessment, the impact of potential growth around the open area, the historic landscapes and the setting of the city; and,
  - Be guided by the Ecological Network Map and Norfolk Biodiversity Action Plan, to protect and enhance the biodiversity and landscape of the area (including the contribution that can be made by development).

#### **SCORING SYSTEM PROPOSED:**

SA Objective	Decision making criteria	Short- Term 0-5 yrs	Medium Term 5-20 yrs	Long- Term 20+ yrs	Comments / Justification Inc. cumulative effects				
<b>ENVIRONMEN</b>	ENVIRONMENTAL								
ENV 1 To reduce the effect of traffic on the environment.	Will it reduce traffic volumes, ease the flow of traffic and reduce congestion? Will it increase the proportion of journeys using modes other than the car? Will it reduce the effect of HGV traffic on people and the environment? Will it encourage more benign modes of travel? Will new development be located such to reduce the need for people to travel?	8©	8©	8©	The effects are marginal.  This could include some negative effects if designations restrict development and so force people to drive further, but it may help to reduce the impacts from traffic on the historic areas if there is limited development or restrictions imposed.				
ENV 2 To improve the quality of the water environment	Will it improve the quality of the water environment (streams, rivers, lakes etc)?  Will it help to support wetland habitats and species?	Θ	٥	٥	Although they are location-specific, protected assets such as river valleys could be preserved. An approach that targets protection and enhancement through the Landscape Character Assessment and an ecological network approach would seek to ensure the integrity of river corridors, therefore benefiting the general water environment.				

ENV 3 To improve environmental amenity, including air quality.	Will it improve air quality?  Will it reduce the emission of atmospheric pollutants?	©	©	©	Overall, all development that is required to pay regard to landscape will have to consider amenity and tranquillity protection, for example. There should be an emphasis on ensuring that green space and wildlife habitat is multifunctional where possible, so that there are also benefits to the amenity of new and existing communities.
ENV 4 To maintain and enhance biodiversity and geodiversity.	Will it conserve / enhance natural or semi-natural habitats, and promote habitat connections?  Is it likely to have a significant effect on sites designated for international, national or local importance?  Will it conserve / enhance species diversity, and in particular avoid harm to protected species?	©	©	©	This in particular improves biodiversity and geo- diversity by improving connections between sites and identifying where expansion is required, and preserving those sites that are known to be important reserves for wildlife and biodiversity value.  New developments will also have to contribute towards biodiversity enhancement.
ENV 5 To maintain and enhance the quality of landscapes, townscapes and the historic environment.	Will it protect and enhance the quality of landscapes, townscapes and countryside character, including the character of the Broads and its setting where relevant?  Will it maintain and enhance the distinctiveness of the landscapes/townscapes and heritage?  Will it reduce the amount of derelict, underused land?  Will it protect and enhance features of historical, archaeological and cultural value?	©	©	©	This can defend and protect specific identified sites across the area and identify the most vulnerable areas and then link these sites with features of other areas (for example The Brecks) and build connections between them.  This policy promotes a proactive approach to nature conservation that will target efforts according to priorities identified at the landscape scale.  Conservation (protection and enhancement) of the important natural components of individual landscapes will help to ensure that the distinctiveness of landscapes is not eroded.
ENV 6 To adapt to and mitigate against the impacts of climate change.	Will it reduce emissions of greenhouse gases by reducing energy consumption? Will it lead to an increased proportion of energy needs being met from renewable sources? Will it increase the capacity of the area to withstand the effects of climate change? How can it be ensured that the risks to lives, land and property are minimised?	٥	©	☺	New development will take into account the surrounding landscape character as well as protecting specific sites. Protecting sites will also help mitigate against the effects of climate change in an area and increase the capacity of wildlife to withstand its effects by promoting ecological connections between habitats. It allows migration of

ENV 7 To avoid, reduce and manage flood risk.	Will it minimise the risk of flooding to people and property?  Can it incorporate new designs to adapt to possible flood risk?  Will it promote the use of sustainable drainage systems to reduce run off?	©	©	©	species and will include open space to reduce urban heating.  Resistance to flooding can be increased by promoting the use of Sustainable Drainage Systems within other development features, such as open space or wildlife havens, which both reduce flood risk and contribute to local wetland habitats.  This approach, which promotes ecological networks, should target biodiversity areas to ensure they are multifunctional and able to contribute to reduced flood risk.
ENV 8 To provide for sustainable use and sources of water supply.	Will it conserve groundwater resources? Will it minimise water consumption?	☺	☺	☺	Integrating Sustainable Drainage Systems into new developments can help to improve groundwater recharge and minimise damage to water quality.
ENV 9 To make the best use of resources, including land and energy, and to minimise waste production.	Will it minimise consumption of materials and resources? Will it promote the use of land in sustainable locations that has been previously developed? Will it use land efficiently? Will it minimise the loss of "greenfield" land? Will it avoid the loss of good quality agricultural land and preserve soil resources? Will it minimise energy consumption and promote energy efficiency? Will it promote the use of renewable energy sources? Will it lead to less waste being produced? Will it lead to less waste being disposed, by promoting more recycling and composting? Will it increase waste recovery for other means eg. energy generation?	©	©	☺	This can protect the countryside by identifying the most valuable areas for protection and increasing the use of brownfield land. It could help to identify where the most suitable areas are for renewable energy allocations, including an area's sensitivity and appropriateness to wind turbines, although by the same method it would identify where they couldn't go, so reducing their use.
SOCIAL					
SOC 1 To reduce poverty & social exclusion.	Will it reduce poverty and social exclusion in those areas most affected? Will it help to reduce deprivation levels? Will it help meet the needs of residents most effectively?	☺	☺	☺	This could increase residents' access to the countryside and improve recreation opportunities.

SOC 2 To maintain and improve the health of the whole population and promote healthy lifestyles.	Will it improve access to high quality health facilities? Will it encourage healthy lifestyles? How? Will it provide adequate health infrastructure for existing and new communities? Will the links between poorer health and deprivation be addressed? Will links to the countryside be maintained and enhanced?	©	©	©	This could improve access to recreation and health opportunities by improving the conditions for walking and cycling in the countryside and protected areas.
SOC 3 To improve education and skills.	Will it improve qualifications and skills for both young people and amongst the workforce? Will it help to retain key workers and provide more skilled workers from school leavers? Will adequate education infrastructure be provided for existing and new communities? Will it promote lifelong learning and skills training? Will links between lower levels of education and deprivation be addressed?	©	©	©	Education can benefit through providing new facilities and habitat improvements as an educational resource
SOC 4 To provide the opportunity to live in a decent, suitable and affordable home.	Will it increase the range of types, sizes and affordability of housing for all social groups? Will it reduce the housing need and ensure that housing provision addresses the needs of all? Will it provide the most appropriate solutions to address the housing requirements needed for creating sustainable communities? Will it make best use of existing housing stock?	N/a	N/a	N/a	N/a
SOC 5 To build community identity, improve social welfare, and reduce crime and anti-social activity.	Will it encourage engagement in community activities?  Will it contribute to the achievement of a mixed and balanced community?  Will it reduce actual levels of crime?  Will it reduce the fear of crime?	©	©	٥	This policy seeks to protect landscape distinctiveness, which is an important part of sense of place in more rural areas. In more urban areas this policy will be likely to encourage a network of green spaces that are also available as a shared community resource.
SOC 6 To offer more opportunities for	Will it reduce unemployment overall? Will it help to improve earnings?	N/a	N/a	N/a	N/a

rewarding and satisfying employment for all.					
SOC 7 To improve the quality of where people live.	Will it improve the quality of dwellings?  Will it improve the quality of local open space?  Will it improve the satisfaction of people with their neighbourhoods?	☺	☺	☺	It can improve the quality of buildings by integrating new development into the existing settings and improving the surroundings of developments and provides important additions such as open space or 'green wedges'.
SOC 8 To improve accessibility to essential services, facilities and jobs.	Will it improve accessibility to key local services and facilities (including health, education, leisure, open space, the countryside and community facilities)? Will it improve accessibility for all whilst reducing dependency on the private car? Will it improve access to jobs and services for all?	N/a	N/a	N/a	N/a
<b>ECONOMIC</b>					
EC 1 To encourage sustained economic growth.	Will it assist in strengthening the local economy? Will it improve business development and enhance competitiveness? Will it reduce vulnerability to economic shocks? Will it promote growth in key sectors? Will it increase vitality & viability of town centres and improve economic diversity?	©	٥	©	Overall, by preserving and improving important environmental features, there would be a consequential improvement in health and productivity of workers, improved tourism if the design of buildings is also sensitive to heritage protection and landscape preservation.
To encourage and accommodate both indigenous and inward investment.	Will it encourage indigenous businesses? Will it encourage inward investment? Will it make land and property available for business? Will it improve economic performance across the Greater Norwich area? Will it support / encourage rural diversification? Will it support / encourage small city businesses?	©	٥	©	Businesses will be more encouraged to locate in surroundings that are well designed and have environmental features included.
EC 3 To encourage efficient patterns of movement in	Will it improve provision of local jobs? Will it improve accessibility to work, particularly by public transport, walking and cycling? Will it reduce journey times between key employment areas and key transport interchanges?	N/a	N/a	N/a	N/a

support of economic growth.	Will it improve efficiency and sustainability of freight distribution? Will it support provision of key communications infrastructure?				
EC 4 To improve the social and environmental performance of the economy.	Will it reduce the impact on the environment from businesses? Will it reduce the impact on residents from businesses? Will it attract new investment and skilled workers to the area? Will it maintain existing business and employment provision? Will it provide employment in the best locations to serve urban and rural residents?	9	©	©	The option will seek to create a better place to work and encourage more investment from businesses in environmental protection and enhancement.

Overall Conclusions: What are the main effects of the policy option as identified through the sustainability appraisal process?

- POLICY OPTION: Question 28 Environment: Protection of landscapes and biodiversity. The strategy could:
  - Ensure that growth is directed away from areas where it would cause most harm, using nationally and locally designated landscape and conservation sites; and
  - Identify additional specific areas and policy criteria based on Landscape Character Assessment, the impact of potential growth around the open area, the historic landscapes and the setting of the city; and,
  - Be guided by the Ecological Network Map and Norfolk Biodiversity Action Plan, to protect and enhance the biodiversity and landscape of the area (including the contribution that can be made by development).

Environmental Impacts	The option will seek to preserve the biodiversity and heritage of the area and its character. It could also incorporate sustainable drainage systems to reduce the risks of flooding and return run-off back to groundwater sources. It can promote biodiversity inclusion within developments. Targeting efforts according to priorities identified at the landscape scale, will help to preserve the distinctiveness of landscapes. By maintaining and promoting ecological networks, this approach will promote ecological connectivity between important habitat areas, which will be important to ensure the resilience of species to climate change.
Social Impacts	Education can benefit through providing new facilities and habitat improvements as an educational resource and opportunity for community involvement and improvements to the local environment. A sense of place and community identity will be retained if landscapes can be preserved and enhanced.
Economic Impacts	Overall, by preserving and improving important environmental features, there would be a consequential improvement in health and productivity of workers. Businesses will be more encouraged to locate in surroundings that are nicely designed and have environmental features incorporated, and may feel more inclined to invest in improvements to the local environment.

### **Overall summary:**

- Impacts
- Possible mitigation measures
- Recommended further research
- Considering cumulative impacts

This option's use will be crucial when applied in combination with the options for growth and regeneration. There should be an emphasis on ensuring that green space and wildlife habitat is integrated into new developments and is designed to be multifunctional where possible, so that there are also benefits to the amenity of new and existing communities and can contribute to such facilities as recreation, health, sustainable transport, flood protection and educational resources.

- Option Appraised: Question 29 Environment: Sustainable Building Methods
  - Option 1 All new developments should meet the current Housing Corporation requirements on the Code for Sustainable Homes as these are upgraded over time.
  - Option 2 Housing design should match a lower requirement linked to the Code for Sustainable Homes, and again be upgraded over time.
  - Option 3 Set standards for other types of development on a similar basis to bring them towards zerocarbon standards before 2016.
  - Option 4 Do not set standards for sustainable construction ahead of national regulations.

#### **SCORING SYSTEM PROPOSED:**

SA Objective	Decision making criteria	Short- Term 0-5 yrs	Medium Term 5-20 yrs	Long- Term 20+ yrs	Comments / Justification Inc. cumulative effects				
<b>ENVIRONMEN</b>	ENVIRONMENTAL								
ENV 1 To reduce the effect of traffic on the environment.	Will it reduce traffic volumes, ease the flow of traffic and reduce congestion? Will it increase the proportion of journeys using modes other than the car? Will it reduce the effect of HGV traffic on people and the environment?	©	☺	©	Options 1 and 3 can use improvements to links to public transport as part of reducing dependency on the car and reducing net development emissions as part of the Code for Sustainable Homes and wider carbon neutral targets.				
	Will it encourage more benign modes of travel? Will new development be located such to reduce the need for people to travel?	☺	8	8	Option 2 and 4 would involve such improved accessibility as arising from the demonstrable links to public transport.				
ENV 2 To improve the quality of the water	Will it improve the quality of the water environment (streams, rivers, lakes etc)?  Will it help to support wetland habitats and species?	٥	©	☺	Options 1 and 3 would reduce water consumption and encourage provision of sustainable urban drainage systems. The materials used should also be more environmentally friendly.				
environment		(3)	☺	⊗	Options 2 and 4 would not insist on improvements to				

					the water disposal systems.
ENV 3 To improve	Will it improve air quality?  Will it reduce the emission of atmospheric pollutants?	<b>(i)</b>	<b>©</b>	©	Options 1 and 3 could include reducing the need to travel by car (in order to reduce overall development
environmental amenity,	will it reduce the emission of atmospheric politicants?				emissions) so improving local air quality.
including air quality.		☺	8	8	Options 2 and 4 would not result in improvements to air quality.
ENV 4 To maintain and enhance biodiversity and	Will it conserve / enhance natural or semi-natural habitats, and promote habitat connections?  Is it likely to have a significant effect on sites designated for international, national or local importance?	☺	☺	☺	Options 1 and 3 have more inclusion of natural features and promote biodiversity features within developments.
geodiversity.	Will it conserve / enhance species diversity, and in particular avoid harm to protected species?	(3)	<b>©</b>	8	Options 2 and 4 would not require such improvements to the natural environment.
ENV 5 To maintain and enhance the quality of landscapes, townscapes and the historic environment.	Will it protect and enhance the quality of landscapes, townscapes and countryside character, including the character of the Broads and its setting where relevant? Will it maintain and enhance the distinctiveness of the landscapes/townscapes and heritage? Will it reduce the amount of derelict, underused land? Will it protect and enhance features of historical, archaeological and cultural value?	©	©	☺	All options could promote more innovative designs that could enhance the appearance of some landscapes and promote integration into the existing built form. However, designs will have to be considerate enough to avoid adverse impacts on historic landscapes from technology such as wind turbines.
ENV 6 To adapt to and mitigate against the impacts of climate change.	Will it reduce emissions of greenhouse gases by reducing energy consumption? Will it lead to an increased proportion of energy needs being met from renewable sources? Will it increase the capacity of the area to withstand the effects of climate change? How can it be ensured that the risks to lives, land and property are minimised?	©	☺	©	Options 1 and 3 would make significant improvements to the extent of climate change emissions from buildings, particularly option 3 as this would cover all developments. They would also ensure that new buildings account for climate change impacts.
	minimiseu:	☺	⊜	8	Options 2 and 4 would not be quite so progressive as options 1 and 3.
ENV 7 To avoid, reduce and manage flood risk.	Will it minimise the risk of flooding to people and property?  Can it incorporate new designs to adapt to possible flood risk?  Will it promote the use of sustainable drainage systems to reduce run off?	©	☺	☺	Options 1 and 3 would reduce run off as the Code for Sustainable Homes promotes an emphasis in installing sustainable drainage systems to decrease surface water run off and reduce flood risk.

		8	8	8	Options 2 and 4 are less effective in what they require.
ENV 8 To provide for sustainable use and sources of water supply.	Will it conserve groundwater resources? Will it minimise water consumption?	©	©	☺	Options 1 and 3 are able to encourage better water efficiency techniques in development as the Code for Sustainable Homes encourages measures to minimise water consumption, and promote greywater and recycled rainwater harvesting as means to increase water efficiency. Including sustainable drainage systems will improve the recharge of aquifers and maintain water groundwater supplies.
		8	⊗	⊜	Options 2 and 4 are less effective without the Code.
ENV 9 To make the best use of resources, including land and energy, and	Will it minimise consumption of materials and resources? Will it promote the use of land in sustainable locations that has been previously developed? Will it use land efficiently? Will it minimise the loss of "greenfield" land? Will it avoid the loss of good quality agricultural land and preserve	☺	☺	☺	Options 1 and 3 would incorporate higher standards into the designs of buildings to minimise the energy use and improve the amount of recycled materials incorporated into designs.
to minimise waste production.	soil resources? Will it minimise energy consumption and promote energy efficiency? Will it promote the use of renewable energy sources? Will it lead to less waste being produced? Will it lead to less waste being disposed, by promoting more recycling and composting? Will it increase waste recovery for other means eg. energy generation?	8	8	8	Without requiring higher standards of construction or design, options 2 and 4 are likely to be less effective in minimising the energy and raw materials required in development.
SOCIAL					
SOC 1 To reduce poverty and social exclusion.	Will it reduce poverty and social exclusion in those areas most affected?  Will it help to reduce deprivation levels?  Will it help meet the needs of residents most effectively?	©8	©8	©8	Options 1 and 3: Social exclusion would be reduced by improving access to facilities and public transport as a means to reduce the net impact of a developments' traffic emissions.
					Better energy efficiency helps to reduce the energy needed in homes and so reduce fuel poverty for residents. However, the homes that include higher

					standards and more efficient features could result in higher prices for homes.
		②	<b>⊗</b>	⊗	Options 2 and 4 are less effective in their application, and would not promote such improvements to the overall building stock.
To maintain and improve the health of the whole	Will it improve access to high quality health facilities? Will it encourage healthy lifestyles? How? Will it provide adequate health infrastructure for existing and new communities? Will the links between poorer health and deprivation be addressed?	©	☺	☺	Options 1 and 3 would result in 'healthier homes' being constructed. Features would include installing cycle tracks, thermal efficiency, natural air ventilation, more sunlight and a promote health improvements for residents.
population and promote healthy lifestyles.	Will links to the countryside be maintained and enhanced?	(3)	☺	⊗	Options 2 and 4 would not insist in such measures and may not improve the standard of the housing stock.
SOC 3 To improve education and skills.	Will it improve qualifications and skills for both young people and amongst the workforce? Will it help to retain key workers and provide more skilled workers from school leavers? Will adequate education infrastructure be provided for existing and	©	☺	☺	Options 1 and 3 would improve standards of design in the general built environment and so improve the learning environment in homes and in schools (under option 3).
	new communities? Will it promote lifelong learning and skills training? Will links between lower levels of education and deprivation be addressed?	8	8	8	Options 2 and 4 have less emphasis on improving the standards of the wider environment.
SOC 4 To provide the opportunity to live in a decent, suitable and affordable	Will it increase the range of types, sizes and affordability of housing for all social groups? Will it reduce the housing need and ensure that housing provision addresses the needs of all? Will it provide the most appropriate solutions to address the housing requirements needed for creating sustainable communities?	©⊗	©⊗	©⊗	Options 1 and 3: Reaching the Decent Homes Standard would be most likely by using the Code for Sustainable Homes, but it could make homes less affordable if prices increased as a result.
home.	Will it make best use of existing housing stock?	©Ø	©⊗	©\(\text{\tin}\text{\tetx{\text{\tetx{\text{\text{\texi}\text{\text{\texi}\text{\text{\text{\text{\ti}\}\tittt{\text{\texi}\text{\texi}\text{\text{\texi}\text{\tex{\texi}\text{\text{\texi}\text{\text{\texi}\text{\text{\tet	Options 2 and 4 could keep the price of new homes lower. However, the overall standard of development would be less.
SOC 5 To build community	Will it encourage engagement in community activities?  Will it contribute to the achievement of a mixed and balanced community?	©	©	©	Options 1 and 3 would promote natural surveillance as a crime reduction measure through designs, including open space provision, as such

identity, improve social welfare, and reduce crime and anti-social activity.	Will it reduce actual levels of crime? Will it reduce the fear of crime?				considerations should become integral to development.  Better standards of housing and the local environment would build pride in an area.
		8	⊗	8	Options 2 and 4 are less effective in this regard, and may not include these design features and safety reduction.
SOC 6 To offer more opportunities for rewarding and satisfying employment for all.	Will it reduce unemployment overall?  Will it help to improve earnings?	☺	(()	☺	Some employment opportunities may arise from the construction and installation of sustainable buildings and features.
SOC 7 To improve the quality of where people live.	Will it improve the quality of dwellings?  Will it improve the quality of local open space?	☺	©	☺	Options 1 and 3 can improve the standard of dwellings, which will lead to more satisfaction in neighbourhoods, and local open space would be included and would be integral within designs.
	Will it improve the satisfaction of people with their neighbourhoods?	☺	⊗	⊜	Options 2 and 4 would not have the same emphasis on including features to benefit the local community.
SOC 8 To improve accessibility to essential services, facilities and jobs.	Will it improve accessibility to key local services and facilities (including health, education, leisure, open space, the countryside and community facilities)? Will it improve accessibility for all whilst reducing dependency on the private car? Will it improve access to jobs and services for all?	N/a	N/a	N/a	N/a
ECONOMIC					
EC 1 To encourage sustained economic	Will it assist in strengthening the local economy?  Will it improve business development and enhance competitiveness?	©⊗	©®	©8	Options 1 and 3 would include an emphasis on designing a better housing stock (option 1) and better public buildings and business premises (especially option 3).

growth.	Will it reduce vulnerability to economic shocks?  Will it promote growth in key sectors?  Will it increase vitality & viability of town centres and improve economic diversity?				New businesses could even arise to cater for the new requirements for sustainable construction designs and materials. However, requiring higher standards could deter some investment in the area and incur higher costs for developers and homebuyers.
		80	80	80	Options 2 and 4 would not promote these developments in such a proactive manner, but that could be beneficial to new business growth.
EC 2 To encourage and accommodate both indigenous and inward investment.	Will it encourage indigenous businesses? Will it encourage inward investment? Will it make land and property available for business? Will it improve economic performance across the Greater Norwich area?	©8	©®	©®	Options 1 and 3: New businesses could emerge to cater for the requirements to use new designs and products as a result of adhering to the Code for Sustainable Homes. However, there could be more construction costs on new businesses.
investment.	Will it support / encourage rural diversification?  Will it support / encourage small city businesses?	80	80	80	Options 2 and 4 would be less effective in this regard, but may support more start-up businesses if there are fewer restrictions on compliance.
EC 3 To encourage efficient patterns of	Will it improve provision of local jobs? Will it improve accessibility to work, particularly by public transport, walking and cycling? Will it reduce journey times between key employment areas and key transport interchanges?	©	©	©	Options 1 and 3 could demonstrate improved access to public transport links and encourage walking and cycling as part of reducing the net carbon footprint of the wider development.
movement in support of economic growth.	Will it improve efficiency and sustainability of freight distribution? Will it support provision of key communications infrastructure?	8	⊗	8	Options 2 and 4 are less effective in this regard.
To improve the social and environmental performance of the economy.	Will it reduce the impact on the environment from businesses?  Will it reduce the impact on residents from businesses?  Will it attract new investment and skilled workers to the area?  Will it maintain existing business and employment provision?	©	☺	©	Option 3 could require higher standards of development, which means that businesses need to be more innovative in order to reach higher levels of sustainability. Achieving high BREEAM and Code for Sustainable Homes standards should result in a range of social and environmental benefits arising

Will it provide employment in the best locations to serve urban and				from business premises.
rural residents?	⊗	8	☺	Options 1, 2 and 4 do not require such high standards.

Overall Conclusions: What are the main effects of the policy option as identified through the sustainability appraisal process?

- POLICY OPTION: Question 29 Environment: Sustainable Building Methods
  - Option 1 All new developments should meet the national requirements for developing to standards within the Code for Sustainable Homes.
  - Option 2 Housing design should meet a lower requirement linked to the Code for Sustainable Homes.
  - Option 3 Other types of development (not just housing) should also meet standards to help achieve zerocarbon standards by 2016.
  - Option 4 Do not set standards for sustainable construction ion excess of the national regulations.

	Options 1 and 3 require higher standards from new development in terms of environmental performance and sustainability.
Environmental	Option 3 would have the most far-reaching effects as it would require higher standards across all sectors of development,
Impacts	particularly the employment and business development. Options 2 and 4 are less progressive and could mean that
	development could avoid making the most of their potential to minimise contributions to climate change, for example.
	Options 1 and 3 would increase accessibility, as the Code for Sustainable Homes would insist on demonstrable links being
Social Impacts	provided to public transport and easy access to local facilities, such as by walking and cycling. A higher standard of construction
	would increase the healthiness of homes and businesses, leading to healthier living and working environments. This could
	make some homes less affordable however. Options 2 and 4 are less restrictive but could keep house prices lower.
	Whilst improving the environmental performance of the economy, Options 1 and 3 could actually deter some investment if there
Economic Impacts	are higher standards to meet, although running costs should be cheaper in the long term and Option 3 would also provide a
	healthier and more productive working environment. Options 2 and 4 could ease the development of new businesses by having
	fewer restrictions for small companies to adhere to.

### **Overall summary:**

- Impacts
- Possible mitigation measures
- Recommended further research
- · Considering cumulative impacts

This is an important policy to consider alongside the strategic growth development options and the housing distribution options. It would complement environmental policy options that encourage the inclusion of biodiversity and open space features within new developments. Over the long-term, higher standards of building construction would improve the building stock.

The changing nature of the standards required will mean that short-term impacts are likely to be more certain and obvious than over the long-term, although the long-term improvement to standards of new development will possibly be more widespread and lasting.

The Code for Sustainable Homes standard Level 3, for example, requires that developments must result in a 25% decrease in dwelling emission rate below current Building Regulations requirements. There will also be similar reductions on water consumption, use of resources, surface water run off and household waste management will also become more efficient.

In general, option 2 would require some increased standards, for example in sustainable design and construction, more than would be the case under option 4, but these would not be quite as high as would be the case under options 1 and 3.

- Option Appraised: Question 30 Environment: Promotion of renewable energy.
  - Should all types of new development, including businesses and housing, be required to incorporate an element of sustainable energy, where feasible?
  - o Option Including a requirement to incorporate sustainable energy within new developments.

#### **SCORING SYSTEM PROPOSED:**

SA Objective	Decision making criteria	Short- Term 0-5 yrs	Medium Term 5-20 yrs	Long- Term 20+ yrs	Comments / Justification Inc. cumulative effects
<b>ENVIRONMEI</b>	NTAL				
ENV 1 To reduce the effect of traffic on the environment.	Will it reduce traffic volumes, ease the flow of traffic and reduce congestion? Will it increase the proportion of journeys using modes other than the car? Will it reduce the effect of HGV traffic on people and the environment? Will it encourage more benign modes of travel? Will new development be located such to reduce the need for people to travel?	N/a	N/a	N/a	N/a
ENV 2 To improve the quality of the water environment	Will it improve the quality of the water environment (streams, rivers, lakes etc)?  Will it help to support wetland habitats and species?	N/a	N/a	N/a	N/a
ENV 3 To improve environmental amenity, including air quality.	Will it improve air quality?  Will it reduce the emission of atmospheric pollutants?	8	8	8	Local production and processing of bio-fuel could create some impacts on the local environment – freight transport could increase local noise and air pollution and it would need careful design to minimise the effects of incineration from combined heat and power sources, for example. Other renewable energy

					schemes would not affect air quality though.
ENV 4 To maintain and enhance biodiversity and geodiversity.	Will it conserve / enhance natural or semi-natural habitats, and promote habitat connections? Is it likely to have a significant effect on sites designated for international, national or local importance? Will it conserve / enhance species diversity, and in particular avoid harm to protected species?	8	©⊗	☺	Monoculture of bio-fuel crops could reduce local biodiversity in the short-term, but reducing the rate of climate change by minimising carbon emissions could be more beneficial in the long-term in building up capacity to resist climate change. Other forms of renewable energy would have less intrusive impacts.
ENV 5 To maintain and enhance the quality of landscapes, townscapes and the historic environment.	Will it protect and enhance the quality of landscapes, townscapes and countryside character, including the character of the Broads and its setting where relevant?  Will it maintain and enhance the distinctiveness of the landscapes/townscapes and heritage?  Will it reduce the amount of derelict, underused land?  Will it protect and enhance features of historical, archaeological and cultural value?	?	?	?	The extent of these effects is largely location-specific and quite subjective. Some changes to the landscape would be inevitable, such as by growing willow crops in the countryside or using wind turbines. Household or domestic renewable energy appliances could also gradually change the appearance of townscapes and the urban area. As designs evolve they could be integrated into the built form and become more accepted or less intrusive. Ground Source Heat Pumps are one example of where the visual effects of a renewable energy scheme can be minimised. Some types of renewable energy development may be less suitable than others.
ENV 6 To adapt to and mitigate against the impacts of climate change.	Will it reduce emissions of greenhouse gases by reducing energy consumption? Will it lead to an increased proportion of energy needs being met from renewable sources? Will it increase the capacity of the area to withstand the effects of climate change? How can it be ensured that the risks to lives, land and property are minimised?	٥	©	☺	Renewable energy schemes that require use of sustainable energy within all new developments will help to significantly reduce the local area's contributions to climate change by reducing carbon emissions.
ENV 7 To avoid, reduce and manage flood risk.	Will it minimise the risk of flooding to people and property?  Can it incorporate new designs to adapt to possible flood risk?  Will it promote the use of sustainable drainage systems to reduce run off?	N/a	N/a	☺	Over the long-term, the extent of flood risk would be minimised if there are fewer contributions to climate change brought about by increasing the use of sustainable energy.
ENV 8 To provide for sustainable use	Will it conserve groundwater resources? Will it minimise water consumption?	N/a	N/a	N/a	N/a

and sources of water supply.  ENV 9  To make the best use of resources, including land and energy, and to minimise waste production.	Will it minimise consumption of materials and resources? Will it promote the use of land in sustainable locations that has been previously developed? Will it use land efficiently? Will it minimise the loss of "greenfield" land? Will it avoid the loss of good quality agricultural land and preserve soil resources? Will it minimise energy consumption and promote energy efficiency? Will it promote the use of renewable energy sources? Will it lead to less waste being produced? Will it lead to less waste being disposed, by promoting more recycling and composting?	©	©	©	This can minimise energy and fuel use by promoting the use of renewable energy as an integral part of developments. Combined Heat and Power schemes are one example of where recycling can also be increased as part of waste management to provide more resources for CHP stations.
SOCIAL	generation?				
SOC 1 To reduce poverty and social exclusion	Will it reduce poverty and social exclusion in those areas most affected? Will it help to reduce deprivation levels? Will it help meet the needs of residents most effectively?	?	☺	☺	In the medium and long-term, if self-contained and local energy generation could be implemented it could enable cheaper fuel bills for local people.
To maintain and improve the health of the whole population and promote healthy lifestyles.	Will it improve access to high quality health facilities? Will it encourage healthy lifestyles? How? Will it provide adequate health infrastructure for existing and new communities? Will the links between poorer health and deprivation be addressed? Will links to the countryside be maintained and enhanced?	©	©	©	Renewable energy is generally cleaner than burning fossil fuels, so it would serve to promote healthier lifestyles and reduce the likelihood of air pollution occurrences.
SOC 3 To improve education and skills.	Will it improve qualifications and skills for both young people and amongst the workforce? Will it help to retain key workers and provide more skilled workers from school leavers? Will adequate education infrastructure be provided for existing and new communities? Will it promote lifelong learning and skills training?	©	☺	©	Renewable energy generation projects could be used as an educational resource. If there were cheaper bills for school fuels it could provide more money for investment in local education.

