

**Dacorum Local Development Framework Strategic  
Environmental Assessment and Sustainability  
Appraisal**

Core Strategy Issues and Options Working Note

May 2006

# 1 Appraisal Results

## 1.1 Background

This Working Note sets out the results of the initial appraisal of Dacorum's Core Strategy Issues and Options Paper (DCSIOP). This Working Note does not form part of the formal SA/SEA process or the final SA/Environmental Report.

The CSIOP sets out the overall vision for future development in the District; the strategy outlines the key issues under seven broad topics: Spatial Development Strategy, Housing, Employment, Retail, Transport and Infrastructure, Community Development and Landscape Management and Biodiversity. The CSIOP does not explicitly state Options for all the identified issues and in some cases the issues and options are presented as consultation questions and as policy guidelines. To maintain consistency and clarity with the CSIOP, the options and consultation questions are numbered as it appears in the CSIOP.

## 1.2 Appraisal Approach

The appraisal of the CSIOP was undertaken using the Appraisal Framework developed at the start of the SEA/SA process in December 2005 and further modified after the stakeholder consultation workshop held in February 2006 and comments received during the Scoping Report consultation. The CSIOP were scored against their potential compliance with broad sustainable objectives. A qualitative assessment of the options was undertaken and where appropriate quantitative data was drawn upon and the results of the appraisal have been recorded in a series of matrices. The performance of the CSIOP against the broad SEA/SA objectives was scored using the following six point scale:

| Symbol | Description        |
|--------|--------------------|
| ✓✓     | Very sustainable   |
| ✓      | Sustainable        |
| –      | Neutral            |
| ?      | Uncertain          |
| x      | Unsustainable      |
| xx     | Very unsustainable |

It should be noted that the scoring was based on available information in respect of each of the options and has been based on the SEA/SA team's judgment, substantiated by quantitative data where possible. Reference is made to the environmental baseline where appropriate but the options being considered are high level and generic and therefore the spatial dimension is not developed in sufficient detail at this stage. The baseline will be drawn upon in future phases when appraisal of the preferred options is undertaken.

## 1.3 Appraisal Results

This section of the SA Working Note summarises the sustainability implications of the various proposed issues and options. It also includes a series of recommendations to be taken forward as part of future stages of Core Strategy development. A summary of the appraisal results is set out in Appendix A and the full appraisal results are contained in Appendix B.

### Issue 5.1, 5.2 and 7.2: Spatial Strategy

At this stage of the Core Strategy preparation, the proposed options are largely generic and do not have a clear physical/geographic dimension and therefore the effects of many of the options could not be determined at this stage. However on the basis of our initial appraisal, it seems the concentrated and compact development at Hemel Hempstead outperforms the alternative options. The compact growth scores particularly highly in terms of integration of development with public transport, enhancement of the town centre, creation of thriving mixed

use development and efficient use of land.

Although the distribution of services between Hemel Hempstead, Berkamstead and Tring is outperformed by the compact centre at Hemel Hempstead, the dispersal of growth does have merits in terms of the diversification and enhancement of the local centres. The development of these local centres through the location of facilities and houses in these locations could avoid overload of Hemel Hempstead as well as improving local accessibility. However, it is considered that too much dispersion of key functions has the potential to undermine the role of Hemel Hempstead as a District centre.

It is considered that there are a number of specific issues which will need to be considered in greater detail if the compact growth scenario is to be progressed as a preferred option. Demonstration of how the impacts of climate change (drought and flooding) can be addressed and overcome will be necessary as well as the identification of specific measures to protect biodiversity and measures to address impacts on landscape and heritage.

#### **Issue 5.3 and 5.4: Protection of Greenbelt and Open Green Space**

Option 1 'to maximise urban capacity and limit greenfield/site development' consistently outperforms the other three options. Option 4 scores poorly against most of the SEA/SA objectives, primarily owing to the dispersed nature of the proposed development. Option 4 is considered to make the least efficient use of land, with consequent adverse impacts on biodiversity, landscape, travel options and air quality. While impacts on biodiversity may be capable of mitigation, it is not considered the other adverse impacts could be easily overcome. Option 1 scores best under all SEA/SA objectives, with the exception of ability to withstand climate change (drought and flooding, water consumption). It is considered that the next stage of Core Strategy development will demonstrate how the impacts of climate change can be addressed and overcome.

#### **Issue 8.1, 8.4, 8.5 Development of Town Centres and Local Centres**

Option 1 scores particularly well in relation to impacts on greenfield land and sites, integration with public transport, a good opportunity for modal shift, reducing the number of trips and trip length and provides good access to local facilities. If successfully implemented Option 1 is likely to provide positive economic benefits by delivering retail space and providing further employment opportunities. However, it is anticipated that by distributing economic development through the District, including at Maylands it will avoid over-dependence on the town centres.

#### **Issues 6.1, 6.3, 6.6 – Housing and Delivering Affordable housing**

Four growth scenarios are outlined in the Issues and Options Paper. The levels of proposed growth will have inevitable adverse impacts on biodiversity, potential loss of greenfield land/sites, landscape, air quality, water quality and consumption and potential impacts on the floodplain. Nevertheless, these levels of growth will have positive benefits in relation to diversification and revitalizing of town and local centres, promotion of high density development, increase viability of public transport and help meet affordable housing targets.

Linked to the flood risk issue is the issue of run off rates from development. It is assumed that as the RSS proposal of 6,300 dwellings is the lowest growth option, the run off rates are likely to be less than the three other options. Nevertheless, this will be largely dependent on the promotion of measures for natural drainage and groundwater replenishment as part of future plan preparation.

It is recognized that high density housing development can often have a detrimental impact on the character of the area and lead to an area losing its distinctive qualities. Although the implementation of high density options could lead to potential sustainable conflicts, it is considered that it will have significant positive outcomes for example, higher densities often result in more efficient use of land and thereby reduce greenfield development.

A steady supply of housing is necessary to generate vitality and facilitate continued economic

prosperity and helps support local shops and services required by local residents. However, housing without the supporting employment opportunities, could lead to an increase in out-commuting. New housing should be designed to a high quality and include a variety of dwelling types and sizes. The link between housing and employment growth will need to be monitored to ensure a housing/employment balance.

#### **Issue 9.1 – Traffic and Transport**

It is considered that future growth will greatly increase pressure on Dacorum's transport infrastructure. However, one of the underlying principles of the Issues and Options Paper is to increase the modal share of public transport over the private car and to reduce the number of trips and trip length. All the options, with the exception of Option 4 'to improve road infrastructure, without attracting more traffic' score well against the SEA/SA objectives. Options 1, 2, 3 and 5 encourage high density mixed-use development at key transport nodes, presents opportunities for access to local amenities, enables facilities to be located close to where people live, thus reducing car use and increasing cycling and walking. This is likely to contribute to better use of existing facilities.

The appraisal raises a number of concerns in respect of Option 4. Problems arise under Option 4 due to the anticipated rise in traffic and increased car dependence and less encouragement of sustainable modes of transport. In particular development under Option 4 is likely to lead to a significant increase in modal share of the car, reduced walking and cycling which is likely to result in worsening air quality and congestion which could have a detrimental effect on the quality of the Districts' environment and consequently its ability to attract inward investment.

The anticipated increased road building under Option 4 is likely to increase flood risk, due to the greater number of transport infrastructure schemes and therefore a greater potential for increased area of impermeable surfaces and reduced flood storage capacity. The effects of climate change will also increase the rate and volume of flow which could lead to greater risk of localised flooding. The development of new road schemes could also lead to the disturbance of known or undiscovered cultural heritage resources and there are unlikely to be any benefits to the landscape. However it is anticipated that a number of these impacts may be capable of mitigation for example through safeguarding road space for bus and cycle lanes.

#### **Issue 9.3 – Accessibility**

All five options presented in the Issues and Options Paper score either neutral or positively against the SEA/SA objectives, not only because development is to be integrated with public transport but also owing to all options aiming to reduce the need to travel and trip length and to ensure accessibility of local amenities.

#### **Issue 10.1 and 10.2 – Community Facility and Education Provision**

All options listed under these issues will help create a sense of community. The enhancement and protection of public open spaces will enhance human health by providing an area where people can walk, socially interact, encourage community gathering and social cohesion. The proposed community facilities and extended education facilities will also provide for further employment opportunities in the town and local centres and help improve the skills base of Dacorum's population and help develop a skilled workforce.

#### **Issue 11.1, 11.2 and 11.3 – Biodiversity and Landscape Protection**

The Issues and Options Paper does not set out clearly defined options in relation to biodiversity so an assessment could not be made at this stage. The Issues and Options Paper outlines a series of principles and pledges to protect the most important natural assets and resources. The principles are in keeping with the SEA/SA objectives in respect of biodiversity, habitats and landscape. Objectives aimed at biodiversity enhancement and the improving and extending linkages between habitats are also endorsed. It is recommended that consideration is given to requirements for replacement habitat.

### **1.4 Recommendations**

The Core Strategy represents a significant opportunity to lay the groundwork for sustainability.

As the primary framework for the overall vision for future development in the District, the strategy should be solidly and unequivocally grounded in the principles of sustainability. To help improve its sustainability performance there are a number of recommendations and mitigation measures which should be incorporated into the final Core Strategy. These are summarised below under key themes. A number of these recommendations could also be incorporated into later development plan documents, such as development briefs, design codes or town centre Supplementary Planning Documents.

### **Protection of the Environment**

- The Core Strategy should include measures to protect the river corridors from development;
- Opportunities to enhance biodiversity along the river corridors should be set out in a management plan;
- The nature conservation interest of brownfield and greenfield sites should be assessed prior to development;
- Consideration of the long-term management and financing of open spaces, river corridors and areas of nature conservation interest will be required; and
- Developers should be encouraged from the outset to incorporate habitats into their developments.

### **Social Progress**

- The final Core Strategy should include specific reference to measures to reduce crime and the fear of crime, including for example good lighting of public spaces, convenient parking that is overlooked, security lighting, CCTV etc;
- The desired housing types and tenure should be outlined e.g. public/private housing, apartments, high-density, low-rise apartments etc;
- The Core Strategy should consider the introduction of reserve sites which allow for flexible uses (could also include a variety of housing types), wherever practical new buildings should provide for flexible space suitable for various uses;
- It is necessary that the Core Strategy considers the provision of housing which is suitable to the needs of the labour market; and
- Attention should be taken to ensure that design and location of commercial uses do not impact on residential amenity.

### **Prudent use of natural resources**

- Consideration should be given to incorporate measures to promote re-use of construction waste and use of low environmental impact materials;
- Commitment to energy efficiency should be considered with targets for all development to achieve EcoHomes/ BREEAM Very Good or Excellent rating;
- Consideration should be given to include measures to reduce per capita water and water saving technology in layout and design of development. This should include consideration of rain water capture, grey water recycling, water efficient appliances as part of the design and layout of buildings;

- Consideration should be given to include measures to encourage creative solutions for managing extreme weather events. This should include designing with climate change in mind e. g passive solar gain, SUDS and wetland sites in the form of tertiary reedbeds;
- SUDS will require ongoing management to maximise their habitat potential, ideally these should remain in public ownership to ensure their integrity; and
- Include initiatives to reduce run off (during construction and operation of development quarters), including green roofs, rain water usage and grey water recycling.

#### **Economic Development**

- A detailed phasing strategy is required to ensure that mixed use sites are safeguarded for their intended use. Monitoring will be required to ensure that residential development is not at the expense of provision of employment land;
- Include measures to ensure that buildings are E-enabled, (sufficient access to IT services); this in turn will help support the knowledge based economy;
- Identification of measures to ensure the necessary variety of employment sites and opportunities for the existing local population;
- Consideration should be given to the inclusion of specific measures to encourage commercial, retail/leisure developments to incorporate landscaping, public open spaces and the use of porous hard surfacing; and
- The opportunity to provide live-work units and measures to encourage home working should be explored.

### **1.5 Concluding Thoughts**

The remaining phases of Core Strategy preparation represent a critical opportunity to ensure that the groundwork for sustainability is laid down and that future development will impact positively on sustainability objectives. If the issues and opportunities identified in this report are not clarified as part of the Core Strategy there is a significant risk that they will be omitted altogether at the expense of sustainable development.

## Appendix A: Summary Table

| SEA Objective  | 1. Biodiversity | 2. Water Quality | 3. Flood risk | 4. Soils | 5. CO2 emissions | 6. 'Climate Change proof' | 7. Air Quality | 8. Use of brownfield land | 9. Resource Efficiency | 10. Historic & Cultural assets | 11. Landscape & Townscape | 12. Health | 13. Sustainable Dev't Patterns & 19. Accessibility | 14. Equity & Social Exclusion | 15. Good Quality Housing | 16. Community Identity & Participation | 17. Crime | 18. Sustainable Prosperity & Growth | 20. Revitalise town centres |
|--|-----------------|------------------|---------------|----------|------------------|---------------------------|----------------|---------------------------|------------------------|--------------------------------|---------------------------|------------|--|-------------------------------|--------------------------|--|-----------|-------------------------------------|-----------------------------|
| <b>Issue: 5.1, 5.2 and 7.2: Opportunity areas and Spatial Strategy</b>   |                 |                  |               |          |                  |                           |                |                           |                        |                                |                           |            |  |                               |                          |  |           |                                     |                             |
| 1 (Q25) Promote concentrated & compact development at Hemel Hempstead.   | ✓✓              | xx               | ?             | ✓        | ✓✓               | x                         | ✓✓             | ✓✓                        | x                      | ✓                              | ?                         | ✓          | ✓  | ✓                             | ✓                        | ✓                                      | ?         | ✓✓                                  | ✓✓                          |
| 2 (Q24) Distribute development opportunities between three settlements- Hemel Hempstead, Berkamstead and Tring.          | ✓               | xx               | ?             | ?        | ✓                | x                         | ✓              | ?                         | x                      | ✓                              | ?                         | ✓          | ✓  | ✓                             | ✓                        | ✓                                      | ?         | ✓✓                                  | ✓                           |
| 3a) Protect site for Employment only   | -               | x                | ?             | -        | ?                | x                         | x              | ✓✓                        | x                      | -                              | ?                         | x          | ✓  | -                             | x                        | -                                      | -         | ✓                                   | ✓                           |
| 3b) Allow Mixed- land use development  | -               | x                | ?             | -        | ✓                | x                         | ?              | ✓✓                        | x                      | -                              | ?                         | x          | ✓  | -                             | ✓                        | ✓                                      | -         | ✓                                   | ✓                           |
| 3c) Allow alternative land use, eg., housing, on the site  | -               | x                | ?             | -        | ?                | x                         | x              | ✓✓                        | x                      | -                              | ?                         | x          | ✓  | -                             | ✓                        | ✓                                      | -         | x                                   | ✓                           |
| <b>Issue 5.3 Protection of Greenspaces and Greenbelt</b>   |                 |                  |               |          |                  |                           |                |                           |                        |                                |                           |            |  |                               |                          |  |           |                                     |                             |
| 1) Limit Greenfield site consumption by maximising Urban Capacity of all settlements.                                    | ✓✓              | ✓                | ?             | ✓        | ✓✓               | x                         | ✓              | ✓✓                        | x                      | ✓                              | ✓✓                        | ✓          | ✓✓   | ✓                             | -                        | ✓                                      | -         | ✓✓                                  | ✓                           |
| 2) Maximise Urban Capacity and allow Greenfield site consumption.  | ✓               | ?                | ?             | ?        | ✓                | x                         | ✓              | ✓                         | x                      | ✓                              | ✓                         | ✓          | ✓  | ✓                             | -                        | ✓                                      | -         | ✓                                   | ?                           |
| 3) Seeks to utilise Greenfield sites prior to consideration of greenbelts.   | x               | ?                | ?             | x        | ?                | x                         | ✓              | x                         | x                      | -                              | x                         | ✓          | x  | ✓                             | -                        | x                                      | -         | ✓                                   | x                           |
| <b>Issue 5.4: Protection of countryside Open Spaces</b>  |                 |                  |               |          |                  |                           |                |                           |                        |                                |                           |            |  |                               |                          |  |           |                                     |                             |
| 4) Strategy considers limited utilisation of land, beyond the green belt, in the open countryside to meet local demands. | x               | x                | ?             | ?        | xx               | x                         | x              | x                         | x                      | -                              | xx                        | x          | x  | ✓                             | -                        | x                                      | -         | x                                   | -                           |
| <b>Issue 10.5 Protection of Open Green spaces</b>  |                 |                  |               |          |                  |                           |                |                           |                        |                                |                           |            |  |                               |                          |  |           |                                     |                             |
| (Q52) : Retain & protect open space from all developments  | ✓✓              | ✓                | ?             | ✓        | -                | x                         | ✓✓             | -                         | x                      | -                              | ✓                         | ✓✓         | -  | ✓                             | -                        | ✓✓                                     | ✓         | ✓✓                                  | ✓✓                          |
| 2) (Q53): Can some open land be lost to improve the quality of other   | ✓               | -                | ?             | ?        | -                | x                         | ?              | -                         | x                      | -                              | ✓                         | ✓          | -  | ✓                             | -                        | ✓✓                                     | ✓         | ✓✓                                  | ✓                           |

| SEA Objective   | 1. Biodiversity | 2. Water Quality | 3. Flood risk | 4. Soils | 5. CO2 emissions | 6. 'Climate Change proof' | 7. Air Quality | 8. Use of brownfield land | 9. Resource Efficiency | 10. Historic & Cultural assets | 11. Landscape & Townscape | 12. Health | 13. Sustainable Development Patterns & 19. Accessibility | 14. Equity & Social Exclusion | 15. Good Quality Housing | 16. Community Identity & Participation | 17. Crime | 18. Sustainable Prosperity & Growth | 20. Revitalise town centres |
|---|-----------------|------------------|---------------|----------|------------------|---------------------------|----------------|---------------------------|------------------------|--------------------------------|---------------------------|------------|--|-------------------------------|--------------------------|--|-----------|-------------------------------------|-----------------------------|
| open space?   |                 |                  |               |          |                  |                           |                |                           |                        |                                |                           |            |  |                               |                          |  |           |                                     |                             |
| <b>Issue 6.1 and 6.2: Housing Growth Scenarios</b>  |                 |                  |               |          |                  |                           |                |                           |                        |                                |                           |            |  |                               |                          |  |           |                                     |                             |
| 1-A) Adopting RSS 14 recommendation of 6300 dwellings   | ✓✓              | ?                | ?             | x        | ✓                | x                         | ✓✓             | ✓                         | x                      | ✓                              | ?                         | ✓          | ?  | ✓                             | x                        | -                                      | ?         | ✓                                   | ✓                           |
| 1- B) Council's estimate of housing need- 7100 dwellings  | ✓               | ?                | ?             | x        | ✓                | x                         | ✓              | ✓                         | x                      | ✓                              | ?                         | ✓          | ?  | ✓                             | ✓                        | ✓                                      | ?         | ✓                                   | ✓                           |
| 1-C) RSS 14 original proposal of 8,200 dwellings  | x               | ?                | ?             | x        | -                | x                         | x              | x                         | x                      | x                              | ?                         | ?          | ?  | ✓                             | ✓                        | ✓                                      | ?         | ✓                                   | ✓                           |
| 1-D) 10,000 dwellings, suggested by RSS 14 objectors.   | x               | ?                | ?             | x        | -                | x                         | x              | x                         | x                      | x                              | ?                         | ?          | ?  | ✓✓                            | ✓                        | ✓                                      | ?         | ✓                                   | ✓                           |
| <b>Issue 6.3: Housing density and location</b>  |                 |                  |               |          |                  |                           |                |                           |                        |                                |                           |            |  |                               |                          |  |           |                                     |                             |
| A (Q11): Focusing development within Hemel Hempstead  | ✓✓              | ?                | ?             | ✓        | ✓                | x                         | ✓✓             | ✓✓                        | x                      | ✓                              | ?                         | ✓          | ✓  | ✓                             | -                        | ✓                                      | ?         | ✓                                   | ✓✓                          |
| B (Q12): Distribute housing requirement, beyond Hemel Hempstead.  | ?               | ?                | ?             | ?        | ?                | x                         | x              | ?                         | x                      | ✓                              | ?                         | -          | x  | x                             | -                        | x                                      | ?         | x                                   | ✓✓                          |
| 3-C (Q13):Options for housing development beyond 7100 dwellings: i) Increase density at Hemel Hempstead town centre | ✓✓              | ?                | ?             | -        | ✓                | x                         | ✓              | ✓                         | x                      | ✓                              | x                         | ✓          | ✓  | ✓                             | ✓                        | ✓                                      | ?         | ✓                                   | ✓✓                          |
| ii) Extend to Greenfield sites within Hemel Hempstead   | x               | -                | ?             | x        | -                | x                         | x              | x                         | x                      | ✓                              | x                         | -          | ✓  | x                             | -                        | x                                      | ?         | ✓                                   | ?                           |
| (iii):Extend to Greenfield sites around other existing settlements  | x               | -                | ?             | x        | ?                | x                         | x              | xx                        | x                      | ✓                              | x                         | -          | ✓  | x                             | -                        | x                                      | ?         | x                                   | -                           |
| 3-D (Q14): Location for Greenfield extension, if necessary i) Around Hemel Hempstead                                | x               | x                | ?             | x        | ✓                | x                         | ✓              | x                         | x                      | -                              | xx                        | ✓          | ✓  | x                             | -                        | ✓                                      | -         | ✓                                   | ✓                           |
| ( ii) Around Berkhamstead   | x               | x                | ?             | x        | ✓                | x                         | ✓              | x                         | x                      | -                              | xx                        | ✓          | ✓  | x                             | -                        | x                                      | -         | ✓                                   | ✓                           |
| (iii) Around Tring  | x               | x                | ?             | x        | ✓                | x                         | ✓              | x                         | x                      | -                              | xx                        | ✓          | ✓  | x                             | -                        | x                                      | -         | ✓                                   | ✓                           |
| (iv): Settlements outside Greenbelt   | x               | x                | ?             | x        | x                | x                         | x              | x                         | x                      | -                              | xx                        | x          | x  | x                             | -                        | x                                      | -         | x                                   | ✓                           |
| (v): Distributed between different settlements  | x               | x                | ?             | x        | x                | x                         | x              | x                         | x                      | -                              | xx                        | x          | x  | x                             | -                        | x                                      | -         | x                                   | ✓                           |
| 4) (Q13,16) Increase housing densities,50+ dwellings/ha, in all res neighbourhoods                                  | ✓✓              | ?                | ?             | -        | ✓                | x                         | ✓              | ✓✓                        | x                      | -                              | ?                         | -          | ✓  | ✓                             | ?                        | ?                                      | ?         | ✓                                   | ✓                           |



| SEA Objective   | 1. Biodiversity | 2. Water Quality | 3. Flood risk | 4. Soils | 5. CO2 emissions | 6. 'Climate Change proof' | 7. Air Quality | 8. Use of brownfield land | 9. Resource Efficiency | 10. Historic & Cultural assets | 11. Landscape & Townscape | 12. Health | 13. Sustainable Dev't Patterns & 19. Accessibility | 14. Equity & Social Exclusion | 15. Good Quality Housing | 16. Community Identity & Participation | 17. Crime | 18. Sustainable Prosperity & Growth | 20. Revitalise town centres |
|---|-----------------|------------------|---------------|----------|------------------|---------------------------|----------------|---------------------------|------------------------|--------------------------------|---------------------------|------------|--|-------------------------------|--------------------------|--|-----------|-------------------------------------|-----------------------------|
| 4-B Settlement considered for densification i) Hemel Hempstead                      | ✓               | ?                | ?             | ✓        | ✓                | x                         | ✓              | ✓                         | x                      | ✓                              | ?                         | ✓          | ✓  | ?                             | ?                        | ?                                      | ?         | ✓                                   | ✓                           |
| (ii):Berkhamstead   | ✓               | ?                | ?             | ✓        | ✓                | x                         | ✓              | ✓                         | x                      | ✓                              | ?                         | ✓          | ✓  | ?                             | ?                        | ?                                      | ?         | ✓                                   | ✓                           |
| (iii):Tring   | ✓               | ?                | ?             | ✓        | ✓                | x                         | ✓              | ✓                         | x                      | ✓                              | ?                         | ✓          | ✓  | ?                             | ?                        | ?                                      | ?         | ✓                                   | ✓                           |
| <b>Issue 6.6 Locating Affordable Housing</b>  |                 |                  |               |          |                  |                           |                |                           |                        |                                |                           |            |  |                               |                          |  |           |                                     |                             |
| 3 Options on affordable housing location are proposed (Question 21):                | ?               | ?                | ?             | ?        | ?                | x                         | ?              | ?                         | x                      | ✓                              | ?                         | ?          | ?  | ?                             | ?                        | ?                                      | ?         | ✓                                   | ✓                           |
| 1. On Large sites   | ?               | ✓                | ?             | ?        | ?                | x                         | ?              | ?                         | x                      | ✓                              | ?                         | ?          | ?  | ?                             | ?                        | ?                                      | ?         | ✓                                   | ✓                           |
| 2. On Greenfield Sites  | ?               | ✓                | ?             | ?        | ?                | x                         | ?              | ?                         | x                      | ✓                              | ?                         | ?          | ?  | ?                             | ?                        | ?                                      | ?         | ✓                                   | ✓                           |
| 3. On sites with high accessibility.  | ?               | ✓                | ?             | ?        | ?                | x                         | ✓              | ?                         | x                      | ✓                              | ?                         | ?          | ?  | ?                             | ?                        | ?                                      | ?         | ✓                                   | ✓                           |
| <b>Issue 8.1: Location of new retail space</b>                                      |                 |                  |               |          |                  |                           |                |                           |                        |                                |                           |            |  |                               |                          |  |           |                                     |                             |
| 1 (Question 29, Question 32): Adopt sequential approach to locate new retail spaces | ✓               | ?                | ?             | ?        | ✓                | x                         | ✓              | ✓                         | x                      | ✓                              | ?                         | ✓          | ✓  | ✓                             | ✓                        | ✓                                      | ✓         | ✓                                   | ✓                           |
| 2 (Question 30): Create opportunity for local retail shopping in business area      | ✓               | ✓                | ?             | ✓        | ✓                | x                         | x              | ✓                         | x                      | ✓                              | ?                         | x          | x  | ✓                             | ✓                        | ✓                                      | ✓         | ✓                                   | ✓                           |
| <b>Issue 8.4: Landuse pattern at the Town Centre</b>                                |                 |                  |               |          |                  |                           |                |                           |                        |                                |                           |            |  |                               |                          |  |           |                                     |                             |
| 3-1) Allow non-shop use in office use areas   | ✓               | ✓                | ?             | ✓        | ?                | x                         | ?              | ✓                         | x                      | ✓                              | ?                         | ✓          | ✓  | ✓                             | ✓                        | ✓                                      | ✓         | ✓                                   | ?                           |
| 3-2)Encourage mixed land use  | ✓               | ✓                | ?             | ✓        | ✓                | x                         | ✓              | ✓                         | x                      | ✓                              | ?                         | ✓          | ✓  | ✓                             | ✓                        | ✓                                      | ✓         | ✓                                   | ?                           |
| 3-3) Retain and protect office use in town centres.                                 | ✓               | ✓                | ?             | ✓        | ?                | x                         | ✓              | ✓                         | x                      | ✓                              | ?                         | ✓          | ✓  | ✓                             | ✓                        | ✓                                      | ✓         | ✓                                   | ✓                           |
| <b>Issue 8.5: Landuse pattern at the Local Centres</b>                              |                 |                  |               |          |                  |                           |                |                           |                        |                                |                           |            |  |                               |                          |  |           |                                     |                             |
| 4-1) Retain and protect shopping facilities in local centres                        | ✓               | ✓                | ?             | ✓        | ✓                | x                         | ✓              | ✓                         | x                      | ✓                              | ?                         | ✓          | ✓  | ✓                             | ✓                        | ✓                                      | ✓         | ✓                                   | ✓                           |
| 4-2) Support a more flexible approach to non-shop uses in local centres             | ✓               | ✓                | ?             | ✓        | ✓                | x                         | ✓              | ✓                         | x                      | ✓                              | ?                         | ✓          | ✓  | ✓                             | ✓                        | ✓                                      | ✓         | ✓                                   | ✓                           |
| <b>Issue 9.1: Traffic and Transport</b>   |                 |                  |               |          |                  |                           |                |                           |                        |                                |                           |            |  |                               |                          |  |           |                                     |                             |