	Will links between lower levels of education and deprivation be addressed?				
SOC 4 To provide the opportunity to live in a decent, suitable and affordable home.	Will it increase the range of types, sizes and affordability of housing for all social groups? Will it reduce the housing need and ensure that housing provision addresses the needs of all? Will it provide the most appropriate solutions to address the housing requirements needed for creating sustainable communities? Will it make best use of existing housing stock?	N/a	N/a	©	In general, there are minimal effects, but over the long term homes could be cheaper to run if their fuel bills can be reduced.
SOC 5 To build community identity, improve social welfare, and reduce crime and anti-social activity.	Will it encourage engagement in community activities?  Will it contribute to the achievement of a mixed and balanced community?  Will it reduce actual levels of crime?  Will it reduce the fear of crime?	☺	٥	☺	Community-owned renewable projects and Combined Heat and Power can create interest in the process and promote community identity. Community 'ownership' of the energy issue would increase as an area becomes 'greener'.
SOC 6 To offer more opportunities for rewarding and satisfying employment for all.	Will it reduce unemployment overall?  Will it help to improve earnings?	☺	©	©	Employment generation is possible as new sectors develop to provide materials and products for use locally. Increasing local support for renewable energy generation could help to support local businesses as well.
SOC 7 To improve the quality of where people live.	Will it improve the quality of dwellings? Will it improve the quality of local open space? Will it improve the satisfaction of people with their neighbourhoods?	©	©	©	The area would benefit from being home to more environmentally-friendly buildings and innovative architecture, although there would be few direct influences.
SOC 8 To improve accessibility to essential services, facilities & jobs.	Will it improve accessibility to key local services and facilities (including health, education, leisure, open space, the countryside and community facilities)? Will it improve accessibility for all whilst reducing dependency on the private car? Will it improve access to jobs and services for all?	N/a	N/a	N/a	N/a

ECONOMIC					
EC 1 To encourage sustained economic growth.	Will it assist in strengthening the local economy?  Will it improve business development and enhance competitiveness?  Will it reduce vulnerability to economic shocks?  Will it promote growth in key sectors?  Will it increase vitality & viability of town centres and improve economic diversity?	☺	☺	☺	The renewable energy sector would be developed, as would parts of the construction industry. Overall there would be more jobs and business investment created in new sectors. With less reliance on finite resources for energy, there would also be improved fuel security.  However, ambitious on-site renewable energy requirements may be a disincentive for new economic investment and cause disproportionate impacts on businesses with higher energy use and smaller financial capacity to withstand new development standards.
EC 2 To encourage and accommodate both indigenous and inward investment.	Will it encourage indigenous businesses? Will it encourage inward investment? Will it make land and property available for business? Will it improve economic performance across the Greater Norwich area? Will it support / encourage rural diversification? Will it support / encourage small city businesses?	☺	☺	©	See EC1.
EC 3 To encourage efficient patterns of movement in support of economic growth.	Will it improve provision of local jobs? Will it improve accessibility to work, particularly by public transport, walking and cycling? Will it reduce journey times between key employment areas and key transport interchanges? Will it improve efficiency and sustainability of freight distribution? Will it support provision of key communications infrastructure?	٥	©	©	Using localised fuels and energy generated located within a development could reduce the amount of freight and energy used in distribution, of petrol for example.
EC 4 To improve the social and environmental performance of the economy.	Will it reduce the impact on the environment from businesses? Will it reduce the impact on residents from businesses? Will it attract new investment and skilled workers to the area? Will it maintain existing business and employment provision? Will it provide employment in the best locations to serve urban and rural residents?	٥	©	©	There would be improved environmental performance from using cleaner fuels and energy. Community ownership of the renewable energy issue would increase if an area could experience the benefits of reduced emissions or local energy generation.

Overall Conclusions: What are the main effects of the policy option as identified through the sustainability appraisal process?

- POLICY OPTION: Question 30 Environment: Promotion of renewable energy.
  - Should all types of new development, including businesses and housing, be required to incorporate an element of sustainable energy, where feasible?
  - Option Including a requirement to incorporate sustainable energy within new developments.

	Promoting renewable energy by requiring an increase in contributions from new developments would encourage a significant
Environmental	reduction in carbon emissions in the area. Incorporating sustainable energy through renewable energy generation could also
Impacts	lead to the area becoming an exemplar in sustainable construction. Contaminants from burning fossil fuels could be reduced considerably, and the reduced contributions to climate change would help to minimise the rate of change to habitats and biodiversity and to slow the risks from extreme weather events, flooding and sea level rise. There would be some local impacts from combustion of bio-fuels.
	Using cleaner fuels would promote healthier lifestyles and reduce the level of contaminants in the local atmosphere. Localised
Social Impacts	or community-based power generation would also help to promote the 'community ownership' of the renewable energy and energy efficiency issue.
Economic Impacts	The environmental performance of the economy would be improved, particularly if this required renewable energy generation from business as well as residential development. There could also be some economic diversification through developing the renewable energy sector and producing appliances for the construction industry to incorporate. However, ambitious on-site renewable energy requirements may be a disincentive for new economic investment and cause disproportionate impacts on
	businesses with higher energy use and smaller financial capacity to withstand new development standards.

### **Overall summary:**

- Impacts
- Possible mitigation measures
- Recommended further research
- Considering cumulative impacts

This option presents a significant opportunity to help the area make a considerable reduction in its emissions of greenhouse gasses and contributions to climate change. If the policies were used in tandem with sustainable construction techniques and local employment promotion it could help new developments to encourage a step-change in the way communities view energy conservation. As part of a strategic growth development strategy, localised energy generation could help provide sustainable energy solutions. Further development of the bio-fuel industry would be needed before the benefits could become more widespread, such as in emissions of transport, although this is an area over which planning can have limited impact. If cleaner traffic emissions did encourage people to use their cars more, this option would have to be matched by an option to reduce the influence and priority given to private cars.

- Option Appraised: Question 31 Environment: Requiring renewable energy generation from all new developments.
  - Would a requirement for each new development to meet at least 20% of energy requirements from renewable sources be a reasonable target?
  - o Option Including a requirement for at least 20% renewable energy generation within new developments.

### **SCORING SYSTEM PROPOSED:**

SA Objective	Decision making criteria	Short- Term 0-5 yrs	Medium Term 5-20 yrs	Long- Term 20+ yrs	Comments / Justification Inc. cumulative effects
<b>ENVIRONMEI</b>	NTAL				
ENV 1 To reduce the effect of traffic on the environment.	Will it reduce traffic volumes, ease the flow of traffic and reduce congestion? Will it increase the proportion of journeys using modes other than the car? Will it reduce the effect of HGV traffic on people and the environment? Will it encourage more benign modes of travel? Will new development be located such to reduce the need for people to travel?	N/a	N/a	N/a	N/a
ENV 2 To improve the quality of the water environment	Will it improve the quality of the water environment (streams, rivers, lakes etc)?  Will it help to support wetland habitats and species?	N/a	N/a	N/a	N/a
ENV 3 To improve environmental amenity, including air quality.	Will it improve air quality?  Will it reduce the emission of atmospheric pollutants?	8	8	8	Some local renewable energy generation could create more local noise and disturbance, such as from combined heat and power stations, and would need careful designs to minimise the effects of incineration, for example. Burning bio-fuels, for example, can result in impacts on the local

ENV 4 To maintain and enhance biodiversity and geodiversity.	Will it conserve / enhance natural or semi-natural habitats, and promote habitat connections? Is it likely to have a significant effect on sites designated for international, national or local importance? Will it conserve / enhance species diversity, and in particular avoid harm to protected species?	83	80	©	environment, such as from increased local freight transport movements.  However, it could reduce local pollution from carbonbased fuel energy sources.  Monoculture of bio-fuel crops could reduce the local biodiversity, in the short-term at least, but reducing the rate of climate change by minimising carbon emissions could be more beneficial in the long-term in building up capacity to resist climate change.
ENV 5 To maintain and enhance the quality of landscapes, townscapes and the historic environment.	Will it protect and enhance the quality of landscapes, townscapes and countryside character, including the character of the Broads and its setting where relevant?  Will it maintain and enhance the distinctiveness of the landscapes/townscapes and heritage?  Will it reduce the amount of derelict, underused land?  Will it protect and enhance features of historical, archaeological and cultural value?	?	?	?	The extent of these effects is largely location-specific and quite subjective. Changes to the landscape and townscape could be inevitable, such as by growing willow crops in the countryside or using wind turbines. Household or domestic renewable energy appliances could also gradually change the appearance of townscapes and the urban area. As designs evolve they could be integrated into the built form and become more accepted or less intrusive. Ground Source Heat Pumps are one example of where the visual effects of a renewable energy scheme can be minimised.
ENV 6 To adapt to and mitigate against the impacts of climate change.	Will it reduce emissions of greenhouse gases by reducing energy consumption? Will it lead to an increased proportion of energy needs being met from renewable sources? Will it increase the capacity of the area to withstand the effects of climate change? How can it be ensured that the risks to lives, land and property are minimised?	©	©	©	Renewable energy generation schemes within all new developments will help to significantly reduce the local area's contributions to climate change by reducing carbon emissions.
ENV 7 To avoid, reduce and manage flood risk.	Will it minimise the risk of flooding to people and property?  Can it incorporate new designs to adapt to possible flood risk?  Will it promote the use of sustainable drainage systems to reduce run off?	N/a	N/a	©	Over the long-term, the extent of flood risk would be minimised if there are fewer contributions to climate change brought about by increasing the use of sustainable energy.
ENV 8	Will it conserve groundwater resources?				

To provide for sustainable use and sources of water supply.	Will it minimise water consumption?	N/a	N/a	N/a	N/a
ENV 9 To make the best use of resources, including land and energy, and to minimise waste production.	Will it minimise consumption of materials and resources? Will it promote the use of land in sustainable locations that has been previously developed? Will it use land efficiently? Will it minimise the loss of "greenfield" land? Will it avoid the loss of good quality agricultural land and preserve soil resources? Will it minimise energy consumption and promote energy efficiency? Will it promote the use of renewable energy sources? Will it lead to less waste being produced? Will it lead to less waste being disposed, by promoting more recycling and composting? Will it increase waste recovery for other means eg. energy generation?	©	©	©	This can minimise energy and fuel use by promoting the use of renewable energy as an integral part of developments. Combined Heat and Power schemes are one example of where recycling can also be increased as part of waste management to provide more resources for CHP stations.  Land may also be used more efficiently if there is more emphasis on on-site renewable energy generation rather than requiring large allocated wind-turbine farms.
SOCIAL					
SOC 1 To reduce poverty and social exclusion.	Will it reduce poverty and social exclusion in those areas most affected? Will it help to reduce deprivation levels? Will it help meet the needs of residents most effectively?	?	☺	☺	In the medium and long-term, if self-contained and local energy generation could be implemented it could enable cheaper fuel bills for local people.
SOC 2 To maintain and improve the health of the whole population and promote healthy lifestyles.	Will it improve access to high quality health facilities? Will it encourage healthy lifestyles? How? Will it provide adequate health infrastructure for existing and new communities? Will the links between poorer health and deprivation be addressed? Will links to the countryside be maintained and enhanced?	©	٥	☺	Renewable energy is generally cleaner than burning fossil fuels, so it would generally serve to promote healthier lifestyles and reduce the likelihood of air pollution occurrences. There may be some local air quality impacts associated with combustion of biofuels, however, but it is important to remember that the plan will only have limited ability to influence the uptake and use of biofuels in transport.
SOC 3 To improve education and skills.	Will it improve qualifications and skills for both young people and amongst the workforce? Will it help to retain key workers and provide more skilled workers from school leavers?	©	☺	☺	Renewable energy generation projects could be used as an educational resource. If there were cheaper bills for school fuels it could provide more money for investment in local education.

SOC 4	Will adequate education infrastructure be provided for existing and new communities? Will it promote lifelong learning and skills training? Will links between lower levels of education and deprivation be addressed? Will it increase the range of types, sizes and affordability of housing for all social groups?				In general, there are minimal effects, but over the
To provide the opportunity to live in a decent, suitable and affordable home.	Will it reduce the housing need and ensure that housing provision addresses the needs of all? Will it provide the most appropriate solutions to address the housing requirements needed for creating sustainable communities? Will it make best use of existing housing stock?	N/a	N/a	©	long term homes could be cheaper to run if their fuel bills can be reduced.
SOC 5 To build community identity, improve social welfare, and reduce crime and anti-social activity.	Will it encourage engagement in community activities?  Will it contribute to the achievement of a mixed and balanced community?  Will it reduce actual levels of crime?  Will it reduce the fear of crime?	©	©	☺	Community-owned renewable projects and Combined Heat and Power can create interest in the process and promote community identity.  Community 'ownership' of the energy issue would increase as an area becomes 'greener'.
SOC 6 To offer more opportunities for rewarding and satisfying employment for all.	Will it reduce unemployment overall?  Will it help to improve earnings?	٥	☺	©	Employment generation is possible as new sectors develop to provide materials and products for use locally. Increasing local support for renewable energy generation could help to support local businesses as well.
SOC 7 To improve the quality of where people live.	Will it improve the quality of dwellings? Will it improve the quality of local open space? Will it improve the satisfaction of people with their neighbourhoods?	☺	☺	☺	The area would benefit from being home to more environmentally-friendly buildings and innovative architecture, although there would be few direct influences.
SOC 8 To improve accessibility to essential	Will it improve accessibility to key local services and facilities (including health, education, leisure, open space, the countryside and community facilities)? Will it improve accessibility for all whilst reducing dependency on	N/a	N/a	N/a	N/a

services,	the private car? Will it improve access to jobs and services for all?				
facilities & jobs.  ECONOMIC	will it improve access to jobs and services for all:				
ECONOMIC  EC 1 To encourage sustained economic growth.	Will it assist in strengthening the local economy?  Will it improve business development and enhance competitiveness?  Will it reduce vulnerability to economic shocks?  Will it promote growth in key sectors?  Will it increase vitality & viability of town centres and improve economic diversity?	©	©	©	The renewable energy sector would be developed, as would parts of the construction industry. Overall there would be more jobs and business investment created in new sectors. With less reliance on finite resources for energy, there would also be improved fuel security.  However, ambitious on-site renewable energy requirements have the potential to act as a disincentive for investment and could impact on some types of development disproportionately, such as those with high energy usage and smaller financial support.
EC 2 To encourage and accommodate both indigenous and inward investment.	Will it encourage indigenous businesses? Will it encourage inward investment? Will it make land and property available for business? Will it improve economic performance across the Greater Norwich area? Will it support / encourage rural diversification? Will it support / encourage small city businesses?	©	☺	©	See EC1.
EC 3 To encourage efficient patterns of movement in support of economic growth.	Will it improve provision of local jobs? Will it improve accessibility to work, particularly by public transport, walking and cycling? Will it reduce journey times between key employment areas and key transport interchanges? Will it improve efficiency and sustainability of freight distribution? Will it support provision of key communications infrastructure?	©	©	©	Using localised fuels and energy generated located within a development could reduce the amount of freight and energy used in distribution, of petrol for example.
EC 4 To improve the social and environmental	Will it reduce the impact on the environment from businesses? Will it reduce the impact on residents from businesses? Will it attract new investment and skilled workers to the area? Will it maintain existing business and employment provision?	☺	☺	☺	There would be improved environmental performance from using cleaner fuels and energy. Community ownership of the renewable energy issue could increase if an area could experience the

performance of the economy.	Will it provide employment in the best locations to serve urban and rural residents?	improvements in reduced emissions or local renewable energy generation.					
Overall Conclusions: What are the main effects of the policy option as identified through the sustainability appraisal process?							
- POLICY OPTION: Question 31 – Environment: Requiring renewable energy generation from all new developments.							
<ul> <li>POLICY OPTION: Question 31 – Environment: Requiring renewable energy generation from all new developments.</li> <li>Would a requirement for each new development to meet at least 20% of energy requirements from renewable sources be a reasonable target?</li> </ul>							

	Option –	including a requirement for at least 20 % renewable energy generation within new developments.
		Promoting renewable energy by requiring an increase in contributions from new developments would encourage a significant
	Environmental	reduction in carbon emissions in the area. Providing at least 20% of energy through renewable energy generation could also
	Impacts	lead to the area becoming an exemplar in sustainable construction. Contaminants from burning fossil fuels could be reduced considerably, and the reduced contributions to climate change would help to minimise the rate of change to habitats and biodiversity and to slow the risks from extreme weather events, flooding and sea level rise. There would be some local impacts from combustion of bio-fuels.
ŀ		
	Social Impacts	Using cleaner fuels would promote healthier lifestyles and reduce the level of contaminants in the local atmosphere. Localised or community-based power generation would also help to promote the 'community ownership' of the renewable energy and

Ontion – Including a requirement for at least 20% renewable energy generation within new developments

The environmental performance of the economy would be improved, particularly if this required renewable energy generation from business as well as residential development. There could also be some economic diversification through developing the renewable energy sector and producing appliances for the construction industry to incorporate. However, ambitious on-site renewable energy requirements may be a disincentive for new economic investment and cause disproportionate impacts on businesses with higher energy use and smaller financial capacity to withstand new development standards

## **Overall summary:**

**Economic Impacts** 

- Impacts
- Possible mitigation measures
- Recommended further research
- Considering cumulative impacts

This option presents a significant opportunity to help the area make a considerable reduction in its emissions of greenhouse gasses and contributions to climate change. If the policies were used in tandem with sustainable construction techniques and local employment promotion it could help new developments to encourage a step-change in the way communities view energy conservation. As part of a strategic growth development strategy, localised energy generation could help provide sustainable energy solutions. Further development of the bio-fuel industry would be needed before the benefits could become more widespread, such as in emissions of transport. If cleaner traffic emissions did encourage people to use their cars more, this option would have to be matched an option to reduce the influence and priority given to private cars.

**Option Appraised: Question 32 – Transport – Potential Long Stratton Bypass Development:** 

- Option A Major mixed use growth at Long Stratton could be promoted as a way of securing strategic improvements to the A140;
- Option B The Joint Core Strategy will not promote growth in Long Stratton to improve the A140 at Long Stratton.

#### **SCORING SYSTEM PROPOSED:**

SA Objective	Decision making criteria	Short- Term 0-5 yrs	Medium Term 5-20 yrs	Long- Term 20+ yrs	Comments / Justification Inc. cumulative effects				
<b>ENVIRONMEN</b>	ENVIRONMENTAL								
ENV 1 To reduce the effect of traffic on the environment.	Will it reduce traffic volumes, ease the flow of traffic and reduce congestion?  Will it increase the proportion of journeys using modes other than the car?  Will it reduce the effect of HGV traffic on people and the environment?  Will it encourage more benign modes of travel?	☺	☺	?	Option A: Short-term benefits of diverting traffic away from the settlement could be reduced in the long-term by a general increase in traffic from both growth and traffic making use of the improved road links between Norwich and the south. The extent of future negative effects will, to a degree, be dependent on the extent of growth provided.				
	Will new development be located such to reduce the need for people to travel?	☺	☺	8	Option B: Without a bypass on the A140, congestion in Long Stratton would continue to increase with adverse environmental impacts of congestion.  It is also worth considering that significant growth may not automatically lead to the development of a bypass.				
ENV 2 To improve the	Will it improve the quality of the water environment (streams, rivers, lakes etc)?	?	?	?	Option A: The effects of this policy are dependent on the location and scale of growth of growth.				

quality of the					
water	Will it help to support wetland habitats and species?				Option B: N/a
environment ENV 3	Will it improve air quality?				Ontion A.
To improve	will it improve all quality?	©		?	Option A: As with ENV 1, the extent of effects will depend on
environmental	Will it reduce the emission of atmospheric pollutants?	$\odot$	☺	?	the extent of the growth provided.
amenity,					
including air quality.		$\odot$	$\approx$	$\otimes$	Option B: Without a bypass on the A140 traffic congestion in
quality.		0			Long Stratton would continue to increase with
					adverse environmental impacts of congestion. In
					general, more traffic will create more noise and
ENV 4	Will it conserve / enhance natural or semi-natural habitats, and				reduced local air quality.  Option A:
To maintain and	promote habitat connections?	$\otimes$	$\otimes$	$\otimes$	The effects are location-specific but overall a new
enhance	Is it likely to have a significant effect on sites designated for	J			road and associated growth would put pressure on
biodiversity and geodiversity.	international, national or local importance?				the natural environment.
goodivoloky	Will it conserve / enhance species diversity, and in particular avoid				Option B:
	harm to protected species?	$\odot$	☺	☺	Existing natural environments would be preserved in
					the Long Stratton area if t he growth and bypass were not introduced.
ENV 5	Will it protect and enhance the quality of landscapes, townscapes				Option A:
To maintain and	and countryside character, including the character of the Broads and its setting where relevant?	$\odot \odot$	◎⊗	◎⊗	Providing major growth and a new road could have
enhance the quality of					adverse environmental impacts on the built environment and local setting, but the removal of
landscapes,	Will it maintain and enhance the distinctiveness of the landscapes/townscapes and heritage?				traffic would enhance the village centre and
townscapes and					townscape.
the historic environment.	Will it reduce the amount of derelict, underused land?	© (S)	© (S)	© (S	Option B:
	Will it protect and enhance features of historical, archaeological and	$\odot \odot$			Increased traffic would adversely affect the historic
	cultural value?				setting and village centre, but major growth and a
					road could have an impact on the townscape and the setting.
ENV 6	Will it reduce emissions of greenhouse gases by reducing energy				With all the large scale growth, climate change
	consumption?				

To adapt to and mitigate against the impacts of climate change.	Will it lead to an increased proportion of energy needs being met from renewable sources?  Will it increase the capacity of the area to withstand the effects of climate change?  How can it be ensured that the risks to lives, land and property are minimised?	☺	☺	©	mitigation and adaptation effects will only be positive if ambitious and innovative sustainable design and construction measures are implemented, for example.  Option A: Reducing traffic congestion passing through the town could reduce traffic emissions and improved
					traffic flows could encourage people to use the bus. Major growth could be located close to, or contain integral sites for, facilities to help reduce the need to travel to services.
		⊗	☺	8	Option B: Not providing for growth would not provide a road, which would increase congestion and increase traffic emissions. This option would result in more CO2 emissions, per capita, if the bypass and new development could not ease congestion and help support a new dedicated bus service to reduce car dependency.
ENV 7 To avoid,	Will it minimise the risk of flooding to people and property?  Can it incorporate new designs to adapt to possible flood risk?	N	N	N	Option A: Although largely location-specific, any flood risk
reduce and manage flood risk.	Will it promote the use of sustainable drainage systems to reduce run off?				arising from increased surface water run-off could be avoided by mitigation measures in the designs, such as providing sustainable drainage systems integrated into the design of major new developments.
		N/a	N/a	N/a	Option B: N/a
ENV 8 To provide for sustainable use	Will it conserve groundwater resources? Will it minimise water consumption?	N	N	N	Option A: Major growth in Long Stratton could impact on local water supplies and create localised pollution of
and sources of water supply.					groundwater, but this is likely to be insignificant and could be mitigated by using integrated treatment

					methods, such as SuDS.
		N/a	N/a	N/a	Option B: N/a
ENV 9 To make the best use of resources, including land and energy, and to minimise waste production.	Will it minimise consumption of materials and resources? Will it promote the use of land in sustainable locations that has been previously developed? Will it use land efficiently? Will it minimise the loss of "greenfield" land? Will it avoid the loss of good quality agricultural land and preserve soil resources? Will it minimise energy consumption and promote energy efficiency? Will it promote the use of renewable energy sources? Will it lead to less waste being produced? Will it lead to less waste being disposed, by promoting more recycling and composting? Will it increase waste recovery for other means eg. energy generation?	© ©	©⊝ N	©Ø	Option A: Major growth would require permanent loss and development of Greenfield sites in and around the village, and it would increase local waste production in the short-term. Major growth proposals could include integrated energy generation schemes for long-term benefit, however.  Option B: No growth would not require land in Long Stratton but it could prevent the possible use of community or small-scale energy generation schemes.
SOCIAL					
SOC 1 To reduce poverty and social exclusion.	Will it reduce poverty and social exclusion in those areas most affected?  Will it help to reduce deprivation levels?  Will it help meet the needs of residents most effectively?	☺	☺	?	Option A: Major growth and an improved road would go hand- in-hand with provision of local services, reducing the need for the local community to go elsewhere for local facilities and reducing exclusion and social isolation. There may also be some more local jobs created through investment in Long Stratton.
		☺	©	⊗	Option B: Without growth or improved access the existing community would find it harder to access the workplace and facilities and there would be less incentive for new business to invest in Long Stratton, which would reduce the jobs created.
SOC 2 To maintain and improve the	Will it improve access to high quality health facilities?  Will it encourage healthy lifestyles? How?	©	©	©	Option A: Major growth and an improved road would go hand- in-hand with new health services, and would

health of the whole population and promote healthy lifestyles.	Will it provide adequate health infrastructure for existing and new communities?  Will the links between poorer health and deprivation be addressed?				improve the health by reducing congestion and improving road safety in the village. There would also be more access to the countryside for new residents.
	Will links to the countryside be maintained and enhanced?	8	☺	⊗	Option B: The effects are uncertain, but an increase in traffic and congestion could have negative health effects and dissuade walking and cycling access to facilities.
SOC 3 To improve education and skills.	Will it improve qualifications and skills for both young people and amongst the workforce?  Will it help to retain key workers and provide more skilled workers from school leavers?  Will adequate education infrastructure be provided for existing and new communities?	☺	☺	☺	Option A: Major growth could improve the local educational facilities and community education services may be provided. It would also help to retain skilled workers if there are more opportunities to access new local housing and jobs.
	Will links between lower levels of education and deprivation be addressed?	?	8	⊗	Option B: Lack of growth and increased traffic congestion could encourage key workers to move out of the area for work.
To provide the opportunity to live in a decent, suitable and	Will it increase the range of types, sizes and affordability of housing for all social groups?  Will it reduce the housing need and ensure that housing provision addresses the needs of all?	☺	☺	☺	Option A: Major growth would provide new housing that would improve the standard of the local housing market and reduce the local housing need, particularly if this included some affordable housing.
affordable home.	Will it provide the most appropriate solutions to address the housing requirements needed for creating sustainable communities?  Will it make best use of existing housing stock?	⊗	☺	⊜	Option B: Without growth, local housing availability would be constrained and would include less affordable housing.
SOC 5 To build community identity,	Will it encourage engagement in community activities?  Will it contribute to the achievement of a mixed and balanced community?	☺	☺	☺	Option A: Uncertain effects, but major growth could provide the opportunity for more local community facilities, crime-reduction measures in designs and improved

improve social welfare, and reduce crime and anti-social activity.	Will it reduce actual levels of crime?  Will it reduce the fear of crime?	?	?	?	local facilities, but there are not guarantees of social benefits.  Option B: Uncertain effects, but there could be fewer opportunities for community integration.
SOC 6 To offer more opportunities for rewarding and satisfying employment for	Will it reduce unemployment overall? Will it help to improve earnings?	©	☺	☺	Option A: Major growth could help local businesses and services to expand and offer more jobs. Improved access could make Long Stratton more attractive for economic investment.
all.		8	8	8	Option B: Without the bypass, the increased traffic congestion could make Long Stratton less attractive for economic investment.
SOC 7 To improve the quality of where people live.	Will it improve the quality of dwellings?  Will it improve the quality of local open space?  Will it improve the satisfaction of people with their neighbourhoods?	©	☺	☺	Option A: Major growth could include strategic open space and recreation facilities, and improved access to the countryside. Less traffic could improve local environmental amenity.
		⊗	⊜	8	Option B: Congestion and a lack of open space provision could lead people to be dissatisfied with their neighbourhoods.
SOC 8 To improve accessibility to essential services, facilities and	Will it improve accessibility to key local services and facilities (including health, education, leisure, open space, the countryside and community facilities)?  Will it improve accessibility for all whilst reducing dependency on the private car?	٥	☺	☺	Option A: A new bypass would help people and residents to access the local services, village centre, and employment areas. It would also improve the viability of public transport and ease access into the village.
jobs.	Will it improve access to jobs and services for all?	<b>©</b>	⊜	8	Option B: Without growth there would be increased

					congestion, less viability for public transport and less access to jobs.
ECONOMIC					
EC 1 To encourage sustained economic growth.	Will it assist in strengthening the local economy?  Will it improve business development and enhance competitiveness?  Will it reduce vulnerability to economic shocks?  Will it promote growth in key sectors?  Will it increase vitality & viability of town centres and improve economic diversity?	☺	☺	©	Option A: Major growth could help local businesses and services to expand and offer more jobs, and improved access to them. Improved road access and public transport reliability could make Long Stratton more attractive for economic investment as an employment centre. There could be improvements to the economic base of the wider sub-region.
		©	8	8	Option B: Without the bypass, the increased traffic congestion could make Long Stratton less attractive for economic investment.
To encourage and accommodate	Will it encourage indigenous businesses? Will it encourage inward investment? Will it make land and property available for business? Will it improve economic performance across the Greater Norwich area?	©	©	©	Option A: See EC1.
both indigenous and inward investment.	Will it support / encourage rural diversification? Will it support / encourage small city businesses?	8	☺	⊗	Option B: See EC1.
EC 3 To encourage efficient patterns of movement in support of	Will it improve provision of local jobs?  Will it improve accessibility to work, particularly by public transport, walking and cycling?  Will it reduce journey times between key employment areas and key transport interchanges?	٥	٥	©	Option A: Improved access and major growth close to local employment facilities would help people to access the local employment opportunities and possibly bring more custom to existing businesses, possibly helping them to expand.
economic growth.	Will it improve efficiency and sustainability of freight distribution?  Will it support provision of key communications infrastructure?	8	8	8	Option B: Congestion would deter investment and discourage people from using public transport if it remained without a dedicated, frequent service.