| SEA Objective  | 1. Biodiversity | 2. Water Quality | 3. Flood risk | 4. Soils | 5. CO2 emissions | 6. 'Climate Change proof' | 7. Air Quality | 8. Use of brownfield land | 9. Resource Efficiency | 10. Historic & Cultural assets | 11. Landscape & Townscape | 12. Health | 13. Sustainable Dev't Patterns & 19. Accessibility | 14. Equity & Social Exclusion | 15. Good Quality Housing | 16. Community Identity & Participation | 17. Crime | 18. Sustainable Prosperity & Growth | 20. Revitalise town centres |
|--|-----------------|------------------|---------------|----------|------------------|---------------------------|----------------|---------------------------|------------------------|--------------------------------|---------------------------|------------|--|-------------------------------|--------------------------|--|-----------|-------------------------------------|-----------------------------|
| 1) Develop town and local centres  | ✓✓              | ✓                | ?             | ✓        | ✓                | x                         | ✓              | ✓                         | x                      | ✓                              | ?                         | ✓✓         | ✓✓   | ✓✓                            | ✓                        | ✓                                      | ✓         | ✓                                   | ✓✓                          |
| 2) Provide and improve public transport  | ✓✓              | ✓                | ✓             | ✓        | ✓✓               | x                         | ✓              | ✓                         | x                      | ✓                              | ✓                         | ✓✓         | ✓✓   | ✓✓                            | ✓                        | ✓                                      | ✓         | ✓                                   | ✓                           |
| 3) Encourage cyclist and pedestrian access to town and local centres               | ✓✓              | ✓                | ✓             | ✓        | ✓✓               | x                         | ✓✓             | ✓                         | x                      | ✓                              | ✓                         | ✓✓         | ✓✓   | ✓✓                            | ✓                        | ✓                                      | ✓         | ✓                                   | ✓✓                          |
| 4) Improve road infrastructure, without attracting more traffic                    | x               | xx               | xx            | ?        | xx               | x                         | ?              | ✓                         | x                      | ?                              | x                         | xx         | ?  | x                             | ✓                        | ✓                                      | ✓         | ✓                                   | xx                          |
| 5) Design Green Traffic plans for local and major traffic generators.              | ✓✓              | ✓                | ✓             | ✓        | ✓✓               | x                         | ✓✓             | ✓                         | x                      | ✓                              | ✓                         | ✓✓         | ✓✓   | ✓✓                            | ✓                        | ✓                                      | ✓         | ✓                                   | ✓                           |
| <b>Issue 9.3: Accessibility</b>  |                 |                  |               |          |                  |                           |                |                           |                        |                                |                           |            |  |                               |                          |  |           |                                     |                             |
| 1) High density development near appropriate passenger transport interchange       | ✓               | ✓                | ✓             | ✓        | ✓✓               | x                         | ✓✓             | ?                         | x                      | ✓                              | ?                         | ✓          | ✓  | ✓✓                            | ✓                        | ?                                      | ?         | ✓                                   | ?                           |
| 2) Low cost, affordable housing close to basic amenities                           | ✓               | ✓                | ✓             | ✓        | ✓✓               | x                         | ✓✓             | ?                         | x                      | ✓                              | ✓                         | ✓          | ✓  | ✓✓                            | ✓                        | ✓                                      | ?         | ✓                                   | ?                           |
| 3) Encourage live/work units   | ✓               | ✓                | ✓             | ✓        | ✓✓               | x                         | ✓✓             | ✓                         | x                      | ✓                              | ✓                         | ✓          | ✓  | ✓                             | ✓                        | ✓                                      | ?         | ✓                                   | ?                           |
| 4) Improve and promote cyclist and pedestrian network                              | ✓               | ✓                | ✓             | ✓        | ✓✓               | x                         | ✓✓             | ✓                         | x                      | ✓                              | ✓                         | ✓✓         | ✓✓   | ✓✓                            | ✓                        | ✓                                      | ?         | ✓                                   | ✓                           |
| 5) Consider accessibility to all, including the disabled                           | ✓               | ✓                | ✓             | ✓        | ✓✓               | x                         | ✓              | ✓                         | x                      | ✓                              | ?                         | ✓          | ✓  | ✓✓                            | ✓                        | ✓                                      | ?         | ✓                                   | ?                           |
| <b>Issue 10.1 Community Facility provision</b>                                     |                 |                  |               |          |                  |                           |                |                           |                        |                                |                           |            |  |                               |                          |  |           |                                     |                             |
| 1 (Q.41): Locate key community facilities in most accessible areas                 | ✓               | ✓                | ✓             | ?        | ?                | x                         | ?              | ✓                         | x                      | ✓                              | ✓                         | ✓          | ?  | ✓✓                            | ✓                        | ✓                                      | ✓         | ✓                                   | ✓                           |
| 2 (Q.42): Seek alternative community uses/ enhancing existing community facilities | ✓               | ✓                | ✓             | ?        | ?                | x                         | ✓              | ✓                         | x                      | ✓                              | ✓                         | ✓          | ✓  | ✓✓                            | ✓                        | ✓                                      | ✓         | ✓                                   | ✓                           |
| 3 (Q.43): Seek contributions from new developments for community facilities.       | ✓               | ✓                | ✓             | ?        | ?                | x                         | ✓              | ✓                         | x                      | ✓                              | ✓                         | ✓          | ✓  | ✓                             | ✓                        | ✓                                      | ✓         | ✓                                   | ✓                           |
| <b>Issue 10.2 Education Provision/Improvisation</b>                                |                 |                  |               |          |                  |                           |                |                           |                        |                                |                           |            |  |                               |                          |  |           |                                     |                             |
| 1) Provide extended school facilities in selected schools                          | ✓               | ✓                | ✓             | ✓        | ?                | x                         | ?              | ✓                         | x                      | ✓                              | ✓                         | ✓          | ?  | ✓✓                            | ✓                        | ✓                                      | ✓         | ✓                                   | ✓                           |
| 2) Utilisation of surplus school premise space for alternative community purposes. | ✓               | ✓                | ✓             | ✓        | ?                | x                         | ?              | ✓                         | x                      | ✓                              | ✓                         | ✓          | ?  | ✓✓                            | ✓                        | ✓                                      | ✓         | ✓                                   | ✓                           |

## Appendix B: Appraisal Tables

**SA/SEA Objective 1: To protect, maintain and enhance biodiversity and geodiversity at all levels, including the maintenance and enhancement of Biodiversity Action Plan habitats and species in line with local targets**

| Option (abridged)  | Performance | Commentary/explanation   |
|--|-------------|--|
| <b>Issue 5.1: Spatial strategy</b><br><b>Issue 5.2: Issue 7.2: Employment Opportunity areas</b>  |             |  |
| The Issues and Options Paper proposes growth focused at Hemel Hempstead and other settlements. Two Options considered are:   |             |  |
| 1 (Question 25) Promote concentrated and compact development at Hemel Hempstead.   | ✓✓          | While all Options are likely to impact to some degree on areas of habitat importance, careful siting and design can help reduce impacts on areas of habitat importance. The extent of the impacts on biodiversity depends on the location of residential development, which is unknown at this stage.  |
| 2 (Question 24) Distribute development opportunities between three settlements- Hemel Hempstead, Berkamstead and Tring.  | ✓           | <p>Nevertheless, concentrating development in Hemel Hempstead would help avoid areas of biodiversity value and reduce the need for urban extensions on greenfield land however intensification in the town centre could lead to development of sites with wildlife interest. The suitability of under-used sites/brownfield sites should be assessed prior to development. Where practical designs should include measures to enhance and retain wildlife and habitat should be replaced if any lost to development.</p> <p>While in principle, the Issues and Option Paper aims to protect natural assets and resources, development under Option 2 could have an impact on biodiversity as the surrounding areas around Hemel Hempstead, Berkamstead and Tring. is likely to be greenfield and consequently result in loss of rural habitats and species. Option 1 scores better as development under this Option helps to protect the environment elsewhere in Dacorum.</p> |
| 3 (Question 26) Employment areas and Land use:<br>Three Options for utilising the existing isolated employment sites within towns/large villages or Rural parts of the Borough are suggested:<br>a) Protect site for Employment only<br>b) Allow Mixed- land use development | -           | No significant impact  |

| Option (abridged)  | Performance | Commentary/explanation   |
|--|-------------|--|
| c) Allow alternative land use, eg., housing, on the site   |             |  |
| <b>Issue 5.3: Protection of Green Belt</b><br><b>Issue 5.4: Protection of the Open Countryside</b><br><b>Issue 10.5 Protection of Open Green space against development</b>   |             |  |
| The Issues and Options Paper considers a number of Options to treat the green belt. Four Options considered are:   |             |  |
| 1) Limit Greenfield site consumption by maximising Urban Capacity of all settlements.  | ✓✓          | Prudent use of land resources and reduces the pressure for development on greenfield land.   |
| 2) Maximise Urban Capacity and allow Greenfield site consumption.  | ✓           | Could lead to development of sites that may have biodiversity value. Additional development outside main urban areas may not be highly accessible and generate longer journeys having an impact on air quality and having secondary effects on biodiversity. |
| 3) Seeks to utilise Greenfield sites prior to consideration of greenbelts.   | ✗           | Although development proposed would be concentrated around major settlements reducing travel needs, Option 3 may result in species and habitat loss. Utilisation of greenfield sites may prove unsustainable in the long term.                               |
| 4) Strategy considers limited utilisation of land, beyond the green belt, in the open countryside to meet local demands, subject to sustainability considerations.   | ✗           | Not all of these sites will be in highly accessible areas. Could lead to increase in travel and number of journeys resulting in impacts on air quality and secondary effects on biodiversity.  |
| Two Options to address open space provision are suggested.<br>1) (Question 52) : Retain and protect open space from all developments<br>2) (Question 53): Can some open land be lost to improve the quality of other open space or alternative provision made? | ✓✓<br>✓     | Option 1 ensures protection of existing open space.<br><br>Under Option 2 loss of open space should be limited and proactive measures to provide more quality open space should be provided.   |
| <b>Issue 8.1 Location of new retail space</b><br><b>Issue 8.4 Type of land use at the town centre - Mixed or protected development</b><br><b>Issue 8.5 Type of Land-use in the Local Centres</b>   |             |  |

| Option (abridged)  | Performance | Commentary/explanation   |
|--|-------------|--|
| 1 (Question 29, Question 32): Adopt sequential approach to locate new retail spaces, i.e., utilise existing town centre area, followed by edge-of-centre locations and out-of-centre locations.  | ✓✓          | The sequential approach would limit consumption of Greenfield sites. Careful siting for out-of-centre development may prevent loss of species and habitats.  |
| 2 (Question 30): Create opportunity for local retail shopping in business area (Maylands area)   | -           | Option does not have any impact on Biodiversity or natural assets. The suitability of under-used sites/brownfield sites should be assessed prior to development<br><br>Increase in mixed-use development will widen people's choice whether to travel by car and biodiversity will benefit from secondary effects of less traffic. |
| 3. The Issues and Options Paper presents Options for location of commercial shops, non-shops and offices. Three Options are proposed:<br>1) Allow non-shop use in Office areas<br>2) Encourage mixed land use<br>3) Retain and protect office use in town centres. | -           | No significant impact  |
| 4. Two Options to direct future development of local centres are discussed in the strategy:<br>1) Retain and protect shopping facilities in local centres<br>2) Support a more flexible approach to non-shop uses in local centres                                 | -<br>-      | No significant impact  |
| <b>Issue 6.1, 6.2, 6.3 : Housing needs – New development and densification</b>   |             |  |
| The Issues and Options Paper aims to provide a balance between the demand and supply of affordable housing, while considering Greenfield sites.  |             |  |
| 1) Housing Growth Scenarios:<br>A) Adopting RSS 14 recommendation of 6300 dwellings without a need to review the Green belt.   | ✓✓          | Growth under Option A will have positive impact on efficient use of land and limit greenfield losses.  |

| <b>Option (abridged)</b>   | <b>Performance</b> | <b>Commentary/explanation</b>  |
|--|--------------------|--|
| B) Council's estimate of housing need- 7100 dwellings- to be achieved by maximising the Urban Capacity and utilise some green field sites.   | ✓                  | Growth under Option B seeks additional greenfield development only after exhausting the Urban Capacity. If required development of greenfield sites, may have an impact on biodiversity. Development could lead to the breakage of green corridors resulting in loss of biodiversity. Measures to ensure that the permeability of green corridors/habitat linkages are not damaged and where opportunities exist for creation of new habitat linkages it is recommended that these are implemented.<br>Growth under Options C and D may result in loss of significant levels of greenfield land resulting potential in loss of biodiversity. |
| C) RSS 14 original proposal of 8,200 dwellings which may require utilisation of more Greenfield sites.   | x                  |  |
| D) 10,000 dwellings, suggested by RSS 14 objectors.  | x                  |  |
| 3) Housing Capacity and Location<br>A (Question: 11): Focusing development within Hemel Hempstead  | ✓✓                 | Limits greenfield loss.  |
| B (Question 12): Distribute housing requirement, beyond Hemel Hempstead.   | ?                  | Without further information on extent and location of development e.g. urban extensions, rural boundary amendments it is not possible to assess.   |
| C (Question 13): Options for housing development beyond 7100 dwellings:<br>i) Increase density at Hemel Hempstead town centre<br>ii) Extend to Greenfield sites within Hemel Hempstead | ✓✓<br>x            | Development under Option i will protect the environment elsewhere in Dacorum.<br>Growth under Option 3C (ii) and 3C (iii) will result in loss of greenfield sites resulting in potential loss of biodiversity.   |
| iii) Extend to Greenfield sites around other existing settlements  | x                  |  |
| D (Question 14): Location for Greenfield extension, if necessary<br>i) Around Hemel Hempstead<br>ii) Around Berkhamstead<br>iii) Around Tring<br>iv) Settlements outside Green belt    | x<br>x<br>x<br>x   | While all Options are likely to impact to some degree on areas of habitat importance, careful siting and design can help reduce impacts on areas of habitat importance. The extent of the impacts on biodiversity depends on the location of residential development, which is unknown at this stage.<br><br>Options li, iii, iv and v score poorly in relation to adverse impact on biodiversity as a higher  |

| Option (abridged)   | Performance | Commentary/explanation  |
|---|-------------|---|
| v) Distributed among different settlements  | <b>x</b>    | number of rural habitats are likely to be impacted on.<br><br>Settlement extensions need to be carefully controlled in order to preserve each settlements individual character. While all Options could result in loss of habitats; creative design and careful siting could minimise the impact. The biodiversity value of proposed Greenfield sites is unknown at this stage. |
| 4) Increasing density and Location<br>A (Question 13, 16) Increase housing densities, beyond 50 dwellings/ha, in all residential neighbourhoods | ✓✓          | High densities can often result in the more efficient use of land and thus reduce greenfield development, however high density areas can put pressure on local services including open space.   |
| B) Settlement considered for densification<br>i) Hemel Hempstead<br>ii) Berkhamsted<br>iii) Tring   | ✓✓          |   |
| <b>Issue 9.1 : Addressing traffic – to ease congestion</b>  |             |   |
| 1) Develop town and local centres   | ✓✓          | Biodiversity will benefit from secondary effects of anticipated less traffic under Options 1, 2, 3 and 5.<br><br>Assuming improving road infrastructure entails road construction, Option 4 could lead to negative impacts on biodiversity.   |
| 2) Provide and improve public transport   | ✓✓          |   |
| 3) Encourage cyclist and pedestrian access to town and local centres  | ✓✓          |   |
| 4) Improve road infrastructure, without attracting more traffic   | <b>x</b>    |   |
| 5) Design Green Traffic plans for local and major traffic generators.   | ✓✓          |   |
| <b>Issue 9.3 Increasing Accessibility</b>   |             |   |
| Five Options for improving accessibility to services are presented:<br>1)High density development near appropriate                              | ✓           | While Options 2, 3, 4 and 5 would not have any impact on biodiversity, Option 1is likely to result in zero loss of greenfield sites.  |

| Option (abridged)  | Performance      | Commentary/explanation   |
|--|------------------|--|
| passenger transport interchange<br>2) Low cost, affordable housing close to basic amenities<br>3) Encourage live/work units<br>4) Improve and promote cyclist and pedestrian network<br>5) Consider accessibility to all, including the disabled   | -<br>-<br>-<br>- |  |
| <b>Issue 10.1 Community facility provision, 10.2 Education provision</b>   |                  |  |
| Three Options for provision of community facilities are proposed:<br>1 (Question 41) Locate key community facilities in most accessible areas, both in towns and villages<br>2 (Question 42): Seek alternative community uses for available community buildings along with enhancing existing community facilities.<br>3 (Question 43): Seek contributions from new developments to meet demands for community facilities. | -<br>-<br>-      | No significant impact  |
| Two Options for provision of education facilities are proposed:<br>1 (Question 46): Provide extended school facilities in selected schools<br>2 (Question 47): Utilisation of surplus school premise space for alternative social/community purposes.  | -<br>-           | No significant impact  |
| <b>Issue 6.6: Delivering affordable housing</b>  |                  |  |
| Three Options on affordable housing location are proposed (Question 21):<br>1. On Large sites<br>2. On Greenfield sites<br>3. On sites with high accessibility.  | ?<br>?<br>?      | More information on the biodiversity value of potential housing sites is required.<br><br>Greenfield development proposed under Option 2 could lead to loss of sites with high biodiversity value. |



**SA/SEA Objective 2: To protect, maintain and enhance water resources (including water quality and quantity) while taking into account the impacts of climate change**

| Option (abridged)   | Performance                              | Commentary/explanation  |
|---|--|---|
| <b>Issue 5.1: Spatial strategy</b><br><b>Issue 5.2 , Issue 7.2: Employment Opportunity areas</b>  |  |   |
| The Issues and Options Paper proposes growth focused at Hemel Hempstead and other settlements. Two Options considered are:  |  |   |
| 1 (Question 25) Promote concentrated and compact development at Hemel Hempstead.  | <b>XX</b>                                | Development under Option 1, may lead to increased commercial and residential water consumption. Implications of water saving technology for development should be included in future LDF stages. e.g. rain water recycling, grey water recycling The Core Strategy should support positive measures to improve water quality. |
| 2 (Question 24) Distribute development opportunities between three settlements- Hemel Hempstead, Berkamstead and Tring.   | <b>XX</b>                                |   |
| 3 (Question 26) Employment areas and Land use: Three Options for utilising the existing isolated employment sites within towns/large villages or Rural parts of the Borough are suggested:<br>a) Protect site for Employment only<br>b) Allow Mixed- land use development<br>c) Allow alternative land use, eg., housing, on the site | <b>X</b><br><br><b>X</b><br><br><b>X</b> |   |
| <b>Issue 5.3: Protection of Green Belt</b><br><b>Issue 5.4: Protection of the Open Countryside</b><br><b>Issue 10.5 Protection of Open Green space against development</b>  |  |   |
| The Issues and Options Paper considers a number of Options to treat the green belt. Four Options considered are:  |  |   |
| 1) Limit Greenfield site consumption by maximising Urban Capacity of all settlements.   | ✓  | Option 1-1 will limit the development of additional impermeable surfaces; however maximising Urban Capacity can potentially increase water demand to unsustainable rates.   |

| Option (abridged)  | Performance | Commentary/explanation   |
|--|-------------|--|
| 2) Maximise Urban Capacity and allow Greenfield site consumption.  | ?           | New development on greenfield sites will inevitably increase impermeable surfaces resulting in increased water run off and potential pollution of water courses. However implementation of initiatives to reduce run off such as green roofs and channeling of surface water into SUDs would alleviate this potential groundwater pollution. |
| 3) Seeks to utilise Greenfield sites prior to consideration of greenbelts.   | ?           | New development on greenfield sites will inevitably increase impermeable surfaces resulting in increased water run off and potential pollution of water courses. However implementation of initiatives to reduce run off such as green roofs and channeling of surface water into SUDs would alleviate this potential groundwater pollution. |
| 4) Strategy considers limited utilisation of land, beyond the green belt, in the open countryside to meet local demands, subject to sustainability considerations.   | X           | New development on greenfield sites will inevitably increase impermeable surfaces resulting in increased water run off and potential pollution of water courses. However implementation of initiatives to reduce run off such as green roofs and channeling of surface water into SUDs would alleviate this potential groundwater pollution. |
| Two Options to address open space provision are suggested.<br>1) (Question 52) : Retain and protect open space from all developments<br>2) (Question 53): Can some open land be lost to improve the quality of other open space or alternative provision made? | ✓<br>-      | Option 1 shall contribute to increased water retention and unalter water demand in the area.<br><br>Option 2, in absolute terms, shall not alter water run off rates in the region.  |
| <b>Issue 8.1 Location of new retail space</b><br><b>Issue 8.4 Type of land use at the town centre - Mixed or protected development</b><br><b>Issue 8.5 Type of Land-use in the Local Centres</b>   |             |  |
| 1 (Question 29, Question 32): Adopt sequential approach to locate new retail spaces, i.e., utilise existing town centre area, followed by edge-of-centre locations and out-of-centre locations.  | ?           | Type/scale and level of development, i.e. Greenfield/ Brownfield/ PDL in greenbelt/greenfield sites is unknown at this stage thereby impact on water quality and consumption can not be made at this stage of Option development.  |
| 2 (Question 30): Create opportunity for local retail shopping in business area (Maylands area)   | -           | No significant impact  |

| Option (abridged)   | Performance | Commentary/explanation   |
|---|-------------|--|
| 3. The Issues and Options Paper presents Options for location of commercial shops, non-shops and offices. Three Options are proposed:<br>1) Allow non-shop use in Office areas<br>2) Encourage mixed land use<br>3) Retain and protect office use in town centres.  | -           | No significant impact  |
| 4. Two Options to direct future development of local centres are discussed in the strategy:<br>1) Retain and protect shopping facilities in local centres<br>2) Support a more flexible approach to non-shop uses in local centres  | -           | No significant impact  |
| <b>Issue 6.1, 6.2, 6.3 : Housing needs – New development and densification</b>  |             |  |
| The Issues and Options Paper aims to provide a balance between the demand and supply of affordable housing, while considering Greenfield sites.   |             | All Options could lead to a decrease in water quality through increased run off and increase in water consumption however this could be mitigated against if the Core Strategy includes/promotes measures to improve water quality e.g. SUDS and water efficiency. |
| 1) Housing Growth Scenarios:<br>A) Adopting RSS 14 recommendation of 6300 dwellings without a need to review the Green belt.<br>B) Council's estimate of housing need- 7100 dwellings- to be achieved by maximising the Urban Capacity and utilise some green field sites.<br>C) RSS 14 original proposal of 8,200 dwellings which may require utilisation of more Greenfield sites.<br>D) 10,000 dwellings, suggested by RSS 14 objectors. | ?           | All Options could lead to a decrease in water quality through increased run off however this could be mitigated against if the Core Strategy includes/promotes measures to improve water quality e.g. SUDS.  |
|   | ?           |  |
|   | ?           |  |
|   | ?           |  |
| 3) Housing Capacity and Location<br>A (Question: 11): Focusing development within Hemel Hempstead   | ?           |  |
| B (Question 12): Distribute housing requirement, beyond Hemel Hempstead.  | ?           |  |

| Option (abridged)   | Performance           | Commentary/explanation  |
|---|-----------------------|---|
| C (Question 13): Options for housing development beyond 7100 dwellings:<br>i) Increase density at Hemel Hempstead town centre<br>ii) Extend to Greenfield sites within Hemel Hempstead<br>iii) Extend to Greenfield sites around other existing settlements | ?<br><br>-<br><br>-   |   |
| D (Question 14): Location for Greenfield extension, if necessary<br>i) Around Hemel Hempstead<br>ii) Around Berkhamstead<br>iii) Around Tring<br>iv) Settlements outside Green belt<br>v) Distributed among different settlements                           | X<br>X<br>X<br>X<br>X | All Options shall increase impermeable surfaces resulting in increased run of rates.  |
| 4) Increasing density and Location<br>A (Question 13, 16) Increase housing densities, beyond 50 dwellings/ha, in all residential neighbourhoods   | ?                     |   |
| B) Settlement considered for densification<br>i) Hemel Hempstead<br>ii) Berkhamsted<br>iii) Tring   | ?                     | Water demand/consumption could increase however this could be mitigated against through the use of water saving technology. |
| <b>Issue 9.1 : Addressing traffic – to ease congestion</b>  |                       |   |
| 1) Develop town and local centres   | ✓                     | Measures to reduce the need to travel will help reduce run off rates from roads.  |

| Option (abridged)  | Performance | Commentary/explanation  |
|--|-------------|---|
| 2) Provide and improve public transport<br>3) Encourage cyclist and pedestrian access to town and local centres<br>4) Improve road infrastructure, without attracting more traffic<br>5) Design Green Traffic plans for local and major traffic generators.  | ✓           | Development under Option 4 will result in increased run off from roads and the increased level of impermeable road surfaces however this can be reduced/offset by the use of SUDS |
|  | ✓           |   |
|  | xx          |   |
|  | ✓           |   |
| <b>Issue 9.3 Increasing Accessibility</b>  |             |   |
| Five Options for improving accessibility to services are presented:<br>1) High density development near appropriate passenger transport interchange<br>2) Low cost, affordable housing close to basic amenities<br>3) Encourage live/work units<br>4) Improve and promote cyclist and pedestrian network<br>5) Consider accessibility to all, including the disabled | ✓           | Measures to reduce the need to travel will help reduce run off rates from roads.  |
|  | ✓           |   |
|  | ✓           |   |
|  | ✓           |   |
|  | ✓           |   |
| <b>Issue 10.1 Community facility provision, 10.2 Education provision</b>   |             |   |

| Option (abridged)   | Performance                | Commentary/explanation  |
|---|----------------------------|---|
| <p>Three Options for provision of community facilities are proposed:</p> <p>1 (Question 41) Locate key community facilities in most accessible areas, both in towns and villages</p> <p>2 (Question 42): Seek alternative community uses for available community buildings along with enhancing existing community facilities.</p> <p>3 (Question 43): Seek contributions from new developments to meet demands for community facilities.</p> | -                          | No significant impact   |
| <p>Two Options for provision of education facilities are proposed:</p> <p>1 (Question 46): Provide extended school facilities in selected schools</p> <p>2 (Question 47): Utilisation of surplus school premise space for alternative social/community purposes.</p>  | -                          | No significant impact   |
| <b>Issue 6.6: Delivering affordable housing</b>   |                            |   |
| <p>Three Options on affordable housing location are proposed (Question 21):</p> <p>1. On Large sites</p> <p>2. On Greenfield sites</p> <p>3. On sites with high accessibility.</p>  | <p>?</p> <p>-</p> <p>✓</p> | <p>Option 2 will inevitably result in an increase in impermeable surfaces resulting in increased water runoff rates however use of SUDS can help to minimise run off.</p> <p>Type of development on large sites, i.e. Greenfield or brownfield, is unknown at this stage.</p> <p>Measures to reduce the need to travel will help reduce run off rates from roads.</p> |

**SA/SEA Objective 3: Ensure that new developments avoid areas which are at risk from flooding and natural flood storage areas**

| Option (abridged)   | Performance | Commentary/explanation   |
|---|-------------|--|
| <b>Issue 5.1: Spatial strategy</b><br><b>Issue 5.2 , Issue 7.2: Employment Opportunity areas</b>  |             |  |
| The Issues and Options Paper proposes growth focused at Hemel Hempstead and other settlements. Two Options considered are:  |             | Areas of Dacorum lie within areas of flood risk, which may expand due to implications of climate change.   |
| 1 (Question 25) Promote concentrated and compact development at Hemel Hempstead.  | ?           | It should be noted that at this stage of Core Strategy preparation, the Options are largely generic and do not have a clear physical/geographic dimension and therefore impacts on flood risk areas is unknown at this stage. The preferred Options stage will assess development Options on flood risk. The results of the Strategic Flood Risk Assessment (SFRA) will be incorporated into the SA process. |
| 2 (Question 24) Distribute development opportunities between three settlements- Hemel Hempstead, Berkamstead and Tring.   |             |  |
| 3 (Question 26) Employment areas and Land use: Three Options for utilising the existing isolated employment sites within towns/large villages or Rural parts of the Borough are suggested:<br>a) Protect site for Employment only<br>b) Allow Mixed- land use development<br>c) Allow alternative land use, eg., housing, on the site |             |  |
| <b>Issue 5.3: Protection of Green Belt</b><br><b>Issue 5.4: Protection of the Open Countryside</b><br><b>Issue 10.5 Protection of Open Green space against development</b>  |             |  |
| The Issues and Options Paper considers a number of Options to treat the green belt. Four Options considered are:  |             |  |
| 1) Limit Greenfield site consumption by maximising Urban Capacity of All settlements and contain development.   | ?           | It should be noted that at this stage of Core Strategy preparation, the Options are largely generic and do not have a clear physical/geographic dimension and therefore impacts on flood risk areas is unknown at this stage. The preferred Options stage will assess  |

| Option (abridged)  | Performance | Commentary/explanation   |
|--|-------------|--|
| 2) Maximise Urban Capacity and allow Greenfield site consumption.  |             | development Options on flood risk. The results of the Strategic Flood Risk Assessment (SFRA) will be incorporated into the SA process.   |
| 3) Seeks to utilise Greenfield sites prior to consideration of greenbelts.   |             |  |
| 4) Strategy considers limited utilisation of land, beyond the green belt, in the open countryside to meet local demands, subject to sustainability considerations.   |             |  |
| Two Options to address open space provision are suggested.<br>1) (Question 52) : Retain and protect open space from all developments<br>2) (Question 53): Can some open land be lost to improve the quality of other open space or alternative provision made?     |             |  |
| <b>Issue 8.1 Location of new retail space</b><br><b>Issue 8.4 Type of land use at the town centre - Mixed or protected development</b><br><b>Issue 8.5 Type of Land-use in the Local Centres</b>   |             |  |
| 1 (Question 29, Question 32): Adopt sequential approach to locate new retail spaces, i.e., utilise existing town centre area, followed by edge-of-centre locations and out-of-centre locations.  | ?           | It should be noted that at this stage of Core Strategy preparation, the Options are largely generic and do not have a clear physical/geographic dimension and therefore impacts on flood risk areas is unknown at this stage. The preferred Options stage will assess development Options on flood risk. The results of the Strategic Flood Risk Assessment (SFRA) will be incorporated into the SA process. |
| 2 (Question 30): Create opportunity for local retail shopping in business area (Maylands area)   |             |  |
| 3. The Issues and Options Paper presents Options for location of commercial shops, non-shops and offices. Three Options are proposed:<br>1) Allow non-shop use in Office areas<br>2) Encourage mixed land use<br>3) Retain and protect office use in town centres. |             |  |
| 4. Two Options to direct future development of local centres are discussed in the strategy:<br>1) Retain and protect shopping facilities in local  |             |  |



| Option (abridged)   | Performance | Commentary/explanation   |
|---|-------------|--|
| centres<br>2) Support a more flexible approach to non-shop uses in local centres  |             |  |
| <b>Issue 6.1, 6.2, 6.3 : Housing needs – New development and densification</b>  |             |  |
| The Issues and Options Paper aims to provide a balance between the demand and supply of affordable housing, while considering Greenfield sites.   |             | It should be noted that at this stage of Core Strategy preparation, the Options are largely generic and do not have a clear physical/geographic dimension and therefore impacts on flood risk areas is unknown at this stage. The preferred Options stage will assess development Options on flood risk. The results of the Strategic Flood Risk Assessment (SFRA) will be incorporated into the SA process. |
| 1) Housing Growth Scenarios:<br>A) Adopting RSS 14 recommendation of 6300 dwellings without a need to review the Green belt.<br>B) Council's estimate of housing need- 7100 dwellings- to be achieved by maximising the Urban Capacity and utilise some green field sites.<br>C) RSS 14 original proposal of 8,200 dwellings which may require utilisation of more Greenfield sites.<br>D) 10,000 dwellings, suggested by RSS 14 objectors. | ?           |  |
| 3) Housing Capacity and Location<br>A (Question: 11): Focusing development within Hemel Hempstead   |             |  |
| B (Question 12): Distribute housing requirement, beyond Hemel Hempstead.  |             |  |
| C (Question 13): Options for housing development beyond 7100 dwellings:<br>i) Increase density at Hemel Hempstead town centre<br>ii) Extend to Greenfield sites within Hemel Hempstead<br>iii) Extend to Greenfield sites around other existing settlements   |             |  |

| Option (abridged)  | Performance   | Commentary/explanation  |
|--|---|---|
| <p>D (Question 14): Location for Greenfield extension, if necessary</p> <ul style="list-style-type: none"> <li>i) Around Hemel Hempstead</li> <li>ii) Around Berkhamstead</li> <li>iii) Around Tring</li> <li>iv) Settlements outside Green belt</li> <li>v) Distributed among different settlements</li> </ul> <p>4) Increasing density and Location</p> <p>A (Question 13, 16) Increase housing densities, beyond 50 dwellings/ha, in all residential neighbourhoods</p> <hr/> <p>B) Settlement considered for densification</p> <ul style="list-style-type: none"> <li>i) Hemel Hempstead</li> <li>ii) Berkhamsted</li> <li>iii) Tring</li> </ul> | ?   | <p>It should be noted that at this stage of Core Strategy preparation, the Options are largely generic and do not have a clear physical/geographic dimension and therefore impacts on flood risk areas is unknown at this stage. The preferred Options stage will assess development Options on flood risk. The results of the Strategic Flood Risk Assessment (SFRA) will be incorporated into the SA process.</p>   |
| <b>Issue 9.1 : Addressing traffic – to ease congestion</b>   |   |   |
| <ul style="list-style-type: none"> <li>1) Develop town and local centres</li> <li>2) Provide and improve public transport</li> <li>3) Encourage cyclist and pedestrian access to town and local centres</li> <li>4) Improve road infrastructure, without attracting more traffic</li> <li>5) Design Green Traffic plans for local and major traffic generators.</li> </ul>   | <p>?</p> <hr/> <p>✓</p> <hr/> <p>✓</p> <hr/> <p>xx</p> <hr/> <p>✓</p> | <p>Measures to reduce the need to travel will help reduce run off rates from roads.</p> <p>Development under Option 4 will result in increased run off from roads and the increased level of impermeable road surfaces however this can be reduced/offset by the use of SUDS. Increased urban run off due to climate change and increase impermeable surfacing could exacerbate flooding, however this could be managed through use of SUDS, channel improvements and local bank raising.</p> |
| <b>Issue 9.3 Increasing Accessibility</b>  |   |   |
| <p>Five Options for improving accessibility to services are presented:</p>   | <p>✓</p>  | <p>Measures to reduce the need to travel will help reduce run off rates from roads</p>  |

| Option (abridged)  | Performance      | Commentary/explanation   |
|--|------------------|--|
| 1) High density development near appropriate passenger transport interchange<br>2) Low cost, affordable housing close to basic amenities<br>3) Encourage live/work units<br>4) Improve and promote cyclist and pedestrian network<br>5) Consider accessibility to all, including the disabled  | ✓<br>✓<br>✓<br>✓ |  |
| <b>Issue 10.1 Community facility provision, 10.2 Education provision</b>   |                  |  |
| Three Options for provision of community facilities are proposed:<br>1 (Question 41) Locate key community facilities in most accessible areas, both in towns and villages<br>2 (Question 42): Seek alternative community uses for available community buildings along with enhancing existing community facilities.<br>3 (Question 43): Seek contributions from new developments to meet demands for community facilities. | ?                | It should be noted that at this stage of Core Strategy preparation, the Options are largely generic and do not have a clear physical/geographic dimension and therefore impacts on flood risk areas is unknown at this stage. The preferred Options stage will assess development Options on flood risk. The results of the Strategic Flood Risk Assessment (SFRA) will be incorporated into the SA process. |
| Two Options for provision of education facilities are proposed:<br>1 (Question 46): Provide extended school facilities in selected schools<br>2 (Question 47): Utilisation of surplus school premise space for alternative social/community purposes.  |                  |  |
| <b>Issue 6.6: Delivering affordable housing</b>  |                  |  |
| Three Options on affordable housing location are proposed (Question 21):<br>1. On Large sites<br>2. On Greenfield sites<br>3. On sites with high accessibility.  | ?                | It should be noted that at this stage of Core Strategy preparation, the Options are largely generic and do not have a clear physical/geographic dimension and therefore impacts on flood risk areas is unknown at this stage. The preferred Options stage will assess development Options on flood risk. The results of the Strategic Flood Risk Assessment (SFRA) will be incorporated into the SA process. |

**SA/SEA Objective 4: Minimise development of land with high quality soils and minimise the degradation/loss of soils due to new developments**

| Option (abridged)   | Performance | Commentary/explanation   |
|---|-------------|--|
| <b>Issue 5.1: Spatial strategy</b><br><b>Issue 5.2 , Issue 7.2: Employment Opportunity areas</b>  |             |  |
| The Issues and Options Paper proposes growth focused at Hemel Hempstead and other settlements. Two Options considered are:  |             | Urban areas under consideration are predominantly brownfield land, loss of soil (green field) to new development is minimal. Hence the impact of development Options on soil is considered positive. |
| 1 (Question 25) Promote concentrated and compact development at Hemel Hempstead.  | ✓           |  |
| 2 (Question 24) Distribute development opportunities between three settlements- Hemel Hempstead, Berkamstead and Tring.   | ?           |  |
| 3 (Question 26) Employment areas and Land use: Three Options for utilising the existing isolated employment sites within towns/large villages or Rural parts of the Borough are suggested:<br>a) Protect site for Employment only<br>b) Allow Mixed- land use development<br>c) Allow alternative land use, eg., housing, on the site | -<br>-<br>- | Urban areas under consideration are predominantly brownfield land, loss of soil (green field) to new development is minimal.   |
| <b>Issue 5.3: Protection of Green Belt</b><br><b>Issue 5.4: Protection of the Open Countryside</b><br><b>Issue 10.5 Protection of Open Green space against development</b>  |             |  |
| The Issues and Options Paper considers a number of Options to treat the green belt. Four Options considered are:  |             | Development on Greenfield sites under Options 2, 3 and 4 might lead to soil loss. Option 1 scores best as development will occur in urban areas, where effects are likely to be limited.             |
| 1) Limit Greenfield site consumption by maximising Urban Capacity of all settlements.   | ✓           |  |

| <b>Option (abridged)</b>   | <b>Performance</b> | <b>Commentary/explanation</b>  |
|--|--------------------|--|
| 2) Maximise Urban Capacity and allow Greenfield site consumption.  | ?                  | Proposed development should avoid areas of high agricultural land (e.g. grade 1 and 2) and areas of ecological value.  |
| 3) Seeks to utilise Greenfield sites prior to consideration of greenbelts.   | x                  |  |
| 4) Strategy considers limited utilisation of land, beyond the green belt, in the open countryside to meet local demands, subject to sustainability considerations.   | ?                  | Potential loss of soil (green field) to new development  |
| Two Options to address open space provision are suggested.<br>1) (Question 52) : Retain and protect open space from all developments<br>2) (Question 53): Can some open land be lost to improve the quality of other open space or alternative provision made?     | ✓<br><br>?         | Option 1 scores best due to its commitment to protect open spaces and in turn supports the objective. Utilisation of open land might result in soil loss, depending on the type of development, which is unknown at this stage |
| <b>Issue 8.1 Location of new retail space</b><br><b>Issue 8.4 Type of land use at the town centre - Mixed or protected development</b><br><b>Issue 8.5 Type of Land-use in the Local Centres</b>   |                    |  |
| 1 (Question 29, Question 32): Adopt sequential approach to locate new retail spaces, i.e., utilise existing town centre area, followed by edge-of-centre locations and out-of-centre locations.  | ?                  | Focusing development on brownfield land will reduce pressure on greenfield sites elsewhere but development on out of town centre locations may lead to soil loss.  |
| 2 (Question 30): Create opportunity for local retail shopping in business area (Maylands area)   | -                  | No implications for soil resources.  |
| 3. The Issues and Options Paper presents Options for location of commercial shops, non-shops and offices. Three Options are proposed:<br>1) Allow non-shop use in Office areas<br>2) Encourage mixed land use<br>3) Retain and protect office use in town centres. | -                  | No implications for soil resources.  |
| 4. Two Options to direct future development of local centres are discussed in the strategy:  | -                  | No implications for soil resources.  |

| Option (abridged)   | Performance   | Commentary/explanation  |
|---|---|---|
| 1) Retain and protect shopping facilities in local centres<br>2) Support a more flexible approach to non-shop uses in local centres   |   |   |
| <b>Issue 6.1, 6.2, 6.3 : Housing needs – New development and densification</b>  |   |   |
| The Issues and Options Paper aims to provide a balance between the demand and supply of affordable housing, while considering Greenfield sites.   |   |   |
| 1) Housing Growth Scenarios:<br>A) Adopting RSS 14 recommendation of 6300 dwellings without a need to review the Green belt.<br>B) Council's estimate of housing need- 7100 dwellings- to be achieved by maximising the Urban Capacity and utilise some green field sites.<br>C) RSS 14 original proposal of 8,200 dwellings which may require utilisation of more Greenfield sites.<br>D) 10,000 dwellings, suggested by RSS 14 objectors. | <p style="text-align: center;"><b>x</b></p> <hr/> <p style="text-align: center;"><b>x</b></p> <hr/> <p style="text-align: center;"><b>x</b></p> <hr/> <p style="text-align: center;"><b>x</b></p> | <p>Development on Greenfield sites proposed under Option 1 could lead to loss of soil</p> <p>Development under Options 2, 3 and 4 could lead to soil loss</p> |
| 3) Housing Capacity and Location<br>A (Question: 11): Focusing development within Hemel Hempstead   | ✓   | No implications for soil resources.   |
| B (Question 12): Distribute housing requirement, beyond Hemel Hempstead.  | ?   | Without further information on the location of development an assessment can not be made.   |
| C (Question 13): Options for housing development beyond 7100 dwellings:   | -   | Urban areas under consideration in Option 1 are predominantly brownfield land, loss of soil (green field) to new development is likely to be minimal.         |

| Option (abridged)   | Performance          | Commentary/explanation  |
|---|----------------------|---|
| i) Increase density at Hemel Hempstead town centre<br>ii) Extend to Greenfield sites within Hemel Hempstead<br>iii) Extend to Greenfield sites around other existing settlements  | <b>x</b><br><b>x</b> | Development on Greenfield sites under Options 2 and 3 could lead to loss of soil  |
| D (Question 14): Location for Greenfield extension, if necessary<br>i) Around Hemel Hempstead<br>ii) Around Berkhamstead<br>iii) Around Tring<br>iv) Settlements outside Green belt<br>v) Distributed among different settlements | <b>x</b>             | Without further information on the location of development an assessment can not be made. However development on Greenfield sites, suggested by the Options could lead to loss of soil. |
| 4) Increasing density and Location<br>A (Question 13, 16) Increase housing densities, beyond 50 dwellings/ha, in all residential neighbourhoods   | -                    | Focusing development on brownfield land will reduce pressure on Greenfield and limit soil loss.   |
| B) Settlement considered for densification<br>i) Hemel Hempstead<br>ii) Berkhamsted<br>iii) Tring   | -                    |   |
| <b>Issue 9.1 : Addressing traffic – to ease congestion</b>  |                      |   |
| 1) Develop town and local centres<br>2) Provide and improve public transport<br>3) Encourage cyclist and pedestrian access to town and local centres<br>4) Improve road infrastructure, without attracting more                   | -<br>-<br>-          | No implications for soil resources under Options 1, 2, 3 and 5.<br>Depending on the extent and location of new road infrastructure under Option 4, could lead to soil loss.             |

| Option (abridged)  | Performance           | Commentary/explanation   |
|--|-----------------------|--|
| traffic<br>5) Design Green Traffic plans for local and major traffic generators.   | ?<br>-                |  |
| <b>Issue 9.3 Increasing Accessibility</b>  |                       |  |
| Five Options for improving accessibility to services are presented:<br>1) High density development near appropriate passenger transport interchange<br>2) Low cost, affordable housing close to basic amenities<br>3) Encourage live/work units<br>4) Improve and promote cyclist and pedestrian network<br>5) Consider accessibility to all, including the disabled   | -<br>-<br>-<br>-<br>- | Focusing development on brownfield land will reduce pressure on Greenfield and limit soil loss.  |
| <b>Issue 10.1 Community facility provision, 10.2 Education provision</b>   |                       |  |
| Three Options for provision of community facilities are proposed:<br>1 (Question 41) Locate key community facilities in most accessible areas, both in towns and villages<br>2 (Question 42): Seek alternative community uses for available community buildings along with enhancing existing community facilities.<br>3 (Question 43): Seek contributions from new developments to meet demands for community facilities. | ?<br>?<br>?           | Without further information on precise location of community facilities an assessment can not be made but it is envisaged majority of development will be focused on brownfield land which will reduce pressure on Greenfield and limit soil loss. |



| Option (abridged)   | Performance | Commentary/explanation  |
|---|-------------|---|
| Two Options for provision of education facilities are proposed:<br>1 (Question 46): Provide extended school facilities in selected schools<br>2 (Question 47): Utilisation of surplus school premise space for alternative social/community purposes. | -<br>-      | No implications for soil resources.   |
| <b>Issue 6.6: Delivering affordable housing</b>   |             |   |
| Three Options on affordable housing location are proposed (Question 21):<br>1. On Large sites<br>2. On Greenfield sites<br>3. On sites with high accessibility.   | ?<br>x<br>? | The location of the larger sites and the sites with high accessibility is unknown at this stage so assessment can not be made. Development on Greenfield sites under Option 2 could lead to loss of soil. |