EC 4	Will it reduce the impact on the environment from businesses?				Option A:
To improve the social and environmental performance of the economy.	Will it reduce the impact on residents from businesses?  Will it attract new investment and skilled workers to the area?  Will it maintain existing business and employment provision?	☺	☺	☺	The local economy could improve its social and environment performance from improved accessibility, use of some brownfield sites and reduced congestion. More skilled workers could be attracted to the area and the employment base could expand.
	Will it provide employment in the best locations to serve urban and rural residents?	8	⊗	⊗	Option B: The economy would add to congestion through freight movements in the village, and the status quo would not provide incentives to bring forward new employment development opportunities. There would be little additional social benefit as there would be fewer jobs and services to help the surrounding rural area.

Overall Conclusions: What are the main effects of the policy option as identified through the sustainability appraisal process?

POLICY OPTION: Question 32 – Transport – Potential Long Stratton Bypass Development:

• Option A – Major mixed use growth at Long Stratton could be promoted as a way of securing strategic improvements to the A140;

• Option B – The Joint Core Strategy will not promote growth in Long Stratton to improve the A140 at Long Stratton.

Environmental Impacts

Main benefits arise from the removal of traffic through Long Stratton and the subsequent improvements in air quality etc.

Disadvantages can arise from the impact of new housing growth in Greenfield sites.

There would be improved access to facilities with a large development in the village, and more jobs could arise from new developments. Public transport would improve in reliability and there would be more incentive to walk and cycle to local facilities. Significant development could bring school, health and recreation opportunities.

## **Economic Impacts**

A bypass would provide improvements in the economic viability of the village, helping to promote new jobs growth as well as better connectivity to existing workplaces. Local entrepreneurs and key workers would also be likely to remaining the village. Option B could allow congestion to increase, dissuading future investment in Long Stratton as an employment area.

### **Overall summary:**

- Impacts
- Possible mitigation measures
- · Recommended further research
- Considering cumulative impacts

Cumulatively, Option A would work with a concentrated approach to development locations, promotion of rural employment and public transport measures, and strategies that sought to increase the provision of affordable housing in new developments.

It is important to bear in mind that large-scale development may not automatically lead to the construction and delivery of the proposed bypass as there are many other factors involved, and its provision would only be realised in the long-term anyway. There are many impacts that could arise if large-scale development were to take place without the bypass, such as increased congestion, slower and less reliable public transport and more impacts from cars and traffic on the landscape and built heritage. Although there may be more employment included within any large-scale mixed growth, this would also lead to more commuter traffic. With all the large scale growth, climate change mitigation and adaptation effects will only be positive if ambitious and innovative sustainable design and construction measures are implemented, for example.

Option Appraised: Question 33: Transport – Norwich area and strategic growth locations bus priority.

- Option A Promote more bus priority but continue to maintain capacity for cars.
- Option B Promote improvements to public transport that reduce road space for cars which, in some instances, could mean more limited car access.

### **SCORING SYSTEM PROPOSED:**

SA Objective	Decision making criteria	Short- Term 0-5 yrs	Medium Term 5-20 yrs	Long- Term 20+ yrs	Comments / Justification Inc. cumulative effects
<b>ENVIRONMEN</b>	NTAL				
ENV 1 To reduce the effect of traffic on the environment.	Will it reduce traffic volumes, ease the flow of traffic and reduce congestion?  Will it increase the proportion of journeys using modes other than the car?  Will it reduce the effect of HGV traffic on people and the	80	80	80	Option A: Improved public transport would help some people with access but most people would continue to use their cars until congestion forced them out of their cars. In the meantime there would be significant transport impacts from continued congestion.
	environment? Will it encourage more benign modes of travel? Will new development be located such to reduce the need for people to travel?	☺	☺	☺	Option B: Limited car capacity would make improvements to the environment, especially in town centre settlements.
ENV 2 To improve the quality of the water environment	Will it improve the quality of the water environment (streams, rivers, lakes etc)?  Will it help to support wetland habitats and species?	N	N	N	Increased road traffic has the potential to impact on water quality as a result of point source and diffuse pollution. Effects will be location-specific and, to an extent, uncertain.
ENV 3 To improve environmental amenity,	Will it improve air quality?  Will it reduce the emission of atmospheric pollutants?	80	80	80	Option A: See ENV1 Option B:

including air quality.		©	©	©	See ENV1
ENV 4 To maintain and enhance biodiversity and geodiversity.	Will it conserve / enhance natural or semi-natural habitats, and promote habitat connections? Is it likely to have a significant effect on sites designated for international, national or local importance? Will it conserve / enhance species diversity, and in particular avoid harm to protected species?	N	N	N	Increased road traffic has the potential to impact on biodiversity as a result of point source and diffuse pollution. Effects will be location-specific and, to an extent, uncertain.
ENV 5 To maintain and enhance the quality of landscapes, townscapes and the historic environment.	Will it protect and enhance the quality of landscapes, townscapes and countryside character, including the character of the Broads and its setting where relevant?  Will it maintain and enhance the distinctiveness of the landscapes/townscapes and heritage?  Will it reduce the amount of derelict, underused land?  Will it protect and enhance features of historical, archaeological and cultural value?	© ©	© ©	© ©	Option A: There would be significant transport impacts from continued congestion, such as impacts on townscapes and character of market towns. There could be additional effects from increased car dependence in that there will continue to be more pressure for road infrastructure, which could have more impacts on landscapes, for example.  Option B: Limited car capacity would make improvements to the environment, especially in town centre settlements, where the dominance of the car may be reduced. Less
					car priority will reduce the need for more additional road capacity.
ENV 6 To adapt to and mitigate against the impacts of	Will it reduce emissions of greenhouse gases by reducing energy consumption? Will it lead to an increased proportion of energy needs being met from renewable sources? Will it increase the capacity of the area to withstand the effects	80	80	80	Option A: Priority for public transport would help to encourage public transport use but would not necessarily reduce car use on its own.
climate change.	of climate change?  How can it be ensured that the risks to lives, land and property are minimised?	☺	☺	☺	Option B: Promoting public transport and constraining the use of the car would eventually cause people to not use their cars so much and use public transport more.
ENV 7 To avoid, reduce and	Will it minimise the risk of flooding to people and property? Can it incorporate new designs to adapt to possible flood risk? Will it promote the use of sustainable drainage systems to	N/a	N/a	N/a	N/a

manage flood risk.	reduce run off?				
ENV 8 To provide for sustainable use and sources of water supply.	Will it conserve groundwater resources? Will it minimise water consumption?	N/a	N/a	N/a	N/a
ENV 9 To make the best use of resources, including land and energy, and to minimise waste production.	Will it minimise consumption of materials and resources? Will it promote the use of land in sustainable locations that has been previously developed? Will it use land efficiently? Will it minimise the loss of "greenfield" land? Will it avoid the loss of good quality agricultural land and preserve soil resources? Will it minimise energy consumption and promote energy efficiency? Will it promote the use of renewable energy sources? Will it lead to less waste being produced? Will it lead to less waste being disposed, by promoting more recycling and composting? Will it increase waste recovery for other means eg. energy generation?	© (3)	© (S)	©8 ©	Option A: Whilst there is still public transport priority, without car restraining methods there would still be more pressure to provide more roads, space for parking and energy/fuel consumption.  Option B: Car use restraints would reduce the need for land for parking, road development and fuel use.
SOCIAL					
SOC 1 To reduce poverty and social exclusion.	Will it reduce poverty and social exclusion in those areas most affected?  Will it help to reduce deprivation levels?  Will it help meet the needs of residents most effectively?	©	☺	☺	Option A: Promoting bus priority gives non-car owners better accessibility and choice of transport to services and the workplace. This could serve to increase the inequality between those with a car and those without. Rural deprivation would be reduced if there was some degree of reduced car dependency.
		©	☺	©	Option B: This can free-up road space and make public transport more reliable for those that need it. Although it may be harder for rural communities to use public transport into the city and market towns, there may be more social inclusion if the dominance of the car was reduced and

					public transport was made more reliable and frequent.
SOC 2 To maintain and improve the health of the whole population and	Will it improve access to high quality health facilities?  Will it encourage healthy lifestyles? How?  Will it provide adequate health infrastructure for existing and new communities?	©®	©⊗	©®	Option A: This could encourage additional bus use and associated walking, which would have health benefits. However, it could impact on health by allowing car traffic emissions to continue to increase.
promote healthy lifestyles.	Will the links between poorer health and deprivation be addressed?  Will links to the countryside be maintained and enhanced?	©8	©	<b>(i)</b>	Option B: Reducing car use could constrain access to health centres for those dependent on the car in the short-term, but the longer-term encouragement of public transport use could promote healthy lifestyles, reduce the stress of driving cars, improve road safety and promote walking and cycling as alternatives to the car.
SOC 3 To improve education and skills.	Will it improve qualifications and skills for both young people and amongst the workforce? Will it help to retain key workers and provide more skilled workers from school leavers?	☺	©	©	Option A: Bus priority will help improve access to education facilities.
Skills.	Will adequate education infrastructure be provided for existing and new communities? Will it promote lifelong learning and skills training? Will links between lower levels of education and deprivation be addressed?	☺	☺	☺	Option B: Whilst bus priority will help improve access to education facilities, the reduced car use and increased exercise will promote healthy lifestyles and more walking and cycling.
SOC 4 To provide the opportunity to live in a decent, suitable and affordable home.	Will it increase the range of types, sizes and affordability of housing for all social groups? Will it reduce the housing need and ensure that housing provision addresses the needs of all? Will it provide the most appropriate solutions to address the housing requirements needed for creating sustainable communities? Will it make best use of existing housing stock?	N/a	N/a	N/a	N/a
SOC 5 To build community identity, improve social	Will it encourage engagement in community activities?  Will it contribute to the achievement of a mixed and balanced community?  Will it reduce actual levels of crime?	N/a	N/a	N/a	N/a

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welfare, and reduce crime and anti-social	Will it reduce the fear of crime?				
activity.					
SOC 6	Will it reduce unemployment overall?				Option A:
To offer more opportunities for rewarding and satisfying employment for all.	Will it help to improve earnings?	©®	©8	©8	This promotes better access to the jobs market, and economic investment if public transport links are improved. However, for those who are more reliant on the car, such as communities in rural areas, it may be harder to access the jobs market.
		☺	©	©	Option B: Roads may be clearer for public transport to improve its reliability and help more people access the jobs market.
SOC 7	Will it improve the quality of dwellings?				Option A:
To improve the quality of where	Will it improve the quality of local open space?	☺	☺	☺	Public transport will improve and help more people to access facilities.
people live.	Will it improve the satisfaction of people with their neighbourhoods?	☺	☺	☺	Option B: Public transport will improve. Reduced car use will reduce pollution, improve air quality and noise and will improve road safety.
SOC 8 To improve accessibility to essential	Will it improve accessibility to key local services and facilities (including health, education, leisure, open space, the countryside and community facilities)?  Will it improve accessibility for all whilst reducing dependency on	©Ø	©Ø	©\(\text{\tin}\text{\tetx{\text{\tetx{\text{\text{\texi}\text{\text{\texi}\text{\text{\text{\text{\ti}\}\text{\text{\text{\texi}\text{\text{\text{\text{\text{\text{\texi}\text{\text{\texi}\text{\text{\text{\text{\text{\tet	Option A: Mixed benefits as buses will be given priority to local centres and employment areas, but congestion could continue to increase.
services, facilities and jobs.	the private car?  Will it improve access to jobs and services for all?	☺	☺	☺	Option B: Reducing car traffic as well as improving bus priority will reduce congestion and increase public transport reliability, to town centres in particular.
<b>ECONOMIC</b>					
EC 1	Will it assist in strengthening the local economy?				Option A:
To encourage sustained	Will it improve business development and enhance competitiveness?	©8	8	⊗	Mixed benefits as it would promote more economic investment if public transport links are improved, but

economic growth.	Will it reduce vulnerability to economic shocks?  Will it promote growth in key sectors?  Will it increase vitality & viability of town centres and improve economic diversity?	©⊗	©8	©⊗	increasing congestion could damage economic growth, and make the Norwich sub-region area less able to compete with other areas nationally.  Option B: This could make town centres more attractive areas and roads may be clearer for public transport to improve its reliability. This would help more people access the jobs market and attract more economic investment as these areas are more attractive and easier to access. Rural areas may be able to compete less if they have more limited car access into the city area.
EC 2 To encourage and accommodate both indigenous	Will it encourage indigenous businesses?  Will it encourage inward investment?  Will it make land and property available for business?	©®	8	8	Option A: Mixed benefits as it would promote more economic investment if public transport links are improved, but increasing congestion could deter economic investment.
and inward investment.	Will it improve economic performance across the Greater Norwich area?  Will it support / encourage rural diversification?  Will it support / encourage small city businesses?	©®	©	☺	Option B: This could make town centres more attractive areas and roads may be clearer for public transport to improve its reliability. This would help more people access the jobs market and attract more economic development.
EC 3 To encourage efficient patterns of movement in support of economic	Will it improve provision of local jobs?  Will it improve accessibility to work, particularly by public transport, walking and cycling?  Will it reduce journey times between key employment areas and key transport interchanges?	©8	8	8	Option A: Improved bus priority measures will enable more efficient commuting for staff, but the continued dominance of the car will gradually lead to congestion and less reliability of public transport journey times. Deliveries and freight will also be interrupted and made less reliable by likely increased congestion.
growth.	Will it improve efficiency and sustainability of freight distribution?  Will it support provision of key communications infrastructure?	☺	☺	☺	Option B: Improved reliability for public transport means

					commuting will be more efficient, and freight and delivery services will be more reliable if the roads are less congested.
EC 4 To improve the social and environmental performance of the economy.	Will it reduce the impact on the environment from businesses?  Will it reduce the impact on residents from businesses?  Will it attract new investment and skilled workers to the area?  Will it maintain existing business and employment provision?  Will it provide employment in the best locations to serve urban and rural residents?	©®	©8	©8	Aside from improved access to work by sustainable means, neither option will significantly improve the social or environmental performance of the economy.  Option A: This option would help to encourage healthier lifestyles, reduce private commuting, increase access for those without a car. However, it would not necessarily reduce the environmental impacts of business traffic on town centres.
		©	☺	©	Option B: This option would help to encourage healthier lifestyles, reduce private commuting, increase access for those without a car. Car constraint measures would however reduce the environmental impacts of business traffic on town centres.

Overall Conclusions: What are the main effects of the policy option as identified through the sustainability appraisal process?

#### POLICY OPTION:

**Question 33: Transport – Norwich area and strategic growth locations bus priority.** 

- Option A Promote more bus priority but continue to maintain capacity for cars.
- Option B Promote improvements to public transport that reduce road space for cars which, in some instances, could mean more limited car access.

# Environmental Impacts

Promoting public transport would improve local environments, by reducing congestion and the local impact of the dominance of the private car (e.g. air quality, landscape and townscape impacts and contributions to climate change). Option A would still allow the increased dominance of the car, which will lead to an increased pressure for more road infrastructure, which will bring its own additional secondary impacts. Option B would be far more beneficial than option A in reducing the pressure for more roads, cutting vehicular emissions, preserving the townscape and landscapes, and improving the efficiency of public transport.

## **Social Impacts**

Moves to encourage people to find alternative means of travel other than their private cars would see an increase in the amount of cycling and walking to local facilities, would support local services and encourage healthier lifestyles and improved long term educational access, and consequently attainment, for the whole community (Option B), and without reliance on the car, deprivation could be reduced, particularly in the rural areas. Option A would continue to allow the dominance of the private car, which will serve to exacerbate differences in social exclusion between those with, and those without, access to a car.

### **Economic Impacts**

More people would be able to access the workplace and facilities in larger settlements. Improved public transport priority measures could make rural areas more viable if there were better connections for employees and commuting.

### **Overall summary:**

- Impacts
- Possible mitigation measures
- Recommended further research
- Considering cumulative impacts

In combination with concentrated strategic growth, rural employment and business promotion and provision of local facilities, option B would be the most sustainable option in the long term in order to improve accessibility, reduce deprivation by improving access to facilities, education, services and employment opportunities. Reducing the impact of the private car leads to improved environmental performance, such as from increased reliability and frequency of public transport, reduced congestion and emissions, and more walking and cycling as part of a healthier lifestyle.

**Option Appraised: Question 34 – Transport in rural areas and the market towns. We could:** 

- Option A: Accept reliance on travel by private car.
- Option B: Develop strategies that allow greater use of walking, cycling and public transport.

### **SCORING SYSTEM PROPOSED:**

SA Objective	Decision making criteria	Short- Term 0-5 yrs	Medium Term 5-20 yrs	Long- Term 20+ yrs	Comments / Justification Inc. cumulative effects
<b>ENVIRONMEN</b>	NTAL				
ENV 1 To reduce the effect of traffic on the environment.	Will it reduce traffic volumes, ease the flow of traffic and reduce congestion?  Will it increase the proportion of journeys using modes other than the car?	⊜	8	8	Option A: Private car use would increase road congestion and lead to more congestion in smaller village and town centres, and public transport would become less viable.
	Will it reduce the effect of HGV traffic on people and the environment? Will it encourage more benign modes of travel? Will new development be located such to reduce the need for people to travel?	☺	☺	©	Option B: Public transport, walking and cycling would reduce the impact of cars on the environment an lessen the extent of congestion.
ENV 2 To improve the quality of the water environment	Will it improve the quality of the water environment (streams, rivers, lakes etc)?  Will it help to support wetland habitats and species?	N	N	N	Option A: Increased road traffic has the potential to impact on water quality as a result of point source and diffuse pollution. Effects would be largely location-specific and, to an extent, uncertain.
		N/a	N/a	N/a	Option B: N/a
ENV 3 To improve environmental	Will it improve air quality?  Will it reduce the emission of atmospheric pollutants?	8	8	8	Option A: Private car use would increase congestion and environmental pollution and lead to more congestion in

amenity, including air quality.		☺	☺	©	smaller village and town centres. This would lead to more noise and a gradual reduction in air quality.  Option B: Public transport, walking and cycling would reduce the impact of cars on the environment, and help to maintain good air quality.
ENV 4 To maintain and enhance biodiversity and geodiversity.	Will it conserve / enhance natural or semi-natural habitats, and promote habitat connections?  Is it likely to have a significant effect on sites designated for international, national or local importance?  Will it conserve / enhance species diversity, and in particular	N	N	N	Option A: Increased road traffic has the potential to impact on water quality as a result of point source and diffuse pollution. Effects would be largely location-specific and, to an extent, uncertain.
	avoid harm to protected species?	N/a	N/a	N/a	Option B: N/a
ENV 5 To maintain and enhance the quality of landscapes,	Will it protect and enhance the quality of landscapes, townscapes and countryside character, including the character of the Broads and its setting where relevant?  Will it maintain and enhance the distinctiveness of the landscapes/townscapes and heritage?	8	⊗	8	Option A: Private car use would increase environmental damage and lead to more congestion in smaller village and town centres and detract from the traditional village setting.
townscapes and the historic environment.	Will it reduce the amount of derelict, underused land? Will it protect and enhance features of historical, archaeological and cultural value?	©	☺	☺	Option B: Public transport, walking and cycling would reduce the impact of cars on the environment.
ENV 6 To adapt to and mitigate against the impacts of	Will it reduce emissions of greenhouse gases by reducing energy consumption? Will it lead to an increased proportion of energy needs being met from renewable sources?	8	8	8	Option A: Increased car use would increase contributions to climate change.
climate change.	Will it increase the capacity of the area to withstand the effects of climate change?  How can it be ensured that the risks to lives, land and property are minimised?	☺	☺	☺	Option B: Promoting public transport and constraining the use of car would eventually reduce climate change emissions.
ENV 7 To avoid, reduce and manage flood risk.	Will it minimise the risk of flooding to people and property?  Can it incorporate new designs to adapt to possible flood risk?  Will it promote the use of sustainable drainage systems to reduce run off?	N/a	N/a	N/a	N/a

ENV 8	Will it conserve groundwater resources?				
To provide for sustainable use	Will it minimise water consumption?	N/a	N/a	N/a	N/a
and sources of water supply.					
ENV 9 To make the best use of resources.	Will it minimise consumption of materials and resources? Will it promote the use of land in sustainable locations that has been previously developed? Will it use land efficiently?	☺	⊗	8	Option A: There would be more pressure to provide more roads, space for parking and energy / fuel consumption.
including land and energy, and to minimise waste	Will it minimise the loss of "greenfield" land? Will it avoid the loss of good quality agricultural land and preserve soil resources? Will it minimise energy consumption and promote energy efficiency?	©	☺	©	Option B: Alternatives to the car would reduce the need for land for car parking, road development and reduce fuel use.
production.	Will it promote the use of renewable energy sources? Will it lead to less waste being produced? Will it lead to less waste being disposed, by promoting more recycling and composting?				
	Will it increase waste recovery for other means eg. energy generation?				
SOCIAL			•	•	
SOC 1 To reduce poverty and	Will it reduce poverty and social exclusion in those areas most affected?  Will it help to reduce deprivation levels?	8	8	8	Option A: Poverty would not be reduced, but may even be exacerbated if people have no options but to buy a car
social exclusion.	Will it help meet the needs of residents most effectively?				and use it. Social exclusion and deprivation would increase amongst those groups who don't have access to a private car.
		©⊗	©⊗	©®	Option B: With an emphasis on encouraging people to use public transport in rural areas, its services could become more viable and more reliable for those that need it. However, in rural areas public transport, walking and cycling to access facilities are often less practical due to the dispersed settlement pattern.
SOC 2 To maintain and	Will it improve access to high quality health facilities?				Option A: Travelling by car in the rural area would discourage

improve the health of the whole population and promote healthy lifestyles.	Will it encourage healthy lifestyles? How?  Will it provide adequate health infrastructure for existing and new communities?  Will the links between poorer health and deprivation be addressed?	☺	8	8	walking and cycling to services and facilities. It could hinder access to health facilities for those without cars, and it could also create more congestion and subsequent health problems. Public transport improvements should be sought to ensure increased access to services & facilities.
	Will links to the countryside be maintained and enhanced?	©⊗	©8	<b>©</b> 8	Option B: This will provide increased access to the countryside, health facilities and services, and it would implicitly encourage walking and cycling. However, it is not always practical to rely on public transport in the rural areas to access these essential facilities.
SOC 3 To improve education and skills.	Will it improve qualifications and skills for both young people and amongst the workforce?  Will it help to retain key workers and provide more skilled workers from school leavers?  Will adequate education infrastructure be provided for existing and new communities?	(3)	8	8	Option A: Access to education would be harder for people without a car or for those who are too young to drive. Increased private traffic and congestion could deter people from pursuing further education and so would not tackle rural deprivation.
	Will it promote lifelong learning and skills training? Will links between lower levels of education and deprivation be addressed?	☺	☺	©	Option B: Although relying on public transport can sometimes prove difficult in rural areas, if services were expanded to reach more communities more often it would increase access to education, enable skills to be developed in rural areas and reduce deprivation.
SOC 4 To provide the opportunity to live in a decent, suitable and affordable home.	Will it increase the range of types, sizes and affordability of housing for all social groups? Will it reduce the housing need and ensure that housing provision addresses the needs of all? Will it provide the most appropriate solutions to address the housing requirements needed for creating sustainable communities? Will it make best use of existing housing stock?	N/a	N/a	N/a	N/a
SOC 5 To build	Will it encourage engagement in community activities?  Will it contribute to the achievement of a mixed and balanced	8	8	8	Option A: Reliance on the private car could disadvantage those

community identity, improve social welfare, and reduce crime and anti-social activity.	community?  Will it reduce actual levels of crime?  Will it reduce the fear of crime?	©	©	☺	without access to a car by having less access to facilities, events and activities, reducing community interaction.  Option B: Community participation could increase with improved access to local facilities for the community. In places where there may be deprivation and a lack of community identity, increased public transport could be a major boost that results in a significant upward spiral in terms of social capital.
SOC 6 To offer more opportunities for rewarding and satisfying employment for	Will it reduce unemployment overall?  Will it help to improve earnings?	⊗	⊗	8	Option A: Access to the workplace and employment areas would be harder for people without a car or those unable to drive. Increased congestion could eventually deter future rural business investment.
all.		<b>(3)</b>	©	☺	Option B: Improved public transport links will increase access to services and ensure they can reach more communities more often. It will also increase access to employment areas and jobs.
SOC 7 To improve the quality of where people live.	Will it improve the quality of dwellings?  Will it improve the quality of local open space?  Will it improve the satisfaction of people with their	8	8	8	Option A: Access would be harder for people without a car or for those unable to drive. Increased congestion could reduce local satisfaction.
	neighbourhoods?	☺	☺	☺	Option B: Improving public transport could improve access, reduce congestion, and improve road safety and the environment.
SOC 8 To improve accessibility to essential	Will it improve accessibility to key local services and facilities (including health, education, leisure, open space, the countryside and community facilities)?  Will it improve accessibility for all whilst reducing dependency on	8	⊗	⊗	Option A: Access to the workplace, services and facilities would be harder for people without a car or those unable to drive. It would not reduce dependency on the car.

services, facilities and	the private car?	©	©	☺	Option B:
jobs.	Will it improve access to jobs and services for all?	•			Promoting alternative to the car could improve local walking and cycling. Promoting public transport would increase access to jobs, services and facilities for all.
ECONOMIC				<u> </u>	<b>,</b>
EC 1 To encourage sustained economic growth.	Will it assist in strengthening the local economy?  Will it improve business development and enhance competitiveness?  Will it reduce vulnerability to economic shocks?  Will it promote growth in key sectors?	8	⊗	8	Option A: Access to the workplace and employment areas would be harder for people without a car. Increased congestion could eventually hinder future rural business growth and reduce vitality and viability of town centres.
	Will it increase vitality & viability of town centres and improve economic diversity?	☺	©	©	Option B: Improved public transport could actually assist rural business growth if a wider employee base can be encouraged into the rural area. If services were expanded to reach more communities more often it would increase access to employment areas and jobs. Reducing the impact of cars on town centres would improve town centre vitality / viability.
EC 2 To encourage and accommodate both indigenous	Will it encourage indigenous businesses?  Will it encourage inward investment?  Will it make land and property available for business?	N	8	8	Option A: The dominance of the private car would not deter local investment immediately but eventually increased congestion could deter future rural business investment.
and inward investment.	Will it improve economic performance across the Greater Norwich area?  Will it support / encourage rural diversification?  Will it support / encourage small city businesses?	☺	©	<b>©</b>	Option B: Promoting public transport at the expense of the car could actually improve rural investment and diversification by reducing congestion, for example to benefit the tourism industry.
EC 3 To encourage	Will it improve provision of local jobs?	8	8	8	Option A: Access to local jobs and employment areas could

efficient patterns of movement in support of economic growth.	Will it improve accessibility to work, particularly by public transport, walking and cycling?  Will it reduce journey times between key employment areas and key transport interchanges?  Will it improve efficiency and sustainability of freight distribution?  Will it support provision of key communications infrastructure?	☺	©	☺	decrease if local congestion increases. However, alternatives to the car are often impractical in rural areas.  Option B: An emphasis on public transport, walking and cycling could increase access to local jobs, and improve access to larger employment areas in the city and market towns.
EC 4 To improve the social and environmental performance of the economy.	Will it reduce the impact on the environment from businesses?  Will it reduce the impact on residents from businesses?  Will it attract new investment and skilled workers to the area?  Will it maintain existing business and employment provision?  Will it provide employment in the best locations to serve urban and rural residents?	8	8	☺	Aside from improved access to work by sustainable means, neither option will significantly improve the environmental and social performance of the economy.  Option A: There would be more social and environmental problems arising from an emphasis on private car travel, including reduced access, less healthy options of travel and environmental degradation.
		☺	☺	☺	Option B: Improving public transport, walking and cycling could encourage healthier modes of travel, reduce congestion from commuters and improve the local environment by reducing the impact of cars, such as in town centres.

Overall Conclusions: What are the main effects of the policy option as identified through the sustainability appraisal process?

**POLICY OPTION: Question 34 – Transport in rural areas and the market towns. We could:** 

• Option A: Accept reliance on travel by private car.

impact of cars and improve or maintain the local air quality environmental amenity.

• Option B: Develop strategies that allow greater use of walking, cycling and public transport.

# Environmental Impacts

Option A would see an eventual increase in private car travel as public transport would become less viable. This would cause local congestion to increase, would impact on town and village centres and increase air and noise pollution. There would be a significant contribution to climate change from people's daily car-reliant activities. Increased car dependency and related pressure for further road expansion in rural areas may also lead to secondary environmental impacts.

Option B would offer more alternatives to the car to access local facilities and services. It could reduce the local environmental

## **Social Impacts**

Option A could essentially hinder people's access to local facilities and services if they do not have access to the car. It could lead to local health problems from congestion and could exacerbate poverty if there is a reliance on buying and running a car. Use of community facilities could reduce if people are dependent on cars to access them. In the long-term, the car may be the most feasible means of access for local people if public transport does not prove economically viable, but the dominance of the private car would increase the divide between those who can afford a car and those who cannot.

Option B: With an emphasis on developing public transport services in rural areas, their services could become more viable and more reliable for those that need it. However, present rural area public transport, walking and cycling to access facilities can often be less practical due to dispersed settlement patterns. Alternatives to the car would promote healthier lifestyles and offer better access to education facilities, skills development, the workplace, community facilities and health services, and could encourage more investment in rural areas.

### **Economic Impacts**

Option A would lead to congestion in the long-term, which could dissuade local rural investment and business development and by reducing access to facilities it could lead to a loss of skills and entrepreneurs from rural areas. Increased congestion could eventually hinder future rural business growth and the impact of cars on the environment could reduce vitality and viability of town centres.

Option B could expand public transport services to reach more communities more often and so increase access to employment areas and jobs. Reducing the impact of cars on town centres would improve town centre vitality / viability. Promoting alternatives to the car would increase the likelihood of people using their local services and expanding the customer base of existing businesses. Without significant expansion of public transport services, relying on public transport could prove impractical in some areas and in the short term promoting public transport at the expense of the car could actually deter rural investment or diversification of existing businesses.