**SA/SEA Objective 5: Reduce the impacts of climate change, with a particular focus on reducing the consumption of fossil fuels and levels of CO<sub>2</sub>**

| Option (abridged)   | Performance | Commentary/explanation  |
|---|-------------|---|
| <b>Issue 5.1: Spatial strategy</b><br><b>Issue 5.2 , Issue 7.2: Employment Opportunity areas</b>  |             |   |
| The Issues and Options Paper proposes growth focused at Hemel Hempstead and other settlements. Two Options considered are:  |             | Dealing with climate change is a wide ranging policy challenge cutting across all parts of society. The Core Strategy has a critical role in encouraging and enabling patterns of land use that support sustainable patterns of travel and identifying and creating locations with good public transport access to reduce car based travel. |
| 1 (Question 25) Promote concentrated and compact development at Hemel Hempstead.  | ✓✓          |   |
| 2 (Question 24) Distribute development opportunities between three settlements- Hemel Hempstead, Berkamstead and Tring.   | ✓           |   |
| 3 (Question 26) Employment areas and Land use: Three Options for utilising the existing isolated employment sites within towns/large villages or Rural parts of the Borough are suggested:<br>a) Protect site for Employment only<br>b) Allow Mixed- land use development<br>c) Allow alternative land use, eg., housing, on the site | ?           | Travel distances between the existing residential settlements and employment site under consideration in Option a is unknown at this stage so an assessment on land use patterns can not be made.<br><br>Option b would help reduce the number of trips made and the average distance travelled to facilities.                              |
|   | ✓           |   |
|   | ?           | With no information on the location of the employment sites under consideration in Option c a judgment on land use patterns can not be made at this stage. .  |
| <b>Issue 5.3: Protection of Green Belt</b><br><b>Issue 5.4: Protection of the Open Countryside</b><br><b>Issue 10.5 Protection of Open Green space against development</b>  |             |   |

| Option (abridged)  | Performance | Commentary/explanation  |
|--|-------------|---|
| The Issues and Options Paper considers a number of Options to treat the green belt. Four Options considered are:   |             | The concentrated and compact nature of development under Options 1 and 2 will help reduce the need to travel and the average distance travelled which will have positive impact on transport emissions.   |
| 1) Limit Greenfield site consumption by maximising Urban Capacity of all settlements.  | ✓✓          |   |
| 2) Maximise Urban Capacity and allow Greenfield site consumption.  | ✓           | With no information on the location of greenfield sites under Option 3 a judgment on land use patterns can not be made at this stage.   |
| 3) Seeks to utilise Greenfield sites prior to consideration of greenbelts.   | ?           | Development under Option 4 would increase length and number of car based journeys, leading to increased CO <sub>2</sub> emissions. Breaks in continuity of development, such as with Option 4, would tend to undermine public transport viability.  |
| 4) Strategy considers limited utilisation of land, beyond the green belt, in the open countryside to meet local demands, subject to sustainability considerations.   | XX          |   |
| Two Options to address open space provision are suggested.<br>1) (Question 52) : Retain and protect open space from all developments<br>2) (Question 53): Can some open land be lost to improve the quality of other open space or alternative provision made? | -           | No significant impact   |
| <b>Issue 8.1 Location of new retail space</b><br><b>Issue 8.4 Type of land use at the town centre - Mixed or protected development</b><br><b>Issue 8.5 Type of Land-use in the Local Centres</b>   |             |   |
| 1 (Question 29, Question 32): Adopt sequential approach to locate new retail spaces, i.e., utilise existing town centre area, followed by edge-of-centre locations and out-of-centre locations.  | ✓✓          | Sequential approach to development gives more scope to integrate land use and public transport. Focusing retail development (Option 1) and office space (Option 3 (3)) in the main town centre areas will increase the vitality and viability of these centres. This in turn will increase the viability of public transport to them, which could lead to the decrease in modal share of the car. |
| 2 (Question 30): Create opportunity for local retail shopping in business area (Maylands area)   | ✓           |   |

| Option (abridged)   | Performance | Commentary/explanation   |
|---|-------------|--|
| 3. The Issues and Options Paper presents Options for location of commercial shops, non-shops and offices. Three Options are proposed:<br>1) Allow non-shop use in Office areas<br>2) Encourage mixed land use<br>3) Retain and protect office use in town centres.  | ?           | The mixed use area of Mayalnds and Option 3 (2) would help reduce the number of trips made and the average distance travelled to facilities.   |
|   | ✓           | With no information on the location of office areas under Option 3 (1) a judgment on land use patterns can not be made at this stage.  |
|   | ?           | Focusing retail development in Option 4 (1) in the local centres will increase the vitality and viability of these centres. This in turn will increase the viability of public transport to them, which could lead to the decrease in modal share of the car.    |
| 4. Two Options to direct future development of local centres are discussed in the strategy:<br>1) Retain and protect shopping facilities in local centres<br>2) Support a more flexible approach to non-shop uses in local centres  | ✓           | The mixed use areas proposed under Option 4 (2) would help reduce the number of trips made and the average distance travelled to facilities.   |
|   | ✓           |  |
| <b>Issue 6.1, 6.2, 6.3 : Housing needs – New development and densification</b>  |             |  |
| The Issues and Options Paper aims to provide a balance between the demand and supply of affordable housing, while considering Greenfield sites.   |             |  |
| 1) Housing Growth Scenarios:<br>A) Adopting RSS 14 recommendation of 6300 dwellings without a need to review the Green belt.<br>B) Council's estimate of housing need- 7100 dwellings- to be achieved by maximising the Urban Capacity and utilise some green field sites.<br>C) RSS 14 original proposal of 8,200 dwellings which may require utilisation of more Greenfield sites.<br>D) 10,000 dwellings, suggested by RSS 14 objectors. | ✓           | The concentrated and compact nature of development under Options A and B will help reduce the need to travel and the average distance travelled which will have positive impact on transport emissions.  |
|   | ✓           |  |
|   | -           | The dispersed pattern of growth under Options C and D will generally lead to increased distances between services and increase in car dependence. Growth under Options C and D leads to dispersal of residential development with limited supporting facilities. |
|   | -           |  |

| Option (abridged)   | Performance           | Commentary/explanation   |
|---|-----------------------|--|
| 3) Housing Capacity and Location<br>A (Question: 11): Focusing development within Hemel Hempstead   | ✓                     | The concentrated and compact nature of development under Options 3 A will help reduce the need to travel and the average distance travelled which will have positive impact on transport emissions.  |
| B (Question 12): Distribute housing requirement, beyond Hemel Hempstead.  | ?                     | The dispersed pattern of growth under Option B will generally lead to increased distances between services and increase in car dependence. Ultimately the outcome will depend on the precise location of these settlements and accessibility to public transport.  |
| C (Question 13): Options for housing development beyond 7100 dwellings:<br>i) Increase density at Hemel Hempstead town centre<br>ii) Extend to Greenfield sites within Hemel Hempstead<br>iii) Extend to Greenfield sites around other existing settlements | ✓<br>-<br>?           | The concentrated and compact nature of development under Option C I and ii will give the opportunity for local residents to work and access facilities locally and thereby help reduce the need to travel.<br><br>Options C (iii), due to the nature of its development could increase travel distances and encourage private transport to access facilities. Ultimately the outcome will depend on the precise location of these settlements and accessibility to public transport.       |
| D (Question 14): Location for Greenfield extension, if necessary<br>i) Around Hemel Hempstead<br>ii) Around Berkhamstead<br>iii) Around Tring<br>iv) Settlements outside Green belt<br>v) Distributed among different settlements                           | ✓<br>✓<br>✓<br>X<br>X | The expanded neighborhoods at Hemel Hempstead , Berkhamstead and Tring will result in greater mixed-use activity and will give the opportunity for local residents to work and access facilities locally.<br><br>The dispersed nature of development under Options IV and V will generally lead to increased distances between services and increase in car dependence. Growth under Options 1 and 3 will leads to dispersal of residential development with limited supporting facilities |
| 4) Increasing density and Location<br>A (Question 13, 16) Increase housing densities, beyond 50 dwellings/ha, in all residential neighbourhoods   | ✓                     | Higher densities are beneficial to the functioning of a public transport corridor  |

| Option (abridged)  | Performance                | Commentary/explanation  |
|--|----------------------------|---|
| B) Settlement considered for densification<br>i) Hemel Hempstead<br>ii) Berkhamsted<br>iii) Tring  |                            |   |
| <b>Issue 9.1 : Addressing traffic – to ease congestion</b>   |                            |   |
| 1) Develop town and local centres<br>2) Provide and improve public transport<br>3) Encourage cyclist and pedestrian access to town and local centres<br>4) Improve road infrastructure, without attracting more traffic<br>5) Design Green Traffic plans for local and major traffic generators.   | ✓<br>✓✓<br>✓✓<br>XX<br>✓✓  | Encouraging sustainable modes of transport (Options 2, 3 and 5) would reduce the need to travel and positively contribute to a reduction in CO2 emissions.<br><br>Improvement in road infrastructure will inevitably lead to road construction and increased in traffic levels and contribute to increased CO2 emissions. This can be reduced by safeguarding road space for bus and cycle lanes. |
| <b>Issue 9.3 Increasing Accessibility</b>  |                            |   |
| Five Options for improving accessibility to services are presented:<br>1) High density development near appropriate passenger transport interchange<br>2) Low cost, affordable housing close to basic amenities<br>3) Encourage live/work units<br>4) Improve and promote cyclist and pedestrian network<br>5) Consider accessibility to all, including the disabled<br>1. | ✓✓<br>✓✓<br>✓✓<br>✓✓<br>✓✓ | Option 1 has been designed to integrate public transport with high density development. Options 2, 4 and 5 will reduce the need to travel by car and travel distances<br>Live/work units under Option 3 would help reduce the number of trips made.   |
| <b>Issue 10.1 Community facility provision, 10.2 Education provision</b>   |                            |   |

| Option (abridged)   | Performance | Commentary/explanation   |
|---|-------------|--|
| <p>Three Options for provision of community facilities are proposed:</p> <p>1 (Question 41) Locate key community facilities in most accessible areas, both in towns and villages</p> <p>2 (Question 42): Seek alternative community uses for available community buildings along with enhancing existing community facilities.</p> <p>3 (Question 43): Seek contributions from new developments to meet demands for community facilities.</p> | ?           | <p>Without further information on the location of community/education facilities a judgment on land use patterns can not be made at this stage as it is not clear if the development sites are easily accessible by the private car or public transport.</p> |
| <p>Two Options for provision of education facilities are proposed:</p> <p>1 (Question 46): Provide extended school facilities in selected schools</p> <p>2 (Question 47): Utilisation of surplus school premise space for alternative social/community purposes.</p>  | ?           |  |
| <b>Issue 6.6: Delivering affordable housing</b>   |             |  |
| <p>Three Options on affordable housing location are proposed (Question 21):</p> <ol style="list-style-type: none"> <li>1. On Large sites</li> <li>2. On Greenfield sites</li> <li>3. On sites with high accessibility.</li> </ol>   | ?           | <p>Without further information on the location the proposed affordable housing a judgment on land use patterns can not be made at this stage as it is not clear if the development sites are easily accessible by the private car or public transport.</p>   |

**SA/SEA Objective 6: Ensure that developments are capable of withstanding the effects of climate change (adaptation to climate change)**

The Issues and Options Paper currently does not contain any specific reference to the provision of energy efficiency measures and the promotion of design for more extreme climatic events. This should form part of the essential infrastructure for development areas, including residential and commercial buildings. Designing with climate, both at the larger scale (for example in terms of the provision of shelterbelts, SUDS, etc) as well as micro scale (for example through SPDs which acknowledge climatic impacts such as solar gain and shading) should be considered. We see this as a missed opportunity. However climate change has been considered in relation to promoting public transport which has positive effect on climate change through reduction in greenhouse gas emissions due to less car based journeys and land use patterns which can reduce the need for people to travel.

The Core Strategy has an important role to play in contributing to the objective of reducing energy consumption. Increasing energy efficiency and reducing carbon dioxide emissions should be a key design consideration. The Core Strategy should include clear consideration and guidance in respect of the energy used in the construction and use of buildings. The Core Strategy should provide a basis for energy efficient / low energy design and encourage the use of local or recycled material. Specific design measures aimed at achieving EcoHomes ratings of at least "Very Good" should be included and reflected in energy conservation strategies

Designing for climate change should be a key element of building design. Climate change requires detailed consideration as part of Core Strategy development. In particular the Core Strategy should address and include recommendations/ proposals in relation to the following:

- Designing with nature;
- Energy efficient air conditioning and retrofitting.
- Design measures (such as shelter belts, shaded outdoor areas, high reflectivity external surfaces, maximizing solar gain and maximizing absorptive surfaces); and
- Reducing per capita water consumption.



**SA/SEA Objective 7: Achieve good air quality, especially in urban areas**

| Option (abridged)   | Performance | Commentary/explanation   |
|---|-------------|--|
| <b>Issue 5.1: Spatial strategy</b><br><b>Issue 5.2 , Issue 7.2: Employment Opportunity areas</b>  |             |  |
| The Issues and Options Paper proposes growth focused at Hemel Hempstead and other settlements. Two Options considered are:  |             | Transport is a key source of pollutants to air. Compact development under Option 1 will help reduce the proportion of journeys made by the private car and promote cycling and walking.  |
| 1 (Question 25) Promote concentrated and compact development at Hemel Hempstead.  | ✓✓          |  |
| 2 (Question 24) Distribute development opportunities between three settlements- Hemel Hempstead, Berkamstead and Tring.   | ✓           | Development under Option 2 would provide the opportunity to live and work within the larger settlements of Hemel Hempstead, Berkamstead and Tringt therefore reducing the number of necessary trips and traffic movements which would in turn help improve air quality.  |
| 3 (Question 26) Employment areas and Land use: Three Options for utilising the existing isolated employment sites within towns/large villages or Rural parts of the Borough are suggested:<br>a) Protect site for Employment only<br>b) Allow Mixed- land use development<br>c) Allow alternative land use, eg., housing, on the site | x           | Option B would help reduce the number of trips made and reduce trip length.<br><br>Development under Options 3 (a) and 3 (c) could lead to increased travel to other settlements with a greater choice of facilities which could lead to a deterioration in air quality. |
|   | ✓           |  |
|   | x           |  |
| <b>Issue 5.3: Protection of Green Belt</b><br><b>Issue 5.4: Protection of the Open Countryside</b><br><b>Issue 10.5 Protection of Open Green space against development</b>  |             |  |
| The Issues and Options Paper considers a number of Options to treat the green belt. Four Options considered are:  |             | Development under Option 1 would provide the opportunity to live and work within the main towns, therefore reducing the number of necessary trips and traffic movements  |

| Option (abridged)  | Performance | Commentary/explanation  |
|--|-------------|---|
| 1) Limit Greenfield site consumption by maximising Urban Capacity of all settlements.  | ✓           | which would in turn help improve air quality.<br><br>Options 2 and 3 consider the consolidation of development, rather than geographical spread which will encourage modal shift, increase public transport viability and consequently help reduce emissions.   |
| 2) Maximise Urban Capacity and allow Greenfield site consumption.  | ✓           |   |
| 3) Seeks to utilise Greenfield sites prior to consideration of greenbelts.   | ✓           |   |
| 4) Strategy considers limited utilisation of land, beyond the green belt, in the open countryside to meet local demands, subject to sustainability considerations.   | x           | Owing to the location of development under Option 4 this could lead to an increase in traffic/trip generation (and hence emissions)   |
| Two Options to address open space provision are suggested.<br>1) (Question 52) : Retain and protect open space from all developments<br>2) (Question 53): Can some open land be lost to improve the quality of other open space or alternative provision made? | ✓✓          | Option 1 seeks to protect all open space which will help improve air quality.<br><br>Information on the extent of overall open space loss under Option 2 will need to be provided.  |
|  | ?           |   |
| <b>Issue 8.1 Location of new retail space</b><br><b>Issue 8.4 Type of land use at the town centre - Mixed or protected development</b><br><b>Issue 8.5 Type of Land-use in the Local Centres</b>   |             |   |
| 1 (Question 29, Question 32): Adopt sequential approach to locate new retail spaces, i.e., utilise existing town centre area, followed by edge-of-centre locations and out-of-centre locations.  | ✓           | In general terms Option 1 scores well as consolidating development in town centre areas will help reduce the proportion of journeys made by the private car. However development at edge-of-centre locations and out-of-centre locations could lead to an overall increase in traffic/trip generation and hence emissions. The potential dislocation of these development areas from the existing town is likely to increase the number of journeys and reduce the potential for cycling and walking. |
| 2 (Question 30): Create opportunity for local retail shopping in business area (Maylands area)   | x           |   |

| Option (abridged)  | Performance | Commentary/explanation  |
|--|-------------|---|
| 3. The Issues and Options Paper presents Options for location of commercial shops, non-shops and offices. Three Options are proposed:<br>1) Allow non-shop use in Office areas<br>2) Encourage mixed land use<br>3) Retain and protect office use in town centres.   | ?           | The potential dislocation of the Maylands areas is likely to increase the number of journeys made.<br><br>Information on the location of these office areas under Option 3 (1) is required before assessment can be made. However mixed use development under Option 3 (2) will help reduce number/length of journeys. Development under Option 3 (3) would provide the opportunity to live and work within the town centre, therefore reducing the number of necessary trips and traffic movements which would in turn help improve air quality. |
|  | ✓           |   |
|  | ✓           |   |
| 4. Two Options to direct future development of local centres are discussed in the strategy:<br>1) Retain and protect shopping facilities in local centres<br>2) Support a more flexible approach to non-shop uses in local centres   | ✓           | Option 4 (1) considers the consolidation of facilities in local centres which will encourage modal shift, increase public transport viability and consequently help reduce emissions.   |
|  | ✓           | Option 4 (2) prioritises mixed-use development which is likely to have the overall effect of reducing the need to travel and the number of motorized trips. However the limited size of these local centres undermines their potential to support mixed use development, thereby necessitating motorized journeys.  |
| <b>Issue 6.1, 6.2, 6.3 : Housing needs – New development and densification</b>   |             |   |
| The Issues and Options Paper aims to provide a balance between the demand and supply of affordable housing, while considering Greenfield sites.  |             |   |
| 1) Housing Growth Scenarios:<br>A) Adopting RSS 14 recommendation of 6300 dwellings without a need to review the Green belt.<br>B) Council's estimate of housing need- 7100 dwellings- to be achieved by maximising the Urban Capacity and utilise some green field sites.<br>C) RSS 14 original proposal of 8,200 dwellings which may require utilisation of more Greenfield sites. | ✓✓          | The prioritisation of brownfield sites in the existing built up areas under Option 1 and 2 will improve transport choice, promote walking and cycling and help reduce the number and length of journeys made by car. The potential dispersed nature of development under Options 2 and 3 will contribute little to public transport viability or walking and cycling.   |
|  | ✓           |   |
|  | ✗           |   |

| Option (abridged)   | Performance | Commentary/explanation   |
|---|-------------|--|
| D) 10,000 dwellings, suggested by RSS 14 objectors.   | <b>x</b>    |  |
| 3) Housing Capacity and Location<br>A (Question: 11): Focusing development within Hemel Hempstead   | ✓✓          | The prioritisation of development within the existing built up area of Hemel Hempstead will improve transport choice, promote walking and cycling and help reduce the number and length of journeys made by car.   |
| B (Question 12): Distribute housing requirement, beyond Hemel Hempstead.  | <b>x</b>    | Development under this Option could lead to increased travel to other settlements with a greater choice of facilities which could lead to a deterioration in air quality.  |
| C (Question 13): Options for housing development beyond 7100 dwellings:<br>i) Increase density at Hemel Hempstead town centre<br>ii) Extend to Greenfield sites within Hemel Hempstead  | ✓           | Consolidation of development should be a priority rather than geographical spread. The intensification of development under Option C i will improve transport choice, promote walking and cycling and help reduce the number and length of journeys made by car. The viability of public transport will increase as a result of higher densities.<br><br>It is envisaged that due to the relative dislocation of development from the existing town centres under Options C ii and iii this development pattern is likely to increase the number of car journeys and reduce the potential for cycling and walking. |
| ii) Extend to Greenfield sites around other existing settlements  | <b>x</b>    |  |
|   | <b>x</b>    |  |
| D (Question 14): Location for Greenfield extension, if necessary<br>i) Around Hemel Hempstead<br>ii) Around Berkhamstead<br>iii) Around Tring<br>iv) Settlements outside Green belt<br>v) Distributed among different settlements | ✓           | Development of Greenfield extensions under Options 1, 2 and 3 would provide the opportunity to live and work within these larger urban areas, increase public transport viability, therefore reducing the number of necessary trips and traffic movements which would in turn help improve air quality.<br><br>Development under Options 4 and 5 could lead to increased travel to other settlements with a greater choice of facilities which could lead to a deterioration in air quality. The dispersed nature of growth under Options 4 and 5 reduces viability of public transport.                           |
|   | ✓           |  |
|   | ✓           |  |
|   | <b>x</b>    |  |
|   | <b>x</b>    |  |

| Option (abridged)  | Performance             | Commentary/explanation   |
|--|-------------------------|--|
| 4) Increasing density and Location<br>A (Question 13, 16) Increase housing densities, beyond 50 dwellings/ha, in all residential neighbourhoods  | ✓                       | High density development can often have a detrimental impact on the character of the area and lead to an area losing its distinctive qualities. Apartments and flats are often out of keeping with the surrounding area and do not respect areas of heritage and conservation importance. High density areas can put extra pressure on local services, amenities, parking and can increase traffic. Although the implementation of this objective could lead to potential sustainable conflicts, it is considered that it will have significant positive outcomes for example, higher densities often result in the more efficient use of land and thus reduce greenfield development and in terms of affordable housing provision, as flats are more likely to be affordable than semi-detached houses. |
| B) Settlement considered for densification<br>i) Hemel Hempstead<br>ii) Berkhamsted<br>iii) Tring  | ✓                       |  |
| <b>Issue 9.1 : Addressing traffic – to ease congestion</b>   |                         |  |
| 1) Develop town and local centres<br>2) Provide and improve public transport<br>3) Encourage cyclist and pedestrian access to town and local centres<br>4) Improve road infrastructure, without attracting more traffic<br>5) Design Green Traffic plans for local and major traffic generators. | ✓<br>✓<br>✓✓<br>?<br>✓✓ | Options 1, 2, 3 and 5 are all measures which will promote modal shift towards more sustainable transport modes and will have positive impact on transport emissions.<br><br>Development of road infrastructure will invariably lead to increase in traffic levels. Management of traffic is unknown at this stage, if improved road infrastructure accommodates bus and cycle lanes then this will contribute to modal shift towards sustainable transport modes.  |
| <b>Issue 9.3 Increasing Accessibility</b>  |                         |  |
| Five Options for improving accessibility to services are presented:<br>1)High density development near appropriate   | ✓✓                      | All measures will help encourage/promote modal shift towards more sustainable transport modes and will have positive impact on transport emissions.  |

| Option (abridged)  | Performance         | Commentary/explanation   |
|--|---------------------|--|
| passenger transport interchange<br>2) Low cost, affordable housing close to basic amenities<br>3) Encourage live/work units<br>4) Improve and promote cyclist and pedestrian network<br>5) Consider accessibility to all, including the disabled   | ✓✓<br>✓✓<br>✓✓<br>✓ |  |
| <b>Issue 10.1 Community facility provision, 10.2 Education provision</b>   |                     |  |
| Three Options for provision of community facilities are proposed:<br>1 (Question 41) Locate key community facilities in most accessible areas, both in towns and villages<br>2 (Question 42): Seek alternative community uses for available community buildings along with enhancing existing community facilities.<br>3 (Question 43): Seek contributions from new developments to meet demands for community facilities. | ?<br>-<br>-         | Locating community facilities at highly accessible locations could tend to favour access by car thus increasing motorised journeys. But the extent of public transport access/facilities needs to be assessed. |
| Two Options for provision of education facilities are proposed:<br>1 (Question 46): Provide extended school facilities in selected schools<br>2 (Question 47): Utilisation of surplus school premise space for alternative social/community purposes.  | ?                   | At this stage it is unclear the extent of School travel plans, existing bus services and the location of the schools to enable a judgment on the number/length of future journeys.                             |
| <b>Issue 6.6: Delivering affordable housing</b>  |                     |  |

| Option (abridged)   | Performance | Commentary/explanation   |
|---|-------------|--|
| Three Options on affordable housing location are proposed (Question 21):<br>1. On Large sites<br>2. On Greenfield sites<br>3. On sites with high accessibility. | ?           | Without information on the location of these larger sites an assessment can not be made<br>Locating housing at accessible locations such as the town centre and local centres could reinforce the use of more sustainable transport modes. |
|   | ?           |  |
|   | ✓           |  |

**SA/SEA Objective 8: Maximise the use of previously developed land and buildings, and the efficient use of land**

| Option (abridged)   | Performance    | Commentary/explanation  |
|---|----------------|---|
| <b>Issue 5.1: Spatial strategy</b><br><b>Issue 5.2 , Issue 7.2: Employment Opportunity areas</b>  |                |   |
| The Issues and Options Paper proposes growth focused at Hemel Hempstead and other settlements. Two Options considered are:  |                |   |
| 1 (Question 25) Promote concentrated and compact development at Hemel Hempstead.  | ✓✓             | Approach under Option 1 positively contributes to this criterion as all proposed development will occur on previously developed land (PDL). However the availability of brownfield sites which are suitable for residential development is unknown at this stage. The biodiversity interest of brownfield sites should be assessed prior to redevelopment |
| 2 (Question 24) Distribute development opportunities between three settlements- Hemel Hempstead, Berkamstead and Tring.   | ?              |   |
| 3 (Question 26) Employment areas and Land use: Three Options for utilising the existing isolated employment sites within towns/large villages or Rural parts of the Borough are suggested:<br>a) Protect site for Employment only<br>b) Allow Mixed- land use development<br>c) Allow alternative land use, eg., housing, on the site | ✓✓<br>✓✓<br>✓✓ | All Options suggest development on PDL.   |
| <b>Issue 5.3: Protection of Green Belt</b><br><b>Issue 5.4: Protection of the Open Countryside</b><br><b>Issue 10.5 Protection of Open Green space against development</b>  |                |   |
| The Issues and Options Paper considers a number of Options to treat the green belt. Four Options considered are:  |                |   |



| Option (abridged)   | Performance | Commentary/explanation  |
|---|-------------|---|
| 1) Limit Greenfield site consumption by maximising Urban Capacity of all settlements.   | ✓✓          |   |
| 2) Maximise Urban Capacity and allow Greenfield site consumption.   | ✓           | <p>Approach under Options 1 and 2 positively contribute to this criterion as all proposed development will occur on previously developed land (PDL). However the availability of brownfield sites which are suitable for residential development is unknown at this stage. The biodiversity interest of brownfield and greenfield sites should be assessed prior to redevelopment</p> <p>Options 3 score poorly as they promote greenfield development, without attempting to maximise PDL.</p> |
| 3) Seeks to utilise Greenfield sites prior to consideration of greenbelts.  | X           |   |
| 4) Strategy considers limited utilisation of land, beyond the green belt, in the open countryside to meet local demands, subject to sustainability considerations.  | X           |   |
| <p>Two Options to address open space provision are suggested.</p> <p>1) (Question 52) : Retain and protect open space from all developments</p> <p>2) (Question 53): Can some open land be lost to improve the quality of other open space or alternative provision made?</p> | -           | No significant impact   |
| <p><b>Issue 8.1 Location of new retail space</b></p> <p><b>Issue 8.4 Type of land use at the town centre - Mixed or protected development</b></p> <p><b>Issue 8.5 Type of Land-use in the Local Centres</b></p>   |             |   |
| 1 (Question 29, Question 32): Adopt sequential approach to locate new retail spaces, i.e., utilise existing town centre area, followed by edge-of-centre locations  | ✓✓          | All Options encourage utilisation of PDL ahead of greenfield development.   |

| Option (abridged)   | Performance | Commentary/explanation  |
|---|-------------|---|
| and out-of-centre locations.  |             |   |
| 2 (Question 30): Create opportunity for local retail shopping in business area (Maylands area)  | ✓           |   |
| 3. The Issues and Options Paper presents Options for location of commercial shops, non-shops and offices. Three Options are proposed:<br>1) Allow non-shop use in Office areas<br>2) Encourage mixed land use<br>3) Retain and protect office use in town centres.  | ✓           |   |
| 4. Two Options to direct future development of local centres are discussed in the strategy:<br>1) Retain and protect shopping facilities in local centres<br>2) Support a more flexible approach to non-shop uses in local centres  | ✓           |   |
|   | ✓           |   |
| <b>Issue 6.1, 6.2, 6.3 : Housing needs – New development and densification</b>  |             |   |
| The Issues and Options Paper aims to provide a balance between the demand and supply of affordable housing, while considering Greenfield sites.   |             |   |
| 1) Housing Growth Scenarios:<br>A) Adopting RSS 14 recommendation of 6300 dwellings without a need to review the Green belt.<br>B) Council's estimate of housing need- 7100 dwellings- to be achieved by maximising the Urban Capacity and utilise some green field sites.<br>C) RSS 14 original proposal of 8,200 dwellings which may require utilisation of more Greenfield sites.<br>D) 10,000 dwellings, suggested by RSS 14 objectors. | ✓           | Options 1 A and B, encourage utilisation of PDL before considering Greenfield sites, scoring positive against this objective.<br><br>Options 1 C-D will result in greenfield development. |
|   | ✓           |   |
|   | x           |   |
|   | x           |   |
| 3) Housing Capacity and Location  | ✓✓          | The intensification of Hemel Hamstead and re-use of brownfield sites under Option 1 will  |