### **Overall summary:**

- Impacts
- Possible mitigation measures
- Recommended further research
- Considering cumulative impacts

Socially and environmentally Option B would appear to be more beneficial by promoting healthier lifestyles and preserving the environment. Option B would need significant expansion of the existing public transport services if it is to prove a viable alternative to the car, in the short-term at least, and ensure that rural business development is not hindered by having fewer means of accessing the workplace.

Option B would work especially well with housing, employment and strategic growth options that promoted development in rural areas, providing that careful regard was given to ensuring that local people could access the workplace, services and facilities.

**Option Appraised: Question 36 – Transport: Minimising the impacts of freight could involve:** 

- Option A Planning that sites, which will attract and/or generate significant freight movements, are well located to the strategic transport networks (road, rail, water air).
- Option B Not restricting the location of major freight generators.

### **SCORING SYSTEM PROPOSED:**

 $\odot$  = positive effects  $\odot$  = negative effects N = neutral effects O = mixed effects O = uncertain effects O = not applicable

SA Objective	Decision making criteria	Short- Term 0-5 yrs	Medium Term 5-20 yrs	Long- Term 20+ yrs	Comments / Justification Inc. cumulative effects
<b>ENVIRONMEI</b>	NTAL				
ENV 1 To reduce the effect of traffic on the environment.	Will it reduce traffic volumes, ease the flow of traffic and reduce congestion? Will it increase the proportion of journeys using modes other than the car? Will it reduce the effect of HGV traffic on people and the environment?	<b>©</b>	©	©	Option A: This encourages freight to use the existing strategic transport network. This could encourage alternatives to road traffic if this option leads to significant use of rail and water for freight transportation.
	Will it encourage more benign modes of travel? Will new development be located such to reduce the need for people to travel?	⊗	8	8	Option B: Without restrictions freight generators could create more road traffic covering greater distances.
To improve the quality of the water environment	Will it improve the quality of the water environment (streams, rivers, lakes etc)?  Will it help to support wetland habitats and species?	☺	☺	☺	Option A: This option could avoid freight transport in locations where the water environment may be sensitive to the impacts of diffuse and point-source pollution.
CHANGINION		N	N	N	Option B: Although the effects would largely be location-specific, without restrictions freight could affect a widespread area where point source and diffuse pollution could have an impact.

ENV 3 To improve environmental	Will it improve air quality?  Will it reduce the emission of atmospheric pollutants?	©	©	☺	Option A: This encourages freight to use the existing strategic transport network and provides for the use of
amenity, including air quality.					alternatives to road transport, minimising air quality damage.
		8	☺	8	Option B: Without restrictions freight generators could create more road traffic covering greater distances. Environmental damage and reduced air quality could be widespread.
ENV 4 To maintain and	Will it conserve / enhance natural or semi-natural habitats, and promote habitat connections?		0		Option A: This option avoids freight transport in sensitive locations.
enhance	•	☺	☺	☺	This option avoids freight transport in sensitive locations.
biodiversity and geodiversity.	Is it likely to have a significant effect on sites designated for international, national or local importance?	N	N	N	Option B: Although the effects would largely be location-specific,
	Will it conserve / enhance species diversity, and in particular avoid harm to protected species?				without restrictions freight could affect a widespread area and range of habitats through point source and diffuse pollution.
ENV 5 To maintain and enhance the quality of	Will it protect and enhance the quality of landscapes, townscapes and countryside character, including the character of the Broads and its setting where relevant? Will it maintain and enhance the distinctiveness of the landscapes/townscapes and heritage?	☺	☺	☺	Option A: The availability of non-road options should help to reduce the adverse impacts from road freight transport on heritage.
landscapes, townscapes and the historic environment.	Will it reduce the amount of derelict, underused land? Will it protect and enhance features of historical, archaeological and cultural value?	8	8	⊜	Option B: Unrestricted locations could lead to more widespread impacts, developments that can affect the landscape and movement of freight through historic areas.
ENV 6 To adapt to and mitigate against	Will it reduce emissions of greenhouse gases by reducing energy consumption? Will it lead to an increased proportion of energy needs being met from renewable sources?	☺	☺	©	Option A: The availability of non-road transport options would help to reduce road freight emissions.
the impacts of climate change.	Will it increase the capacity of the area to withstand the effects of climate change?  How can it be ensured that the risks to lives, land and property are minimised?	8	8	⊜	Option B: Fewer restrictions would not help to reduce road traffic emissions.
ENV 7	Will it minimise the risk of flooding to people and property?				

To avoid, reduce and manage flood risk.	Can it incorporate new designs to adapt to possible flood risk? Will it promote the use of sustainable drainage systems to reduce run off?	N/a	N/a	N/a	N/a
ENV 8 To provide for sustainable use and sources of water supply.	Will it conserve groundwater resources?  Will it minimise water consumption?	N/a	N/a	N/a	N/a
ENV 9 To make the best use of resources, including land and energy, and to minimise waste production.	Will it minimise consumption of materials and resources? Will it promote the use of land in sustainable locations that has been previously developed? Will it use land efficiently? Will it minimise the loss of "greenfield" land? Will it avoid the loss of good quality agricultural land and preserve soil resources? Will it minimise energy consumption and promote energy efficiency? Will it promote the use of renewable energy sources? Will it lead to less waste being produced? Will it lead to less waste being disposed, by promoting more recycling and composting? Will it increase waste recovery for other means eg. energy	© ©	© ©	© 3	Option A: Using the strategic transport network and the availability of non-road options would help to reduce energy and fuel consumption, and would help to avoid the need to develop further road infrastructure.  Option B: Not having any restrictions on locations would not encourage use of non-road freight transport. It could also require more road infrastructure to be developed in less sustainable locations.
SOCIAL	generation?				
SOC 1 To reduce poverty and social	Will it reduce poverty and social exclusion in those areas most affected?  Will it help to reduce deprivation levels?	©	©	©	Option A: Assuming that sites with freight movements could involve some employment, this option could lead to jobs being created in areas more accessible by public transport along the strategic networks.
exclusion.	Will it help meet the needs of residents most effectively?	©	⊜	⊗	Option B: No restrictions on the location of major freight generators could lead to sites being established near to areas of deprivation, further adding to environmental problems for the neighbourhood.
SOC 2 To maintain and improve the	Will it improve access to high quality health facilities? Will it encourage healthy lifestyles? How? Will it provide adequate health infrastructure for existing and	☺	☺	☺	Option A: Locating sites closer to the strategic transport networks would reduce freight on inappropriate roads, so encouraging more people to cycle and walk, and lead to

health of the whole population and promote healthy lifestyles.	new communities? Will the links between poorer health and deprivation be addressed? Will links to the countryside be maintained and enhanced?	8	8	<b>©</b>	an improvement to the health of the local community.  Option B: No restrictions on the location of major freight generators could lead to more freight on inappropriate roads, discouraging people from cycling and walking and reducing the environmental health of local communities.
SOC 3 To improve education and skills.	Will it improve qualifications and skills for both young people and amongst the workforce? Will it help to retain key workers and provide more skilled workers from school leavers? Will adequate education infrastructure be provided for existing and new communities? Will it promote lifelong learning and skills training? Will links between lower levels of education and deprivation be addressed?	N/a	N/a	N/a	N/a
SOC 4 To provide the opportunity to live in a decent, suitable and affordable home.	Will it increase the range of types, sizes and affordability of housing for all social groups? Will it reduce the housing need and ensure that housing provision addresses the needs of all? Will it provide the most appropriate solutions to address the housing requirements needed for creating sustainable communities? Will it make best use of existing housing stock?	N/a	N/a	N/a	N/a
SOC 5 To build community identity, improve social welfare, and reduce crime and anti-social activity.	Will it encourage engagement in community activities?  Will it contribute to the achievement of a mixed and balanced community?  Will it reduce actual levels of crime?  Will it reduce the fear of crime?	N/a	N/a	N/a	N/a
SOC 6 To offer more opportunities for rewarding and satisfying	Will it reduce unemployment overall? Will it help to improve earnings?	☺	☺	☺	Option A: Freight-generating employment opportunities would be more accessible to the workforce if they were located close to the strategic transport network with public transport links.

employment for all.		©	☺	☺	Option B: Non-restricted development could offer some local job opportunities to more remote communities.
SOC 7 To improve the quality of where people live.	Will it improve the quality of dwellings?  Will it improve the quality of local open space?  Will it improve the satisfaction of people with their	©	©	☺	Option A: Locating freight generators close to the strategic transport network would help avoid those more sensitive locations.
	neighbourhoods?	8	8	8	Option B: Without restrictions, there is more likelihood that freight could impact on local communities and cause less community satisfaction.
SOC 8 To improve accessibility to	Will it improve accessibility to key local services and facilities (including health, education, leisure, open space, the countryside and community facilities)?	©	☺	☺	Option A: New employment opportunities would be accessible to more people more easily via the strategic transport network.
essential services, facilities and jobs.	Will it improve accessibility for all whilst reducing dependency on the private car?  Will it improve access to jobs and services for all?	8	8	8	Option B: Without restrictions, any new employment opportunities could be less accessible to the general workforce and could be less viable for commuting via public transport, and discourage walking and cycling.
ECONOMIC		<u> </u>	<u> </u>	<u> </u>	
EC 1 To encourage sustained economic growth.	Will it assist in strengthening the local economy? Will it improve business development and enhance competitiveness? Will it reduce vulnerability to economic shocks? Will it promote growth in key sectors?	©	©	☺	Option A: Freight-generating business uses would be most suited to expansion or spin-off business generation if they were located close to the strategic transport network and other similar business enterprises.
giowai.	Will it increase vitality & viability of town centres and improve economic diversity?	©8	©®	©8	Option B: Developments could generate some employment in local areas, such as for rural diversification schemes, but may have less ability to withstand change if there are not similar businesses nearby.
EC 2 To encourage and accommodate	Will it encourage indigenous businesses? Will it encourage inward investment? Will it make land and property available for business? Will it improve economic performance across the Greater Norwich area?	©8	©®	©8	Option A: There could be more investment in businesses that are located close to main employment hubs and the strategic transport network. It may prevent business expansion in areas where employment

both indigenous and inward investment.	Will it support / encourage rural diversification? Will it support / encourage small city businesses?	☺	©	☺	opportunities are less prevalent.  Option B: Freight generating business could be well suited as a rural diversification scheme and prompt other services to emerge in such areas.
EC 3 To encourage efficient patterns of movement in support of	Will it improve provision of local jobs? Will it improve accessibility to work, particularly by public transport, walking and cycling? Will it reduce journey times between key employment areas and key transport interchanges? Will it improve efficiency and sustainability of freight	©	()	☺	Option A: This encourages freight to use the existing strategic transport network and encourages alternatives to road traffic. It also improves access for commuters to any new jobs. Freight distribution could become more sustainable.
economic growth.	distribution? Will it support provision of key communications infrastructure?	☺	©	⊜	Option B: Without restrictions freight generators could create more road traffic that covers greater distances.  There would also be less incentive to use non-car modes of freight transport.
EC 4 To improve the social and environmental performance of the economy.	Will it reduce the impact on the environment from businesses?  Will it reduce the impact on residents from businesses?  Will it attract new investment and skilled workers to the area?  Will it maintain existing business and employment provision?	©	©	☺	Option A: Encouraging freight to use the strategic transport network would improve access to the workplace, remove the impact of the business on residential areas and would reduce the carbon footprint of the local economy by reducing reliance on road based transport.
	Will it provide employment in the best locations to serve urban and rural residents?	8©	8©	80	Option B: Without restrictions there could be more impact on local communities if business was located away from the strategic network. There would be less access to the workplace for employees, although it could offer new employment opportunities, particularly for rural areas.

	clusions: What are the main effects of the policy option as identified through the sustainability appraisal process?  uestion 36 – Transport: Minimising the impacts of freight could involve:					
TOLIOT OF HOR. Q	- Option A – Planning that sites, which will attract and/or generate significant freight movements, are wel					
	located to the strategic transport networks (road, rail, water air).					
	- Option B – Not restricting the location of major freight generators.					
Environmental	Option A can reduce the emissions from freight distribution by offering alternatives to road-based transport, providing this option leads to significant use of rail and water for freight transportation. It minimises the impact of freight traffic on local environments					
Impacts	(such as from air quality and pollution affecting historic areas) and minimises the need for new infrastructure and minimises fuel consumption.					
	Option B could increase emissions by not utilising the strategic transport network and could lead to more localised environmental impacts, possibly on residential areas or in rural communities. There would be less protection of sensitive areas.					
Social Impacts	Option A would make employment areas more accessible to the general workforce, and would reduce freight transport's health impacts. It would help to maintain community satisfaction. Locating sites closer to the strategic transport networks would reduce freight on inappropriate roads, so encouraging more people to cycle and walk, and lead to an improvement to the health of the local community.					
	Option B, with non-restricted development, could offer some local job opportunities to more remote communities, but it could allow potential employment opportunities to be located away from areas most accessible by public transport. On the whole it could allow development to be located in sensitive areas, such as freight movements passing through historic settlements. No restrictions on the location of major freight generators could lead to more freight on inappropriate roads, discouraging people from cycling and walking and reducing the environmental health of local communities.					
Economic Impacts	Option A would mean that freight-generating business uses would be most suited to expansion or spin-off business generation if they were located close to the strategic transport network and other similar business enterprises.					
Option B could generate some employment in local areas, such as for rural diversification schemes, but may have less ability withstand change if there are not similar businesses nearby.						
Overall summary:	These options are contrasting on their nature and would present very different impacts.					
<ul><li>Impacts</li><li>Possible mitigati</li></ul>	Option A would increase it's effectiveness if it was used in tandem with some strategic growth options that can seek to tackle the effects of freight servicing and strategic employment generation. The potential negative					
<ul><li>Recommended for Considering cum</li></ul>	urther research cumulative impacts of option B over the long term could be very significant for both communities and the local					

Option Appraised: Question 37 – Is providing dedicated community workers the best way to support new communities?

### **SCORING SYSTEM PROPOSED:**

SA Objective	Decision making criteria	Short- Term 0-5 yrs	Medium Term 5-20 yrs	Long- Term 20+ yrs	Comments / Justification Inc. cumulative effects
ENVIRONMEN	ITAL				
ENV 1 To reduce the effect of traffic on the environment.	Will it reduce traffic volumes, ease the flow of traffic and reduce congestion? Will it increase the proportion of journeys using modes other than the car? Will it reduce the effect of HGV traffic on people and the environment? Will it encourage more benign modes of travel? Will new development be located such to reduce the need for people to travel?	N/a	N/a	N/a	This option is concerned with providing a community worker so any effects from transport are likely to be marginal.
ENV 2 To improve the quality of the water environment	Will it improve the quality of the water environment (streams, rivers, lakes etc)?  Will it help to support wetland habitats and species?	N/a	N/a	N/a	N/a
ENV 3 To improve environmental amenity, including air quality.	Will it improve air quality?  Will it reduce the emission of atmospheric pollutants?	N/a	N/a	N/a	N/a
ENV 4 To maintain and enhance biodiversity and	Will it conserve / enhance natural or semi-natural habitats, and promote habitat connections? Is it likely to have a significant effect on sites designated for international, national or local importance?	N/a	N/a	N/a	N/a

geodiversity.	Will it conserve / enhance species diversity, and in particular avoid harm to protected species?				
ENV 5 To maintain and enhance the quality of landscapes, townscapes and the historic environment.	Will it protect and enhance the quality of landscapes, townscapes and countryside character, including the character of the Broads and its setting where relevant?  Will it maintain and enhance the distinctiveness of the landscapes/townscapes and heritage?  Will it reduce the amount of derelict, underused land?  Will it protect and enhance features of historical, archaeological and cultural value?	N/a	N/a	N/a	N/a
ENV 6 To adapt to and mitigate against the impacts of climate change.	Will it reduce emissions of greenhouse gases by reducing energy consumption? Will it lead to an increased proportion of energy needs being met from renewable sources? Will it increase the capacity of the area to withstand the effects of climate change? How can it be ensured that the risks to lives, land and property are minimised?	N/a	N/a	N/a	N/a
ENV 7 To avoid, reduce and manage flood risk.	Will it minimise the risk of flooding to people and property? Can it incorporate new designs to adapt to possible flood risk? Will it promote the use of sustainable drainage systems to reduce run off?	N/a	N/a	N/a	N/a
ENV 8 To provide for sustainable use and sources of water supply.	Will it conserve groundwater resources?  Will it minimise water consumption?	N/a	N/a	N/a	N/a
ENV 9 To make the best use of resources, including land and energy, and to minimise waste	Will it minimise consumption of materials and resources? Will it promote the use of land in sustainable locations that has been previously developed? Will it use land efficiently? Will it minimise the loss of "greenfield" land? Will it avoid the loss of good quality agricultural land and preserve soil resources? Will it minimise energy consumption and promote energy efficiency?	N/a	N/a	N/a	N/a

production.	Will it promote the use of renewable energy sources? Will it lead to less waste being produced? Will it lead to less waste being disposed, by promoting more recycling and composting? Will it increase waste recovery for other means eg. energy generation?				
SOCIAL					
SOC 1 To reduce poverty and social exclusion	Will it reduce poverty and social exclusion in those areas most affected? Will it help to reduce deprivation levels? Will it help meet the needs of residents most effectively?	☺	☺	☺	A community worker would help to improve community integration and awareness of activities, services and facilities. The worker would help to provide advice on access to jobs and education.
To maintain and improve the health of the whole population and promote healthy lifestyles.	Will it improve access to high quality health facilities? Will it encourage healthy lifestyles? How? Will it provide adequate health infrastructure for existing and new communities? Will the links between poorer health and deprivation be addressed? Will links to the countryside be maintained and enhanced?	☺	☺	☺	A community worker would help to improve community integration and awareness of activities, services and facilities. The worker would help to provide advice on access to health and act in a signposting role for new residents.
SOC 3 To improve education and skills.	Will it improve qualifications and skills for both young people and amongst the workforce? Will it help to retain key workers and provide more skilled workers from school leavers? Will adequate education infrastructure be provided for existing and new communities? Will it promote lifelong learning and skills training?	☺	☺	©	A community worker would help to improve community integration and awareness of activities, services and facilities. The worker would help to provide advice on access to education by acting in a signposting role for new residents.
SOC 4 To provide the opportunity to live in a decent, suitable and affordable home.	Will it increase the range of types, sizes and affordability of housing for all social groups? Will it reduce the housing need and ensure that housing provision addresses the needs of all? Will it provide the most appropriate solutions to address the housing requirements needed for creating sustainable communities? Will it make best use of existing housing stock?	N/a	N/a	N/a	N/a
SOC 5 To build community	Will it encourage engagement in community activities?  Will it contribute to the achievement of a mixed and balanced community?	☺	©	☺	A community worker would help to improve community integration and awareness of activities, services and facilities. The worker would involve

identity, improve social welfare, and reduce crime and anti-social activity.	Will it reduce actual levels of crime? Will it reduce the fear of crime?				communities, help people meet one another and encourage neighbourliness. So reducing likelihood and fear of crime amongst residents.
SOC 6 To offer more opportunities for rewarding and satisfying employment for all.	Will it reduce unemployment overall? Will it help to improve earnings?	©	©	©	A community worker would help to improve awareness of activities, services and facilities. The worker would help to provide advice on access to the jobs market in a signposting role for new residents.
SOC 7 To improve the quality of where people live.	Will it improve the quality of dwellings? Will it improve the quality of local open space? Will it improve the satisfaction of people with their neighbourhoods?	?	?	?	People may be more satisfied with their neighbourhoods if community cohesion is encouraged.
SOC 8 To improve accessibility to essential services, facilities & jobs.	Will it improve accessibility to key local services and facilities (including health, education, leisure, open space, the countryside and community facilities)? Will it improve accessibility for all whilst reducing dependency on the private car? Will it improve access to jobs and services for all?	9	©	©	A community worker would help to improve awareness of access to a range of activities, services and facilities.
ECONOMIC					
EC 1 To encourage sustained economic growth.	Will it assist in strengthening the local economy? Will it improve business development and enhance competitiveness? Will it reduce vulnerability to economic shocks? Will it promote growth in key sectors?	N/a	N/a	N/a	N/a
EC 2 To encourage and accommodate both indigenous and inward	Will it encourage indigenous businesses? Will it encourage inward investment? Will it make land and property available for business? Will it improve economic performance across the Greater Norwich area? Will it support / encourage rural diversification? Will it support / encourage small city businesses?	N/a	N/a	N/a	N/a

investment.					
EC 3 To encourage efficient patterns of movement in support of economic growth.	Will it improve provision of local jobs? Will it improve accessibility to work, particularly by public transport, walking and cycling? Will it reduce journey times between key employment areas and key transport interchanges? Will it improve efficiency and sustainability of freight distribution? Will it support provision of key communications infrastructure? How can access to jobs be improved?	N/a	N/a	N/a	N/a
EC 4 To improve the social and environmental performance of the economy.	Will it reduce the impact on the environment from businesses? Will it reduce the impact on residents from businesses? Will it attract new investment and skilled workers to the area? Will it maintain existing business and employment provision? Will it provide employment in the best locations to serve urban and rural residents?	N/a	N/a	N/a	N/a

Overall Conclusions: What are the main effects of the policy option as identified through the sustainability appraisal process?  • POLICY OPTION: Question 37: Community Life and Culture – Social infrastructure & providing community workers								
	Is providing dedicated community workers the best way to support new communities?							
Environmental	N/a							
Impacts								
Social Impacts	A community worker would be able to provide advice to residents and improve awareness of access to a range of activities, services and facilities. They would signpost residents to local and community opportunities. Overall it could improve the community cohesion and integration of new residential areas, help to develop sustainable communities, and in so doing reduce the fear of crime, for example.							
<b>Economic Impacts</b>	N/a							
Overall summary:	Overall summary: The benefits would be socially advantageous. There are no disadvantages identified.							
• Impacts	Impacts							
<ul> <li>Possible mitigation measures</li> <li>Collectively, this option would help to make the best use of social and community facilities. It would help to</li> </ul>								
Recommended further research integrate and develop balanced new communities, particularly where there is major or rapid growth.								
<ul> <li>Considering cum</li> </ul>	ulative impacts							

Option Appraised: Question 38: Community Life and Culture – Tackling Rural Deprivation

- Option A Improving public transport and access to towns and larger villages where facilities already exist.
- Option B Allow significant residential development in rural areas to support existing and new facilities.
- Option C Provide, maintain and improve essential facilities for the community, even if they may be uneconomic.
- Option D Promote the multi-use of rural buildings, which could help to provide some community facilities.
- Option E Do nothing and accept that living in rural areas comes with poorer access to services and facilities.

### **SCORING SYSTEM PROPOSED:**

SA Objective	Decision making criteria	Short- Term 0-5 yrs	Medium Term 5-20 yrs	Long- Term 20+ yrs	Comments / Justification Inc. cumulative effects
<b>ENVIRONMEN</b>	NTAL				
ENV 1 To reduce the effect of traffic on the environment.	Will it reduce traffic volumes, ease the flow of traffic and reduce congestion?  Will it increase the proportion of journeys using modes other than the car?	☺	©	☺	Option A: Improved public transport to towns and villages where there are more facilities will reduce the need to travel by private car and reduce congestion within town centres.
	Will it reduce the effect of HGV traffic on people and the environment?  Will it encourage more benign modes of travel?  Will new development be located such to reduce the need for people to travel?	8	8	⊗	Option B: Significant residential development in rural areas could support some facilities, but the extent of development would need to be substantial to have any significant effect, and in practice the main effect would be increased commuting to facilities and work elsewhere.
		☺	☺	☺	Option C and D: Providing local facilities, including promoting multi-use of rural buildings would bring local facilities to an area

		8	⊗	8	and reduce the need to travel.  Option E: Doing nothing will encourage people to travel more to services and facilities further afield where they are available.
ENV 2 To improve the quality of the water environment	Will it improve the quality of the water environment (streams, rivers, lakes etc)?  Will it help to support wetland habitats and species?	N/a	N/a	N/a	N/a
ENV 3 To improve environmental amenity, including air quality.	Will it improve air quality?  Will it reduce the emission of atmospheric pollutants?	See ENV 1	See ENV 1	See ENV 1	Similar issues apply as with ENV1 in relation to increased traffic generation. With more houses or fewer facilities, there would be more travel and commuting and an increase in noise and congestion, and air quality could be damaged.
ENV 4 To maintain and enhance biodiversity and geodiversity.	Will it conserve / enhance natural or semi-natural habitats, and promote habitat connections?  Is it likely to have a significant effect on sites designated for international, national or local importance?  Will it conserve / enhance species diversity, and in particular avoid harm to protected species?	N/a	N/a	N/a	N/a
ENV 5 To maintain and enhance the	Will it protect and enhance the quality of landscapes, townscapes and countryside character, including the character of the Broads and its setting where relevant?	9	©	☺	Option A: Better public transport links could reduce the impact of traffic on historic town centres.
quality of landscapes, townscapes and the historic environment.	Will it maintain and enhance the distinctiveness of the landscapes/townscapes and heritage?  Will it reduce the amount of derelict, underused land?	8	8	8	Option B: Significant residential development in rural locations would have an impact on the landscape and setting of settlements.
	Will it protect and enhance features of historical, archaeological and cultural value?	?	?	?	Option C and D: Uncertain effects: The impact of new facilities and reusing existing buildings would depend on how well they were designed and integrated into the character

		⊗	⊗	⊗	of the area.  Option E: Some buildings may fall into disuse if they are not viable for economic use in the rural area through lack of transport access.
ENV 6 To adapt to and mitigate against the impacts of climate change.	Will it reduce emissions of greenhouse gases by reducing energy consumption? Will it lead to an increased proportion of energy needs being met from renewable sources? Will it increase the capacity of the area to withstand the effects of climate change? How can it be ensured that the risks to lives, land and property are minimised?	See ENV 1	See ENV 1	See ENV 1	Similar issues apply as with ENV1 in relation to increased traffic generation causing moiré contributions to climate change. With more houses or fewer facilities, there would be more travel and commuting.
ENV 7 To avoid, reduce and manage flood risk.	Will it minimise the risk of flooding to people and property?  Can it incorporate new designs to adapt to possible flood risk?  Will it promote the use of sustainable drainage systems to reduce run off?	N/a	N/a	N/a	N/a
ENV 8 To provide for sustainable use and sources of water supply.	Will it conserve groundwater resources? Will it minimise water consumption?	N/a	N/a	N/a	N/a
ENV 9 To make the best use of resources,	Will it minimise consumption of materials and resources? Will it promote the use of land in sustainable locations that has been previously developed? Will it use land efficiently? Will it minimise the loss of "greenfield" land?	☺	©	©	Options A, C and D: These options would help to make use of existing facilities and promote more self-containment.
including land and energy, and to minimise	Will it avoid the loss of good quality agricultural land and preserve soil resources?  Will it minimise energy consumption and promote energy	₿	⊜	☺	Option B: Isolated rural locations are unlikely to be sustainable.
waste production.	efficiency and promote renewable energy sources?  Will it lead to less waste being produced?  Will it lead to less waste being disposed, by promoting more recycling and composting?  Will it increase waste recovery for other means eg. energy generation?	N/a	N/a	N/a	Option E: N/a

SOCIAL					
SOC 1 To reduce poverty and social exclusion.	Will it reduce poverty and social exclusion in those areas most affected?  Will it help to reduce deprivation levels?  Will it help meet the needs of residents most effectively?	☺	☺	☺	Options A-D: All these options would help to contribute towards reducing social exclusion by providing improved access to local facilities. Option A would benefit the whole rural area, whereas options B-D would be able to benefit more people than option A because there would be services provided locally rather than needing to make use of public transport.
		8	8	8	Option E: Doing nothing could lead to current facilities becoming less viable as people continue to travel elsewhere for services. Support for local facilities would decline if there is less public transport access and people preferred to make combined trips to larger centres.
SOC 2 To maintain and improve the	Will it improve access to high quality health facilities?  Will it encourage healthy lifestyles? How?	©	☺	©	Option A could increase the walking and cycling of residents as part of using improved public transport.
health of the whole population and	Will it provide adequate health infrastructure for existing and new communities?	☺	☺	☺	Option B could improve the provision of local health facilities if these were included in significant new developments in the rural area.
promote healthy lifestyles.	Will the links between poorer health and deprivation be addressed?  Will links to the countryside be maintained and enhanced?	☺	☺	☺	Options C and D could involve provision of health facilities.
	, and the second	⊜	8	⊜	Option E would make it harder for people to access health facilities and would could make existing centres less viable.
SOC 3 To improve education and skills.	Will it improve qualifications and skills for both young people and amongst the workforce? Will it help to retain key workers and provide more skilled workers from school leavers?	©	☺	☺	Options A-D: All these options would help to improve access to local facilities, which could include local education.
SKIIIS.	Will adequate education infrastructure be provided for existing and new communities? Will it promote lifelong learning and skills training?	8	8	8	Option E: Doing nothing could lead to current facilities becoming

	Will links between lower levels of education and deprivation be addressed?				less viable as people continue to travel elsewhere for services.
SOC 4 To provide the opportunity to live in a decent, suitable and affordable home.	Will it increase the range of types, sizes and affordability of housing for all social groups? Will it reduce the housing need and ensure that housing provision addresses the needs of all? Will it provide the most appropriate solutions to address the housing requirements needed for creating sustainable communities? Will it make best use of existing housing stock?	N/a ©	N/a ©	N/a ©	Options A, C, D, E: N/a  Option B: This would provide opportunities for more social housing for local needs to be brought to rural areas, and possibly for a general improvement in the affordability of housing in rural areas.
SOC 5 To build community identity, improve social welfare, and	Will it encourage engagement in community activities?  Will it contribute to the achievement of a mixed and balanced community?  Will it reduce actual levels of crime?	©8	©8	©8	Option A: This would help communities to mix as they share facilities and community services, although the individual communities would perhaps interact with one-another less.
reduce crime and anti-social activity.	Will it reduce the fear of crime?	©	©	©	Options B-D: All these options would help to maintain community facilities that contribute to the achievement of building community identity, although the development from option B could have an impact on existing local communities.
		⊜	8	8	Option E: Doing nothing could lead to current facilities becoming less viable, and people could go elsewhere for services and so not integrate with their local community. Support for local facilities would decline if there were less public transport access and people preferred to make combined trips to larger centres.
SOC 6 To offer more opportunities for	Will it reduce unemployment overall? Will it help to improve earnings?	©	©	☺	Option A: Improved public transport could also improve access to job opportunities.
rewarding and satisfying		☺	☺	☺	Options B-D:

employment for all.		8	⊗	8	New developments could generate some employment in local areas from the provision of new services.  Option E: Doing nothing could mean people continue to travel elsewhere for jobs and lead to current facilities being less viable and closing.
SOC 7 To improve the quality of where people live.	Will it improve the quality of dwellings?  Will it improve the quality of local open space?  Will it improve the satisfaction of people with their	☺	☺	☺	Options A-D: These options would provide better access to local facilities, making settlements better places to live and enabling the daily needs of residents to be met.
	neighbourhoods?	8	8	⊗	Option E: Doing nothing could lead to current facilities being less viable and eventually closing and the overall provision of services declining. Support for local facilities would decline if there is less public transport access and people preferred to make combined trips to larger centres.
SOC 8 To improve accessibility to essential services,	Will it improve accessibility to key local services and facilities (including health, education, leisure, open space, the countryside and community facilities)?  Will it improve accessibility for all whilst reducing dependency on	©	☺	☺	Options A-D: All these options would help to improved access to local facilities and services and help to promote job opportunities.
facilities and jobs.	the private car?  Will it improve access to jobs and services for all?	⊜	⊗	8	Option E: Doing nothing could lead to current facilities becoming less viable as people continue to travel elsewhere for services. Support for local facilities would decline if there is less public transport access and people preferred to make combined trips to larger centres.
ECONOMIC					
EC 1 To encourage sustained economic	Will it assist in strengthening the local economy? Will it improve business development and enhance competitiveness? Will it reduce vulnerability to economic shocks? Will it promote growth in key sectors?	☺	☺	☺	Options A-D: Better public transport links and more local facilities would help to make the rural areas more economically attractive for new investment.

growth.	Will it increase vitality & viability of town centres and improve economic diversity?	8	8	⊗	Option E: Doing nothing could encourage a decline in facilities and make the rural area less attractive for investment.
To encourage and accommodate	Will it encourage indigenous businesses? Will it encourage inward investment? Will it make land and property available for business? Will it improve economic performance across the Greater Norwich area?	<b>(i)</b>	<b>③</b>	☺	Options A-D: Better public transport links and more local facilities would help to make the rural areas more economically attractive for new investment.
both indigenous and inward investment.	Will it support / encourage rural diversification? Will it support / encourage small city businesses?	8	⊗	8	Option E: Doing nothing could encourage a decline in facilities and make the rural area less attractive for investment.
EC 3 To encourage efficient patterns of	Will it improve provision of local jobs?  Will it improve accessibility to work, particularly by public transport, walking and cycling?	☺	☺	☺	Options A-D: Better public transport links and more local facilities would help to improve access to jobs and encourage employment provision in rural areas.
movement in support of economic growth.	Will it reduce journey times between key employment areas and key transport interchanges?  Will it improve efficiency and sustainability of freight distribution?  Will it support provision of key communications infrastructure?	⊗	⊗	8	Option E: Doing nothing could encourage a decline in facilities and make the rural area less accessible for employees and less attractive to further investment in
EC 4 To improve the social and environmental performance of the economy.	Will it reduce the impact on the environment from businesses?  Will it reduce the impact on residents from businesses?  Will it attract new investment and skilled workers to the area?  Will it maintain existing business and employment provision?	©	©	©	jobs.  Options A-D: All these options would help to improve access to local facilities and services and help to promote job opportunities. They could increase the ability of businesses to serve identified needs in rural areas, as well as source employees from the area.
	Will it provide employment in the best locations to serve urban and rural residents?	☺	8	⊜	Option E: Doing nothing could lead to current facilities becoming less viable as people continue to travel elsewhere for services and jobs as employment may not be provided so easily in rural areas.

Overall Conclusions: What are the main effects of the policy option as identified through the sustainability appraisal process?

POLICY OPTION: Question 38: Community Life and Culture – Tackling Rural Deprivation

- Option A Improving public transport and access to towns and larger villages where facilities already exist.
- Option B Allow significant residential development in rural areas to support existing and new facilities.
- Option C Provide, maintain and improve essential facilities for the community, even if they may be uneconomic.
- Option D Promote the multi-use of rural buildings, which could help to provide some community facilities.
- Option E Do nothing and accept that living in rural areas comes with poorer access to services and facilities.

	Options A, C and D have environmental benefits from the reduction of traffic volume and improved accessibility to services.
Environmental	Options B, C, and D would need careful design to integrate new developments into the existing village form and minimise the
Impacts	impacts on the built environment and to improve the viability of reusing existing buildings.
	Option B could likely have negative effects arising from traffic generation. Major expansion would also impact on landscapes
	and settings of the rural villages.
	Option E could continue to experience increased commuting to settlements with more facilities and job opportunities, especially
	if local facilities continue to decline as a result of being less viable.
	Options A-D would all help to reduce social exclusion, promote community integration and reduce rural isolation by providing
Social Impacts	improved access to local facilities, although option A would still require a degree of dependence on public transport. Education
_	and health facilities could also be provided within the new facilities of Option B.
	Options B-D would also increase the attractiveness for new employment in rural areas.
	Option E (doing nothing) could lead to current facilities becoming less viable as people continue to travel elsewhere for services.
	Options A-D would help to provide better public transport links and more local facilities in rural areas, which would help to make
<b>Economic Impacts</b>	the rural areas more economically attractive for new investment, as businesses could be more accessible for both customers
-	and employees.
	Option E (doing nothing) could encourage a decline in facilities and could make the rural area less attractive for investment if
	people continue to have to look elsewhere for employment opportunities.

## **Overall summary:**

- Impacts
- Possible mitigation measures
- Recommended further research
- Considering cumulative impacts

Options A-D are generally beneficial, although Option B could have environmental impacts borne of significant development being introduced to rural settlements. In general, improving the facilities offered to local communities will help new communities to become more self-contained and require less out-commuting. It may help local people remain in the area and keep local services viable. Option E would see the current situation continue, whereby people commute to the workplace and services and facilities and may not be so well involved in their local communities.

It is worth considering that options A-D are not all mutually exclusive, and could bring more benefit to rural areas if they were adopted together or in combination.

- Option Appraised: Question 39 The City Centre: Areas for promoting growth and enhancement of city centre retail.
  - Option A Concentrating around the existing retail area
  - Option B Expanding the retail centre
  - Option C Developing additional retail capacity in the Anglia Square / Northern city centre area to significantly improve its attraction to shoppers.

#### **SCORING SYSTEM PROPOSED:**

SA Objective	Decision making criteria	Short- Term 0-5 yrs	Medium Term 5-20 yrs	Long- Term 20+ yrs	Comments / Justification Inc. cumulative effects
<b>ENVIRONMEN</b>	NTAL				
ENV 1 To reduce the effect of traffic on the environment.	Will it reduce traffic volumes, ease the flow of traffic and reduce congestion? Will it increase the proportion of journeys using modes other than the car? Will it reduce the effect of HGV traffic on people and the environment? Will it encourage more benign modes of travel? Will new development be located such to reduce the need for people to travel?	©®	©⊗	©⊗	All options will be able to benefit from transport links to the city centre and encourage people to use public transport, but it would increase the freight traffic in the city centre.  Options A and B could lead to more car restrictions being introduced to the city centre. Option C could bring improved public transport services to serve the redeveloped area.
ENV 2 To improve the quality of the water environment	Will it improve the quality of the water environment (streams, rivers, lakes etc)?  Will it help to support wetland habitats and species?	N/a	N/a	N/a	N/a
ENV 3 To improve environmental amenity,	Will it improve air quality?  Will it reduce the emission of atmospheric pollutants?	©Ø	©8	©8	If the influence of cars can be reduced, it would cut down on congestion and noise and vibration damage to the city centre's heritage, as well as pollution. Air quality could be improved if there were

including air quality.					greater use of public transport, but there would also be more freight traffic in the city centre.  Option C would also make use of previously developed land and underused sites.
ENV 4 To maintain and enhance biodiversity and geodiversity.	Will it conserve / enhance natural or semi-natural habitats, and promote habitat connections? Is it likely to have a significant effect on sites designated for international, national or local importance? Will it conserve / enhance species diversity, and in particular avoid harm to protected species?	N/a	N/a	N/a	N/a
ENV 5 To maintain and enhance the quality of landscapes, townscapes and the historic environment.	Will it protect and enhance the quality of landscapes, townscapes and countryside character, including the character of the Broads and its setting where relevant?  Will it maintain and enhance the distinctiveness of the landscapes/townscapes and heritage?  Will it reduce the amount of derelict, underused land?  Will it protect and enhance features of historical, archaeological and cultural value?	©	© (3)	©\(\text{\text{\$\delta}}\)	Expanding the retail core would be able to attract new investment and with it encourage better designs of architecture. This could help bring a modern statement to the townscape of Norwich. However, there would also be an impact from the increased freight traffic in the historic city.  Option A and B would be able to make use of peripheral and underused buildings around the historic core. The historic core would be under pressure from new development but this could be used to enhance its heritage and preserve the character within new uses.  Option C would also make use of previously developed land and underused sites.
ENV 6 To adapt to and mitigate against the impacts of climate change.	Will it reduce emissions of greenhouse gases by reducing energy consumption?  Will it lead to an increased proportion of energy needs being met from renewable sources?  Will it increase the capacity of the area to withstand the effects of climate change?  How can it be ensured that the risks to lives, land and property are	⊗	8	8	All new developments will need to include design measures that help to mitigate against climate change and the effects thereof.  Option A and B could be prevented from reaching their potential to mitigate and adapt to climate change if the high number of historic buildings around the city centre were to restrict certain building designs from being used.

	minimised?				
		©	©	©	Option C would enable more energy generation designs and schemes to be introduced to the area as part of area-wide redevelopment.
ENV 7 To avoid, reduce and	Will it minimise the risk of flooding to people and property?  Can it incorporate new designs to adapt to possible flood risk?	☺	☺	☺	Options A and B offer more scope for avoiding areas at risk of flooding.
manage flood risk.	Will it promote the use of sustainable drainage systems to reduce run off?	?	?	?	Option C is an area located next to the river Yare, and would need to ensure its designs include the necessary flood protection measures.
ENV 8 To provide for sustainable use and sources of water supply.	Will it conserve groundwater resources?  Will it minimise water consumption?	N/a	N/a	N/a	N/a
ENV 9 To make the best use of resources,	Will it minimise consumption of materials and resources? Will it promote the use of land in sustainable locations that has been previously developed? Will it use land efficiently?				All options will be able to make use of previously developed land and should be in sustainable locations well connected to public transport.
including land and energy, and to minimise waste	Will it minimise the loss of "greenfield" land? Will it avoid the loss of good quality agricultural land and preserve soil resources? Will it minimise energy consumption and promote energy efficiency?	80	80	80	Options A and B may be less able to incorporate renewable energy schemes, but would make use of existing buildings.
production.	Will it promote the use of renewable energy sources? Will it lead to less waste being produced? Will it lead to less waste being disposed, by promoting more recycling and composting? Will it increase waste recovery for other means eg. energy generation?	80	80	80	Option C would likely involve redevelopment of a wide area and using more raw construction materials, but could include renewable energy generation schemes and efficient waste collection measures. This option is also significant in being able to make good use of previously developed land.
SOCIAL					
SOC 1 To reduce poverty and social	Will it reduce poverty and social exclusion in those areas most affected?  Will it help to reduce deprivation levels?	©	☺	©	All options would help to improve the range of services and facilities available to people using the city centre, the transport links to which would serve to reduce access deprivation to services. There
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exclusion.	Will it help meet the needs of residents most effectively?				may also be new jobs provided.
					Option C in particular would be able to bring retail services to people in the northern part of the city centre and could offer jobs for local people there.
SOC 2 To maintain and improve the health of the whole population and promote healthy lifestyles.	Will it improve access to high quality health facilities? Will it encourage healthy lifestyles? How? Will it provide adequate health infrastructure for existing and new communities? Will the links between poorer health and deprivation be addressed? Will links to the countryside be maintained and enhanced?	☺	☺	☺	Public transport improvements could lead to healthier lifestyles for people using public transport, as part of increased walking and cycling. It would also improve the environment for those who live and work in the city centre or north of the centre.
SOC 3 To improve education and skills.	Will it improve qualifications and skills for both young people and amongst the workforce? Will it help to retain key workers and provide more skilled workers from school leavers? Will adequate education infrastructure be provided for existing and new communities? Will it promote lifelong learning and skills training? Will links between lower levels of education and deprivation be addressed?	N/a	N/a	N/a	N/a
SOC 4 To provide the opportunity to live in a decent, suitable and affordable home.	Will it increase the range of types, sizes and affordability of housing for all social groups? Will it reduce the housing need and ensure that housing provision addresses the needs of all? Will it provide the most appropriate solutions to address the housing requirements needed for creating sustainable communities? Will it make best use of existing housing stock?	N/a	N/a	N/a	N/a
SOC 5 To build community identity,	Will it encourage engagement in community activities?  Will it contribute to the achievement of a mixed and balanced community?	©	©	©	All options that will bring new development standards will be able to improve the local area and increase pride in their surroundings for people living in the city centre.
improve social welfare, and reduce crime	Will it reduce actual levels of crime?  Will it reduce the fear of crime?				Option C in particular will bring a new identity to the community north of the city centre, and reusing the

and anti-social					current site will help to reduce crime.
SOC 6 To offer more opportunities for rewarding and	Will it reduce unemployment overall? Will it help to improve earnings?	☺	©	©	All options will be able to offer new jobs for local people, and retail developments can offer work for lower-skilled residents and those who need part-time jobs.
satisfying employment for all.					Option C in particular will bring new job opportunities to the community north of the city centre, although plans must be careful not to cause existing facilities to close elsewhere.
SOC 7 To improve the quality of where people live.	Will it improve the quality of dwellings?  Will it improve the quality of local open space?  Will it improve the satisfaction of people with their neighbourhoods?	☺	©	☺	All options will be able improve the local environment by making use of under-used buildings and previously-developed sites, particularly for Option C, which has the most opportunity to include open space and other community-improvement initiatives.
SOC 8 To improve accessibility to essential services, facilities and	Will it improve accessibility to key local services and facilities (including health, education, leisure, open space, the countryside and community facilities)?  Will it improve accessibility for all whilst reducing dependency on the private car?	☺	()	☺	All options would help to improve the range of services and facilities available to people living in, visiting or working in the city centre, the transport links to which would serve to improve access to services and jobs.
jobs.	Will it improve access to jobs and services for all?				Option C would bring retail services and jobs to the northern part of the city centre.
ECONOMIC					
EC 1 To encourage sustained economic growth.	Will it assist in strengthening the local economy?  Will it improve business development and enhance competitiveness?  Will it reduce vulnerability to economic shocks?  Will it promote growth in key sectors?	©®	©8	©⊗	All options will help to develop new investment in the retail economy of Norwich city. As the city retail offer expands, however, it could threaten the viability of local shopping in market towns and district centres in the city, and could make independent trading unviable. The expansion of retail must not be allowed to prevent investment in
	Will it increase vitality & viability of town centres and improve				office-based business development.

	economic diversity?				Options A and C could also increase the viability of some local centres if larger retailers brought more customer footfall to existing shops.
To encourage and accommodate both indigenous and inward investment.	Will it encourage indigenous businesses?  Will it encourage inward investment?  Will it make land and property available for business?  Will it improve economic performance across the Greater Norwich area?	©®	©®	©®	All options will help to develop new investment in the retail economy of Norwich city, but it could threaten the viability of local shopping in market towns and district centres in the city, and could make independent trading less viable. The expansion of retail must not be allowed to prevent investment in office-based business development.
	Will it support / encourage rural diversification? Will it support / encourage small city businesses?				Options A and C could also increase the viability of some local centres if larger retailers brought more customer footfall to existing shops.
EC 3 To encourage efficient patterns of movement in support of	Will it improve provision of local jobs? Will it improve accessibility to work, particularly by public transport, walking and cycling? Will it reduce journey times between key employment areas and key transport interchanges? Will it improve efficiency and sustainability of freight distribution? Will it support provision of key communications infrastructure?	© <u></u>	© <u></u>	©8	Local jobs would be available in the city centre, where there are good public transport links and cycling/walking networks.  It would however mean more freight traffic also comes into the city centre, which would serve to
economic growth.  EC 4  To improve the social and environmental performance of the economy.	Will it reduce the impact on the environment from businesses?  Will it reduce the impact on residents from businesses?  Will it attract new investment and skilled workers to the area?  Will it maintain existing business and employment provision?  Will it provide employment in the best locations to serve urban and	©®	©®	© (S)	increase congestion.  Socially, all options would provide jobs in the city, but they could threaten some jobs in market towns' retail. This option represents a distinct favour towards expanding retail in the city, which may have financial implications for businesses elsewhere, and cause a reduction in local service provision, except to the north of the city centre where services may increase.
	rural residents?				Although there could be more use of public transport, there would likely be an increase in freight in the city, which could impact on health and heritage of Norwich and its residents.

Overall Conclusions: What are the main effects of the policy option as identified through the sustainability appraisal process?

- POLICY OPTION: Question 39 The City Centre: Areas for promoting growth and enhancement of city centre retail.
  - Option A Concentrating around the existing retail area
  - Option B Expanding the retail centre
  - Option C Developing additional retail capacity in the Anglia Square / Northern city centre area to significantly improve its attraction to shoppers.

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Environmental	Environmental benefits include more use of public transport for shopping and working in the city centre and north of the city, but possibly more freight traffic, which could have an impact on the city centre's heritage. Expanding the retail core would be able to
Impacts	attract new investment and encourage better designs of architecture. Regeneration of the north of the city centre / Anglia
	Square (Option C) would also make particularly good use of previously developed land, and even be able to include some
	renewable energy generation schemes.
Social Impacts	There would be more employment opportunities created, which could be suitable for those looking for part-time or less skilled work. It would increase the attraction of Norwich as a place to live, but it could draw business away from existing district centres
Social illipacts	and market town retail, possibly creating unemployment there. The local environment would be improved, to the north of the city
	centre in particular (Option C), where there would also be an improvement in accessibility to local services for residents in the

# **Economic Impacts**

It is important that under all options, expansion of the retail core must not be allowed to restrict opportunities for office-based business investment in the city or around the city centre. It could leave the city more vulnerable to a slow-down in consumer spending, and less resilient to economic shocks in this sector of the economy.

# **Overall summary:**

- Impacts
- Possible mitigation measures
- Recommended further research

area.

• Considering cumulative impacts

These options will help develop the retail sector even further, but must not be allowed to threaten the viability of the local retail or service provision in district centres or market towns, or this would serve to increase travel to facilities and could create unemployment. The options may work particularly well with office-based business and employment expansion in and around the city centre. In the long-term, if Norwich continues to be an leading centre for shoppers and visitors (barring a slow-down in the retail consumer economy), it will serve to attract more people to live and work in Norwich, so it must be able to offer other forms of employment. An essential aspect of these options will be to minimise the impact of the increased freight needing to access the city centre; any freight distribution schemes that can support this would create significant synergistic benefits.

- Option Appraised: Question 40 The City Centre: Cultural development Areas for late night leisure activities.
  - Option A Retain the approach of concentration of late night leisure, but expand the area to allow additional development of this kind.
  - Option B Control expansion of leisure activities to those more suitable for all age groups with encouragement for this wider range of uses to remain open late.
  - Option C Encourage dispersal of late night leisure activities around the city centre area.

#### **SCORING SYSTEM PROPOSED:**

SA Objective	Decision making criteria	Short- Term 0-5 yrs	Medium Term 5-20 yrs	Long- Term 20+ yrs	Comments / Justification Inc. cumulative effects
<b>ENVIRONMEN</b>	NTAL				
ENV 1 To reduce the effect of traffic on the	Will it reduce traffic volumes, ease the flow of traffic and reduce congestion? Will it increase the proportion of journeys using modes other than the car?	☺	☺	©	Option A: Public transport would continue to be more viable if activities were concentrated within a core area.
environment.	Will it reduce the effect of HGV traffic on people and the environment? Will it encourage more benign modes of travel? Will new development be located such to reduce the need for	80	80	80	Option B: Whilst it would bring more traffic into the city at night, this could also increase the numbers of people likely to use public transport.
	people to travel?	⊗	8	8	Option C: This would spread the evening economy around the city centre, and could in fact make public transport less viable.
ENV 2 To improve the quality of the water environment	Will it improve the quality of the water environment (streams, rivers, lakes etc)?  Will it help to support wetland habitats and species?	N/a	N/a	N/a	N/a
ENV 3	Will it improve air quality?				All options that increase or expand the night time

To improve environmental amenity, including air quality.	Will it reduce the emission of atmospheric pollutants?	8	8	⊗	economy will be likely to significantly impact on the amenity of the city centre. Increases in litter and noise could be a particular nuisance for city centre residents. Options A and B would serve to concentrate the efforts for mitigation, but Option C would disperse these effects and impact on a wider area and larger number of people.
ENV 4 To maintain and enhance biodiversity and geodiversity.	Will it conserve / enhance natural or semi-natural habitats, and promote habitat connections? Is it likely to have a significant effect on sites designated for international, national or local importance? Will it conserve / enhance species diversity, and in particular avoid harm to protected species?	N/a	N/a	N/a	N/a
ENV 5 To maintain and enhance the quality of landscapes, townscapes and the historic environment.	Will it protect and enhance the quality of landscapes, townscapes and countryside character, including the character of the Broads and its setting where relevant? Will it maintain and enhance the distinctiveness of the landscapes/townscapes and heritage? Will it reduce the amount of derelict, underused land? Will it protect and enhance features of historical, archaeological and cultural value?	N	Z	N	It is possible that an increase in late night leisure, and certainly its dispersal to a wider area, could create secondary effects such as litter and noise that could affect the culture and heritage of the area and act as a disincentive to other forms of investment in the city centre.
ENV 6 To adapt to and mitigate against the impacts of climate change.	Will it reduce emissions of greenhouse gases by reducing energy consumption? Will it lead to an increased proportion of energy needs being met from renewable sources? Will it increase the capacity of the area to withstand the effects of climate change? How can it be ensured that the risks to lives, land and property are minimised?	N/a	N/a	N/a	N/a
ENV 7 To avoid, reduce and manage flood risk.	Will it minimise the risk of flooding to people and property? Can it incorporate new designs to adapt to possible flood risk? Will it promote the use of sustainable drainage systems to reduce run off?	N/a	N/a	N/a	N/a
ENV 8 To provide for sustainable use	Will it conserve groundwater resources? Will it minimise water consumption?	N/a	N/a	N/a	N/a

and sources of					
water supply.  ENV 9  To make the best use of resources, including land and energy, and to minimise waste production.	Will it minimise consumption of materials and resources? Will it promote the use of land in sustainable locations that has been previously developed? Will it use land efficiently? Will it minimise the loss of "greenfield" land? Will it avoid the loss of good quality agricultural land and preserve soil resources? Will it minimise energy consumption and promote energy efficiency? Will it promote the use of renewable energy sources? Will it lead to less waste being produced? Will it lead to less waste being disposed, by promoting more recycling and composting? Will it increase waste recovery for other means eg. energy generation?	8	8	8	All options would cause an increase in energy consumption and create more waste being produced, particularly litter, as activities are open later, longer and more frequently.
SOCIAL	1 0				
SOC 1 To reduce poverty and	Will it reduce poverty and social exclusion in those areas most affected?  Will it help to reduce deprivation levels?	☺	☺	☺	Social exclusion may be reduced if the late night leisure activities included voluntary organisation activities.
social exclusion.	Will it help meet the needs of residents most effectively?	☺	☺	☺	Option B would be particularly beneficial in reducing social exclusion and promoting integration by offering more activities for families and older people.
To maintain and improve the health of the whole population and promote healthy lifestyles.	Will it improve access to high quality health facilities? Will it encourage healthy lifestyles? How? Will it provide adequate health infrastructure for existing and new communities? Will the links between poorer health and deprivation be addressed? Will links to the countryside be maintained and enhanced?	N/a	N/a	N/a	These options may need to be accompanied by, or even lead to, a means to tackle any possible alcohol or drug abuse issues associated with late night leisure activity.
SOC 3 To improve education and skills.	Will it improve qualifications and skills for both young people and amongst the workforce? Will it help to retain key workers and provide more skilled workers from school leavers?	N/a	N/a	N/a	N/a

SOC 4	Will adequate education infrastructure be provided for existing and new communities? Will it promote lifelong learning and skills training? Will links between lower levels of education and deprivation be addressed? Will it increase the range of types, sizes and affordability of				
To provide the opportunity to live in a decent, suitable and affordable home.	housing for all social groups?  Will it reduce the housing need and ensure that housing provision addresses the needs of all?  Will it provide the most appropriate solutions to address the housing requirements needed for creating sustainable communities?  Will it make best use of existing housing stock?	N/a	N/a	N/a	N/a
SOC 5 To build community identity, improve social welfare, and reduce crime and anti-social activity.	Will it encourage engagement in community activities?  Will it contribute to the achievement of a mixed and balanced community?  Will it reduce actual levels of crime?  Will it reduce the fear of crime?	©®	©8	©®	All options could have mixed effects. There would be more leisure activities available to more people, particularly under Option B, so it would increase pride and identity in the city. However, it could increase some crime and anti-social behaviour, as related to late night leisure, for which Option C would also spread further around the city, and make the city centre a less desirable place to live as a 24hr city.
SOC 6 To offer more opportunities for rewarding and satisfying employment for all.	Will it reduce unemployment overall?  Will it help to improve earnings?	©	☺	☺	Job opportunities would increase, and it all options would offer more part-time work, particularly for younger people. Although these are traditionally lower-paid jobs, it would help those with fewer skills or qualifications.
SOC 7 To improve the quality of where people live.	Will it improve the quality of dwellings? Will it improve the quality of local open space? Will it improve the satisfaction of people with their neighbourhoods?	⊗	⊗	8	For city-centre dwellers, without adequate management the likely increase in noise, litter, antisocial behaviour and even crime could dissuade people from living in the city. Open spaces are also often areas where anti-social behaviour is concentrated.
SOC 8 To improve	Will it improve accessibility to key local services and facilities (including health, education, leisure, open space, the countryside	☺	☺	☺	Access to more jobs and leisure pursuits would be increased in the city centre, and could be more viable

accessibility to essential services, facilities & jobs.	and community facilities)? Will it improve accessibility for all whilst reducing dependency on the private car? Will it improve access to jobs and services for all?				for public transport.
<b>ECONOMIC</b>					
EC 1 To encourage sustained economic growth.	Will it assist in strengthening the local economy? Will it improve business development and enhance competitiveness? Will it reduce vulnerability to economic shocks? Will it promote growth in key sectors? Will it increase vitality & viability of town centres and improve economic diversity?	☺	٥	☺	Growth in the leisure industry would be expanded, particularly under Option B, which could promote more investment in a wider range of leisure activities.
EC 2 To encourage and accommodate both indigenous and inward investment.	Will it encourage indigenous businesses? Will it encourage inward investment? Will it make land and property available for business? Will it improve economic performance across the Greater Norwich area? Will it support / encourage rural diversification? Will it support / encourage small city businesses?	☺	☺	☺	The impacts from more investment in the city centre would be beneficial on the whole, but it could also threaten the viability of some market town leisure activities if it drew many customers away from market town leisure.
EC 3 To encourage efficient patterns of	Will it improve provision of local jobs?  Will it improve accessibility to work, particularly by public transport, walking and cycling?	☺	☺	©	Option A: More people could use viable public transport services if activities were concentrated in a core area.
movement in support of economic	Will it reduce journey times between key employment areas and key transport interchanges?	80	80	80	Option B: This could increase the numbers of people likely to use public transport, but would also be likely to bring more traffic into the city for families.
growth.	Will it improve efficiency and sustainability of freight distribution?  Will it support provision of key communications infrastructure?	⊜	⊜	⊜	Option C: This would spread the evening economy around the city centre, and could in fact make public transport less viable.
To improve the social and	Will it reduce the impact on the environment from businesses?  Will it reduce the impact on residents from businesses?	80	80	80	The evening economy could provide more jobs and activities for people, but could cause more impact on residents from anti-social behaviour, noise and litter.
environmental performance of the economy.	Will it attract new investment and skilled workers to the area?  Will it maintain existing business and employment provision?				Environmentally, new business for longer hours of the day will create more waste and use more energy.

Will it provide employment in the best locations to serve urban and rural residents?	The city-centre leisure location will increase the opportunities for people to access them via public transport.
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- Overall Conclusions: What are the main effects of the policy option as identified through the sustainability appraisal process?

   POLICY OPTION: Question 40 The City Centre: Cultural development Areas for late night leisure activities.
  - Option A Retain the approach of concentration of late night leisure, but expand the area to allow additional development of this kind.
  - Option B Control expansion of leisure activities to those more suitable for all age groups with encouragement for this wider range of uses to remain open late.
  - Option C Encourage dispersal of late night leisure activities around the city centre area.

    Traffic and dispersal in the city centre area.

	Traffic could increase if late night public transport services do not expand and become more accessible for more people.
Environmental	Environmental amenity would also be compromised as noise and litter increases in the city centre. Although Options A and B
Impacts	concentrate the effects and help manage them, Option C would increase the area affected making it hard to manage the effect.
	Accessibility to leisure pursuits could increase if the range and area of activities in the city centre increased or were expanded. If
Social Impacts	some forms of leisure activities are increased (Options A and B), or allowed to spread around the city (Option C) there could
	also be an increase in anti-social behaviour, crime, litter and noise pollution. These effects could make the city centre a less
	desirable place to visit or live in and could also dissuade investment. On the other hand, more jobs would likely be available.
	Growth in the leisure industry would be expanded, particularly under Option B, which could promote more investment in a wider
<b>Economic Impacts</b>	range of leisure activities. It could cause more impact on residents from anti-social behaviour, noise and litter. Environmentally,
	new business for longer hours of the day will create more waste and use more energy, but the city-centre leisure location will
	increase the opportunities for people to access them via public transport.

### **Overall summary:**

- Impacts
- Possible mitigation measures
- Recommended further research
- · Considering cumulative impacts

Mitigating against the effects of increased waste and litter generation must include efforts to increase on-site recycling at leisure venues, which will also help to reduce litter in the area, alongside a programme of city centre management to reduce anti-social behaviour. Public transport connections should also be encouraged to become more flexible and offer later services. These options would need to be applied in combination with policy options to improve the viability of the city centre as a business and office-based employment location, and possibly schemes to help address any exacerbation of social problems that may arise. These options would have to work closely and carefully with other options to increase retail and office-based business in the city centre especially, because of the sensitivity to possible conflicts of interest and incompatible uses.