| Option (abridged)   | Performance | Commentary/explanation  |
|---|-------------|---|
| A (Question: 11): Focusing development within Hemel Hempstead   |             | positively contribute to the reduction in the overall amount of greenfield land absorbed.   |
| B (Question 12): Distribute housing requirement, beyond Hemel Hempstead.  | ?           | Option 3-B does not indicate the nature of land, i.e., PDL or Greenfield site, considered for development. With not enough information the impact is uncertain to this stage.                       |
| C (Question 13): Options for housing development beyond 7100 dwellings:<br>i) Increase density at Hemel Hempstead town centre<br>ii) Extend to Greenfield sites within Hemel Hempstead<br>iii) Extend to Greenfield sites around other existing settlements | ✓           | Approach under Option 1 positively contributes to this criterion as all proposed development will occur on PDL.<br><br>Options 2 and 3 will result in some level of Greenfield land being absorbed. |
|   | x           |   |
|   | xx          |   |
| D (Question 14): Location for Greenfield extension, if necessary<br>i) Around Hemel Hempstead<br>ii) Around Berkhamstead<br>iii) Around Tring<br>iv) Settlements outside Green belt<br>v) Distributed among different settlements                           | x           | All greenfield extensions would occur entirely on Greenfield land.  |
| 4) Increasing density and Location<br>A (Question 13, 16) Increase housing densities, beyond 50 dwellings/ha, in all residential neighbourhoods   | ✓✓          | All development under Options A and B is likely to occur on brownfield land.  |
| B) Settlement considered for densification<br>i) Hemel Hempstead<br>ii) Berkhamsted<br>iii) Tring   |             |   |
| <b>Issue 9.1 : Addressing traffic – to ease congestion</b>  |             |   |

| Option (abridged)  | Performance   | Commentary/explanation  |
|--|---|---|
| 1) Develop town and local centres<br>2) Provide and improve public transport<br>3) Encourage cyclist and pedestrian access to town and local centres<br>4) Improve road infrastructure, without attracting more traffic<br>5) Design Green Traffic plans for local and major traffic generators.   | -   | No significant impact   |
| <b>Issue 9.3 Increasing Accessibility</b>  |   |   |
| Five Options for improving accessibility to services are presented:<br>1) High density development near appropriate passenger transport interchange<br>2) Low cost, affordable housing close to basic amenities<br>3) Encourage live/work units<br>4) Improve and promote cyclist and pedestrian network<br>5) Consider accessibility to all, including the disabled | <div style="display: flex; flex-direction: column; align-items: center;"> <div style="margin-bottom: 2px;">?</div> <div style="margin-bottom: 2px;">?</div> <div style="margin-bottom: 2px;">-</div> <div style="margin-bottom: 2px;">-</div> <div style="margin-bottom: 2px;">-</div> </div> | Without information on the nature of the land considered for development an assessment on levels of PDL/Greenfield absorption can not be made.<br><br>Options 2-5 are assessed as having no/neutral impact to this objective. |
| <b>Issue 10.1 Community facility provision, 10.2 Education provision</b>   |   |   |

| Option (abridged)   | Performance | Commentary/explanation   |
|---|-------------|--|
| <p>Three Options for provision of community facilities are proposed:</p> <p>1 (Question 41) Locate key community facilities in most accessible areas, both in towns and villages</p> <p>2 (Question 42): Seek alternative community uses for available community buildings along with enhancing existing community facilities.</p> <p>3 (Question 43): Seek contributions from new developments to meet demands for community facilities.</p> | -           | No significant impact  |
| <p>Two Options for provision of education facilities are proposed:</p> <p>1 (Question 46): Provide extended school facilities in selected schools</p> <p>2 (Question 47): Utilisation of surplus school premise space for alternative social/community purposes.</p>  | -           | No significant impact  |
| <b>Issue 6.6: Delivering affordable housing</b>   |             |  |
| <p>Three Options on affordable housing location are proposed (Question 21):</p> <p>1. On Large sites</p> <p>2. On Greenfield sites</p> <p>3. On sites with high accessibility.</p>  | ?           | Options 1 and 3 does not indicate nature of land considered for development, so assessment can not be made at this time. |
|   | x           |  |
|   | ?           |  |

**SA/SEA Objective 9: To use natural resources, both finite and renewable, as efficiently as possible, and re-use finite resources or recycled alternatives wherever possible**

The Issues and Options Paper does not include measures to promote use of renewable/recycled, low impact materials and measures to enable waste re-use and recycling are also absent. 20% of total UK waste is produced by the construction industry<sup>1</sup>. Construction on the scale envisaged in Dacorum has the potential to generate significant amounts of waste. Measures aimed at reducing construction waste should be promoted through the Core Strategy.

Future LDF stages should consider the provision of facilities to enable the re-use, disposal and recycling of materials within development and give consideration to the use of renewable and recycled materials in buildings. The Core Strategy should include consideration of measures to reduce waste and to recycle and re-use waste that is produced. This will require the provision of infrastructure to encourage recycling etc. but also measures to encourage the adoption of more sustainable practices, e.g. through the adoption of Environmental Management Systems.

In order to ensure that the construction industry takes responsibility for the waste it produces, management efforts will need to be focused on ensuring that the waste hierarchy is adopted – with an emphasis on reducing the amount of waste produced. Much of the waste produced in construction is derived from materials which are delivered to site and never used. Wastage can be reduced and avoided if integrated into the design and phasing of construction and packaging. Efforts to reduce construction waste can include just in time deliveries and off site manufacture of components. The outlining of a waste management hierarchy focusing on reuse and composting in the Core Strategy will help minimize the production of waste and help increase reuse, recycling and recovery rates.

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<sup>1</sup> See WWF “One Planet Living in the Thames Gateway” A WWF-UK One Million Sustainable Homes Campaign Report” June 2003, page 13.

**SA/SEA Objective 10: To identify, maintain and enhance historic and cultural assets**

| Option (abridged)   | Performance | Commentary/explanation  |
|---|-------------|---|
| <b>Issue 5.1: Spatial strategy</b><br><b>Issue 5.2 , Issue 7.2: Employment Opportunity areas</b>  |             |   |
| The Issues and Options Paper proposes growth focused at Hemel Hempstead and other settlements. Two Options considered are:  |             | Development under Option 1 could involve redevelopment/disturbance of known or undiscovered cultural heritage resources. However widespread improvements to public realm will improve quality of the built environment, which in turn will help support regeneration. Proposals to reduce traffic/encourage modal shift will be beneficial for the setting of cultural heritage features. |
| 1 (Question 25) Promote concentrated and compact development at Hemel Hempstead.  | ✓           |   |
| 2 (Question 24) Distribute development opportunities between three settlements- Hemel Hempstead, Berkamstead and Tring.   | ✓           | No significant impact   |
| 3 (Question 26) Employment areas and Land use: Three Options for utilising the existing isolated employment sites within towns/large villages or Rural parts of the Borough are suggested:<br>a) Protect site for Employment only<br>b) Allow Mixed- land use development<br>c) Allow alternative land use, eg., housing, on the site | -           |   |
| <b>Issue 5.3: Protection of Green Belt</b><br><b>Issue 5.4: Protection of the Open Countryside</b><br><b>Issue 10.5 Protection of Open Green space against development</b>  |             |   |

| Option (abridged)  | Performance | Commentary/explanation  |
|--|-------------|---|
| The Issues and Options Paper considers a number of Options to treat the green belt. Four Options considered are:   |             | Development under Options 1 and 2 could involve redevelopment/disturbance of known or undiscovered cultural heritage resources. However widespread improvements to public realm will improve quality of the built environment, which in turn will help support regeneration. Proposals to reduce traffic/encourage modal shift will be beneficial for the setting of cultural heritage features.<br><br>No significant impact |
| 1) Limit Greenfield site consumption by maximising Urban Capacity of all settlements.  | ✓           |   |
| 2) Maximise Urban Capacity and allow Greenfield site consumption.  | ✓           |   |
| 3) Seeks to utilise Greenfield sites prior to consideration of greenbelts.   | -           |   |
| 4) Strategy considers limited utilisation of land, beyond the green belt, in the open countryside to meet local demands, subject to sustainability considerations.   | -           |   |
| Two Options to address open space provision are suggested.<br>1) (Question 52) : Retain and protect open space from all developments<br>2) (Question 53): Can some open land be lost to improve the quality of other open space or alternative provision made? | ✓           | Protection of open spaces is a way of protecting and enhancing local identity.  |
|  | ✓           |   |
| <b>Issue 8.1 Location of new retail space</b><br><b>Issue 8.4 Type of land use at the town centre - Mixed or protected development</b>   |             |   |



| Option (abridged)  | Performance | Commentary/explanation  |
|--|-------------|---|
| <b>Issue 8.5 Type of Land-use in the Local Centres</b>   |             |   |
| 1 (Question 29, Question 32): Adopt sequential approach to locate new retail spaces, i.e., utilise existing town centre area, followed by edge-of-centre locations and out-of-centre locations.  |             | No significant impact<br><br>Option 4 (2) could involve redevelopment/disturbance of known or undiscovered cultural heritage resources. |
| 2 (Question 30): Create opportunity for local retail shopping in business area (Maylands area)   | -           |   |
| 3. The Issues and Options Paper presents Options for location of commercial shops, non-shops and offices. Three Options are proposed:<br>1) Allow non-shop use in Office areas<br>2) Encourage mixed land use<br>3) Retain and protect office use in town centres. | -           |   |
| 4. Two Options to direct future development of local centres are discussed in the strategy:<br>1) Retain and protect shopping facilities in local centres<br>2) Support a more flexible approach to non-shop uses in local centres                                 | ?           |   |
| <b>Issue 6.1, 6.2, 6.3 : Housing needs – New development and densification</b>   |             |   |

| Option (abridged)   | Performance      | Commentary/explanation  |
|---|------------------|---|
| The Issues and Options Paper aims to provide a balance between the demand and supply of affordable housing, while considering Greenfield sites.   |                  |   |
| 1) Housing Growth Scenarios:<br>A) Adopting RSS 14 recommendation of 6300 dwellings without a need to review the Green belt.<br>B) Council's estimate of housing need- 7100 dwellings- to be achieved by maximising the Urban Capacity and utilise some green field sites.<br>C) RSS 14 original proposal of 8,200 dwellings which may require utilisation of more Greenfield sites.<br>D) 10,000 dwellings, suggested by RSS 14 objectors. | ✓<br>✓<br>X<br>X | Development under all Options could involve redevelopment/disturbance of known or undiscovered cultural heritage resources. However widespread improvements to public realm will improve quality of the built environment, which in turn will help support regeneration.<br><br>It is considered that recommendations/guidelines relating to the typical treatment of historical assets will be required in future stages in order to ascertain the potential extent of impacts on heritage.<br><br>The scale of growth under Options 3 and 4 would lead to an inevitable impact on historical assets and their settings, however this can be mitigated through phasing of development, careful siting and design, green gaps, strategic planting and improved open spaces. |
| 3) Housing Capacity and Location<br>A (Question: 11): Focusing development within Hemel Hampstead<br><br>B (Question 12): Distribute housing requirement, beyond Hemel Hampstead.   | ✓                | Development under all Options could involve redevelopment/disturbance of known or undiscovered cultural heritage resources. However widespread improvements to public realm will improve quality of the built environment, which in turn will help support regeneration.  |

| Option (abridged)   | Performance | Commentary/explanation   |
|---|-------------|--|
| C (Question 13): Options for housing development beyond 7100 dwellings:<br>i) Increase density at Hemel Hempstead town centre<br>ii) Extend to Greenfield sites within Hemel Hempstead<br>iii) Extend to Greenfield sites around other existing settlements |             |  |
| D (Question 14): Location for Greenfield extension, if necessary<br>i) Around Hemel Hempstead<br>ii) Around Berkhamstead<br>iii) Around Tring<br>iv) Settlements outside Green belt<br>v) Distributed among different settlements                           | -           | No significant impact  |
| 4) Increasing density and Location<br>A (Question 13, 16) Increase housing densities, beyond 50 dwellings/ha, in all residential neighbourhoods   | -           | Development under all Options could involve redevelopment/disturbance of known or undiscovered cultural heritage resources. However widespread improvements to public realm will improve quality of the built environment, which in turn will help support regeneration. Core Strategy should consider the implementation of a general criteria-based policy to help produce higher quality developments that incorporate buildings identified as being at risk. |
| B) Settlement considered for densification<br>i) Hemel Hempstead<br>ii) Berkhamsted<br>iii) Tring   |             | Ensuring minimum densities in historical areas would help minimize damage to the historical character.   |
| <b>Issue 9.1 : Addressing traffic – to ease congestion</b>  |             |  |
| 1) Develop town and local centres<br>2) Provide and improve public transport<br>3) Encourage cyclist and pedestrian access to town and local centres<br>4) Improve road infrastructure, without attracting more   | ✓<br>✓<br>✓ | Proposals to reduce traffic/encourage modal shift will be beneficial for the setting of cultural heritage features.  |

| Option (abridged)  | Performance           | Commentary/explanation   |
|--|-----------------------|--|
| traffic<br>5) Design Green Traffic plans for local and major traffic generators.   | ?<br><br>✓            | Land safeguarded for road infrastructure should be assessed for impacts on historical resources prior to development.  |
| <b>Issue 9.3 Increasing Accessibility</b>  |                       |  |
| Five Options for improving accessibility to services are presented:<br>1) High density development near appropriate passenger transport interchange<br>2) Low cost, affordable housing close to basic amenities<br>3) Encourage live/work units<br>4) Improve and promote cyclist and pedestrian network<br>5) Consider accessibility to all, including the disabled   | -<br>-<br>-<br>✓<br>- | No significant impacts<br><br>Proposals to reduce traffic/encourage modal shift will be beneficial for the setting of cultural heritage features.  |
| <b>Issue 10.1 Community facility provision, 10.2 Education provision</b>   |                       |  |
| Three Options for provision of community facilities are proposed:<br>1 (Question 41) Locate key community facilities in most accessible areas, both in towns and villages<br>2 (Question 42): Seek alternative community uses for available community buildings along with enhancing existing community facilities.<br>3 (Question 43): Seek contributions from new developments to meet demands for community facilities. | -                     | Development under all Options could involve redevelopment/disturbance of known or undiscovered cultural heritage resources. However widespread improvements to public realm will improve quality of the built environment, which in turn will help support regeneration. Core Strategy should consider the implementation of a general criteria-based policy to help produce higher quality developments that incorporate buildings identified as being at risk. |

| Option (abridged)   | Performance | Commentary/explanation                                   |
|---|-------------|--|
| Two Options for provision of education facilities are proposed:<br>1 (Question 46): Provide extended school facilities in selected schools<br>2 (Question 47): Utilisation of surplus school premise space for alternative social/community purposes. | -           | Options are assessed to have no impact on this objective |
| <b>Issue 6.6: Delivering affordable housing</b>   |             |  |
| Three Options on affordable housing location are proposed (Question 21):<br>1. On Large sites<br>2. On Greenfield sites<br>3. On sites with high accessibility.   | -           | Options are assessed to have no impact on this objective |

**SA/SEA Objective 11: To conserve and enhance landscape and townscape character and encourage local distinctiveness**

| Option (abridged)   | Performance | Commentary/explanation   |
|---|-------------|--|
| <b>Issue 5.1: Spatial strategy</b><br><b>Issue 5.2 , Issue 7.2: Employment Opportunity areas</b>  |             |  |
| The Issues and Options Paper proposes growth focused at Hemel Hempstead and other settlements. Two Options considered are:  |             | Due to the uncertainty of the lay out, details on qualities and scale of development at this stage the impact of the Options on this objective remain unclear, however it is likely that the sustainability score in relation to impacts on landscape will be positive as development is consolidated in Hemel Hempstead (Option 1) which will reduce impacts on the rural landscape elsewhere in the District. However, some impacts on Dacorum's landscape and townscape are inevitable, although these can be mitigated through siting and design measures.<br><br>Development under both Options could have visual impact on the setting of the Chilterns AONB and the Bedfordshire and Cambridgeshire Claylands, given the towns proximity to these Character Areas.<br><br>It is important to protect and enhance Dacorum's landscape and townscape as it acts as a lure for new residents and businesses. Clear design guidance and mitigation is required to protect the character of Dacorum's towns. |
| 1 (Question 25) Promote concentrated and compact development at Hemel Hempstead.  | ?           |  |
| 2 (Question 24) Distribute development opportunities between three settlements- Hemel Hempstead, Berkamstead and Tring.   | ?           |  |
| 3 (Question 26) Employment areas and Land use: Three Options for utilising the existing isolated employment sites within towns/large villages or Rural parts of the Borough are suggested:<br>a) Protect site for Employment only<br>b) Allow Mixed- land use development<br>c) Allow alternative land use, eg., housing, on the site | ?           |  |
| <b>Issue 5.3: Protection of Green Belt</b><br><b>Issue 5.4: Protection of the Open Countryside</b><br><b>Issue 10.5 Protection of Open Green space against development</b>  |             |  |

| Option (abridged)  | Performance | Commentary/explanation  |
|--|-------------|---|
| The Issues and Options Paper considers a number of Options to treat the green belt. Four Options considered are:   |             | Due to the uncertainty of the lay out, details on qualities and scale of development at this stage the impact of the Options on this objective remain unclear, however it is likely that the sustainability score in relation to impacts on landscape will be positive as development is consolidated in urban areas which will reduce impacts on the rural landscape elsewhere in the District. Limiting greenfield development is a positive step as development of these sites will have inevitable negative impacts on Dacorum's landscape. |
| 1) Limit Greenfield site consumption by maximising Urban Capacity of all settlements.  | ✓✓          |   |
| 2) Maximise Urban Capacity and allow Greenfield site consumption.  | ✓           | Development of greenfield sites under Options 2 and 3 could have negative impacts on both landscape and townscape   |
| 3) Seeks to utilise Greenfield sites prior to consideration of greenbelts.   | X           |   |
| 4) Strategy considers limited utilisation of land, beyond the green belt, in the open countryside to meet local demands, subject to sustainability considerations. | XX          | Development under Option 4 has the greatest potential for adverse visual impacts on the Chilterns AONB and the Bedfordshire and Cambridgeshire Claylands.   |
| Two Options to address open space provision are suggested.   |             | Enhancement and protection of open space will contribute to the overall quality of the built environment.   |
| 1) (Question 52) : Retain and protect open space from all developments   | ✓           |   |
| 2) (Question 53): Can some open land be lost to improve the quality of other open space or alternative provision made?   | ✓           |   |
| <b>Issue 8.1 Location of new retail space</b>  |             |   |

| Option (abridged)  | Performance | Commentary/explanation   |
|--|-------------|--|
| <b>Issue 8.4 Type of land use at the town centre - Mixed or protected development</b>  |             |  |
| <b>Issue 8.5 Type of Land-use in the Local Centres</b>   |             |  |
| 1 (Question 29, Question 32): Adopt sequential approach to locate new retail spaces, i.e., utilise existing town centre area, followed by edge-of-centre locations and out-of-centre locations.  | ?           | Due to the uncertainty of the lay out, details on qualities and scale of development at this stage the impact of the Options on this objective remain unclear. |
| 2 (Question 30): Create opportunity for local retail shopping in business area (Maylands area)   |             |  |
| 3. The Issues and Options Paper presents Options for location of commercial shops, non-shops and offices. Three Options are proposed:<br>1) Allow non-shop use in Office areas<br>2) Encourage mixed land use<br>3) Retain and protect office use in town centres. |             |  |
| 4. Two Options to direct future development of local centres are discussed in the strategy:<br>1) Retain and protect shopping facilities in local centres<br>2) Support a more flexible approach to non-shop uses in local centres                                 |             |  |
| <b>Issue 6.1, 6.2, 6.3 : Housing needs – New development and densification</b>   |             |  |
| The Issues and Options Paper aims to provide a balance between the demand and supply of affordable housing, while considering Greenfield sites.  |             |  |



| Option (abridged)   | Performance | Commentary/explanation  |
|---|-------------|---|
| 1) Housing Growth Scenarios:<br>A) Adopting RSS 14 recommendation of 6300 dwellings without a need to review the Green belt.<br>B) Council's estimate of housing need- 7100 dwellings- to be achieved by maximising the Urban Capacity and utilise some green field sites.<br>C) RSS 14 original proposal of 8,200 dwellings which may require utilisation of more Greenfield sites.<br>D) 10,000 dwellings, suggested by RSS 14 objectors. | ?           | Due to the uncertainty of the lay out, details on qualities and scale of development at this stage the impact of the Options on this objective remain unclear, however some impacts on Dacorurm's landscape and townscape are inevitable, although these can be mitigated through siting and design measures. |
| 3) Housing Capacity and Location<br>A (Question: 11): Focusing development within Hemel Hempstead   | ?           | Due to the uncertainty of the lay out, details on qualities and scale of development at this stage the impact of the Options on this objective remain unclear, however some impacts on Dacorurm's landscape and townscape are inevitable, although these can be mitigated through siting and design measures. |
| B (Question 12): Distribute housing requirement, beyond Hemel Hempstead.  |             |   |
| C (Question 13): Options for housing development beyond 7100 dwellings:<br>i) Increase density at Hemel Hempstead town centre<br>ii) Extend to Greenfield sites within Hemel Hempstead<br>iii) Extend to Greenfield sites around other existing settlements   | X<br>X<br>X | Development of greenfield sites under Options C ii and iii will have negative impacts on both landscape and townscape quality.  |
| D (Question 14): Location for Greenfield extension, if  | XX          | All Options are likely to have negative visual impacts on the Chilterns AONB and the  |

| Option (abridged)  | Performance | Commentary/explanation  |
|--|-------------|---|
| necessary<br>i) Around Hemel Hempstead<br>ii) Around Berkhamstead<br>iii) Around Tring<br>iv) Settlements outside Green belt<br>v) Distributed among different settlements   |             | Bedfordshire and Cambridgeshire Claylands, given their proximity to these landscape character areas. If these Options are progressed design will need to be to a high standard, with effective landscape treatment/measures to ensure that the impacts on the landscape are limited. It is essential that clear principles/guidelines are put in place to mitigate any potential adverse landscape impacts and to ensure that any future development is responsive to the local landscape, particularly in more sensitive locations.  |
| 4) Increasing density and Location<br>A (Question 13, 16) Increase housing densities, beyond 50 dwellings/ha, in all residential neighbourhoods  | ?           | High density development can often have a detrimental impact on the character of the area and lead to an area losing its distinctive qualities. Apartments and flats are often out of keeping with the surrounding area and do not respect areas of heritage and conservation importance. Although the implementation of these Options could lead to potential sustainable conflicts, it is considered that it will have significant positive outcomes for example, higher densities often result in the more efficient use of land and thus reduce greenfield development elsewhere in the District. Impacts on the landscape and townscape will depend on siting of development. Until this is resolved, the overall impacts on the landscape/townscape remain uncertain. |
| B) Settlement considered for densification<br>i) Hemel Hempstead<br>ii) Berkhamsted<br>iii) Tring  |             |   |
| <b>Issue 9.1 : Addressing traffic – to ease congestion</b>   |             |   |
| 1) Develop town and local centres<br>2) Provide and improve public transport<br>3) Encourage cyclist and pedestrian access to town and local centres<br>4) Improve road infrastructure, without attracting more traffic<br>5) Design Green Traffic plans for local and major traffic generators. | ?           | Townscape quality will benefit from secondary effects of less traffic. Construction of road infrastructure (Option 4) could have negative impacts on both the landscape and townscape.  |
|  | ✓           |   |
|  | ✓           |   |
|  | x           |   |
|  | ✓           |   |
| <b>Issue 9.3 Increasing Accessibility</b>  |             |   |

| Option (abridged)   | Performance                                  | Commentary/explanation  |
|---|--|---|
| <p>Five Options for improving accessibility to services are presented:</p> <p>1) High density development near appropriate passenger transport interchange</p> <p>2) Low cost, affordable housing close to basic amenities</p> <p>3) Encourage live/work units</p> <p>4) Improve and promote cyclist and pedestrian network</p> <p>5) Consider accessibility to all, including the disabled</p>   | <p>?</p> <p>-</p> <p>-</p> <p>✓</p> <p>?</p> | <p>Due to the uncertainty of the lay out, details on qualities and scale of development at this stage the impact of the Options on this objective remain unclear.</p> <p>Measures to encourage modal shift away from the private car will reduce the need for new road infrastructure which will have positive benefits on townscape and landscape quality.</p> <p>No significant impacts on this objective are anticipated through implementation of Options 2 and 3</p> |
| <b>Issue 10.1 Community facility provision, 10.2 Education provision</b>  |  |   |
| <p>Three Options for provision of community facilities are proposed:</p> <p>1 (Question 41) Locate key community facilities in most accessible areas, both in towns and villages</p> <p>2 (Question 42): Seek alternative community uses for available community buildings along with enhancing existing community facilities.</p> <p>3 (Question 43): Seek contributions from new developments to meet demands for community facilities.</p> | <p>-</p>                                     | <p>No significant impact</p>  |
| <p>Two Options for provision of education facilities are proposed:</p> <p>1 (Question 46): Provide extended school facilities in selected schools</p> <p>2 (Question 47): Utilisation of surplus school premise space for alternative social/community purposes.</p>  | <p>-</p>                                     | <p>No significant impact</p>  |

| Option (abridged)  | Performance | Commentary/explanation   |
|--|-------------|--|
| <b>Issue 6.6: Delivering affordable housing</b>  |             |  |
| Three Options on affordable housing location are proposed (Question 21): <ol style="list-style-type: none"> <li>1. On Large sites</li> <li>2. On Greenfield sites</li> <li>3. On sites with high accessibility.</li> </ol> | ?           | Due to the uncertainty of the lay out, details on qualities and scale of development at this stage the impact of the Options on this objective remain unclear. |