- Option Appraised: Question 41 The Norwich Policy Area: Should housing need that would ideally be met in the city of Norwich be met instead in the Norwich Policy Area?
  - Option 1: Meeting some of Norwich's affordable housing needs in the Norwich Policy Area.
  - Option 2: Meeting some of Norwich's affordable housing needs outside the Norwich Policy Area.

#### **SCORING SYSTEM PROPOSED:**

SA Objective	Decision making criteria	Short- Term 0-5 yrs	Medium Term 5-20 yrs	Long- Term 20+ yrs	Comments / Justification Inc. cumulative effects
<b>ENVIRONMEN</b>	NTAL				
ENV 1 To reduce the effect of traffic on the	Will it reduce traffic volumes, ease the flow of traffic and reduce congestion? Will it increase the proportion of journeys using modes other than the car?	☺	©	©	Option 1: Although this is location-specific, residents should be relatively close to local facilities, so promoting walking and cycling, and transport links should also
environment.	Will it reduce the effect of HGV traffic on people and the environment? Will it encourage more benign modes of travel? Will new development be located such to reduce the need for people to travel?	8	8	8	be accessible.  Option 2: This is location-specific, but residents could be further from services and the main employment centres & become more dependent on private cars.
ENV 2 To improve the quality of the water environment	Will it improve the quality of the water environment (streams, rivers, lakes etc)?  Will it help to support wetland habitats and species?	N	N	N	Option 1: This could lead to more use of public transport from those people living in the NPA, and less point source and diffuse pollution into water courses.
ovcion		N	N	N	Option 2: If this led to more car dependency amongst people living in the rural area, it could create more point source and diffuse pollution into water courses.

ENV 3 To improve environmental amenity,	Will it improve air quality?  Will it reduce the emission of atmospheric pollutants?	N	N	N	Option 1: This could lead to more use of public transport from those people living in the NPA, and less environmental damage and air pollution.
including air quality.		N	N	N	Option 2:  If this led to more car dependency amongst people living in the rural area, it could create more environmental damage and air pollution.
ENV 4 To maintain and enhance biodiversity and geodiversity.	Will it conserve / enhance natural or semi-natural habitats, and promote habitat connections?  Is it likely to have a significant effect on sites designated for international, national or local importance?	N	N	N	Option 1: This could lead to more use of public transport from those people living in the NPA, and less point source and diffuse pollution harm on habitats.
geouversity.	Will it conserve / enhance species diversity, and in particular avoid harm to protected species?	N	N	N	Option 2: If this led to more car dependency amongst people living in the rural area, it could create more pollution and damage to habitats.
ENV 5 To maintain and enhance the quality of landscapes,	Will it protect and enhance the quality of landscapes, townscapes and countryside character, including the character of the Broads and its setting where relevant?  Will it maintain and enhance the distinctiveness of the landscapes/townscapes and heritage?	N	N	N	Option 1: This could lead to more use of public transport from those people living in the NPA, and less environmental damage from, and dominance of, the private car in heritage areas.
townscapes and the historic environment.	Will it reduce the amount of derelict, underused land?  Will it protect and enhance features of historical, archaeological and cultural value?	N	N	N	Option 2: If this led to more car dependency amongst people living in the rural area, it could create more environmental damage from, and dominance of, the private car in heritage areas.
ENV 6 To adapt to and mitigate against the impacts of climate change.	Will it reduce emissions of greenhouse gases by reducing energy consumption? Will it lead to an increased proportion of energy needs being met from renewable sources? Will it increase the capacity of the area to withstand the effects of	N	N	N	Option 1: This could lead to more use of public transport from those people living in the NPA, and less contributions to climate change from the private car.
omnate onange.	climate change? How can it be ensured that the risks to lives, land and property are	N	N	N	Option 2:

	minimised?				If this led to more car dependency amongst people living in the rural area, it could create more emissions from the private car.
ENV 7 To avoid, reduce and manage flood risk.	Will it minimise the risk of flooding to people and property?  Can it incorporate new designs to adapt to possible flood risk?  Will it promote the use of sustainable drainage systems to reduce run off?	N/a	N/a	N/a	N/a
ENV 8 To provide for sustainable use and sources of water supply.	Will it conserve groundwater resources? Will it minimise water consumption?	N/a	N/a	N/a	N/a
ENV 9 To make the best use of resources.	Will it minimise consumption of materials and resources? Will it promote the use of land in sustainable locations that has been previously developed? Will it use land efficiently?	☺	☺	©	Option 1: Focussing more housing in the Norwich policy Area will be able to make better use of previously developed land.
including land and energy, and to minimise waste production.	Will it minimise the loss of "greenfield" land? Will it avoid the loss of good quality agricultural land and preserve soil resources? Will it minimise energy consumption and promote energy efficiency? Will it promote the use of renewable energy sources? Will it lead to less waste being produced? Will it lead to less waste being disposed, by promoting more recycling and composting? Will it increase waste recovery for other means eg. energy generation?	8	8	⊗	Option 2: This could lead to more housing needing to be built on Greenfield sites.
SOCIAL	generation:				
SOC 1 To reduce poverty and social	Will it reduce poverty and social exclusion in those areas most affected?  Will it help to reduce deprivation levels?	☺	☺	☺	Option 1: This would place residents closer to services, facilities and the main employment centres, helping people to meet their daily needs.
exclusion.	Will it help meet the needs of residents most effectively?	⊜	⊜	8	Option 2: Residents could be further away from service centres and so incur more costs in accessing the facilities

					they need. It could be more difficult to access the workplace.
SOC 2 To maintain and improve the health of the	Will it improve access to high quality health facilities? Will it encourage healthy lifestyles? How? Will it provide adequate health infrastructure for existing and new communities?	©	☺	☺	Option 1: Residents could be located closer to main facilities and health services.
whole population and promote healthy lifestyles.	Will the links between poorer health and deprivation be addressed? Will links to the countryside be maintained and enhanced?	8	8	⊜	Option 2: Residents could find health facilities to be less accessible. There could also be more strain on rural area facilities if they are not able to expand.
SOC 3 To improve education and	Will it improve qualifications and skills for both young people and amongst the workforce? Will it help to retain key workers and provide more skilled workers	<b>©</b>	☺	☺	Option 1: Residents could be located closer to education services and transport routes to them.
skills.	from school leavers? Will adequate education infrastructure be provided for existing and new communities? Will it promote lifelong learning and skills training? Will links between lower levels of education and deprivation be addressed?	©	8	8	Option 2: Residents could find education to be less accessible and it would be harder to use public transport to get there. There would also likely be fewer facilities available for adult or community education.
SOC 4 To provide the opportunity to live in a decent,	Will it increase the range of types, sizes and affordability of housing for all social groups? Will it reduce the housing need and ensure that housing provision addresses the needs of all?	9	©	☺	Both options would increase access to housing for those in housing need and offer a range of new types of housing.
suitable and affordable home.	Will it provide the most appropriate solutions to address the housing requirements needed for creating sustainable communities? Will it make best use of existing housing stock?				Option 1 would deny some important affordable social housing to those groups in need in the more dispersed rural areas, although it would probably serve greater numbers of people in need.
SOC 5 To build community identity,	Will it encourage engagement in community activities?  Will it contribute to the achievement of a mixed and balanced community?	©	©	☺	Both options would promote mixed and balanced communities, particularly in the rural area where existing populations are perhaps less diverse and where there may be a pressing need for the retention
improve social welfare, and reduce crime	Will it reduce actual levels of crime?				of key local workers.
and anti-social activity.	Will it reduce the fear of crime?				

SOC 6 To offer more opportunities for rewarding and	Will it reduce unemployment overall?  Will it help to improve earnings?	☺	©	©	Option 1: This could ensure that residents are able to access the main workplaces more easily and have a greater variety of work.
satisfying employment for all.		8	⊗	8	Option 2: Residents could be more isolated from the jobs market and find it harder to access jobs by public transport.
SOC 7 To improve the quality of where people live.	Will it improve the quality of dwellings?  Will it improve the quality of local open space?  Will it improve the satisfaction of people with their neighbourhoods?	©®	©®	©8	Option 1: This would place more residents in housing need closer to the areas they wish to live in the same area, so improving satisfaction with the neighbourhood. However, it could reduce access to the countryside, for example.
		◎⊗	©®	©8	Option 2: New residents may be further away from their original locations, and further from the city centre and main facilities and services, but there would likely be better access to the countryside and open space.
SOC 8 To improve accessibility to essential	Will it improve accessibility to key local services and facilities (including health, education, leisure, open space, the countryside and community facilities)?  Will it improve accessibility for all whilst reducing dependency on	©	©	©	Option 1: This would place residents closer to services, facilities and the main employment centres, helping people to meet their daily needs.
services, facilities and jobs.	the private car?  Will it improve access to jobs and services for all?	☺	⊗	☺	Option 2: Residents could be further away from service centres and the workplace and the facilities they need.
ECONOMIC					
EC 1 To encourage sustained	Will it assist in strengthening the local economy?  Will it improve business development and enhance	©	©	☺	Option 1: This improves access to main employment areas for those in need of work.
economic growth.	competitiveness? Will it reduce vulnerability to economic shocks?	80	©	☺	Option 2: Access to employment areas may become more difficult, although it could bring key workers to

	Will it promote growth in key sectors?  Will it increase vitality & viability of town centres and improve economic diversity?				the area. Overall the lack of employment opportunities in the rural area could lead to a further exacerbation of economic problems, unemployment and deprivation in the rural area.
EC 2 To encourage and	Will it encourage indigenous businesses? Will it encourage inward investment? Will it make land and property available for business?	©	©	©	Option 1: This improves access to main employment areas for those in need of work.
accommodate both indigenous and inward investment.	Will it improve economic performance across the Greater Norwich area?  Will it support / encourage rural diversification?  Will it support / encourage small city businesses?	80	©	☺	Option 2: Access to employment areas may become more difficult, although it could bring key workers to the area. Overall the lack of employment opportunities in the rural area could lead to a further exacerbation of
EC 3	Will it improve provision of local jobs?				economic problems, unemployment and deprivation in the rural area.
To encourage efficient patterns of movement in support of economic growth.	Will it improve accessibility to work, particularly by public transport, walking and cycling? Will it reduce journey times between key employment areas and key transport interchanges? Will it improve efficiency and sustainability of freight distribution? Will it support provision of key communications infrastructure?	N/a	N/a	N/a	N/a
EC 4 To improve the social and environmental performance of the economy.	Will it reduce the impact on the environment from businesses? Will it reduce the impact on residents from businesses? Will it attract new investment and skilled workers to the area? Will it maintain existing business and employment provision? Will it provide employment in the best locations to serve urban and rural residents?	N/a	N/a	N/a	N/a

Overall Conclusions: What are the main effects of the policy option as identified through the sustainability	appraisal process?
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- POLICY OPTION: Question 41 – The Norwich Policy Area: Should housing need that would ideally be met in the city of Norwich be met instead in the Norwich Policy Area?

Option 1: Meeting some of Norwich's affordable housing needs in the Norwich Policy Area.

Option 2: Meeting some of Norwich's affordable housing needs outside the Norwich Policy Area.

Environmental Impacts	Option 1 would ensure better access to public transport and possibly more walking and cycling to facilities.  Option 2 may entail more travelling for residents in the rural area. As public transport is less readily available in rural areas, it may increase dependency on the private car.
Social Impacts	Both options would encourage development of mixed and balanced communities, and ensure that those in housing need are accommodated in improved standards of housing. Option 1 offers the most benefit for access to local services, transport, health facilities and education, but Option 2 will provide improved access to the countryside.
Economic Impacts	Option 1 would offer better access to main employment centres.  Option 2 could eventually lead to more local key workers living in the rural area and entrepreneurs setting up businesses and supporting local services, facilities and rural diversification, but access to employment areas may become more difficult and commuting to Norwich would likely increase. Overall the lack of employment opportunities in the rural area could lead to a further exacerbation of economic problems, unemployment and deprivation in the rural area.

### **Overall summary:**

- Impacts
- Possible mitigation measures
- · Recommended further research
- Considering cumulative impacts

Option 2 would work particularly well if combined with employment promotion in the rural area, so that there are more local jobs available for those who are also in housing need. Reducing the possible isolation of new residents in the rural area, and so reducing the dependency on the private car, would require improved transport reliability, which could be provided by allocating a dispersed approach to housing growth across the rural area.

- Option Appraised: Question 42 The Norwich Policy Area: Regeneration Should we focus on area-wide improvements in any part of the built up area?
- Option appraised: Making area-wide regeneration improvements in a built-up area.

### **SCORING SYSTEM PROPOSED:**

SA Objective	Decision making criteria	Short- Term 0-5 yrs	Medium Term 5-20 yrs	Long- Term 20+ yrs	Comments / Justification Inc. cumulative effects			
<b>ENVIRONMEN</b>	ENVIRONMENTAL							
ENV 1 To reduce the effect of traffic on the environment.	Will it reduce traffic volumes, ease the flow of traffic and reduce congestion?  Will it increase the proportion of journeys using modes other than the car?  Will it reduce the effect of HGV traffic on people and the environment?  Will it encourage more benign modes of travel?  Will new development be located such to reduce the need for people to travel?	©	☺	©	Regenerating an area would bring more services to the area and should improve accessibility, so reducing the need to use a car and successfully promoting cycling and walking.  Housing developments as part of regeneration schemes could also increase the density of the area and, although it may lead to more car ownership in an area, the increased density could be conducive to an increased use of sustainable modes of transport to access services, facilities and employment.			
ENV 2 To improve the quality of the water environment	Will it improve the quality of the water environment (streams, rivers, lakes etc)?  Will it help to support wetland habitats and species?	?	?	?	The scale of regeneration is important to ensure that appropriate functions and facilities are provided to meet the needs of the local area.  The effects are location-specific, but could be used to improve the quality of a local water environment. On the whole, if a brownfield site were developed it could include removing contaminants.			

ENV 3	Will it improve air quality?				
To improve environmental amenity, including air quality.	Will it reduce the emission of atmospheric pollutants?	©	☺	☺	The effects are location-specific, but could be used to improve local air quality, such as by reducing congestion by reducing the need to travel and improving public transport, cycling and walking links.
To maintain and enhance biodiversity and geodiversity.	Will it conserve / enhance natural or semi-natural habitats, and promote habitat connections?  Is it likely to have a significant effect on sites designated for international, national or local importance?  Will it conserve / enhance species diversity, and in particular avoid harm to protected species?	☺	©	©	The effects are location-specific, but could involve improving local habitats or introducing new green infrastructure and improving the conditions for local biodiversity improvements. Multi-functional green-spaces could be incorporated into a regenerated area to contribute to both physical and intellectual access to nature.  Brownfield site redevelopment would have to ensure that potential habitat conservation was taken into account.
ENV 5 To maintain and enhance the quality of landscapes, townscapes and the historic environment.	Will it protect and enhance the quality of landscapes, townscapes and countryside character, including the character of the Broads and its setting where relevant?  Will it maintain and enhance the distinctiveness of the landscapes/townscapes and heritage?  Will it reduce the amount of derelict, underused land?  Will it protect and enhance features of historical, archaeological and cultural value?	©	©	☺	Better designs through regeneration could improve the standards of the local townscape and protect and enhance the city centre heritage if applied sensitively. Regeneration could also reduce the amount of derelict and underused land.
ENV 6 To adapt to and mitigate against the impacts of climate change.	Will it reduce emissions of greenhouse gases by reducing energy consumption? Will it lead to an increased proportion of energy needs being met from renewable sources? Will it increase the capacity of the area to withstand the effects of climate change? How can it be ensured that the risks to lives, land and property are minimised?	©	٥	©	New architectural designs could include measures to mitigate against contributions to climate change and to protect against the effects of climate change.
ENV 7 To avoid, reduce and	Will it minimise the risk of flooding to people and property?  Can it incorporate new designs to adapt to possible flood risk?	©	☺	☺	The regeneration of an area that may be prone to flooding or at risk in the future could include measures to bolster flood defences and minimise

manage flood risk.	Will it promote the use of sustainable drainage systems to reduce run off?				risks.
ENV 8 To provide for sustainable use and sources of water supply.	Will it conserve groundwater resources? Will it minimise water consumption?	N/a	N/a	N/a	N/a
ENV 9 To make the best use of resources, including land and energy, and to minimise waste production.	Will it minimise consumption of materials and resources? Will it promote the use of land in sustainable locations that has been previously developed? Will it use land efficiently? Will it minimise the loss of "greenfield" land? Will it avoid the loss of good quality agricultural land and preserve soil resources? Will it minimise energy consumption and promote energy efficiency? Will it promote the use of renewable energy sources? Will it lead to less waste being produced? Will it lead to less waste being disposed, by promoting more recycling and composting? Will it increase waste recovery for other means eg. energy generation?	©	©	©	Regeneration plans can include improvements to energy supply, such as providing renewable energy and combined heat and power schemes. There could be more re-use of brownfield land and incorporation of waste collection and management facilities.
SOCIAL SOC 1 To reduce poverty and social exclusion.	Will it reduce poverty and social exclusion in those areas most affected? Will it help to reduce deprivation levels? Will it help meet the needs of residents most effectively?	©	☺	☺	Social exclusion will be reduced if the regeneration schemes can include bringing more local facilities to an area. It may also include employment development, which could offer work for local people.
To maintain and improve the health of the whole population and promote healthy lifestyles.	Will it improve access to high quality health facilities? Will it encourage healthy lifestyles? How? Will it provide adequate health infrastructure for existing and new communities? Will the links between poorer health and deprivation be addressed? Will links to the countryside be maintained and enhanced?	☺	☺	©	Regeneration that brings new facilities brings more opportunities for walking and cycling to new facilities, so improving the health of the population. There could be health services provided and improvements to road safety and the local environment that will improve the health of the community.

SOC 3 To improve education and skills.	Will it improve qualifications and skills for both young people and amongst the workforce? Will it help to retain key workers and provide more skilled workers from school leavers? Will adequate education infrastructure be provided for existing and new communities? Will links between lower levels of education and deprivation be addressed?	☺	☺	☺	Access to education could be improved and facilities could include activities for community learning and skills development.
SOC 4 To provide the opportunity to live in a decent, suitable and affordable home.	Will it increase the range of types, sizes and affordability of housing for all social groups? Will it reduce the housing need and ensure that housing provision addresses the needs of all? Will it provide the most appropriate solutions to address the housing requirements needed for creating sustainable communities? Will it make best use of existing housing stock?	☺	☺	☺	If regeneration includes new housing developments, then this would raise the standard of the local housing and help those in need access the range or type of housing they require.
SOC 5 To build community identity, improve social welfare, and reduce crime and anti-social activity.	Will it encourage engagement in community activities?  Will it contribute to the achievement of a mixed and balanced community?  Will it reduce actual levels of crime?  Will it reduce the fear of crime?	☺	☺	☺	Regeneration would help build pride in an area and improve social integration through better networking and more use of local facilities. Designs would include crime reduction measures.
SOC 6 To offer more opportunities for rewarding and satisfying employment for all.	Will it reduce unemployment overall? Will it help to improve earnings?	©8	©®	©8	This could provide more opportunities for jobs for local people, but new facilities and services could lead to the closure of existing shops.
SOC 7 To improve the quality of where people live.	Will it improve the quality of dwellings?  Will it improve the quality of local open space?  Will it improve the satisfaction of people with their neighbourhoods?	80	©	<b>©</b>	There may be some short -term construction disturbance, but regeneration would improve an area and provide more local facilities.

SOC 8 To improve accessibility to essential services, facilities & jobs.	Will it improve accessibility to key local services and facilities (including health, education, leisure, open space, the countryside and community facilities)? Will it improve accessibility for all whilst reducing dependency on the private car? Will it improve access to jobs and services for all?	☺	☺	©	Regeneration should provide more local facilities, services, better access and transport links, and offer employment development opportunities.
<b>ECONOMIC</b>					
EC 1 To encourage sustained economic growth.	Will it assist in strengthening the local economy? Will it improve business development & enhance competitiveness? Will it reduce vulnerability to economic shocks? Will it promote growth in key sectors? Will it increase vitality & viability of town centres and improve economic diversity?	☺	☺	☺	Providing that the new developments do not transfer from elsewhere, this should offer more business opportunities and jobs creation, which also create attractions to new facilities and footfall into surrounding businesses.
EC 2 To encourage and accommodate both indigenous and inward investment.	Will it encourage indigenous businesses? Will it encourage inward investment? Will it make land and property available for business? Will it improve economic performance across the Greater Norwich area? Will it support / encourage rural diversification? Will it support / encourage small city businesses?	©	©	©	New facilities can help to promote business development, and if housing is included it could also be used to include some home-working facilities or start-up units.
EC 3 To encourage efficient patterns of movement in support of economic growth.	Will it improve provision of local jobs? Will it improve accessibility to work, particularly by public transport, walking and cycling? Will it reduce journey times between key employment areas and key transport interchanges? Will it improve efficiency and sustainability of freight distribution? Will it support provision of key communications infrastructure?	©	©	©	There will be less travel and more non-car commuting. There may be an increase in freight delivery into the area, but a net decrease in the number of car trips required by local residents, both new and existing.
To improve the social and environmental performance of the economy.	Will it reduce the impact on the environment from businesses? Will it reduce the impact on residents from businesses? Will it attract new investment and skilled workers to the area? Will it maintain existing business and employment provision? Will it provide employment in the best locations to serve urban and rural residents?	©	☺	©	The business and employment environment would be improved through regeneration, and social improvements would include providing better accessibility to facilities.  Business will need to be designed into the regeneration plans to have as minimal a social and environmental impact as possible.

Overall Conclusions: What are the main effects of the policy option as identified through the sustainability appraisal process?

- POLICY OPTION: Question 42 The Norwich Policy Area: Regeneration Should we focus on area-wide improvements in any part of the built up area?
- Option appraised: Making area-wide regeneration improvements in a built-up area.

Environmental Impacts	Regeneration can improve and enhance the local environment through developing new architecture and installing features such as more open space or provisions for improved traffic management and new multi-functional green spaces to promote biodiversity. New features can include using previously developed land (and enhance any habitat that may have developed on it), minimising contributions to climate change, such as by using densities that promote more uptake of public transport, improving conditions for local walking and cycling, and installing renewable energy generation features.
Social Impacts	Regeneration will improve access to an area, improve the range of local services on offer, provide benefits from more walking and cycling through networking and connectivity improvements, and possibly improve the quality of the local housing stock to benefit those in need. An improved environment and greater provision of local facilities will install more pride in local communities.
Economic Impacts	Regeneration that brings new facilities to the area will help to promote business development, and if housing is included it could also be used to include some home-working facilities or start-up units. Providing that the new developments do not transfer from elsewhere, this should offer a net increase in business opportunities and jobs creation.

#### **Overall summary:**

- Impacts
- Possible mitigation measures
- Recommended further research
- Considering cumulative impacts

This option offers many benefits from improving an area and encouraging jobs creation and community facilities to start-up. It would work well in combination with city centre regeneration and transport improvement schemes. There may be some impacts from any combined housing developments, such as some traffic increase and noise increase, but the designs of the development and improved public transport, cycling and walking connectivity would ease the congestion.

- Option Appraised: Question 43 The Norwich Policy Area: The extent of the Norwich Policy Area (NPA).
  - Option A To reduce the area within the NPA.
  - Option B To extend the boundaries of the NPA.

#### **SCORING SYSTEM PROPOSED:**

SA Objective	Decision making criteria	Short- Term 0-5 yrs	Medium Term 5-20 yrs	Long- Term 20+ yrs	Comments / Justification Inc. cumulative effects
<b>ENVIRONMEN</b>	NTAL				
ENV 1 To reduce the effect of traffic on the environment.	Will it reduce traffic volumes, ease the flow of traffic and reduce congestion?  Will it increase the proportion of journeys using modes other than the car?  Will it reduce the effect of HGV traffic on people and the environment?  Will it encourage more benign modes of travel?	8©	☺	☺	Option A: Locally, in the short-term at least, the effect of closer, tighter boundaries of the NPA would be that congestion could increase in the area around the city as development is concentrated there. In the long term, public transport modes would also become more viable, and shorter journeys would hopefully be possible, so minimising the effect of traffic on environments.
	Will new development be located such to reduce the need for people to travel?	©⊗	©8	©8	Option B: A wider NPA would lead to development being more dispersed, including the impact of traffic (although not reduced), but public transport would be less feasible the further the development extended.
ENV 2 To improve the quality of the water environment	Will it improve the quality of the water environment (streams, rivers, lakes etc)?  Will it help to support wetland habitats and species?	N	N	N	Option A: An increase in traffic volumes and concentrations could lead to an increase in point source and diffuse pollution instances affecting water quality.

		?	?	?	Option B: The possible pollution effects would be less concentrated as they would be more dispersed.
ENV 3 To improve environmental amenity, including air	Will it improve air quality?  Will it reduce the emission of atmospheric pollutants?	⊗©	80	80	Option A: Effects could be concentrated, unless employment moves out further to disperse commuting. Overall, journeys from the new residents into the area would be shortened.
quality.		©	☺	☺	Option B: Effects from development and commuting would be dispersed over a wider area.
ENV 4 To maintain and enhance biodiversity and geodiversity.	Will it conserve / enhance natural or semi-natural habitats, and promote habitat connections?  Is it likely to have a significant effect on sites designated for international, national or local importance?	☺	8	8	Option A: Restricting new growth could require development on sensitive sites where there are fewer options to avoid sites of natural significance.
geodiversity.	Will it conserve / enhance species diversity, and in particular avoid harm to protected species?	☺	☺	☺	Option B: Expanded boundaries would allow more opportunities to move away from sensitive areas.
ENV 5 To maintain and enhance the quality of landscapes,	Will it protect and enhance the quality of landscapes, townscapes and countryside character, including the character of the Broads and its setting where relevant?  Will it maintain and enhance the distinctiveness of the landscapes/townscapes and heritage?	8	8	8	Option A: Restricting new growth could require development on sensitive sites where there are fewer options to avoid sites of natural significance.
townscapes and the historic environment.	Will it reduce the amount of derelict, underused land? Will it protect and enhance features of historical, archaeological and cultural value?	©	©	☺	Option B: Expanded boundaries would allow more opportunities to move development away from sensitive areas, such as the Broads.
ENV 6 To adapt to and mitigate against the impacts of climate change.	Will it reduce emissions of greenhouse gases by reducing energy consumption? Will it lead to an increased proportion of energy needs being met from renewable sources? Will it increase the capacity of the area to withstand the effects of climate change? How can it be ensured that the risks to lives, land and property	©	©	<b>©</b>	Option A: Constricted boundaries would help to reduce contributions to climate change by reducing the amount of travelling needed.  Option B:

	are minimised?	8	8	8	Expanded boundaries would increase the travelling required if development was dispersed.
ENV 7 To avoid, reduce and manage flood risk.	Will it minimise the risk of flooding to people and property?  Can it incorporate new designs to adapt to possible flood risk?  Will it promote the use of sustainable drainage systems to reduce run off?	©8	©8	©8	Option A: Concentrated development would help to make implementation of Sustainable Drainage Systems more viable, to reduce the risk of flooding, but there would be fewer areas where SUDS could be implemented.
		☺	☺	☺	Option B: Expanded boundaries offer more areas where SUDs can be a success geologically.
ENV 8 To provide for sustainable use and sources of water supply.	Will it conserve groundwater resources? Will it minimise water consumption?	8	8	8	Option A: Although unlikely to be significant, groundwater contamination could become more concentrated in areas around the city.
		©	©	☺	Option B: Although unlikely to be significant, there are more areas to avoid water supply 'pinch points' if development is dispersed.
ENV 9 To make the best use of resources, including land and energy, and to minimise	Will it minimise consumption of materials and resources? Will it promote the use of land in sustainable locations that has been previously developed? Will it use land efficiently? Will it minimise the loss of "greenfield" land? Will it avoid the loss of good quality agricultural land and preserve soil resources?	©	©	©	Option A: Restricted boundaries would ensure that brownfield land development becomes a priority and would ensure that land is used more efficiently. Waste collection would also be easier, so reducing its impact.
waste production.	Will it minimise energy consumption and promote energy efficiency? Will it promote the use of renewable energy sources? Will it lead to less waste being produced? Will it lead to less waste being disposed, by promoting more recycling and composting? Will it increase waste recovery for other means e.g. energy generation?	©	©	©	Option B: It is possible that expanded boundaries could provide more areas for previously developed land to be utilised, but in reality there are fewer sites available in the rural fringe area around the city.

SOCIAL					
SOC 1 To reduce poverty and social exclusion.	Will it reduce poverty and social exclusion in those areas most affected?  Will it help to reduce deprivation levels?  Will it help meet the needs of residents most effectively?	☺	☺	©	Option A: Development closer to Norwich would help to ensure that new residents are close to existing facilities and services, and provide a more viable means of public transport. This would reduce social exclusion and deprivation.
		☺	⊗	⊗	Option B; A more dispersed area of development could make it harder for new residents to access existing employment centres and transport may become less viable.
SOC 2 To maintain and improve the health of the whole	Will it improve access to high quality health facilities? Will it encourage healthy lifestyles? How? Will it provide adequate health infrastructure for existing and new communities? Will the links between poorer health and deprivation be addressed?	☺	☺	☺	Option A: A concentrated NPA would make health facilities more viable and enable more walking and cycling to local facilities and public transport.
population and promote healthy lifestyles.	Will links to the countryside be maintained and enhanced?	☺	⊗	8	Option B: Health facilities would be less viable if the catchment population is not as large.
SOC 3 To improve education and skills.	Will it improve qualifications and skills for both young people and amongst the workforce? Will it help to retain key workers and provide more skilled workers from school leavers? Will adequate education infrastructure be provided for existing and new communities? Will it promote lifelong learning and skills training? Will links between lower levels of education and deprivation be	©	©	©	Option A: A concentrated NPA would make higher education more viable and accessible to a greater catchment population, enabling more walking, cycling and public transport use. There is also better access to further education and workplace training.
	addressed?	<b>③</b>	☺	8	Option B: Further accessible if the pupils' catchment populations are more disbursed.
SOC 4 To provide the opportunity to live in a decent,	Will it increase the range of types, sizes and affordability of housing for all social groups? Will it reduce the housing need and ensure that housing provision addresses the needs of all?	N/a	N/a	N/a	N/a

suitable and affordable home.	Will it provide the most appropriate solutions to address the housing requirements needed for creating sustainable communities? Will it make best use of existing housing stock?				
SOC 5 To build community identity, improve social	Will it encourage engagement in community activities?  Will it contribute to the achievement of a mixed and balanced community?  Will it reduce actual levels of crime?	N/a	N/a	N/a	N/a
welfare, and reduce crime and anti-social activity.	Will it reduce the fear of crime?				
SOC 6 To offer more opportunities for rewarding and	Will it reduce unemployment overall?  Will it help to improve earnings?	©	©	☺	Option A: This would offer residents the best access to main employment sites.
satisfying employment for all.		(3)	☺	⊗	Option B: Unless employment is also disbursed, there would be less access to the main job market.
SOC 7 To improve the quality of where people live.	Will it improve the quality of dwellings?  Will it improve the quality of local open space?	☺	☺	☺	Option A: Concentrated development within restricted boundaries would bring more facilities to the housing development.
	Will it improve the satisfaction of people with their neighbourhoods?	©⊗	©⊗	©8	Option B: Disbursed developments would have less impact on the area and local communities, but there could be a greater impact on existing local communities receiving significant extended growth.
SOC 8 To improve accessibility to	Will it improve accessibility to key local services and facilities (including health, education, leisure, open space, the countryside and community facilities)?	☺	☺	☺	Option A: This would increase accessibility to services and facilities by bringing transport improvements to areas of new developments.
essential services, facilities & jobs.	Will it improve accessibility for all whilst reducing dependency on the private car?	©⊗	©®	©8	Option B: There could be less viability of public transport, but in a large new development some new

	Will it improve access to jobs and services for all?				services could be provided to benefit residents that currently do not have easy access to local facilities in the rural area.
ECONOMIC					
EC 1 To encourage sustained economic growth.	Will it assist in strengthening the local economy? Will it improve business development and enhance competitiveness? Will it reduce vulnerability to economic shocks? Will it promote growth in key sectors?	©	☺	☺	For both options new development will improve the viability of services by increasing the number of customers that can use the facilities.  Dispersal of growth will not only bring business to
growth.	Will it increase vitality & viability of town centres and improve economic diversity?				existing services, but offer more opportunities for rural economic growth under option B.
To encourage and accommodate	Will it encourage indigenous businesses? Will it encourage inward investment? Will it make land and property available for business? Will it improve economic performance across the Greater Norwich area?	?	?	?	Option A: There would be more emphasis on the area immediately around Norwich for housing, services and employment growth.
both indigenous and inward investment.	Will it support / encourage rural diversification? Will it support / encourage small city businesses?	©	☺	☺	Option B: Expanded boundaries could help to promote rural diversification and would make more land available for business development.
EC 3 To encourage efficient patterns of	Will it improve provision of local jobs? Will it improve accessibility to work, particularly by public transport, walking and cycling? Will it reduce journey times between key employment areas and	©	☺	☺	Option A: Concentrating development in an area closer to Norwich would be able to reduce the need to travel by car and make public transport more viable.
movement in support of economic growth.	key transport interchanges? Will it improve efficiency and sustainability of freight distribution? Will it support provision of key communications infrastructure?	©	8	☺	Option B: A wider NPA boundary could be less feasible to service by public transport and entail more car-based commuting.
EC 4 To improve the social and	Will it reduce the impact on the environment from businesses?  Will it reduce the impact on residents from businesses?	©8	© (S	©8	Option A: This would bring less pressure to the rural areas and help to avoid rural sites, but it could put more
environmental performance of	Will it attract new investment and skilled workers to the area?				pressure on the city's heritage. Improved access would benefit communities.
the economy.	Will it maintain existing business and employment provision?				

Will it provide employment in the best locations to serve urban and rural residents?	80	8©	80	Option B: This could pressure the rural area and bring significant new development to smaller villages, which could impact on their heritage. However, it could bring more employment to the rural area, along with new and more viable community facilities as part of new developments.
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Overall Conclusions: What are the main effects of the policy option as identified through the sustainability appraisal process? POLICY OPTION: Question 43 – The Norwich Policy Area: The extent of the Norwich Policy Area (NPA). Option A – To reduce the area within the NPA. Option B – To extend the boundaries of the NPA. Option A: Whilst public transport viability and accessibility to local services could improve, there could be more congestion in the short term and pressure on heritage sites in the Norwich area or market towns where new development is proposed. **Environmental** Option B: Expanded boundaries would help to avoid sensitive sites and offer more opportunities to utilise sustainable drainage **Impacts** systems. There would be less viability for public transport if new developments are more dispersed. Option A would improve accessibility by public transport and increase access to local facilities. This would help build community **Social Impacts** identity and offer more opportunity for accessing the main jobs markets. Option B would bring more local facilities to the rural area and could help provide jobs, but would reduce access by public transport to the main employment areas and the city centre. Both options would improve the feasibility of existing services by increasing the customer base, but Option B would help to **Economic Impacts** promote rural diversification and would make more land available for business development if there was more emphasis on

## **Overall summary:**

- Impacts
- Possible mitigation measures
- Recommended further research

development over a wider area.

Considering cumulative impacts

These options are linked to the impacts of strategic options that would concentrate or encourage dispersed development around both the city fringe and rural area, so need to be complemented by options on strategic growth locations, employment and housing development, and promotion of community facilities and services.

The secondary impacts of option B over the long term would be that a larger area is considered to be part of the Norwich urban area, and as such development pressures will continue to increase further away from the city core through subsequent development plans.

- Option Appraised: Question 44 Rural areas, towns and villages: Rural exception site allocations.
  - Option A: Allocate sites in all villages where a need is identified
  - Option B: Allocate sites only in villages with a defined range of services
  - Option C: Not allocate sites but encourage sites to be brought forward where needed

#### **SCORING SYSTEM PROPOSED:**

SA Objective	Decision making criteria	Short- Term	Medium Term 5-20 yrs	Long- Term	Comments / Justification Inc. cumulative effects						
		0-5 yrs	3-20 yis	20+ yrs							
ENVIRONMEN	ENVIRONMENTAL										
ENV 1 To reduce the effect of traffic	Will it reduce traffic volumes, ease the flow of traffic and reduce congestion?				All options for rural exception sites would increase the distances travelled by new residents.						
on the environment.	Will it increase the proportion of journeys using modes other than the car?	©®	©8	©\(\text{\tin}\text{\tetx{\text{\tetx{\text{\text{\texi}\text{\text{\texi}\text{\text{\text{\text{\texi}\text{\text{\text{\texi}\text{\texi{\text{\text{\text{\text{\texi}\titt{\text{\texi}\text{\text{\texi}\text{\text{\tet	Option A would minimise the locations where developments could be built, but not specifically						
	Will it reduce the effect of HGV traffic on people and the environment?				reduce the need to travel.						
	Will it encourage more benign modes of travel?	☺	☺	☺	Option B would minimise the distances and frequency of needing to travel by ensuring there are services available locally.						
	Will new development be located such to reduce the need for people to travel?				Ontion C could load to now bousing locations in						
	poople to mavoi.	☺	8	☺	Option C could lead to new housing locations in isolated areas coming forward regularly at the expense of more sustainable locations.						
ENV 2 To improve the quality of the	Will it improve the quality of the water environment (streams, rivers, lakes etc)?	N/a	N/a	N/a	N/a						
water environment	Will it help to support wetland habitats and species?										

ENV 3 To improve environmental amenity, including air quality.	Will it improve air quality? Will it reduce the emission of atmospheric pollutants?	N	N	N	All options could increase the impacts from traffic on air quality, tranquillity and amenity, although these would only be of minor significance because housing would only be meeting existing need.
ENV 4 To maintain and enhance biodiversity and geodiversity.	Will it conserve / enhance natural or semi-natural habitats, and promote habitat connections?  Is it likely to have a significant effect on sites designated for international, national or local importance?  Will it conserve / enhance species diversity, and in particular avoid harm to protected species?	?	?	?	Effects are location-specific and unlikely to be significant.
ENV 5 To maintain and enhance the quality of landscapes, townscapes and	Will it protect and enhance the quality of landscapes, townscapes and countryside character, including the character of the Broads and its setting where relevant?  Will it maintain and enhance the distinctiveness of the landscapes/townscapes and heritage?	00	9	00	All options bring the potential to impact on the edge and fringes of rural settlements and their landscape settings. Greenfield land use would increase, but the extent of impacts would be minimised through considerate designs.
the historic environment.	Will it reduce the amount of derelict, underused land?  Will it protect and enhance features of historical, archaeological	80	80	80	Option A and B could minimise the impacts through careful allocations and site selection.
	and cultural value?	<b>②</b>	8	☺	Option C could lead to multiple developments that do not necessarily pay regard to factors such as the landscape.
ENV 6 To adapt to and mitigate against the impacts of climate change.	Will it reduce emissions of greenhouse gases by reducing energy consumption?  Will it lead to an increased proportion of energy needs being met from renewable sources?  Will it increase the capacity of the area to withstand the effects of climate change?  How can it be ensured that the risks to lives, land and property are minimised?	©8 ©	©8 ©	©8 ©	All options could increase the distances travelled by new residents and so increase contribution to climate change, although these effects would be minimal.  Option A would minimise the locations where developments could be built, but does not reduce the need to travel.  Option B would minimise the distances and frequency of needing to travel by ensuring there are services available locally.

		8	8	8	Option C could lead to new housing locations in isolated areas coming forward regularly at the expense of more sustainable locations.
ENV 7 To avoid, reduce and manage flood risk.	Will it minimise the risk of flooding to people and property?  Can it incorporate new designs to adapt to possible flood risk?  Will it promote the use of sustainable drainage systems to reduce run off?	?	?	?	Effects are location-specific and unlikely to be significant.
ENV 8 To provide for sustainable use and sources of water supply.	Will it conserve groundwater resources? Will it minimise water consumption?	?	?	?	Effects are location-specific, but these rural developments may not have such readily available infrastructure and supply / sewage connections.
ENV 9 To make the best use of resources, including land and energy, and to minimise waste production.	Will it minimise consumption of materials and resources? Will it promote the use of land in sustainable locations that has been previously developed? Will it use land efficiently? Will it minimise the loss of "greenfield" land? Will it avoid the loss of good quality agricultural land and preserve soil resources? Will it minimise energy consumption and promote energy efficiency? Will it promote the use of renewable energy sources? Will it lead to less waste being produced? Will it lead to less waste being disposed, by promoting more recycling and composting? Will it increase waste recovery for other means eg. energy generation?	8	8	8	Rural settlement developments will incur slightly more travel and fuel use, and extensions will require Greenfield site development, some of which may be of good agricultural quality. Rural areas generally have fewer brownfield sites available than urban areas.
SOCIAL					
SOC 1 To reduce poverty and social exclusion.	Will it reduce poverty and social exclusion in those areas most affected?  Will it help to reduce deprivation levels?  Will it help meet the needs of residents most effectively?	©	☺	©	Affordable housing should be provided for those in housing need local to the area. This may help to relieve some social exclusion in those areas, but it would not reduce deprivation generally, apart from providing a means to live and work in the local area.
					Option A would reduce exclusion and increase access to jobs for those in the area.

					Option B would also reduce deprivation by removing the need to travel to access main services.  Option C would reduce exclusion in most areas as the need arises but there would not need to be a link to local services to reduce deprivation.
SOC 2 To maintain and improve the health of the whole population and	Will it improve access to high quality health facilities?  Will it encourage healthy lifestyles? How?  Will it provide adequate health infrastructure for existing and new communities?				Providing a home would help those in housing need by improving the standard of the home environment and living conditions. It would reduce the stress experienced by those in housing need, would offer local support by keeping families close-by and reduce isolation.
promote healthy lifestyles.	Will the links between poorer health and deprivation be addressed?  Will links to the countryside be maintained and enhanced?	©8	©8	©®	Options A and C would improve standards of living but not ensure health services are available.
	•	<b>©</b>	☺	☺	Option B would ensure that some form of local services are accessible locally.
SOC 3 To improve education and skills.	Will it improve qualifications and skills for both young people and amongst the workforce? Will it help to retain key workers and provide more skilled workers from school leavers? Will adequate education infrastructure be provided for existing				Providing a local home would help improve the learning environments for local families, would retain local workers and their families and help to keep schools open.
	and new communities? Will it promote lifelong learning and skills training? Will links between lower levels of education and deprivation be addressed?	©\(\text{\tin}\text{\tetx{\text{\tetx{\text{\text{\texi}\text{\text{\texi}\text{\text{\text{\text{\ti}\}\tittt{\text{\texi}\text{\texi}\text{\text{\texi}\text{\tex{\texi}\text{\text{\texi}\text{\text{\texi}\text{\text{\tet	©\(\text{\tin}\text{\tetx{\text{\tetx{\text{\text{\texi}\text{\text{\texi}\text{\text{\text{\text{\ti}\}\tittt{\text{\texi}\text{\texi}\text{\text{\text{\texi}\tex{\texit{\texi}\text{\texi}\text{\texit{\texi}\text{\texi}\t	©\(\text{\tin}\text{\tetx{\text{\tetx{\text{\text{\texi}\text{\text{\texi}\text{\text{\text{\text{\ti}\}\tittt{\text{\texi}\text{\texi}\text{\text{\texi}\text{\tex{\texi}\text{\text{\texi}\text{\text{\texi}\text{\text{\tet	Options A and C would not ensure schools are closeby.
		$\odot$	☺	☺	Option B would ensure that local schools are available for the new rural residents.
SOC 4 To provide the opportunity to live in a decent, suitable and affordable home.	Will it increase the range of types, sizes and affordability of housing for all social groups? Will it reduce the housing need and ensure that housing provision addresses the needs of all? Will it provide the most appropriate solutions to address the housing requirements needed for creating sustainable communities? Will it make best use of existing housing stock?	©	©	©	All options will increase the access for local people to housing if they are in housing need. In particular, Option C would ensure that homes could be made available as the need arises, meaning there is a possibility of bringing more flexibility to the allocation process.

SOC 5 To build	Will it encourage engagement in community activities?				All options would serve to keep family groups together and help to build mixed and balanced communities.
community identity,	Will it contribute to the achievement of a mixed and balanced community?	☺	☺	©	and help to build mixed and balanced communities.
improve social welfare, and	Will it reduce actual levels of crime?				
reduce crime and anti-social	Will it reduce the fear of crime?				
activity.					
SOC 6	Will it reduce unemployment overall?				Proving more homes for local people may help people
To offer more opportunities for rewarding and satisfying employment for	Will it help to improve earnings?	©	©	©	to retain their local jobs and to access the jobs market by having a fixed address. They may not improve earnings but they could reduce expenses and help to retain jobs rather than having to leave them when people move home.
all.	AACH Science of the Proceedings of the Procedings of the Procedings of the Procedings of the Procedings of the Proceedings of the Procedings of the Pr				T
To improve the quality of where people live.	Will it improve the quality of dwellings? Will it improve the quality of local open space? Will it improve the satisfaction of people with their neighbourhoods?	☺	☺	☺	The quality of the overall home stock will increase if new homes are built. People will be able to remain in their communities and retain social networks, so improving the satisfaction of the area as a place to live.
SOC 8 To improve accessibility to essential services, facilities and jobs.	Will it improve accessibility to key local services and facilities (including health, education, leisure, open space, the countryside and community facilities)?  Will it improve accessibility for all whilst reducing dependency on the private car?  Will it improve access to jobs and services for all?	8	8	☺	These effects are largely location-specific.  Options A and C would not necessarily ensure that some local services and facilities are available to new residents. It could mean that people are housed in areas where there are insufficient facilities available to avoid using cars and exacerbating rural isolation and social exclusion.
		☺	☺	<b>©</b>	Option B would ensure that people can access local services and facilities.
ECONOMIC					
EC 1	Will it assist in strengthening the local economy?				All options will help to ensure that local key workers
To encourage	Will it improve business development and enhance	☺	☺	☺	can live and work in the local rural area. As a result

sustained economic growth.	competitiveness? Will it reduce vulnerability to economic shocks? Will it promote growth in key sectors? Will it increase vitality & viability of town centres and improve economic diversity?				there may be more opportunities for new businesses to develop from entrepreneurs working at home or in start-up units.
To encourage and accommodate both indigenous and inward investment.	Will it encourage indigenous businesses? Will it encourage inward investment? Will it make land and property available for business? Will it improve economic performance across the Greater Norwich area? Will it support / encourage rural diversification? Will it support / encourage small city businesses?	٥	☺	©	See EC1.
EC 3 To encourage efficient patterns of movement in	Will it improve provision of local jobs?  Will it improve accessibility to work, particularly by public transport, walking and cycling?	8	8	⊗	On the whole, commuting could increase if those in housing need do not work in the same area they live.  Options A and C would not reduce the need to travel by car if there are not local facilities or employment
support of economic	Will it reduce journey times between key employment areas and key transport interchanges?				areas available in the area.
growth.	Will it improve efficiency and sustainability of freight distribution?  Will it support provision of key communications infrastructure?	☺	©	☺	Option B would at least ensure that some travelling could be avoided by locating housing in areas with existing facilities and rural employment areas.
EC 4 To improve the social and environmental performance of the economy.	Will it reduce the impact on the environment from businesses? Will it reduce the impact on residents from businesses? Will it attract new investment and skilled workers to the area? Will it maintain existing business and employment provision? Will it provide employment in the best locations to serve urban and rural residents?	N	N	N	Aside from improved access to work, none of the options will significantly improve the environmental and social performance of the economy.

Overall Conclusions: What are the main effects of the policy option as identified through the sustainability appraisal process? POLICY OPTION: Question 44 – Rural areas, towns and villages: Rural exception site allocations. Option A: Allocate sites in all villages where a need is identified • Option B: Allocate sites only in villages with a defined range of services Option C: Not allocate sites but encourage sites to be brought forward where needed All options for bringing exception housing sites to rural areas would serve to increase the amount of travel necessary for local **Environmental** residents, and also contributions to climate change. However, there are some important environmental benefits associated with **Impacts** allocating sites rather than letting them come forward in a more ad hoc fashion, such as minimising the need to travel far to access services and facilities, and avoiding sensitive flood risk, habitat, landscape and heritage areas. Option B would optimise this by choosing locations that ensure that some services are available for local residents and being more selective in the opportunities for rural housing growth. All options would impact on the environment and the local settings and landscapes, but a more proactive approach would be beneficial. All options would serve to keep communities together and create a more balanced population. Option B would improve **Social Impacts** accessibility to local services, health, education and facilities. It is possible that Option C could ensure that homes could be made available more quickly as the need arises, which may be able to increase people's access to affordable homes. All options will help to ensure that local key workers can live and work in the local rural area. As a result there may be more **Economic Impacts** opportunities for new businesses to develop from entrepreneurs working at home or in start-up units.

# **Overall summary:**

- Impacts
- Possible mitigation measures
- · Recommended further research
- Considering cumulative impacts

These options must consider the impacts that they could have on local areas as brought about by new housing and traffic generation. Allocations or site proposals should be made with a provision that services and facilities are available for local people, and where possible, access to employment areas via public transport links is of a standard suitable for commuting. It is possible that Option C could ensure that homes could be made available more quickly as the need arises, which may be able to increase people's access to affordable homes.

These options would need to be applied in conjunction with rural environmental protection and enhancement, employment development, services retention and options for rural market housing development in order to secure the most sustainable benefits long term.

- Option Appraised: Question 45 Rural areas, towns and villages: Affordable housing development thresholds.
  - Option A sites of 2+ dwellings should contribute affordable housing
  - Option B sites of 5+ dwellings should contribute affordable housing
  - Option C sites of 10+ dwellings should contribute affordable housing

#### **SCORING SYSTEM PROPOSED:**

SA Objective	Decision making criteria	Short- Term 0-5 yrs	Medium Term 5-20 yrs	Long- Term 20+ yrs	Comments / Justification Inc. cumulative effects
<b>ENVIRONMEN</b>	NTAL				
ENV 1 To reduce the effect of traffic on the environment.	Will it reduce traffic volumes, ease the flow of traffic and reduce congestion? Will it increase the proportion of journeys using modes other than the car? Will it reduce the effect of HGV traffic on people and the environment? Will it encourage more benign modes of travel? Will new development be located such to reduce the need for people to travel?	N/a	N/a	N/a	N/a
ENV 2 To improve the quality of the water environment	Will it improve the quality of the water environment (streams, rivers, lakes etc)?  Will it help to support wetland habitats and species?	N/a	N/a	N/a	N/a
ENV 3 To improve environmental amenity, including air quality.	Will it improve air quality?  Will it reduce the emission of atmospheric pollutants?	N/a	N/a	N/a	N/a

ENV 4 To maintain and enhance biodiversity and geodiversity.	Will it conserve / enhance natural or semi-natural habitats, and promote habitat connections?  Is it likely to have a significant effect on sites designated for international, national or local importance?  Will it conserve / enhance species diversity, and in particular avoid harm to protected species?	N/a	N/a	N/a	N/a
ENV 5 To maintain and enhance the quality of landscapes, townscapes and the historic environment.	Will it protect and enhance the quality of landscapes, townscapes and countryside character, including the character of the Broads and its setting where relevant? Will it maintain and enhance the distinctiveness of the landscapes/townscapes and heritage? Will it reduce the amount of derelict, underused land? Will it protect and enhance features of historical, archaeological and cultural value?	N/a	N/a	N/a	N/a
ENV 6 To adapt to and mitigate against the impacts of climate change.	Will it reduce emissions of greenhouse gases by reducing energy consumption? Will it lead to an increased proportion of energy needs being met from renewable sources? Will it increase the capacity of the area to withstand the effects of climate change? How can it be ensured that the risks to lives, land and property are minimised?	N/a	N/a	N/a	N/a
ENV 7 To avoid, reduce and manage flood risk.	Will it minimise the risk of flooding to people and property?  Can it incorporate new designs to adapt to possible flood risk?  Will it promote the use of sustainable drainage systems to reduce run off?	N/a	N/a	N/a	N/a
ENV 8 To provide for sustainable use and sources of water supply.	Will it conserve groundwater resources? Will it minimise water consumption?	N/a	N/a	N/a	N/a
ENV 9 To make the best use of resources, including land	Will it minimise consumption of materials and resources? Will it promote the use of land in sustainable locations that has been previously developed? Will it use land efficiently? Will it minimise the loss of "greenfield" land?	N/a	N/a	N/a	N/a

and energy, and to minimise waste production.	Will it avoid the loss of good quality agricultural land and preserve soil resources? Will it minimise energy consumption and promote energy efficiency? Will it promote the use of renewable energy sources? Will it lead to less waste being produced? Will it lead to less waste being disposed, by promoting more recycling and composting? Will it increase waste recovery for other means eg. energy generation?				
SOCIAL					
SOC 1 To reduce poverty and social	Will it reduce poverty and social exclusion in those areas most affected?  Will it help to reduce deprivation levels?	☺	©	☺	All options will increase the proportion of affordable housing contributions made through development in the rural area.
exclusion.	Will it help meet the needs of residents most effectively?				Option A will maximise the contributions made towards providing affordable housing, but Option C will secure fewer contributions by affecting fewer sites.
To maintain and improve the health of the whole population and promote healthy lifestyles.	Will it improve access to high quality health facilities? Will it encourage healthy lifestyles? How? Will it provide adequate health infrastructure for existing and new communities? Will the links between poorer health and deprivation be addressed? Will links to the countryside be maintained and enhanced?	N/a	N/a	N/a	N/a
SOC 3 To improve education and skills.	Will it improve qualifications and skills for both young people and amongst the workforce? Will it help to retain key workers and provide more skilled workers from school leavers? Will adequate education infrastructure be provided for existing and new communities? Will it promote lifelong learning and skills training? Will links between lower levels of education and deprivation be addressed?	N/a	N/a	N/a	N/a
SOC 4	Will it increase the range of types, sizes and affordability of				All options will increase the proportion of affordable

To provide the opportunity to live in a decent, suitable and affordable home.	housing for all social groups?  Will it reduce the housing need and ensure that housing provision addresses the needs of all?  Will it provide the most appropriate solutions to address the housing requirements needed for creating sustainable communities?  Will it make best use of existing housing stock?	©	©	©	housing contributions made through development in the rural area.  Option A will maximise the contributions made towards providing affordable housing, so bring forward funds for new affordable housing quickly. However, smaller sites may be more likely to pass on the costs of affordable housing contributions onto the consumer.  Option C will secure fewer contributions by affecting fewer sites.
SOC 5 To build community identity, improve social welfare, and reduce crime and anti-social activity.	Will it encourage engagement in community activities?  Will it contribute to the achievement of a mixed and balanced community?  Will it reduce actual levels of crime?  Will it reduce the fear of crime?	©	☺	©	All options will be able to ensure that more developments contribute to affordable housing than is the case at present and so will build more mixed communities.  Option A would be most effective in this regard by affecting as many new developments as possible.
SOC 6 To offer more opportunities for rewarding and satisfying employment for all.	Will it reduce unemployment overall?  Will it help to improve earnings?	N/a	N/a	N/a	N/a
SOC 7 To improve the quality of where people live.	Will it improve the quality of dwellings?  Will it improve the quality of local open space?  Will it improve the satisfaction of people with their neighbourhoods?	©	©	©	All options will increase the proportion of affordable housing contributions made through development in the rural area.  Option A will maximise the contributions made towards providing affordable housing, so provide better housing for more people, but Option C will

SOC 8 To improve accessibility to essential services, facilities and iobs.	Will it improve accessibility to key local services and facilities (including health, education, leisure, open space, the countryside and community facilities)? Will it improve accessibility for all whilst reducing dependency on the private car? Will it improve access to jobs and services for all?	N/a	N/a	N/a	secure fewer contributions and so be able to supply less new housing overall.  N/a
ECONOMIC		L	<u> </u>	<u> </u>	
EC 1 To encourage sustained economic growth.	Will it assist in strengthening the local economy? Will it improve business development and enhance competitiveness? Will it reduce vulnerability to economic shocks? Will it promote growth in key sectors? Will it increase vitality & viability of town centres and improve economic diversity?	☺	©	☺	All options will increase the proportion of affordable housing contributions made through development in the rural area.  Option A will maximise the contributions made towards providing affordable housing, so provide more housing for key rural workers, but Option C will secure fewer contributions and so be able to supply less new housing for rural workers.
EC 2 To encourage and accommodate both indigenous and inward investment.	Will it encourage indigenous businesses? Will it encourage inward investment? Will it make land and property available for business? Will it improve economic performance across the Greater Norwich area? Will it support / encourage rural diversification? Will it support / encourage small city businesses?	N/a	N/a	N/a	N/a
EC 3 To encourage efficient patterns of movement in support of economic growth.	Will it improve provision of local jobs? Will it improve accessibility to work, particularly by public transport, walking and cycling? Will it reduce journey times between key employment areas and key transport interchanges? Will it improve efficiency and sustainability of freight distribution? Will it support provision of key communications infrastructure?	N/a	N/a	N/a	N/a
EC 4	Will it reduce the impact on the environment from businesses?		1		

To improve the	Will it reduce the impact on residents from businesses?	N/a	N/a	N/a	N/a	l
social and	Will it attract new investment and skilled workers to the area?	,	,			l
environmental performance of	Will it maintain existing business and employment provision? Will it provide employment in the best locations to serve urban and					
the economy.	rural residents?					

Overall Conclusions: What are the main effects of the policy option as identified through the sustainability appraisal process? POLICY OPTION: Question 45 – Rural areas, towns and villages: Affordable housing development thresholds. Option A - sites of 2+ dwellings should contribute affordable housing Option B - sites of 5+ dwellings should contribute affordable housing Option C - sites of 10+ dwellings should contribute affordable housing N/a: The contributions made to affordable housing provision based on the threshold sizes of development in the rural area do **Environmental** not have environmental impacts as in themselves they do not prompt extra development. **Impacts** More affordable housing can be provided if more sites contribute to funding, and this would help to create more mixed **Social Impacts** communities. Option A would be most effective in this regard by affecting as many new developments as possible. Option A would in general maximise the potential gains from new development in rural areas, although it could make those homes from small sites lightly more expensive if costs are reflected onto the consumer. Option C would generate more funds of homes per site, and Option B would be a compromise of the two. Option A will be able to provide more contributions for affordable housing, so enabling more development for homes for key **Economic Impacts** workers to remain in the local area.

# **Overall summary:**

- Impacts
- Possible mitigation measures
- Recommended further research
- Considering cumulative impacts

There are some important sustainability differenced between the options, but they all help to provide means for supplying new affordable housing for the rural area, and as such will minimise the out-migration of key rural / local workers. The options would be effective if they were applied in line with new strategic allocations for rural housing developments. Precautions may need to be taken to ensure that larger sites are not brought forward by being sub-divided into smaller plots in order to avoid making the affordable housing contributions.

- Option Appraised: Question 46 Rural areas, towns and villages: Definition of "local" for housing needs.
  - Option A "Local" could be defined as from within a particular village.
  - Option B "Local" could be from a wider definition of a group of villages.

### **SCORING SYSTEM PROPOSED:**

SA Objective	Decision making criteria	Short-	Medium	Long-	Comments / Justification
		Term	Term	Term	Inc. cumulative effects
		0-5 yrs	5-20 yrs	20+ yrs	
<b>ENVIRONME</b>	NTAL		•	,	
ENV 1	Will it reduce traffic volumes, ease the flow of traffic and	8	8	8	Option A could lead to new residents being located in
To reduce the	reduce congestion?				villages that are not so well connected to public transport.
effect of traffic	Will it increase the proportion of journeys using modes other				
on the	than the car? Will it reduce the effect of HGV traffic on people and the	©	☺	☺	Option B would offer more locations for housing, where
environment.	environment?				public transport links could be beneficial for new
	Will it encourage more benign modes of travel?				residents.
	Will new development be located such to reduce the need for				
	people to travel?				
ENV 2	Will it improve the quality of the water environment (streams,				
To improve the	rivers, lakes etc)?	N/a	N/a	N/a	N/a
quality of the	Will it help to support wetland habitats and species?				
water	Will it holp to support worlding habitate and openies.				
environment	Men at the control of				
ENV 3	Will it improve air quality?				NI/-
To improve	Will it reduce the emission of atmospheric pollutants?	N/a	N/a	N/a	N/a
environmental	Will it reduce the difficulty of authorphicito politicality.				
amenity,					
including air					
quality.					