**SA/SEA Objective 12: To encourage healthier lifestyles and reduce adverse health impacts of new developments**

| Option (abridged)  | Performance | Commentary/explanation   |
|--|-------------|--|
| <b>Issue 5.1: Spatial strategy<br/>Issue 5.2 , Issue 7.2: Employment Opportunity areas</b>                                 |             |  |
| The Issues and Options Paper proposes growth focused at Hemel Hempstead and other settlements. Two Options considered are: |             | Land use planning and the integration of development with public transport plays a critical role in enhancing human health and encouraging healthy lifestyles.   |
| 1 (Question 25) Promote concentrated and compact development at Hemel Hempstead.   | ✓           | The compact nature of development under Option 1 encourages healthy lifestyles and provides opportunities for physical activity into people’s daily lives at no or low cost by promoting access to recreation, high walkability neighbourhoods, mixed-use and permeability. It is also considered that the development proposals integrate opportunities for physical activity into people’s daily lives, including a range of transport Options and promotes access to green space and sports facilities. A positive score is dependant on meeting public open space targets and provision of public transport systems and measures to ensure that users of public transport (and other modes) enjoy and promote physical activity. |
| 2 (Question 24) Distribute development opportunities between three settlements- Hemel Hempstead, Berkamstead and Tring.    | ✓           | The development approach under Options 1 and 2 will contribute to the viability and self sufficiency of Hemel Hempstead, Berkamstead and Tring will reduce the need to travel and average journey distances and will increase the potential for cycling and walking.<br><br>Critiques of Compact city have associated densification with increased psychological issues among the population however this can be offset by creative design solutions and provision of sufficient open spaces.  |

| Option (abridged)   | Performance | Commentary/explanation   |
|---|-------------|--|
| 3 (Question 26) Employment areas and Land use: Three Options for utilising the existing isolated employment sites within towns/large villages or Rural parts of the Borough are suggested:<br>a) Protect site for Employment only<br>b) Allow Mixed- land use development<br>c) Allow alternative land use, eg., housing, on the site | <b>x</b>    | The dispersed nature of development under Option 3 would make it hard to provide efficient public transport as well as reducing the viability of public transport and encourage people to drive. However mixed use would encourage walking to amenities and facilities.  |
| <b>Issue 5.3: Protection of Green Belt</b><br><b>Issue 5.4: Protection of the Open Countryside</b><br><b>Issue 10.5 Protection of Open Green space against development</b>  |             |  |
| The Issues and Options Paper considers a number of Options to treat the green belt. Four Options considered are:  |             | Development under Options 1 and 2 encourage healthy lifestyles and exercise by promoting access to recreation, high walkability neighbourhoods, mixed-use and permeability. It is also considered that the development proposals integrate opportunities for physical activity into people's daily lives, including a range of transport Options and promotes access to green space and sports facilities.<br><br>Development under Option 3 will contribute to the viability and self sufficiency of the major settlements and will reduce the need to travel and average journey distances and will increase the potential for cycling and walking.<br><br>The geographic spread of development under Option 4 would tend to compromise the potential viability of public transport and travel by the private car is more attractive. .<br><br>Provision and protection of open space will enhance human health and social cohesion. The creation of areas of public open space will help people to socially interact and provide areas where people can walk and cycle. . |
| 1) Limit Greenfield site consumption by maximising Urban Capacity of all settlements.   | ✓           |  |
| 2) Maximise Urban Capacity and allow Greenfield site consumption.   | ✓           |  |
| 3) Seeks to utilise Greenfield sites prior to consideration of greenbelts.  | ✓           |  |
| 4) Strategy considers limited utilisation of land, beyond the green belt, in the open countryside to meet local demands, subject to sustainability considerations.  | <b>x</b>    |  |
| Two Options to address open space provision are suggested.<br>1) (Question 52) : Retain and protect open space from all developments  |             |  |

| Option (abridged)   | Performance | Commentary/explanation   |
|---|-------------|--|
| 2) (Question 53): Can some open land be lost to improve the quality of other open space or alternative provision made?  | ✓           |  |
| <b>Issue 8.1 Location of new retail space</b><br><b>Issue 8.4 Type of land use at the town centre - Mixed or protected development</b><br><b>Issue 8.5 Type of Land-use in the Local Centres</b>  |             |  |
| 1 (Question 29, Question 32): Adopt sequential approach to locate new retail spaces, i.e., utilise existing town centre area, followed by edge-of-centre locations and out-of-centre locations.   | ✓           | <p>Development under Option 1 will encourage people to access retail facilities by public transport rather than the car.</p> <p>The “monofunctional” retail areas of Option 2 are isolated from other uses and is incompatible with this objectives and tends to undermine the opportunities for public transport use and walking and cycling.</p> |
| 2 (Question 30): Create opportunity for local retail shopping in business area (Maylands area)  | ✗           |  |
| <p>3. The Issues and Options Paper presents Options for location of commercial shops, non-shops and offices. Three Options are proposed:</p> <p>1) Allow non-shop use in Office areas</p> <p>2) Encourage mixed land use</p> <p>3) Retain and protect office use in town centres.</p> | ✓           |  |
| <p>4. Two Options to direct future development of local centres are discussed in the strategy:</p> <p>1) Retain and protect shopping facilities in local centres</p> <p>2) Support a more flexible approach to non-shop uses in local centres</p>                                     | ✓           | <p>All alternatives under Options 3 promote mixed use and integration of retail areas with other uses reducing the need to travel.</p>   |
| <b>Issue 6.1, 6.2, 6.3 : Housing needs – New development and densification</b>  |             |  |

| Option (abridged)   | Performance      | Commentary/explanation  |
|---|------------------|---|
| The Issues and Options Paper aims to provide a balance between the demand and supply of affordable housing, while considering Greenfield sites.   |                  |   |
| 1) Housing Growth Scenarios:<br>A) Adopting RSS 14 recommendation of 6300 dwellings without a need to review the Green belt.<br>B) Council's estimate of housing need- 7100 dwellings- to be achieved by maximising the Urban Capacity and utilise some green field sites.<br>C) RSS 14 original proposal of 8,200 dwellings which may require utilisation of more Greenfield sites.<br>D) 10,000 dwellings, suggested by RSS 14 objectors. | ✓<br>✓<br>?<br>? | <p>Development under Options 1 A and B encourages healthy lifestyles and exercise by promoting access to recreation, high walkability neighbourhoods, mixed-use and permeability. It is also considered that the development proposals integrate opportunities for physical activity into people's daily lives, including a range of transport Options and promotes access to green space and sports facilities. A positive score is dependant on meeting public open space targets and provision of public transport systems and measures to ensure that users of public transport (and other modes) enjoy and promote physical activity.</p> <p>The potential isolation of development areas under Options C and D tends to undermine potential for mixed use development and the viability of public transport and the levels of proposed growth could lead to higher levels of noise and other pollution but final judgment can not be made without further details on public space provision and public transport provision.</p> |
| 3) Housing Capacity and Location<br>A (Question: 11): Focusing development within Hemel Hampstead   | ✓                | <p>Development under Options A and C i encourages healthy lifestyles and exercise by promoting access to recreation, high walkability neighbourhoods, mixed-use and permeability. It is also considered that the development proposals integrate opportunities for physical activity into people's daily lives, including a range of transport Options and promotes access to green space and sports facilities. A positive score is dependant on meeting public open space targets and provision of public transport systems and measures to ensure that users of public transport (and other modes) enjoy and promote physical activity.</p>  |
| B (Question 12): Distribute housing requirement, beyond Hemel Hampstead.  | -                | <p>The potential isolation of development areas under Options B and C ii and iii tends to undermine potential for mixed use development and the viability of public transport but final judgment can not be made without further details on public space provision and public transport provision.</p>  |



| Option (abridged)   | Performance           | Commentary/explanation   |
|---|-----------------------|--|
|   |                       |  |
| C (Question 13): Options for housing development beyond 7100 dwellings:<br>i) Increase density at Hemel Hempstead town centre<br>ii) Extend to Greenfield sites within Hemel Hempstead<br>iii) Extend to Greenfield sites around other existing settlements | ✓<br>-<br>-           | Development under Option C ii could result in loss of public open space which will undermine the opportunities for community gathering, social cohesion and physical activity.   |
| D (Question 14): Location for Greenfield extension, if necessary<br>i) Around Hemel Hempstead<br>ii) Around Berkhamstead<br>iii) Around Tring<br>iv) Settlements outside Green belt<br>v) Distributed among different settlements                           | ✓<br>✓<br>✓<br>X<br>X | The development approach under Options i, ii and iii will contribute to the viability and self sufficiency of Hemel Hempstead, Berkhamstead and Tring will reduce the need to travel and average journey distances and will increase the potential for cycling and walking.<br><br>The potential isolation of development areas under Options iv and v undermines potential for mixed use development and the viability of public transport. |
| 4) Increasing density and Location<br>A (Question 13, 16) Increase housing densities, beyond 50 dwellings/ha, in all residential neighbourhoods   | -                     | Higher densities are beneficial to the viability of public transport however higher densities could lead to higher levels of noise and other pollution and areas of open space may be lost to development. With no information on planned levels of growth, open space targets and frequency of public transport the impact is unknown at this stage.  |
| B) Settlement considered for densification<br>i) Hemel Hempstead<br>ii) Berkhamsted<br>iii) Tring   |                       |  |
| <b>Issue 9.1 : Addressing traffic – to ease congestion</b>  |                       |  |

| Option (abridged)  | Performance                | Commentary/explanation   |
|--|----------------------------|--|
| 1) Develop town and local centres<br>2) Provide and improve public transport<br>3) Encourage cyclist and pedestrian access to town and local centres<br>4) Improve road infrastructure, without attracting more traffic<br>5) Design Green Traffic plans for local and major traffic generators.   | ✓✓<br>✓✓<br>✓✓<br>xx<br>✓✓ | Improved public transport and reduced need to travel shall limit vehicular emissions, leading to improved air quality and healthy lifestyle.<br><br>Options 3 and 5 score well through encouraging physical activity into peoples' daily lives at no or little cost.<br><br>Improved road infrastructure under Option 4 will make driving an appealing Option at the expense of more healthy and sustainable modes, with detrimental effects on air quality.   |
| <b>Issue 9.3 Increasing Accessibility</b>  |                            |  |
| Five Options for improving accessibility to services are presented:<br>1) High density development near appropriate passenger transport interchange<br>2) Low cost, affordable housing close to basic amenities<br>3) Encourage live/work units<br>4) Improve and promote cyclist and pedestrian network<br>5) Consider accessibility to all, including the disabled | -<br>-<br>✓<br>✓✓<br>-     | Higher densities under Options 1 and 5 are beneficial to the viability of public transport, increased accessibility to services under Option 2 is key to healthier lifestyles. Option 3 presents the opportunity for people to live close to their workplace and will reduce the need to travel and will have positive impact on air quality.<br><br>Option 4 will encourage exercise through enhanced pedestrian and cycling facilities. Sustainable modes of transport, leading to healthy lifestyles. |
| <b>Issue 10.1 Community facility provision, 10.2 Education provision</b>   |                            |  |

| Option (abridged)   | Performance  | Commentary/explanation   |   |   |  |
|---|--|--|---|---|--|
| <p>Three Options for provision of community facilities are proposed:</p> <p>1 (Question 41) Locate key community facilities in most accessible areas, both in towns and villages</p> <p>2 (Question 42): Seek alternative community uses for available community buildings along with enhancing existing community facilities.</p> <p>3 (Question 43): Seek contributions from new developments to meet demands for community facilities.</p> | ✓  | Provision of community facilities will help create a sense of community and encourage social cohesion.   |   |   |  |
| <p>Two Options for provision of education facilities are proposed:</p> <p>1 (Question 46): Provide extended school facilities in selected schools</p> <p>2 (Question 47): Utilisation of surplus school premise space for alternative social/community purposes.</p>  | ✓  | Provision of education, community and adult learning and education facilities will help create a sense of community and encourage social cohesion. |   |   |  |
| <b>Issue 6.6: Delivering affordable housing</b>   |  |  |   |   |  |
| <p>Three Options on affordable housing location are proposed (Question 21):</p> <p>1. On Large sites</p> <p>2. On Greenfield sites</p> <p>3. On sites with high accessibility.</p>  | <table border="1" style="width: 100%; height: 100%;"> <tr> <td style="text-align: center;">?</td> </tr> <tr> <td style="text-align: center;">?</td> </tr> <tr> <td style="text-align: center;">✓</td> </tr> </table> | ?  | ? | ✓ | Without further information on the extent, location of development and accessibility to public transport a judgment can not be made. |
| ?   |  |  |   |   |  |
| ?   |  |  |   |   |  |
| ✓   |  |  |   |   |  |

**SA/SEA Objective 13: To deliver more sustainable patterns of location of development and SA/SEA Objective 19: Achieve a more equitable sharing of the benefits of prosperity across all sectors of society and fairer access to services, focusing on deprived areas in the region**

| Option (abridged)   | Performance | Commentary/explanation   |
|---|-------------|--|
| <b>Issue 5.1: Spatial strategy</b><br><b>Issue 5.2 , Issue 7.2: Employment Opportunity areas</b>  |             |  |
| The Issues and Options Paper proposes growth focused at Hemel Hempstead and other settlements. Two Options considered are:  |             | Option 1 provides the best opportunity to locate homes close to existing employment opportunities, services and amenities, therefore reducing the need to travel.  |
| 1 (Question 25) Promote concentrated and compact development at Hemel Hempstead.  | ✓           | Focusing development around the larger settlements under Option 2 would make these areas more self sufficient and could encourage more businesses and support the existing employers. As well as locating homes close to existing employment opportunities, services and amenities, therefore reducing the need to travel.<br><br>As well as ensuring access to local facilities and services, locating housing development between the main settlements will help meet housing and affordable housing targets. However infilling and potential settlement extensions need to be carefully controlled in order to preserve their individual character. |
| 2 (Question 24) Distribute development opportunities between three settlements- Hemel Hempstead, Berkamstead and Tring.   | ✓           |  |
| 3 (Question 26) Employment areas and Land use: Three Options for utilising the existing isolated employment sites within towns/large villages or Rural parts of the Borough are suggested:<br>a) Protect site for Employment only<br>b) Allow Mixed- land use development<br>c) Allow alternative land use, eg., housing, on the site | ✓           | All Options seek alternative use of existing land, minimising the need for expansion, thus reducing travel distances and the need for travel.  |
| <b>Issue 5.3: Protection of Green Belt</b><br><b>Issue 5.4: Protection of the Open Countryside</b><br><b>Issue 10.5 Protection of Open Green space against development</b>  |             |  |

| Option (abridged)  | Performance | Commentary/explanation   |
|--|-------------|--|
| The Issues and Options Paper considers a number of Options to treat the green belt. Four Options considered are:   |             | Option 1 and 2 provides opportunity to locate homes close to existing employment opportunities, services and amenities, therefore reducing the need to travel. |
| 1) Limit Greenfield site consumption by maximising Urban Capacity of all settlements.  | ✓✓          | The dispersed nature of development under Options 3 and 4 would increase car use and compromise the potential viability of public transport.                   |
| 2) Maximise Urban Capacity and allow Greenfield site consumption.  | ✓           |  |
| 3) Seeks to utilise Greenfield sites prior to consideration of greenbelts.   | ✗           |  |
| 4) Strategy considers limited utilisation of land, beyond the green belt, in the open countryside to meet local demands, subject to sustainability considerations.   | ✗           |  |
| Two Options to address open space provision are suggested.<br>1) (Question 52) : Retain and protect open space from all developments<br>2) (Question 53): Can some open land be lost to improve the quality of other open space or alternative provision made? | -           | No significant impact  |
| <b>Issue 8.1 Location of new retail space</b><br><b>Issue 8.4 Type of land use at the town centre - Mixed or protected development</b><br><b>Issue 8.5 Type of Land-use in the Local Centers</b>   |             |  |
| 1 (Question 29, Question 32): Adopt sequential approach to locate new retail spaces, i.e., utilise existing town centre area, followed by edge-of-centre locations and out-of-centre locations.  | ✓✓          | Sequential approach allows for the prioritisation of locations that are well placed to provide local services, facilities and public transport                 |

| Option (abridged)   | Performance | Commentary/explanation  |
|---|-------------|---|
| 2 (Question 30): Create opportunity for local retail shopping in business area (Maylands area)  | <b>x</b>    | Development under Option 2 will tend to encourage car use.  |
| 3. The Issues and Options Paper presents Options for location of commercial shops, non-shops and offices. Three Options are proposed:<br>1) Allow non-shop use in Office areas<br>2) Encourage mixed land use<br>3) Retain and protect office use in town centres.  | ✓<br>✓<br>✓ | Mixed use is a theme which underpins all the Options, all Options achieve integration between employment and other uses, reducing the need to travel.   |
| 4. Two Options to direct future development of local centres are discussed in the strategy:<br>1) Retain and protect shopping facilities in local centres<br>2) Support a more flexible approach to non-shop uses in local centres  | ✓<br>✓      |   |
| <b>Issue 6.1, 6.2, 6.3 : Housing needs – New development and densification</b>  |             |   |
| The Issues and Options Paper aims to provide a balance between the demand and supply of affordable housing, while considering Greenfield sites.   |             |   |
| 1) Housing Growth Scenarios:<br>A) Adopting RSS 14 recommendation of 6300 dwellings without a need to review the Green belt.<br>B) Council's estimate of housing need- 7100 dwellings- to be achieved by maximising the Urban Capacity and utilise some green field sites.<br>C) RSS 14 original proposal of 8,200 dwellings which may require utilisation of more Greenfield sites.<br>D) 10,000 dwellings, suggested by RSS 14 objectors. | <b>?</b>    | Without further information on the location of urban extensions, density levels, public transport levels an assessment on travel patterns can not be made<br><br>The higher housing targets under Options C and D could result in housing growth without the supporting employment opportunities, which could lead to an increase in out-commuting. |

| Option (abridged)   | Performance           | Commentary/explanation  |
|---|-----------------------|---|
| 3) Housing Capacity and Location<br>A (Question: 11): Focusing development within Hemel Hempstead   | ✓                     | Focusing development in Hemel Hempstead provides the best opportunity to locate homes close to existing employment opportunities, services and amenities, therefore reducing the need to travel.  |
| B (Question 12): Distribute housing requirement, beyond Hemel Hempstead.  | X                     | Option B could potentially lead to increased travel distances to reach services, amenities and employment opportunities.  |
| C (Question 13): Options for housing development beyond 7100 dwellings:<br>i) Increase density at Hemel Hempstead town centre<br>ii) Extend to Greenfield sites within Hemel Hempstead<br>iii) Extend to Greenfield sites around other existing settlements | ✓                     | All Options provide the opportunity to locate homes close to existing employment opportunities, jobs, services and amenities, therefore reducing the need to travel.  |
| D (Question 14): Location for Greenfield extension, if necessary<br>i) Around Hemel Hempstead<br>ii) Around Berkhamstead<br>iii) Around Tring<br>iv) Settlements outside Green belt<br>v) Distributed among different settlements                           | ✓<br>✓<br>✓<br>X<br>X | Options 1-3 are well placed to provide local services, facilities, public transport services for new and existing residents. Developing houses outside the green belt under Options 4 and 5 with limited access to employment opportunities, jobs, facilities and public transport services would increase car use and associated environmental impacts including visual impacts on the setting and character of a greater number of smaller settlements. |
| 4) Increasing density and Location<br>A (Question 13, 16) Increase housing densities, beyond 50 dwellings/ha, in all residential neighbourhoods   | ✓                     | Increasing densities in the main urban areas will provide access to employment opportunities, jobs, facilities and public transport services.   |

| Option (abridged)  | Performance               | Commentary/explanation  |
|--|---------------------------|---|
| B) Settlement considered for densification<br>i) Hemel Hempstead<br>ii) Berkhamsted<br>iii) Tring  |                           |   |
| <b>Issue 9.1 : Addressing traffic – to ease congestion</b>   |                           |   |
| 1) Develop town and local centres<br>2) Provide and improve public transport<br>3) Encourage cyclist and pedestrian access to town and local centres<br>4) Improve road infrastructure, without attracting more traffic<br>5) Design Green Traffic plans for local and major traffic generators.   | ✓✓<br>✓✓<br>✓✓<br>?<br>✓✓ | Options 1, 2, 3 and 5 will help reduce the reliance on the private car and encourage more sustainable modes of travel.<br><br>Improved road infrastructure could encourage more dispersed settlement patterns.  |
| <b>Issue 9.3 Increasing Accessibility</b>  |                           |   |
| Five Options for improving accessibility to services are presented:<br>1) High density development near appropriate passenger transport interchange<br>2) Low cost, affordable housing close to basic amenities<br>3) Encourage live/work units<br>4) Improve and promote cyclist and pedestrian network<br>5) Consider accessibility to all, including the disabled | ✓<br>✓<br>✓<br>✓✓<br>✓    | Options 1, 2 and 5 provide the opportunity to locate homes near public transport services and employment opportunities which will reduce the need to travel by car.<br><br>Option 3 will reduce travel distances and Option 4 will help reduce reliance on the car. |
| <b>Issue 10.1 Community facility provision, 10.2 Education provision</b>   |                           |   |



| Option (abridged)   | Performance                | Commentary/explanation  |
|---|----------------------------|---|
| <p>Three Options for provision of community facilities are proposed:</p> <p>1 (Question 41) Locate key community facilities in most accessible areas, both in towns and villages</p> <p>2 (Question 42): Seek alternative community uses for available community buildings along with enhancing existing community facilities.</p> <p>3 (Question 43): Seek contributions from new developments to meet demands for community facilities.</p> | <p>?</p> <p>-</p> <p>-</p> | <p>Locating facilities in the most accessible locations could tender to favors car use but final judgment can not be made without information on public transport accessibility.</p> <p>No significant impact</p> |
| <p>Two Options for provision of education facilities are proposed:</p> <p>1 (Question 46): Provide extended school facilities in selected schools</p> <p>2 (Question 47): Utilisation of surplus school premise space for alternative social/community purposes.</p>  | <p>?</p>                   | <p>Without further information on the extent, location of development and accessibility to public transport a judgment on travel patterns can not be made.</p>  |
| <p><b>Issue 6.6: Delivering affordable housing</b></p>  |                            |   |
| <p>Three Options on affordable housing location are proposed (Question 21):</p> <p>1. On Large sites</p> <p>2. On Greenfield sites</p> <p>3. On sites with high accessibility.</p>  | <p>?</p>                   | <p>Locating facilities in the most accessible locations could tender to favors car use but final judgment can not be made without information on public transport accessibility.</p>                              |

**SA/SEA Objective 14: Promote equity & address social exclusion by closing the gap between the poorest communities and the rest**

| Option (abridged)   | Performance | Commentary/explanation   |
|---|-------------|--|
| <b>Issue 5.1: Spatial strategy</b><br><b>Issue 5.2 , Issue 7.2: Employment Opportunity areas</b>  |             |  |
| The Issues and Options Paper proposes growth focused at Hemel Hempstead and other settlements. Two Options considered are:  |             | Development under Option 1 would allow non car owners and those who are unable to access a private car increased accessibility to services, housing and to public transport.   |
| 1 (Question 25) Promote concentrated and compact development at Hemel Hempstead.  | ✓           | The enhancement of the three main urban areas in terms of employment opportunities, provision of housing, local facilities and amenities in Hemel Hempstead, Berkamstead and Tring could avoid overload of Hemel Hemspsstead as well as improving local accessibility. However, it is considered that too much dispersion of key functions has the potential to undermine the role of Hemel Hempstead. |
| 2 (Question 24) Distribute development opportunities between three settlements- Hemel Hempstead, Berkamstead and Tring.   | ✓           |  |
| 3 (Question 26) Employment areas and Land use: Three Options for utilising the existing isolated employment sites within towns/large villages or Rural parts of the Borough are suggested:<br>a) Protect site for Employment only<br>b) Allow Mixed- land use development<br>c) Allow alternative land use, eg., housing, on the site | -           | No significant impact but measures to link isolated sites should be promoted to reduce isolation and promote physical activity.  |
| <b>Issue 5.3: Protection of Green Belt</b><br><b>Issue 5.4: Protection of the Open Countryside</b><br><b>Issue 10.5 Protection of Open Green space against development</b>  |             |  |
| The Issues and Options Paper considers a number of Options to treat the green belt. Four Options considered are:  |             | Development under Options 1, 2 and 3 would allow non car owners and those who are unable to access a private car increased accessibility to services, public transport and helps all sections of the society to facilities available.  |

| Option (abridged)   | Performance | Commentary/explanation  |
|---|-------------|---|
| 1) Limit Greenfield site consumption by maximising Urban Capacity of all settlements.   | ✓           | The continued focus of provision of services, public transport and employment opportunities in the larger settlements could lead to the isolation of smaller settlements, development under Option 4 would help to take the burden off the main settlements and reduce isolation. |
| 2) Maximise Urban Capacity and allow Greenfield site consumption.   | ✓           |   |
| 3) Seeks to utilise Greenfield sites prior to consideration of greenbelts.  | ✓           |   |
| 4) Strategy considers limited utilisation of land, beyond the green belt, in the open countryside to meet local demands, subject to sustainability considerations.  | ✓           |   |
| <p>Two Options to address open space provision are suggested.</p> <p>1) (Question 52) : Retain and protect open space from all developments</p> <p>2) (Question 53): Can some open land be lost to improve the quality of other open space or alternative provision made?</p> | ✓           | Provision and protection of open space will enhance human health and social cohesion. The creation of areas of public open space will help people to socially interact and provide areas where people can walk and cycle.   |
| <p><b>Issue 8.1 Location of new retail space</b></p> <p><b>Issue 8.4 Type of land use at the town centre - Mixed or protected development</b></p> <p><b>Issue 8.5 Type of Land-use in the Local Centres</b></p>   |             |   |
| 1 (Question 29, Question 32): Adopt sequential approach to locate new retail spaces, i.e., utilise existing town centre area, followed by edge-of-centre locations and out-of-centre locations.   | ✓           | Option 1 would allow non car owners and those who are unable to access a private car increased accessibility to retail uses.  |
| 2 (Question 30): Create opportunity for local retail shopping in business area (Maylands area)  | ✓           | Option 2 would increase the mixed use nature of the Maylands business area and reduce the need to travel.   |
| <p>3. The Issues and Options Paper presents Options for location of commercial shops, non-shops and offices. Three Options are proposed:</p> <p>1) Allow non-shop use in Office areas</p>   | ✓           | Options 3.1, 3.2 and 3.3 all help to achieve integration between employment uses and retail uses which increases the viability and vitality of these areas and provide further employment opportunities.  |

| Option (abridged)   | Performance       | Commentary/explanation  |
|---|-------------------|---|
| 2) Encourage mixed land use<br>3) Retain and protect office use in town centres.  |                   |   |
| 4. Two Options to direct future development of local centres are discussed in the strategy:<br>1) Retain and protect shopping facilities in local centres<br>2) Support a more flexible approach to non-shop uses in local centres  | -                 | Protecting retail facilities in local centres is likely to reduce the need to travel to larger settlements and would encourage the use of public transport, walking and cycling and allowing access to facilities for people who may have previously been isolated.   |
| <b>Issue 6.1, 6.2, 6.3 : Housing needs – New development and densification</b>  |                   |   |
| The Issues and Options Paper aims to provide a balance between the demand and supply of affordable housing, while considering Greenfield sites.   |                   |   |
| 1) Housing Growth Scenarios:<br>A) Adopting RSS 14 recommendation of 6300 dwellings without a need to review the Green belt.<br>B) Council's estimate of housing need- 7100 dwellings- to be achieved by maximising the Urban Capacity and utilise some green field sites.<br>C) RSS 14 original proposal of 8,200 dwellings which may require utilisation of more Greenfield sites.<br>D) 10,000 dwellings, suggested by RSS 14 objectors. | ✓<br>✓<br>✓<br>✓✓ | Affordable housing is much needed in the Borough. The Council seeks 40% provision of all sites. More affordable housing is likely to come forward under Options C and D.<br><br>At this stage it is unclear what housing types/tenures/levels of affordable housing underpin each Option. However good quality housing under all Options especially in areas of deprivation could help to reduce health inequalities. Housing developments spread across Local and District centres may help the viability and vitality of these centres.<br><br>Focusing development at accessible locations such as Hemel Hamstead could further encourage the use of sustainable modes of transport and the use of transport modes of no or low cost such as walking and cycling.<br><br>Development under Option 3 B is likely to lead to less variety in housing types as larger sites which require affordable housing are unlikely to come forward in the smaller settlements. On the larger sites around Hemel Hamstead affordable housing is more likely to be required. |
| 3) Housing Capacity and Location<br>A (Question: 11): Focusing development within Hemel Hampstead   | ✓                 |   |

| Option (abridged)   | Performance   | Commentary/explanation   |
|---|---|--|
| B (Question 12): Distribute housing requirement, beyond Hemel Hempstead.  | <b>X</b>  | <p>Increasing densities at Hemel Hempstead under Option C i could further encourage the use of sustainable modes of transport and the use of transport modes of no or low cost such as walking and cycling.</p> <p>Development under Option ii could result in loss of public open spaces which provide accessible areas for social cohesion and community gathering for people who can not access the open countryside.</p> |
| C (Question 13): Options for housing development beyond 7100 dwellings:<br>i) Increase density at Hemel Hempstead town centre<br>ii) Extend to Greenfield sites within Hemel Hempstead<br>iii) Extend to Greenfield sites around other existing settlements | <p>✓</p> <hr/> <p><b>X</b></p> <hr/> <p><b>X</b></p>  | <p>The dispersed pattern of growth under Option iii will generally lead to increased distances between services and increase in car dependence. Growth under Option iii is likely to lead to dispersal of residential development with limited supporting facilities. The growth is unlikely to support a public transport network.</p>  |
| D (Question 14): Location for Greenfield extension, if necessary<br>i) Around Hemel Hempstead<br>ii) Around Berkhamstead<br>iii) Around Tring<br>iv) Settlements outside Green belt<br>v) Distributed among different settlements                           | <p><b>X</b></p> <hr/> <p><b>X</b></p> <hr/> <p><b>X</b></p> <hr/> <p><b>X</b></p> <hr/> <p><b>X</b></p> | <p>The dispersed pattern of growth under Option iii will generally lead to increased distances between services and increase in car dependence. Growth under Option ii and iii is likely to lead to dispersal of residential development with limited supporting facilities. The growth is unlikely to support a public transport network.</p>   |
| 4) Increasing density and Location<br>A (Question 13, 16) Increase housing densities, beyond 50 dwellings/ha, in all residential neighbourhoods   | <p>✓</p>  | <p>In terms of affordable housing provision all Options would score well as flats are more likely to be affordable than semi-detached and detached houses.</p> <p>Increasing densities at the three main settlements of Hemel Hempstead, Berkhamsted</p>   |

| Option (abridged)  | Performance               | Commentary/explanation   |
|--|---------------------------|--|
| B) Settlement considered for densification<br>i) Hemel Hempstead<br>ii) Berkhamsted<br>iii) Tring  | ✓<br>✓<br>✓               | and Tring will help maintain the viability of the services of these centres. The growth is also likely to support a public transport network.  |
| <b>Issue 9.1 : Addressing traffic – to ease congestion</b>   |                           |  |
| 1) Develop town and local centres<br>2) Provide and improve public transport<br>3) Encourage cyclist and pedestrian access to town and local centres<br>4) Improve road infrastructure, without attracting more traffic<br>5) Design Green Traffic plans for local and major traffic generators.   | ✓✓<br>✓✓<br>✓✓<br>X<br>✓  | Developing facilities in town and local centres is likely to reduce the need to travel to larger settlements and would encourage the use of public transport, walking and cycling and allowing access to facilities for people who may have previously been isolated.<br><br>Measures listed under Options 2, 3 and 5 will improve access to services, especially for people without access to a car.<br><br>Option 4 will tend to favour car owners unless road space is safeguarded for bus and cycle lanes. |
| <b>Issue 9.3 Increasing Accessibility</b>  |                           |  |
| Five Options for improving accessibility to services are presented:<br>1) High density development near appropriate passenger transport interchange<br>2) Low cost, affordable housing close to basic amenities<br>3) Encourage live/work units<br>4) Improve and promote cyclist and pedestrian network<br>5) Consider accessibility to all, including the disabled | ✓✓<br>✓✓<br>✓<br>✓✓<br>✓✓ | Increased accessibility to services and to public transport under Options 1, 2, 4 and 5 helps all sections of the society to facilities available. Option 3 would reduce the need to travel.   |
| <b>Issue 10.1 Community facility provision</b><br><b>10.2 Education provision</b>  |                           |  |

| Option (abridged)   | Performance                  | Commentary/explanation  |
|---|------------------------------|---|
| <p>Three Options for provision of community facilities are proposed:</p> <p>1 (Question 41) Locate key community facilities in most accessible areas, both in towns and villages</p> <p>2 (Question 42): Seek alternative community uses for available community buildings along with enhancing existing community facilities.</p> <p>3 (Question 43): Seek contributions from new developments to meet demands for community facilities.</p> | <p>✓✓</p> <p>✓✓</p> <p>✓</p> | <p>All Options seek the provision of community facilities which will help promote social cohesion, equity and social inclusion. Options 1 and 2 seek to improve community facilities at a local level, thus increasing accessibility to services to all sections of the society.</p>  |
| <p>Two Options for provision of education facilities are proposed:</p> <p>1 (Question 46): Provide extended school facilities in selected schools</p> <p>2 (Question 47): Utilisation of surplus school premise space for alternative social/community purposes.</p>  | <p>✓✓</p> <p>✓✓</p>          | <p>Both Options promote further education and community/social facilities which will have positive effect on educational and training opportunities.</p>  |
| <p><b>Issue 6.6: Delivering affordable housing</b></p>  |                              |   |
| <p>Three Options on affordable housing location are proposed (Question 21):</p> <p>1. On Large sites</p> <p>2. On Greenfield sites</p> <p>3. On sites with high accessibility.</p>  | <p>?</p> <p>X</p> <p>?</p>   | <p>The location of the large sites under Option 1 is unknown at this stage so a judgement on transport accessibility can not be made.</p> <p>The potential dispersed pattern of the greenfield sites under Option 2 will generally lead to increased distances between services and increase in car dependence.</p> <p>Focusing affordable housing at highly accessible areas could favour car use unless the development sites are easily accessible by public transport, which enables the sites to be accessed by all sectors of society. This undermines the sustainable objective of reducing the number of car journeys however it positively contributes to the objective of providing affordable housing in accessible locations.</p> |

**SA/SEA Objective 15: Ensure that everyone has access to good quality housing that meets their needs**

| Option (abridged)   | Performance | Commentary/explanation   |
|---|-------------|--|
| <b>Issue 5.1: Spatial strategy</b><br><b>Issue 5.2 , Issue 7.2: Employment Opportunity areas</b>  |             |  |
| The Issues and Options Paper proposes growth focused at Hemel Hempstead and other settlements. Two Options considered are:  |             | Housing quality, type and tenure is unclear at this stage however, residential development under Option 1 would provide housing in locations supported by sustainable modes of transport.<br><br>Strengthening the housing market in Hemel Hempstead, Berkamstead and Tring would help sustain local services.<br><br>Housing development where possible should re-use existing buildings, resulting in efficient use of land and minimising construction waste. |
| 1 (Question 25) Promote concentrated and compact development at Hemel Hempstead.  | ✓           |  |
| 2 (Question 24) Distribute development opportunities between three settlements- Hemel Hempstead, Berkamstead and Tring.   | ✓           |  |
| 3 (Question 26) Employment areas and Land use: Three Options for utilising the existing isolated employment sites within towns/large villages or Rural parts of the Borough are suggested:<br>a) Protect site for Employment only<br>b) Allow Mixed- land use development<br>c) Allow alternative land use, eg., housing, on the site |             | Protection of employment sites could prevent sites from coming forward for residential use.<br><br>Options b and c would help utilise PDL, help contribute to housing targets and help safeguard greenfield sites and land.  |
| X   |             |  |
| ✓   |             |  |
| ✓   |             |  |
| <b>Issue 5.3: Protection of Green Belt</b><br><b>Issue 5.4: Protection of the Open Countryside</b><br><b>Issue 10.5 Protection of Open Green space against development</b>  |             |  |
| The Issues and Options Paper considers a number of Options to treat the green belt. Four Options considered are:  |             | Housing quality, type and tenure is unclear at this stage  |
| 1) Limit Greenfield site consumption by maximising Urban Capacity of all settlements.   | -           |  |
| 2) Maximise Urban Capacity and allow Greenfield site consumption.   | -           |  |



| Option (abridged)  | Performance | Commentary/explanation  |
|--|-------------|---|
| 3) Seeks to utilise Greenfield sites prior to consideration of greenbelts.   | -           |   |
| 4) Strategy considers limited utilisation of land, beyond the green belt, in the open countryside to meet local demands, subject to sustainability considerations.   | -           |   |
| Two Options to address open space provision are suggested.<br>1) (Question 52) : Retain and protect open space from all developments<br>2) (Question 53): Can some open land be lost to improve the quality of other open space or alternative provision made?     | -           | No significant impact   |
| <b>Issue 8.1 Location of new retail space</b><br><b>Issue 8.4 Type of land use at the town centre - Mixed or protected development</b><br><b>Issue 8.5 Type of Land-use in the Local Centres</b>   |             |   |
| 1 (Question 29, Question 32): Adopt sequential approach to locate new retail spaces, i.e., utilise existing town centre area, followed by edge-of-centre locations and out-of-centre locations.  | ✓           | Housing quality, type and tenure is unclear so the impact on this objective is unclear at this stage.                 |
| 2 (Question 30): Create opportunity for local retail shopping in business area (Maylands area)   | -           | Development under Option 1 would provide housing in accessible locations supported by sustainable modes of transport. |
| 3. The Issues and Options Paper presents Options for location of commercial shops, non-shops and offices. Three Options are proposed:<br>1) Allow non-shop use in Office areas<br>2) Encourage mixed land use<br>3) Retain and protect office use in town centres. | -           |   |
| 4. Two Options to direct future development of local centres are discussed in the strategy:<br>1) Retain and protect shopping facilities in local centres  | -           |   |

| Option (abridged)   | Performance                  | Commentary/explanation   |
|---|------------------------------|--|
| 2) Support a more flexible approach to non-shop uses in local centres   |                              |  |
| <b>Issue 6.1, 6.2, 6.3 : Housing needs – New development and densification</b>  |                              |  |
| The Issues and Options Paper aims to provide a balance between the demand and supply of affordable housing, while considering Greenfield sites.   |                              |  |
| 1) Housing Growth Scenarios:<br>A) Adopting RSS 14 recommendation of 6300 dwellings without a need to review the Green belt.<br>B) Council's estimate of housing need- 7100 dwellings- to be achieved by maximising the Urban Capacity and utilise some green field sites.<br>C) RSS 14 original proposal of 8,200 dwellings which may require utilisation of more Greenfield sites.<br>D) 10,000 dwellings, suggested by RSS 14 objectors. | X<br><br>✓<br><br>✓<br><br>✓ | Housing quality, type and tenure is unclear at this stage however there would be increased accessibility to affordable housing under Options B, C and D. It is unclear how the Council's housing needs estimate would be met under Option A.<br><br>Options B, C and D supports accessibility to a higher number of dwellings than the RSS allocation. Option B would provide housing in accessible locations supported by sustainable modes of transport. |
| 3) Housing Capacity and Location<br>A (Question: 11): Focusing development within Hemel Hempstead   | -                            | Housing quality, type and tenure is unclear at this stage  |
| B (Question 12): Distribute housing requirement, beyond Hemel Hempstead.  | -                            |  |
| C (Question 13): Options for housing development beyond 7100 dwellings:<br>i) Increase density at Hemel Hempstead town centre   | ✓                            |  |

| Option (abridged)  | Performance | Commentary/explanation  |
|--|-------------|---|
| ii) Extend to Greenfield sites within Hemel Hempstead<br>iii) Extend to Greenfield sites around other existing settlements   | -<br>-      | affordable housing, as flats are more likely to be affordable than semi-detached and detached houses. Option i would provide housing in accessible locations supported by sustainable modes of transport.   |
| D (Question 14): Location for Greenfield extension, if necessary<br>i) Around Hemel Hempstead<br>ii) Around Berkhamstead<br>iii) Around Tring<br>iv) Settlements outside Green belt<br>v) Distributed among different settlements                    | -           | Housing quality, type and tenure is unclear at this stage   |
| 4) Increasing density and Location<br>A (Question 13, 16) Increase housing densities, beyond 50 dwellings/ha, in all residential neighbourhoods<br>B) Settlement considered for densification<br>i) Hemel Hempstead<br>ii) Berkhamsted<br>iii) Tring | ?           | The quality of housing and living standards in high density development depends on design, open space and overall management of the townscape. At this stage accessibility to quality housing can not be made. However Option i would provide housing in highly accessible locations supported by sustainable modes of transport. |
| <b>Issue 9.1 : Addressing traffic – to ease congestion</b>   |             |   |
| 1) Develop town and local centres<br>2) Provide and improve public transport<br>3) Encourage cyclist and pedestrian access to town and local centres<br>4) Improve road infrastructure, without attracting more traffic                              | -<br>-<br>- | No significant impact   |

| Option (abridged)   | Performance                                  | Commentary/explanation   |
|---|--|--|
| 5) Design Green Traffic plans for local and major traffic generators.   | -  |  |
| <b>Issue 9.3 Increasing Accessibility</b>   |  |  |
| <p>Five Options for improving accessibility to services are presented:</p> <p>1) High density development near appropriate passenger transport interchange</p> <p>2) Low cost, affordable housing close to basic amenities</p> <p>3) Encourage live/work units</p> <p>4) Improve and promote cyclist and pedestrian network</p> <p>5) Consider accessibility to all, including the disabled</p>   | <p>✓</p> <p>✓</p> <p>✓</p> <p>-</p> <p>✓</p> | <p>The quality of housing and living standards in high density development depends on design, open space and overall management of the townscape. At this stage accessibility to quality housing can not be made. Options 1 and 2 would provide housing in accessible locations supported by sustainable modes of transport.</p> |
| <b>Issue 10.1 Community facility provision</b>  |  |  |
| <b>10.2 Education provision</b>   |  |  |
| <p>Three Options for provision of community facilities are proposed:</p> <p>1 (Question 41) Locate key community facilities in most accessible areas, both in towns and villages</p> <p>2 (Question 42): Seek alternative community uses for available community buildings along with enhancing existing community facilities.</p> <p>3 (Question 43): Seek contributions from new developments to meet demands for community facilities.</p> | -  | No significant impact  |

| Option (abridged)   | Performance   | Commentary/explanation |   |   |  |
|---|---|------------------------|---|---|--|
| Two Options for provision of education facilities are proposed:<br>1 (Question 46): Provide extended school facilities in selected schools<br>2 (Question 47): Utilisation of surplus school premise space for alternative social/community purposes. | -   | No significant impact  |   |   |  |
| <b>Issue 6.6: Delivering affordable housing</b>   |   |                        |   |   |  |
| Three Options on affordable housing location are proposed (Question 21):<br>1. On Large sites<br>2. On Greenfield sites<br>3. On sites with high accessibility.   | <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">?</td> </tr> <tr> <td style="text-align: center;">?</td> </tr> <tr> <td style="text-align: center;">✓</td> </tr> </table> | ?                      | ? | ✓ | Providing a mix of housing under all Options would help reduce the levels of inward commuting.<br><br>The location of housing under Options 1 and 2 is unclear at this stage. Option 3 would provide housing in accessible locations |
| ?   |   |                        |   |   |  |
| ?   |   |                        |   |   |  |
| ✓   |   |                        |   |   |  |

**SA/SEA Objective 16: Enhance community identity and participation**

| Option (abridged)   | Performance | Commentary/explanation  |   |
|---|-------------|---|---|
| <b>Issue 5.1: Spatial strategy</b><br><b>Issue 5.2 , Issue 7.2: Employment Opportunity areas</b>  |             |   |   |
| The Issues and Options Paper proposes growth focused at Hemel Hempstead and other settlements. Two Options considered are:  |             | Development under Options 1 and 2 would ensure that community facilities are in accessible locations for all sectors of society.  |   |
| 1 (Question 25) Promote concentrated and compact development at Hemel Hempstead.  | ✓           |   |   |
| 2 (Question 24) Distribute development opportunities between three settlements- Hemel Hempstead, Berkamstead and Tring.   | ✓           |   |   |
| 3 (Question 26) Employment areas and Land use: Three Options for utilising the existing isolated employment sites within towns/large villages or Rural parts of the Borough are suggested:<br>a) Protect site for Employment only<br>b) Allow Mixed- land use development<br>c) Allow alternative land use, eg., housing, on the site |             | Option A may limit sites for community facilities coming forward but it is recognised that are community facilities available elsewhere in the District.<br><br>Options b and c allows for other uses in employment areas such as community facilities. |   |
| a) Protect site for Employment only   |             |   | ✓ |
| c) Allow alternative land use, eg., housing, on the site  |             |   | ✓ |
| <b>Issue 5.3: Protection of Green Belt</b><br><b>Issue 5.4: Protection of the Open Countryside</b><br><b>Issue 10.5 Protection of Open Green space against development</b>  |             |   |   |
| The Issues and Options Paper considers a number of Options to treat the green belt. Four Options considered are:  |             | Development under Options 1 and 2 would ensure that community facilities are in accessible locations for all sectors of society and would help ensure the use of more sustainable transport modes.  |   |
| 1) Limit Greenfield site consumption by maximising Urban Capacity of all settlements.   | ✓           |   |   |

| Option (abridged)  | Performance | Commentary/explanation  |
|--|-------------|---|
| 2) Maximise Urban Capacity and allow Greenfield site consumption.  | ✓           |   |
| 3) Seeks to utilise Greenfield sites prior to consideration of greenbelts.   | X           | Option 3 could result in the loss of public spaces, which would reduce the opportunity for community gathering and social cohesion.                                       |
| 4) Strategy considers limited utilisation of land, beyond the green belt, in the open countryside to meet local demands, subject to sustainability considerations.   | X           | Option 4 would lead to dispersal of facilities and these development sites are less likely to be accessible by public transport and encourage the use of the private car. |
| Two Options to address open space provision are suggested.<br>1) (Question 52) : Retain and protect open space from all developments<br>2) (Question 53): Can some open land be lost to improve the quality of other open space or alternative provision made?     | ✓✓          | Retaining and protecting open space will further enhance social inclusion through providing space to encourage community gathering and social cohesion.                   |
|  | ✓✓          |   |
| <b>Issue 8.1 Location of new retail space</b><br><b>Issue 8.4 Type of land use at the town centre - Mixed or protected development</b><br><b>Issue 8.5 Type of Land-use in the Local Centres</b>   |             |   |
| 1 (Question 29, Question 32): Adopt sequential approach to locate new retail spaces, i.e., utilise existing town centre area, followed by edge-of-centre locations and out-of-centre locations.  | -           | The Options are found to have no predicted impact on this objective   |
| 2 (Question 30): Create opportunity for local retail shopping in business area (Maylands area)   |             |   |
| 3. The Issues and Options Paper presents Options for location of commercial shops, non-shops and offices. Three Options are proposed:<br>1) Allow non-shop use in Office areas<br>2) Encourage mixed land use<br>3) Retain and protect office use in town centres. |             |   |

| Option (abridged)   | Performance                         | Commentary/explanation   |
|---|-------------------------------------|--|
| <p>4. Two Options to direct future development of local centres are discussed in the strategy:</p> <p>1) Retain and protect shopping facilities in local centres</p> <p>2) Support a more flexible approach to non-shop uses in local centres</p>   |                                     |  |
| <b>Issue 6.1, 6.2, 6.3 : Housing needs – New development and densification</b>  |                                     |  |
| <p>The Issues and Options Paper aims to provide a balance between the demand and supply of affordable housing, while considering Greenfield sites.</p>  |                                     |  |
| <p>1) Housing Growth Scenarios:</p> <p>A) Adopting RSS 14 recommendation of 6300 dwellings without a need to review the Green belt.</p> <p>B) Council's estimate of housing need- 7100 dwellings- to be achieved by maximising the Urban Capacity and utilise some green field sites.</p> <p>C) RSS 14 original proposal of 8,200 dwellings which may require utilisation of more Greenfield sites.</p> <p>D) 10,000 dwellings, suggested by RSS 14 objectors</p> | <p>-</p> <p>✓</p> <p>✓</p> <p>✓</p> | <p>There would be increased accessibility to affordable housing under Options B, C and D. It is unclear how the Council's housing needs estimate would be met under Option A, which could hinder community identity and social inclusion. .</p> <p>Options B, C and D supports accessibility to a higher number of dwellings than the RSS allocation. Option B would provide housing in accessible locations supported by sustainable modes of transport and consequently reducing the need to travel and encouraging social inclusion. It is assumed that all development will be of high quality, with high design standards, provide services to all sectors of the community, promote high walkability neighbourhoods and permeability which will contribute to generating a sense of community identity and social inclusion.</p> |
| <p>3) Housing Capacity and Location</p> <p>A (Question: 11): Focusing development within Hemel Hampstead</p>  | <p>✓</p>                            | <p>Option A and C I will ensure Hemel Hamstead's long-term viability and vitality and reduce the need to travel and help generate a sense of community identity.</p>   |
| <p>B (Question 12): Distribute housing requirement, beyond Hemel Hampstead.</p>   | <p>X</p>                            | <p>Option B would lead to dispersal of facilities and these development sites are less likely to be accessible by public transport and encourage the use of the private car</p> <p>Options ii and iii would lead to loss of greenfield sites, which would reduce the opportunity</p>   |



| Option (abridged)   | Performance           | Commentary/explanation   |
|---|-----------------------|--|
| C (Question 13): Options for housing development beyond 7100 dwellings:<br>i) Increase density at Hemel Hempstead town centre<br>ii) Extend to Greenfield sites within Hemel Hempstead<br>iii) Extend to Greenfield sites around other existing settlements | ✓<br>X<br>X           | for community gathering.   |
| D (Question 14): Location for Greenfield extension, if necessary<br>i) Around Hemel Hempstead<br>ii) Around Berkhamstead<br>iii) Around Tring<br>iv) Settlements outside Green belt<br>v) Distributed among different settlements                           | ✓<br>X<br>X<br>X<br>X | There would be increased accessibility to community facilities under Options I and Bi . Option ii, iii, iv, v and B ii and iii would lead to dispersal of facilities, which would encourage the use of the private car and could potentially increase isolation from services. |
| 4) Increasing density and Location<br>A (Question 13, 16) Increase housing densities, beyond 50 dwellings/ha, in all residential neighbourhoods   | ?                     | The level of community identity and participation depends on the quality of the built environment, quantity and quality of open space, community safety and permeability   |
| B) Settlement considered for densification<br>i) Hemel Hempstead<br>ii) Berkhamsted<br>iii) Tring   | ?                     |  |
| <b>Issue 9.1 : Addressing traffic – to ease congestion</b>  |                       |  |
| 1) Develop town and local centres<br>2) Provide and improve public transport<br>3) Encourage cyclist and pedestrian access to town and  | ✓<br>✓                | Measures listed under Options 1, 2, 3 and 5 would help encourage modal shift away from the car and would help create a sense of community through lower levels of noise, improved air quality, permeability and higher quality built environment.                              |

| Option (abridged)  | Performance           | Commentary/explanation  |
|--|-----------------------|---|
| local centres<br>4) Improve road infrastructure, without attracting more traffic<br>5) Design Green Traffic plans for local and major traffic generators.  | ✓<br>-<br>✓           |   |
| <b>Issue 9.3 Increasing Accessibility</b>  |                       |   |
| Five Options for improving accessibility to services are presented:<br>1) High density development near appropriate passenger transport interchange<br>2) Low cost, affordable housing close to basic amenities<br>3) Encourage live/work units<br>4) Improve and promote cyclist and pedestrian network<br>5) Consider accessibility to all, including the disabled   | ?<br>✓<br>-<br>✓<br>✓ | The level of community identity and participation depends on the quality of the built environment, quantity and quality of open space, community safety and permeability<br><br>Options 2, 4 and 5 will all help generate community identity. |
| <b>Issue 10.1 Community facility provision, 10.2 Education provision</b>   |                       |   |
| Three Options for provision of community facilities are proposed:<br>1 (Question 41) Locate key community facilities in most accessible areas, both in towns and villages<br>2 (Question 42): Seek alternative community uses for available community buildings along with enhancing existing community facilities.<br>3 (Question 43): Seek contributions from new developments to meet demands for community facilities. | ✓<br>✓<br>✓           | Enhancing and provision of community facilities under all Options will help generate a sense of community and well being.   |

| Option (abridged)  | Performance  | Commentary/explanation  |   |   |  |
|--|--|---|---|---|--|
| <p>Two Options for provision of education facilities are proposed:</p> <p>1 (Question 46): Provide extended school facilities in selected schools</p> <p>2 (Question 47): Utilisation of surplus school premise space for alternative social/community purposes.</p> | -  | The Options are found to have no predicted impact on this objective |   |   |  |
| <b>Issue 6.6: Delivering affordable housing</b>  |  |   |   |   |  |
| <p>Three Options on affordable housing location are proposed (Question 21):</p> <p>1. On Large sites</p> <p>2. On Greenfield sites</p> <p>3. On sites with high accessibility.</p>   | <table border="1" style="width: 100%; height: 100%;"> <tr> <td style="text-align: center;">?</td> </tr> <tr> <td style="text-align: center;">X</td> </tr> <tr> <td style="text-align: center;">?</td> </tr> </table> | ?   | X | ? | <p>The level of community identity and participation depends on the quality of the built environment, quantity and quality of open space, community safety and permeability.</p> <p>Option 2 would lead to loss of greenfield sites, which would reduce the opportunity for community gathering.</p> |
| ?  |  |   |   |   |  |
| X  |  |   |   |   |  |
| ?  |  |   |   |   |  |