ENV 4 To maintain and enhance biodiversity and geodiversity.	Will it conserve / enhance natural or semi-natural habitats, and promote habitat connections?  Is it likely to have a significant effect on sites designated for international, national or local importance?  Will it conserve / enhance species diversity, and in particular avoid harm to protected species?	N/a	N/a	N/a	N/a
ENV 5 To maintain and enhance the quality of landscapes, townscapes and the historic environment.	Will it protect and enhance the quality of landscapes, townscapes and countryside character, including the character of the Broads and its setting where relevant? Will it maintain and enhance the distinctiveness of the landscapes/townscapes and heritage? Will it reduce the amount of derelict, underused land? Will it protect and enhance features of historical, archaeological and cultural value?	N	N	N	Option B could allow greater flexibility to ensure that sensitive village settings are not adversely affected.
ENV 6 To adapt to and mitigate against the impacts of	Will it reduce emissions of greenhouse gases by reducing energy consumption? Will it lead to an increased proportion of energy needs being met from renewable sources?	8	⊜	8	Option A could lead to new residents being located in villages that are not so well connected to public transport, so increasing the reliance on the private car.
climate change.	Will it increase the capacity of the area to withstand the effects of climate change?  How can it be ensured that the risks to lives, land and property are minimised?	☺	©	©	Option B would offer more locations for housing, where public transport links could be beneficial for reducing transport emissions.
ENV 7 To avoid, reduce and manage flood risk.	Will it minimise the risk of flooding to people and property?  Can it incorporate new designs to adapt to possible flood risk?  Will it promote the use of sustainable drainage systems to reduce run off?	N/a	N/a	N/a	N/a
ENV 8 To provide for sustainable use and sources of water supply.	Will it conserve groundwater resources? Will it minimise water consumption?	N/a	N/a	N/a	N/a
ENV 9 To make the best use of resources, including land	Will it minimise consumption of materials and resources? Will it promote the use of land in sustainable locations that has been previously developed? Will it use land efficiently? Will it minimise the loss of "greenfield" land?	N	N	N	Option B could allow more flexibility to ensure that new development is located away from areas of valuable agricultural land in need of protection.

and energy, and to minimise waste production.	Will it avoid the loss of good quality agricultural land and preserve soil resources? Will it minimise energy consumption and promote energy efficiency? Will it promote the use of renewable energy sources? Will it lead to less waste being produced? Will it lead to less waste being disposed, by promoting more recycling and composting? Will it increase waste recovery for other means eg. energy generation?				
SOCIAL					
SOC 1 To reduce poverty and social exclusion.	Will it reduce poverty and social exclusion in those areas most affected?  Will it help to reduce deprivation levels?  Will it help meet the needs of residents most effectively?	©8 ©	©8 ©	©8 ©	Both options serve to increase peoples' access to housing in rural areas.  Option A will ensure that local communities can stay together by being housed in the same village they originally are from, but it could take longer for people to access housing as schemes may not come to a certain village very regularly.  Option B would provide better access to new housing for a wider catchment of people from villages in the area. It would also mean that villages act as clusters to provide services for a wider area.
SOC 2 To maintain and improve the health of the whole population and promote healthy lifestyles.	Will it improve access to high quality health facilities? Will it encourage healthy lifestyles? How? Will it provide adequate health infrastructure for existing and new communities? Will the links between poorer health and deprivation be addressed? Will links to the countryside be maintained and enhanced?	© ©	©8 ©	©8 ©	Option A could keep social networks together and reduces the stress of being isolated from family groups, but residents could be in locations isolated from health facilities.  Option B could ensure that new residents are housed in village clusters that have a wider variety of services, including health facilities, available for local residents.
SOC 3 To improve education and skills.	Will it improve qualifications and skills for both young people and amongst the workforce? Will it help to retain key workers and provide more skilled workers from school leavers?	☺	☺	8	Option A could result in residents being housed in locations isolated without easy access to schools.  Option B could ensure that new residents are housed in

	Will adequate education infrastructure be provided for existing and new communities? Will it promote lifelong learning and skills training? Will links between lower levels of education and deprivation be addressed?	©	☺	©	village clusters that have a local school and good public transport connections to further education institutes.
SOC 4 To provide the opportunity to live in a decent, suitable and affordable home.	Will it increase the range of types, sizes and affordability of housing for all social groups? Will it reduce the housing need and ensure that housing provision addresses the needs of all? Will it provide the most appropriate solutions to address the housing requirements needed for creating sustainable communities? Will it make best use of existing housing stock?	© ©	©8 ©	©8 ©	Both options will improve peoples' access to suitable and affordable housing.  Option A could result in fewer opportunities if development in the particular village is restricted.  Option B could increase the opportunities for accessing more local housing schemes across a wider area.
SOC 5 To build community identity, improve social welfare, and reduce crime and anti-social activity.	Will it encourage engagement in community activities?  Will it contribute to the achievement of a mixed and balanced community?  Will it reduce actual levels of crime?  Will it reduce the fear of crime?	©	©	©	Both options will help to retain local members of the community, create balanced communities and offer more opportunities for engaging in local activities.
SOC 6 To offer more opportunities for rewarding and satisfying employment for all.	Will it reduce unemployment overall? Will it help to improve earnings?	N/a	N/a	N/a	N/a
SOC 7 To improve the quality of where people live.	Will it improve the quality of dwellings? Will it improve the quality of local open space? Will it improve the satisfaction of people with their neighbourhoods?	©	☺	☺	Both options will help to increase the satisfaction of people with their neighbourhoods if they are able to live in the area they wish to, or work in, so increasing the pride in an area.
SOC 8 To improve accessibility to	Will it improve accessibility to key local services and facilities (including health, education, leisure, open space, the countryside and community facilities)?				Both options will improve peoples' access to services and jobs by providing a fixed address.

essential services, facilities and	Will it improve accessibility for all whilst reducing dependency on the private car?	©8	©8	©8	Option A could leave new residents with fewer facilities if the particular village does not have many services available.
jobs.	Will it improve access to jobs and services for all?	☺	☺	☺	Option B could increase the access to services if people can be housed in a wider choice of villages, which may have more facilities available.
ECONOMIC					
EC 1 To encourage sustained economic growth.	Will it assist in strengthening the local economy? Will it improve business development and enhance competitiveness? Will it reduce vulnerability to economic shocks? Will it promote growth in key sectors? Will it increase vitality & viability of town centres and improve economic diversity?	©	٥	٥	Both options will help to retain key local workers and bring more custom to local businesses.
EC 2 To encourage and accommodate both indigenous and inward investment.	Will it encourage indigenous businesses? Will it encourage inward investment? Will it make land and property available for business? Will it improve economic performance across the Greater Norwich area? Will it support / encourage rural diversification? Will it support / encourage small city businesses?	©	☺	©	Both options will help to retain key local workers and develop more businesses from self-employed residents.
EC 3 To encourage efficient patterns of movement in support of economic growth.	Will it improve provision of local jobs? Will it improve accessibility to work, particularly by public transport, walking and cycling? Will it reduce journey times between key employment areas and key transport interchanges? Will it improve efficiency and sustainability of freight distribution? Will it support provision of key communications infrastructure?	N/a	N/a	N/a	N/a
EC 4 To improve the social and environmental performance of the economy.	Will it reduce the impact on the environment from businesses? Will it reduce the impact on residents from businesses? Will it attract new investment and skilled workers to the area? Will it maintain existing business and employment provision? Will it provide employment in the best locations to serve urban and rural residents?	N/a	N/a	N/a	N/a

Overall Conclusions: What are the main effects of the	polic	v option as identified through	h the sustainabilit	v appraisal process?

- POLICY OPTION: Question 46 – Rural areas, towns and villages: Definition of "local" for housing needs.

Option A – "Local" could be defined as from within a particular village.

Option B – "Local" could be from a wider definition of a group of villages.

Environmental Impacts	The original residence of those in housing need, and their subsequent validity for new affordable housing, would not have any great effect on the environment, although Option B provides more choice for ensuring that new residences are in villages that are well connected to public transport services, so reducing the need to travel, and where sensitive village settings are not adversely affected, or where important agricultural land can be avoided.
Social Impacts	Option A is subtly different from Option B in that it could restrict the availability of housing for local people if their choices for new housing locations are restricted to one village. Option B offers a cluster of villages for new housing locations, and as such would increase the opportunities to access housing, whilst also offering more locations for housing where there are more local services and facilities available.
Economic Impacts	Whilst both options would help to retain key workers, Option B would be able to offer more opportunities for local workers to live in the broad area where they work and by offering more places to live could help more people establish self-employment.

## **Overall summary:**

- Impacts
- Possible mitigation measures
- Recommended further research
- Considering cumulative impacts

These are important options to ensure that people are able to remain in their local area and retain the communities that have become established over time, and can promote local balanced communities. Option B will provide more opportunities to access local needs housing when it is required, and in areas with more local facilities to reduce the social exclusion that could arise from Option A's limited choice of housing locations.

These options will be important when implemented in conjunction with options for rural regeneration, rural employment and strategic housing allocations, as well as improvements to public transport delivery.

- Option Appraised: Question 47 Rural areas, towns and villages: Distances of rural employment from settlements.
  - Option A Only within or adjacent to existing settlements
  - Option B Within 1 km of a settlement
  - Option C A different higher figure

#### **SCORING SYSTEM PROPOSED:**

SA Objective	Decision making criteria	Short- Term 0-5 yrs	Medium Term 5-20 yrs	Long- Term 20+ yrs	Comments / Justification Inc. cumulative effects
<b>ENVIRONMEN</b>	NTAL				
ENV 1 To reduce the effect of traffic on the	Will it reduce traffic volumes, ease the flow of traffic and reduce congestion? Will it increase the proportion of journeys using modes other than the car?	☺	©	☺	Option A: Within or adjacent to settlements will usually have some public transport links and is more accessible for walking and cycling.
environment.	Will it reduce the effect of HGV traffic on people and the environment? Will it encourage more benign modes of travel? Will new development be located such to reduce the need for	☺	☺	☺	Option B: 1 km from a settlement is still able to offer walking & cycling.
	people to travel?	⊗	8	8	Option C: Distances further away will increase the likelihood of people using their car, creating more impacts on the environment, air quality, and congestion on narrow country roads.
ENV 2 To improve the quality of the water environment	Will it improve the quality of the water environment (streams, rivers, lakes etc)?  Will it help to support wetland habitats and species?	N/a	N/a	N/a	N/a
ENV 3 To improve environmental	Will it improve air quality?  Will it reduce the emission of atmospheric pollutants?	N/a	N/a	N/a	N/a

amenity, including air quality.  ENV 4  To maintain and enhance biodiversity and	Will it conserve / enhance natural or semi-natural habitats, and promote habitat connections? Is it likely to have a significant effect on sites designated for international, national or local importance? Will it conserve / enhance species diversity, and in particular	N/a	N/a	N/a	N/a
geodiversity.	avoid harm to protected species?				
ENV 5 To maintain and enhance the quality of landscapes, townscapes and the historic environment.	Will it protect and enhance the quality of landscapes, townscapes and countryside character, including the character of the Broads and its setting where relevant? Will it maintain and enhance the distinctiveness of the landscapes/townscapes and heritage? Will it reduce the amount of derelict, underused land? Will it protect and enhance features of historical, archaeological and cultural value?	?	?	?	The effects are location specific, but all designs of development would have to be carefully integrated into the surroundings and any conversions should be sympathetic to the original buildings.
ENV 6 To adapt to and mitigate against	Will it reduce emissions of greenhouse gases by reducing energy consumption? Will it lead to an increased proportion of energy needs being met	©	☺	☺	Option A: Public transport links and more access for walking and cycling will help to reduce emissions.
the impacts of climate change.	from renewable sources? Will it increase the capacity of the area to withstand the effects of climate change?	☺	☺	☺	Option B: 1 km from a settlement is still able to offer walking & cycling.
	How can it be ensured that the risks to lives, land and property are minimised?	⊜	⊗	⊗	Option C: Distances further away will increase the need for people to use their car and so create more emissions to climate change contributions.
ENV 7 To avoid, reduce and manage flood risk.	Will it minimise the risk of flooding to people and property? Can it incorporate new designs to adapt to possible flood risk? Will it promote the use of sustainable drainage systems to reduce run off?	N/a	N/a	N/a	N/a
ENV 8 To provide for sustainable use and sources of water supply.	Will it conserve groundwater resources? Will it minimise water consumption?	?	?	?	The effects are location specific, but under Option C there could be less chance that developments would have connections to supply and disposal infrastructure.

ENV 9 To make the best use of resources, including land and energy, and to minimise waste production.	Will it minimise consumption of materials and resources? Will it promote the use of land in sustainable locations that has been previously developed? Will it use land efficiently? Will it minimise the loss of "greenfield" land? Will it avoid the loss of good quality agricultural land and preserve soil resources? Will it minimise energy consumption and promote energy efficiency? Will it promote the use of renewable energy sources? Will it lead to less waste being produced? Will it lead to less waste being disposed, by promoting more recycling and composting? Will it increase waste recovery for other means eg. energy generation?	?	?	?	The effects are location specific, but if all options make use of existing buildings this will reduce the need for raw materials. However, options B and C could involve some more use of Greenfield sites and more petrol fuels.
SOCIAL					
SOC 1 To reduce poverty and	Will it reduce poverty and social exclusion in those areas most affected?	☺	☺	☺	Option A could be closer for people to access jobs if the developments offered employment.
social exclusion.	Will it help to reduce deprivation levels?  Will it help meet the needs of residents most effectively?	©⊗	©8	©®	Option B would also be accessible to most people, although may not include public transport links.
		8	8	⊗	Option C would cause people to use their cars more often so being less cost effective for employees or people using the services / shops.
SOC 2 To maintain and improve the	Will it improve access to high quality health facilities? Will it encourage healthy lifestyles? How? Will it provide adequate health infrastructure for existing and new communities?	©	©	©	Option A promotes more walking and cycling to the local facilities, and to public transport if that is the mode of travel.
health of the whole population and promote healthy	Will the links between poorer health and deprivation be addressed? Will links to the countryside be maintained and enhanced?	©8	©8	©8	Option B also promotes more walking and cycling, although could see more car use.
lifestyles.		8	⊜	8	Option C would lead to more people using cars and not walking or cycling to the area.
SOC 3 To improve	Will it improve qualifications and skills for both young people and amongst the workforce? Will it help to retain key workers and provide more skilled	N/a	N/a	N/a	N/a

education and skills.	workers from school leavers? Will adequate education infrastructure be provided for existing and new communities? Will it promote lifelong learning and skills training? Will links between lower levels of education and deprivation be addressed?				
SOC 4 To provide the opportunity to live in a decent, suitable and affordable home.	Will it increase the range of types, sizes and affordability of housing for all social groups? Will it reduce the housing need and ensure that housing provision addresses the needs of all? Will it provide the most appropriate solutions to address the housing requirements needed for creating sustainable communities? Will it make best use of existing housing stock?	N/a	N/a	N/a	N/a
SOC 5 To build community identity, improve social welfare, and	Will it encourage engagement in community activities?  Will it contribute to the achievement of a mixed and balanced community?  Will it reduce actual levels of crime?	©	٥	©	Effects are largely location and proposal specific.  Options A and B: Developments could be less vulnerable to crime if projects are within an existing village, and it would also increase local pride if the area claimed 'ownership' of the facility.
reduce crime and anti-social activity.	Will it reduce the fear of crime?	8	⊜	⊗	Option C: Developments that are detached from existing villages benefit from less natural surveillance and are less a part of actual village life.
SOC 6 To offer more opportunities for	Will it reduce unemployment overall?  Will it help to improve earnings?	©	©	0	Option A could be closer for people to access jobs if the developments offered employment.
rewarding and satisfying employment for		©8	©®	©8	Option B would also be accessible to most people, although may not include public transport links.
all.		8	⊗	☺	Option C would cause people to use their cars more often so being less cost effective for employees.
SOC 7 To improve the quality of where people live.	Will it improve the quality of dwellings? Will it improve the quality of local open space? Will it improve the satisfaction of people with their neighbourhoods?	N/a	N/a	N/a	N/a
SOC 8	Will it improve accessibility to key local services and facilities				Option A could be closer for people to access by

To improve accessibility to	(including health, education, leisure, open space, the countryside and community facilities)?	☺	☺	☺	walking and cycling, and become a part of the village's facilities.
essential services, facilities and	Will it improve accessibility for all whilst reducing dependency on the private car?	©®	©\(\text{\tin}\text{\tetx{\text{\tetx{\text{\text{\texi}\text{\text{\texi}\text{\text{\text{\text{\texi}\text{\text{\texi}\text{\text{\texi}\text{\text{\text{\text{\texi}\text{\texi}\text{\text{\texi}\text{\text{\text{\tet	© (S)	Option B would also be accessible to most people, although may not include public transport links.
jobs.	Will it improve access to jobs and services for all?	8	8	8	Option C would need employees to use cars more often and so would be less accessible for new employees.
ECONOMIC					
EC 1 To encourage sustained economic	Will it assist in strengthening the local economy?  Will it improve business development and enhance competitiveness?	☺	☺	☺	Option A: The development could become a part of the existing village's economy, helping to increase the number of shoppers / tourists.
growth.	Will it reduce vulnerability to economic shocks?	☺	☺	☺	Option B: This would be less effective in prompting more visits, but it would support the local economy.
	Will it promote growth in key sectors?  Will it increase vitality & viability of town centres and improve economic diversity?	80	80	80	Option C: This could be very detached from the village and even threaten trading in the existing centre, but it would still offer some rural diversification.
EC 2 To encourage and	Will it encourage indigenous businesses? Will it encourage inward investment? Will it make land and property available for business?	©	☺	☺	Option A could offer more support to new business from other development in the area.
accommodate both indigenous and inward	Will it improve economic performance across the Greater Norwich area?	©	☺	☺	Option B could still support new business but be less detached from the centre.
investment.	Will it support / encourage rural diversification? Will it support / encourage small city businesses?	80	80	80	Option C could be least effective in supporting new businesses, although premises could possibly include more room for expansion.
EC 3 To encourage efficient patterns of	Will it improve provision of local jobs?  Will it improve accessibility to work, particularly by public transport, walking and cycling?	©	☺	☺	Option A: Public transport links and more access for walking and cycling will help improve the efficiency of customers and employees alike.
movement in support of	Will it reduce journey times between key employment areas and key transport interchanges?	☺	☺	☺	Option B: 1 km from a settlement is still able to offer walking & cycling.

economic growth.	Will it improve efficiency and sustainability of freight distribution? Will it support provision of key communications infrastructure?	☺	(3)	©	Option C: Distances further away will increase the need for people to use their car and so be less efficient in its movement.
EC 4 To improve the social and environmental performance of	Will it reduce the impact on the environment from businesses?  Will it reduce the impact on residents from businesses?  Will it attract new investment and skilled workers to the area?	©	0	©	Option A improves peoples' access to the business, shops or facilities. If it can be assumed that new developments closer to the village centre will be more likely to create a positive contribution to the local economy, then the social impact will also be greater.
the economy.	Will it maintain existing business and employment provision?  Will it provide employment in the best locations to serve urban and rural residents?	☺	©	©	Option B is less effective than Option A but is still more accessible for Option C.
		⊗	<b>©</b>	<b>③</b>	Option C is least accessible for employees and customers and could involve more use of Greenfield sites.

Overall Conclusions: What are the main effects of the policy option as identified through the sustainability appraisal process?

- POLICY OPTION: Question 47 Rural areas, towns and villages: Distances of rural employment from settlements.
  - Option A Only within or adjacent to existing settlements
  - Option B Within 1 km of a settlement

	• Option C – A different higher figure
Environmental Impacts	New developments that are part of, or closer to, existing settlements will be able to benefit from existing public transport links and encouraging more people to walk and cycle to the facility. Option A and B will be most likely to be able to utilise previously developed land and would reduce the amount of fuel needed to access the area.
Social Impacts	Improved accessibility (Options A and B) will ensure that more people can make use of the facility to gain employment or meet their basic daily needs. There may be some important positive effects from the increased sense of community that a new business in the heart of a village might bring.

Economic Impacts	Developments further away from existing centres will be least accessible and make it harder for people to work there or accessible employment sites if they do not have a car. If new businesses are closer to existing business centres they will be able to benefit from the adjacent business community.			
Overall summary:		These options will be important in establishing the nature of rural employment and business development, and should bean integral aspect of preserving historic buildings, rural diversification and regeneration and rural		

- Impacts
- Possible mitigation measures
- Recommended further research
- Considering cumulative impacts

employment development.

The options would be even more effective if combined with public transport improvements in the rural area.

Generally, in terms of having more connection to the village and being more accessible and able to minimise the use of the car, Option A is more sustainable than options B and C, although option B is more so than C.

- Option Appraised: Question 48 Implementation and Monitoring: Funding Infrastructure
  - Option A: We could seek contributions from developers solely on a site-by-site basis.
  - Option B: We could seek contributions from developers towards the overall infrastructure needs, supplemented by a site-specific contribution where appropriate.

#### **SCORING SYSTEM PROPOSED:**

SA Objective	Decision making criteria	Short- Term 0-5 yrs	Medium Term 5-20 yrs	Long- Term 20+ yrs	Comments / Justification Inc. cumulative effects
ENVIRONMEN	ITAL				
ENV 1 To reduce the effect of traffic on the environment.	Will it reduce traffic volumes, ease the flow of traffic and reduce congestion?  Will it increase the proportion of journeys using modes other than the car?  Will it reduce the effect of HGV traffic on people and the environment?	©8	©8	©8	Option A: The site-specific infrastructure helps to reduce traffic congestion at the site of the immediate development (such as road improvements), but it could deny important funding opportunities for strategic improvements to ease problems elsewhere.
	will it encourage more benign modes of travel?  Will new development be located such to reduce the need for people to travel?	©	©	©	Option B: Development towards the overall infrastructure programme can provide improved traffic management schemes over the whole area. This could include public transport and reduced car dependency.
ENV 2 To improve the quality of the water environment	Will it improve the quality of the water environment (streams, rivers, lakes etc)?  Will it help to support wetland habitats and species?	©⊗	©⊗	©⊗	Both options will serve to improve the water environment.  Option A: There may be more immediate focus brought to a specific site where there may be particular problems, but this could deny important funding opportunities for strategic improvements to ease problems elsewhere.

		©	©	©	Option B: This is a strategic approach that provides
					the flexibility to ease problems where risks to the water environment may be particularly high.
ENV 3 To improve environmental amenity, including air quality.	Will it improve air quality?  Will it reduce the emission of atmospheric pollutants?	©®	©	©®	Both options will serve to improve the water environment.  Option A: There may be more immediate focus brought to a specific site where there may be particular problems, but this could deny important funding opportunities for strategic improvements to ease problems elsewhere.
		0	0	0	Option B: This is a strategic approach that provides the flexibility to ease problems where risks to the environment may be particularly high.
ENV 4 To maintain and enhance biodiversity and geodiversity.	Will it conserve / enhance natural or semi-natural habitats, and promote habitat connections? Is it likely to have a significant effect on sites designated for international, national or local importance? Will it conserve / enhance species diversity, and in particular avoid harm to protected species?	☺	©	☺	Using developer contributions to ensure adequate provision of multifunctional green infrastructure could lead to significant biodiversity benefits.
ENV 5 To maintain and enhance the quality of landscapes, townscapes and the historic environment.	Will it protect and enhance the quality of landscapes, townscapes and countryside character, including the character of the Broads and its setting where relevant? Will it maintain and enhance the distinctiveness of the landscapes/townscapes and heritage? Will it reduce the amount of derelict, underused land? Will it protect and enhance features of historical, archaeological and cultural value?	N/a	N/a	N/a	N/a
ENV 6 To adapt to and mitigate against the impacts of climate change.	Will it reduce emissions of greenhouse gases by reducing energy consumption? Will it lead to an increased proportion of energy needs being met from renewable sources? Will it increase the capacity of the area to withstand the effects of climate change?	☺	©	☺	Developer contributions could potentially be used to secure renewable energy generation.

ENV 7 To avoid, reduce and manage flood risk.	Will it minimise the risk of flooding to people and property?  Can it incorporate new designs to adapt to possible flood risk?  Will it promote the use of sustainable drainage systems to reduce run off?	©	©	☺	Developer contributions could potentially be used to provide Sustainable Drainage Systems to alleviate flood risk.
ENV 8 To provide for sustainable use and sources of water supply.	Will it conserve groundwater resources? Will it minimise water consumption?	©	☺	☺	Site specific funds could include new water treatment works and connections to the supply, whilst an overall contribution would help all the area supply and treatment infrastructure to be improved.
ENV 9 To make the best use of resources, including land and energy, and to minimise waste production.	Will it minimise consumption of materials and resources? Will it promote the use of land in sustainable locations that has been previously developed? Will it use land efficiently? Will it minimise the loss of "greenfield" land? Will it avoid the loss of good quality agricultural land and preserve soil resources? Will it minimise energy consumption and promote energy efficiency? Will it promote the use of renewable energy sources? Will it lead to less waste being produced? Will it lead to less waste being disposed, by promoting more recycling and composting? Will it increase waste recovery for other means eg. energy generation?	©	©	©	Both scenarios would be able to make better use of the land by providing improved transport and infrastructure connections. An overall infrastructure package could help to provide innovative schemes such as waste recycling and composting or energy generation.
SOCIAL					
SOC 1 To reduce poverty and social exclusion.	Will it reduce poverty and social exclusion in those areas most affected? Will it help to reduce deprivation levels? Will it help meet the needs of residents most effectively?	☺	☺	☺	Developer contributions could potentially be used to provide a range of social infrastructure, including improved transport and access measures and community facilities to reduce social exclusion.
SOC 2 To maintain and improve the health of the whole population and	Will it improve access to high quality health facilities? Will it encourage healthy lifestyles? How? Will it provide adequate health infrastructure for existing and new communities? Will the links between poorer health and deprivation be addressed?	☺	☺	©	Developer contributions could potentially be used to provide a range of social infrastructure, including community health facilities and measures to promote healthier lifestyles.

promote healthy lifestyles.	Will links to the countryside be maintained and enhanced?				
SOC 3 To improve education and skills.	Will it improve qualifications and skills for both young people and amongst the workforce? Will it help to retain key workers and provide more skilled workers from school leavers? Will adequate education infrastructure be provided for existing and new communities? Will it promote lifelong learning and skills training? Will links between lower levels of education and deprivation be addressed?	☺	©	©	Developer contributions could potentially be used to provide a range of social infrastructure, including community education facilities and improved access to schools and education resources.
SOC 4 To provide the opportunity to live in a decent, suitable and affordable home.	Will it increase the range of types, sizes and affordability of housing for all social groups? Will it reduce the housing need and ensure that housing provision addresses the needs of all? Will it provide the most appropriate solutions to address the housing requirements needed for creating sustainable communities? Will it make best use of existing housing stock?	☺	٥	☺	Developer contributions could potentially be used to provide a range of social infrastructure, including local needs social housing.
SOC 5 To build community identity, improve social welfare, and reduce crime and anti-social activity.	Will it encourage engagement in community activities?  Will it contribute to the achievement of a mixed and balanced community?  Will it reduce actual levels of crime?  Will it reduce the fear of crime?	☺	©	©	Developer contributions could potentially be used to provide a range of social infrastructure, including improved community facilities to improve community integration and participation and measures to reduce crime.
SOC 6 To offer more opportunities for rewarding and satisfying employment for all.	Will it reduce unemployment overall?  Will it help to improve earnings?	N/a	N/a	N/a	N/a
SOC 7 To improve the	Will it improve the quality of dwellings? Will it improve the quality of local open space?	©	0	©	Both scenarios can help to promote improved public space and community facilities, and improve the

quality of where people live.	Will it improve the satisfaction of people with their neighbourhoods?				standard of services provided to local residents.
SOC 8 To improve accessibility to essential services, facilities & jobs.	Will it improve accessibility to key local services and facilities (including health, education, leisure, open space, the countryside and community facilities)? Will it improve accessibility for all whilst reducing dependency on the private car? Will it improve access to jobs and services for all?	©	☺	©	If infrastructure can include public transport improvements, then local accessibility must improve if new connections are installed.
ECONOMIC					
EC 1 To encourage sustained economic growth.	Will it assist in strengthening the local economy? Will it improve business development & enhance competitiveness Will it reduce vulnerability to economic shocks? Will it promote growth in key sectors? Will it increase vitality & viability of town centres and improve economic diversity?	©®	©®	©8	Well-negotiated planning obligations have the potential to enhance the environmental and social performance of business, but may also hinder the economic viability of business.
To encourage and accommodate both indigenous and inward investment.	Will it encourage indigenous businesses? Will it encourage inward investment? Will it make land and property available for business? Will it improve economic performance across the Greater Norwich area? Will it support / encourage rural diversification? Will it support / encourage small city businesses?	©8	©®	© <u></u>	Well-negotiated planning obligations have the potential to enhance the environmental and social performance of business, but may also hinder the economic viability of business.
EC 3 To encourage efficient patterns of movement in support of economic growth.	Will it improve provision of local jobs? Will it improve accessibility to work, particularly by public transport, walking and cycling? Will it reduce journey times between key employment areas and key transport interchanges? Will it improve efficiency and sustainability of freight distribution? Will it support provision of key communications infrastructure?	©8	©8	©®	Well-negotiated planning obligations have the potential to enhance the environmental and social performance of business, but may also hinder the economic viability of business.
EC 4 To improve the social and environmental performance of the economy.	Will it reduce the impact on the environment from businesses? Will it reduce the impact on residents from businesses? Will it attract new investment and skilled workers to the area? Will it maintain existing business and employment provision? Will it provide employment in the best locations to serve urban and rural residents?	©®	©8	©8	Well-negotiated planning obligations have the potential to enhance the environmental and social performance of business, but may also hinder the economic viability of business.

Overall Conclusions: What are the main effects of the policy option as identified through the sustainability appraisal process?

- POLICY OPTION: Question 48 Implementation and Monitoring: Funding Infrastructure
  - Option A: We could seek contributions from developers solely on a site-by-site basis.
  - Option B: We could seek contributions from developers towards the overall infrastructure needs, supplemented by a site-specific contribution where appropriate.

Environmental Impacts	Option A will allow some specific problems to be addressed where they may exist in areas of development, such as water supply and treatment infrastructure, open space and new habitat connections, public transport improvements and car-reduction measures. Option B could see some larger-scale initiatives being implemented, such as renewable energy schemes.
Social Impacts	Public transport links could be improved both on site and across the area, so helping to reduce isolation and access deprivation. Developer contributions could potentially be used to provide a range of social infrastructure, including improved transport and access measures, community facilities, health facilities, educational resources, social housing and crime reduction measures.
Economic Impacts	Well-negotiated planning obligations have the potential to enhance the environmental and social performance of business, but may also hinder the economic viability of business.

# **Overall summary:**

- Impacts
- Possible mitigation measures
- Recommended further research
- Considering cumulative impacts

Both options will be beneficial, provided that local problems are not overlooked and allowed to persist as a result of contributions being allocated to a larger combined resource, which is then spent elsewhere. This preventative measure should be addressed through the use of a supplementary contribution where necessary.

Although under the Government's Planning Circular 05/05, planning contributions must be used only to meet the need created as a result of the development in question, Option B could, through careful negotiation, be applied a bit more flexibly than Option A.