**SA/SEA Objective 17: Reduce both crime and fear of crime**

| Option (abridged)  | Performance | Commentary/explanation   |
|--|-------------|--|
| <b>Issue 5.1: Spatial strategy</b><br><b>Issue 5.2 , Issue 7.2: Employment Opportunity areas</b>                           |             |  |
| The Issues and Options Paper proposes growth focused at Hemel Hempstead and other settlements. Two Options considered are: |             |  |
| 1 (Question 25) Promote concentrated and compact development at Hemel Hempstead.   | ?           | Crime rates in Dacorum are currently fairly low compared to national and regional standards but anti social behavior could increase due to the anticipated levels of growth and increased town centre accessibility.   |
| 2 (Question 24) Distribute development opportunities between three settlements- Hemel Hempstead, Berkamstead and Tring.    | ?           | <p>At this stage of Option development specific measures to minimise crime and the fear of crime are largely missing from the Issues and Options Paper. Future LDF stages should emphasize the need for development proposals to be developed to high design standards which help design out crime and include measures to minimise the fear of crime, including for example, the overlooking of streets and public spaces, good lighting of public spaces, convenient parking that is overlooked, security lighting, CCTV etc.</p> <p>Design measures are unknown at this stage of Option development, but It is recognised that mixed-use development, particularly at ground level, high density and the anticipated increase in activity in the town centre, including the increase in numbers of local residents under Option 1 will contribute to passive surveillance of streets, spaces and parking.</p> <p>Mixed use development under Option 2 will contribute to passive surveillance of streets, spaces and parking.</p> |

| Option (abridged)  | Performance | Commentary/explanation |
|--|-------------|------------------------|
| 3 (Question 26) Employment areas and Land use:<br>Three Options for utilising the existing isolated employment sites within towns/large villages or Rural parts of the Borough are suggested:<br>a) Protect site for Employment only<br>b) Allow Mixed- land use development<br>c) Allow alternative land use, eg., housing, on the site | -           | No significant impact  |
| <b>Issue 5.3: Protection of Green Belt</b><br><b>Issue 5.4: Protection of the Open Countryside</b><br><b>Issue 10.5 Protection of Open Green space against development</b>   |             |                        |
| The Issues and Options Paper considers a number of Options to treat the green belt. Four Options considered are:   | -           | No significant impact  |
| 1) Limit Greenfield site consumption by maximising Urban Capacity of all settlements.  |             |                        |
| 2) Maximise Urban Capacity and allow Greenfield site consumption.  |             |                        |
| 3) Seeks to utilise Greenfield sites prior to consideration of greenbelts.   |             |                        |
| 4) Strategy considers limited utilisation of land, beyond the green belt, in the open countryside to meet local demands, subject to sustainability considerations.   | -           |                        |

| Option (abridged)   | Performance | Commentary/explanation   |
|---|-------------|--|
| <p>Two Options to address open space provision are suggested.</p> <p>1) (Question 52) : Retain and protect open space from all developments</p> <p>2) (Question 53): Can some open land be lost to improve the quality of other open space or alternative provision made?</p>         | ✓           | <p>Good lighting of public spaces can generate a sense of safety and increase use of quality public open space will contribute to passive surveillance of streets, spaces and parking.</p> |
| <p><b>Issue 8.1 Location of new retail space</b><br/> <b>Issue 8.4 Type of land use at the town centre - Mixed or protected development</b><br/> <b>Issue 8.5 Type of Land-use in the Local Centres</b></p>   |             |  |
| <p>1 (Question 29, Question 32): Adopt sequential approach to locate new retail spaces, i.e., utilise existing town centre area, followed by edge-of-centre locations and out-of-centre locations.</p>  | -           | No significant impact  |
| <p>2 (Question 30): Create opportunity for local retail shopping in business area (Maylands area)</p>   |             |  |
| <p>3. The Issues and Options Paper presents Options for location of commercial shops, non-shops and offices. Three Options are proposed:</p> <p>1) Allow non-shop use in Office areas</p> <p>2) Encourage mixed land use</p> <p>3) Retain and protect office use in town centres.</p> | -           | No significant impact  |
| <p>4. Two Options to direct future development of local centres are discussed in the strategy:</p> <p>1) Retain and protect shopping facilities in local centres</p> <p>2) Support a more flexible approach to non-shop uses in local centres</p>                                     |             |  |
| <p><b>Issue 6.1, 6.2, 6.3 : Housing needs – New development and densification</b></p>   |             |  |

| Option (abridged)  | Performance | Commentary/explanation  |
|--|-------------|---|
| The Issues and Options Paper aims to provide a balance between the demand and supply of affordable housing, while considering Greenfield sites.  | ?           | <p>Anti social behavior could increase due to the anticipated levels of growth however implementation of high design standards and inclusion of specific measures to design out crime for example, the overlooking of streets and public spaces, good lighting of public spaces, convenient parking that is overlooked, security lighting, CCTV etc will help generate a sense of community safety.</p> <p>Design measures are unknown at this stage of Option development.</p> |
| <p>1) Housing Growth Scenarios:</p> <p>A) Adopting RSS 14 recommendation of 6300 dwellings without a need to review the Green belt.</p> <p>B) Council's estimate of housing need- 7100 dwellings- to be achieved by maximising the Urban Capacity and utilise some green field sites.</p> <p>C) RSS 14 original proposal of 8,200 dwellings which may require utilisation of more Greenfield sites.</p> <p>D) 10,000 dwellings, suggested by RSS 14 objectors.</p> | ?           |   |
| <p>3) Housing Capacity and Location</p> <p>A (Question: 11): Focusing development within Hemel Hempstead</p>   | ?           |   |
| B (Question 12): Distribute housing requirement, beyond Hemel Hempstead.   | ?           |   |
| <p>C (Question 13): Options for housing development beyond 7100 dwellings:</p> <p>i) Increase density at Hemel Hempstead town centre</p> <p>ii) Extend to Greenfield sites within Hemel Hempstead</p> <p>iii) Extend to Greenfield sites around other existing settlements</p>   | ?           |   |
| <p>D (Question 14): Location for Greenfield extension, if necessary</p> <p>i) Around Hemel Hempstead</p>   | -           | No significant impact   |

| Option (abridged)  | Performance | Commentary/explanation   |
|--|-------------|--|
| ii) Around Berkhamstead<br>iii) Around Tring<br>iv) Settlements outside Green belt<br>v) Distributed among different settlements   |             |  |
| 4) Increasing density and Location<br>A (Question 13, 16) Increase housing densities, beyond 50 dwellings/ha, in all residential neighbourhoods  | ?           | Anti social behavior could increase due to the anticipated levels of growth however design measures to minimize crime are unknown at this stage. |
| B) Settlement considered for densification<br>i) Hemel Hempstead<br>ii) Berkhamsted<br>iii) Tring  |             |  |
| <b>Issue 9.1 : Addressing traffic – to ease congestion</b>   |             |  |
| 1) Develop town and local centres<br>2) Provide and improve public transport<br>3) Encourage cyclist and pedestrian access to town and local centres<br>4) Improve road infrastructure, without attracting more traffic<br>5) Design Green Traffic plans for local and major traffic generators. | -           | No significant impact  |
| <b>Issue 9.3 Increasing Accessibility</b>  |             |  |



| Option (abridged)  | Performance | Commentary/explanation  |
|--|-------------|---|
| <p>Five Options for improving accessibility to services are presented:</p> <ol style="list-style-type: none"> <li>1) High density development near appropriate passenger transport interchange</li> <li>2) Low cost, affordable housing close to basic amenities</li> <li>3) Encourage live/work units</li> <li>4) Improve and promote cyclist and pedestrian network</li> <li>5) Consider accessibility to all, including the disabled</li> </ol>   | ?           | <p>Anti social behavior could increase due to the anticipated levels of growth and increased town centre accessibility however design measures to minimize crime are unknown at this stage.</p> |
| <b>Issue 10.1 Community facility provision, 10.2 Education provision</b>   |             |   |
| <p>Three Options for provision of community facilities are proposed:</p> <ol style="list-style-type: none"> <li>1 (Question 41) Locate key community facilities in most accessible areas, both in towns and villages</li> <li>2 (Question 42): Seek alternative community uses for available community buildings along with enhancing existing community facilities.</li> <li>3 (Question 43): Seek contributions from new developments to meet demands for community facilities.</li> </ol> | ✓           | <p>Provision of community facilities will help generate a sense of community and ownership of local neighborhoods which in turn will help reduce crime.</p>                                     |
| <p>Two Options for provision of education facilities are proposed:</p> <ol style="list-style-type: none"> <li>1 (Question 46): Provide extended school facilities in selected schools</li> <li>2 (Question 47): Utilisation of surplus school premise space for alternative social/community purposes.</li> </ol>  | -           | <p>No significant impact</p>  |
| <b>Issue 6.6: Delivering affordable housing</b>  |             |   |

| Option (abridged)   | Performance | Commentary/explanation |
|---|-------------|------------------------|
| Three Options on affordable housing location are proposed (Question 21):<br>1. On Large sites<br>2. On Greenfield sites<br>3. On sites with high accessibility. | -           | No significant impact  |

**SA/SEA Objective 18: Achieve sustainable levels of prosperity and economic growth**

| Option (abridged)  | Performance | Commentary/explanation  |
|--|-------------|---|
| <b>Issue 5.1: Spatial strategy</b>   |             |   |
| <b>Issue 5.2 , Issue 7.2: Employment Opportunity areas</b>   |             |   |
| The Issues and Options Paper proposes growth focused at Hemel Hempstead and other settlements. Two Options considered are:   |             | Focusing development in Hemel Hempstead under Option 1 could encourage new businesses and support the existing employers as well as providing employment opportunities in accessible locations, thereby reducing the need to travel.  |
| 1 (Question 25) Promote concentrated and compact development at Hemel Hempstead.   | ✓✓          | Development under Option 2 provides the opportunity to develop employment opportunities, services and amenities close to existing residential areas thereby reducing the need to travel and reducing levels of out-commuting.   |
| 2 (Question 24) Distribute development opportunities between three settlements- Hemel Hempstead, Berkamstead and Tring.  | ✓✓          |   |
| 3 (Question 26) Employment areas and Land use:<br>Three Options for utilising the existing isolated employment sites within towns/large villages or Rural parts of the Borough are suggested:<br>a) Protect site for Employment only<br>b) Allow Mixed- land use development<br>c) Allow alternative land use, eg., housing, on the site | ✓           | Option 3a supports employment growth in terms of the provision of space/premises for employment and secures land for employment use however Option 3a undermines the mix of uses and creates the risk of creating largely mono-functional employment areas thereby increasing the use of the private car. |
|  | ✓           | Development Option 3b would ensure access to local facilities; services and housing development would help economic growth and prosperity and would help meet housing targets.<br><br>Option c may undermine economic interests.  |
|  | X           |   |
| <b>Issue 5.3: Protection of Green Belt</b>   |             |   |

| Option (abridged)  | Performance | Commentary/explanation   |
|--|-------------|--|
| <b>Issue 5.4: Protection of the Open Countryside</b>   |             |  |
| <b>Issue 10.5 Protection of Open Green space against development</b>   |             |  |
| The Issues and Options Paper considers a number of Options to treat the green belt. Four Options considered are:   |             | Focusing development in the built up areas under Options 1 and 2 could encourage new businesses and support the existing employers as well as providing employment opportunities in accessible locations, thereby reducing the need to travel.   |
| 1) Limit Greenfield site consumption by maximising Urban Capacity of all settlements.  | ✓✓          |  |
| 2) Maximise Urban Capacity and allow Greenfield site consumption.  | ✓           |  |
| 3) Seeks to utilise Greenfield sites prior to consideration of greenbelts.   | ✓           |  |
| 4) Strategy considers limited utilisation of land, beyond the green belt, in the open countryside to meet local demands, subject to sustainability considerations. | X           | Development under Option 3 could encourage new businesses and support the existing employers. However loss of greenfield sites may have an effect on the quality of the environment, it is important to provide a good quality environment as this encourages investment by helping to retain existing businesses and attracting more potential investors to the District. |
| Two Options to address open space provision are suggested.   |             | Retaining and protecting open space will bring commercial benefits and help provide a good quality environment which encourages investment by helping to retain existing businesses and attracting more potential investors to the District.   |
| 1) (Question 52) : Retain and protect open space from all developments   | ✓✓          |  |
| 2) (Question 53): Can some open land be lost to improve the quality of other open space or alternative provision made?   | ✓✓          |  |
| <b>Issue 8.1 Location of new retail space</b>  |             |  |
| <b>Issue 8.4 Type of land use at the town centre - Mixed or protected development</b>  |             |  |

| Option (abridged)  | Performance | Commentary/explanation   |
|--|-------------|--|
| <b>Issue 8.5 Type of Land-use in the Local Centres</b>   |             |  |
| 1 (Question 29, Question 32): Adopt sequential approach to locate new retail spaces, i.e., utilise existing town centre area, followed by edge-of-centre locations and out-of-centre locations.  | ✓           | Allowing more retail units in the town centre could potentially increase economic growth and provide employment opportunities and help reduce unemployment. The potential increase in traffic can be mitigated through a sound transport/ traffic management plan, Green travel plans.   |
| 2 (Question 30): Create opportunity for local retail shopping in business area (Maylands area)   | ✓           | Option 2 would lead to the increased viability and vitality of the Maylands area.  |
| 3. The Issues and Options Paper presents Options for location of commercial shops, non-shops and offices. Three Options are proposed:<br>1) Allow non-shop use in Office areas<br>2) Encourage mixed land use<br>3) Retain and protect office use in town centres. | ✓<br>✓<br>✓ | Notwithstanding the role A3 and A4 uses play in delivering vibrant centres, the restriction of such uses may be required as these can often be a nuisance to local residents.<br><br>Options 3 (1) and 3 (2) encourage mixed use areas which would help reduce the need to travel and help achieve sustainable prosperity.<br><br>Option 3 (3) would help provide for a wider range of employment opportunities. |
| 4. Two Options to direct future development of local centres are discussed in the strategy:<br>1) Retain and protect shopping facilities in local centres<br>2) Support a more flexible approach to non-shop uses in local centres                                 | ✓<br>✓      | Ensuring shopping facilities and services within local centres under Option 4 (1) and (2) would help meet needs locally, help ensure economic diversity and reduce the need to travel.   |
| <b>Issue 6.1, 6.2, 6.3 : Housing needs – New development and densification</b>   |             |  |
| The Issues and Options Paper aims to provide a balance between the demand and supply of affordable housing, while considering Greenfield sites.  |             |  |

| Option (abridged)  | Performance      | Commentary/explanation  |
|--|------------------|---|
| 1) Housing Growth Scenarios:<br>A) Adopting RSS 14 recommendation of 6300 dwellings without a need to review the Green belt.<br>B) Council's estimate of housing need- 7100 dwellings- to be achieved by maximising the Urban Capacity and utilise some green field sites.<br>C) RSS 14 original proposal of 8,200 dwellings which may require utilisation of more Greenfield sites.<br>D) 10,000 dwellings, suggested by RSS 14 objectors | ✓<br>✓<br>✓<br>✓ | A steady supply of housing is necessary to generate vitality and facilitate continued economic prosperity and helps support local shops and services required by local residents. However, housing without the supporting employment opportunities, could lead to an increase in out-commuting. New housing should be designed to a high quality and include a variety of dwelling types and sizes.<br><br>The link between housing and employment growth will need to be monitored to ensure a housing/employment balance. |
| 3) Housing Capacity and Location<br>A (Question: 11): Focusing development within Hemel Hempstead  | ✓                | Focusing development in the built up areas under Option 3A could encourage new businesses and support the existing employers as well as providing employment opportunities in accessible locations, thereby reducing the need to travel.  |
| B (Question 12): Distribute housing requirement, beyond Hemel Hempstead.   | X                | Focusing development evenly around the District in Option 3B could result in housing growth without the supporting employment opportunities, which could lead to an increase in out-commuting.  |
| C (Question 13): Options for housing development beyond 7100 dwellings:<br>i) Increase density at Hemel Hempstead town centre<br>ii) Extend to Greenfield sites within Hemel Hempstead<br>iii) Extend to Greenfield sites around other existing settlements  | ✓<br>✓<br>X      | Focusing development in the built up areas under Option C i could encourage new businesses and support the existing employers as well as providing employment opportunities in accessible locations, thereby reducing the need to travel.<br><br>Loss of Greenfield sites could have detrimental impact on the quality of the built environment.  |
| D (Question 14): Location for Greenfield extension, if necessary<br>i) Around Hemel Hempstead<br>ii) Around Berkhamstead<br>iii) Around Tring<br>iv) Settlements outside Green belt  | ✓<br>✓<br>✓<br>X | Urban extensions may increase travel distances and have negative environmental impacts however the Options would help contribute to meeting housing targets which in turn will help facilitate economic development and the environmental impacts can be mitigated through phasing of development, careful siting and design, green gaps and improved open spaces.  |

| Option (abridged)   | Performance | Commentary/explanation   |
|---|-------------|--|
| v) Distributed among different settlements  | X           | Growth under Options IV and V will lead to dispersal of residential development with limited supporting facilities. The growth is unlikely to support a public transport network   |
| 4) Increasing density and Location<br>A (Question 13, 16) Increase housing densities, beyond 50 dwellings/ha, in all residential neighbourhoods | ✓           | Increase in housing densities will result in prudent use of land resources and help ensure the viability and vitality of these areas however supporting services, amenities and employment opportunities, will be required otherwise out-commuting would increase. |
| B) Settlement considered for densification  | ✓           |  |
| i) Hemel Hempstead  | ✓           |  |
| ii) Berkhamsted   | ✓           |  |
| iii) Tring  | ✓           |  |
| <b>Issue 9.1 : Addressing traffic – to ease congestion</b>  |             |  |
| 1) Develop town and local centres   | ✓           | All measures listed are likely to result in positive outcomes in respect of this SA objective. Increased accessibility, road enhancements and reduction in congestion will help improve quality of life, promote economic growth and enhance the Districts image.  |
| 2) Provide and improve public transport   | ✓           |  |
| 3) Encourage cyclist and pedestrian access to town and local centres  | ✓           |  |
| 4) Improve road infrastructure, without attracting more traffic   | ✓           |  |
| 5) Design Green Traffic plans for local and major traffic generators.   | ✓           |  |
| <b>Issue 9.3 Increasing Accessibility</b>   |             |  |
| Five Options for improving accessibility to services are presented:   | ✓           | Increase in housing densities will help ensure the viability and vitality of these areas however supporting services, amenities and employment opportunities, will be required otherwise out-commuting would increase.   |
| 1) High density development near appropriate passenger transport interchange  | ✓           |  |
| 2) Low cost, affordable housing close to basic amenities  | ✓           | Provision of affordable housing will help retain and encourage key workers to the District and help create a mixed community which will further help sustain economic prosperity   |
| 3) Encourage live/work units  | ✓           |  |

| Option (abridged)  | Performance         | Commentary/explanation   |
|--|---------------------|--|
| 4) Improve and promote cyclist and pedestrian network<br>5) Consider accessibility to all, including the disabled  | ✓                   | and diversity.<br><br>Provision of live/work and commercial mixed use should be supported.<br><br>Options 4 and 5 will help reduce congestion on local strategic roads which will have commercial benefits and increase accessibility to employment opportunities. |
| <b>Issue 10.1 Community facility provision, 10.2 Education provision</b>   |                     |  |
| Three Options for provision of community facilities are proposed:<br>1 (Question 41) Locate key community facilities in most accessible areas, both in towns and villages<br>2 (Question 42): Seek alternative community uses for available community buildings along with enhancing existing community facilities.<br>3 (Question 43): Seek contributions from new developments to meet demands for community facilities. | ✓<br><br>✓<br><br>✓ | The proposed community facilities will provide for further employment opportunities.   |
| Ideas on facilities for education, especially to meet needs beyond basic educational needs, like extended schools and community utilities are discussed:<br>1 (Question 46): Provide extended school facilities in selected schools<br>2 (Question 47): Utilization of surplus school premise space for alternative social/community purposes.   | ✓<br><br>✓          | Provision of extended education facilities will help improve the skills base of Dacorum's population.  |
| <b>Issue 6.6: Delivering affordable housing</b>  |                     |  |
| Three Options on affordable housing location are proposed (Question 21):<br>1. On Large sites<br>2. On Greenfield sites<br>3. On sites with high accessibility.  | ✓<br><br>✓<br><br>✓ | Provision of affordable housing will help retain and encourage key workers to the District and help create a mixed community which will further help sustain economic prosperity and diversity.  |

**SA/SEA Objective 20: Revitalise town centres to promote a return to sustainable urban living**

| Option (abridged)   | Performance | Commentary/explanation   |   |
|---|-------------|--|---|
| <b>Issue 5.1: Spatial strategy</b><br><b>Issue 5.2 , Issue 7.2: Employment Opportunity areas</b>  |             |  |   |
| The Issues and Options Paper proposes growth focused at Hemel Hempstead and other settlements. Two Options considered are:  |             | Development under Option 1 will contribute to the viability and self sufficiency of the town centre, will reduce the need to travel and average journey distances and will increase the potential for cycling and walking and improve air quality. |   |
| 1 (Question 25) Promote concentrated and compact development at Hemel Hempstead.  | ✓✓          |  |   |
| 2 (Question 24) Distribute development opportunities between three settlements- Hemel Hempstead, Berkamstead and Tring.   | ✓           | Focusing development in the key settlements will help support the town centre employers and promote economic growth, enhance the town's image and access; reduce the number of essential trips as well as journey length.                          |   |
| 3 (Question 26) Employment areas and Land use: Three Options for utilising the existing isolated employment sites within towns/large villages or Rural parts of the Borough are suggested:<br>a) Protect site for Employment only<br>b) Allow Mixed- land use development<br>c) Allow alternative land use, eg., housing, on the site |             | Option a would secure land for employment uses, which will help reduce unemployment and help revitalise the town centre.   |   |
|   |             | ✓  | Option b encourages a mix of commercial and residential uses which would enable people to live close to their work, reduce travel distances and consequently improve air quality and the built environment. |
|   |             | X  |   |
| <b>Issue 5.3: Protection of Green Belt</b><br><b>Issue 5.4: Protection of the Open Countryside</b><br><b>Issue 10.5 Protection of Open Green space against development</b>  |             |  |   |
| The Issues and Options Paper considers a number of Options to treat the green belt. Four Options considered are:  |             | Development under Option 1 will contribute to the viability and self sufficiency of the town centre and help stimulate town centre investment.   |   |
| 1) Limit Greenfield site consumption by maximising Urban Capacity of all settlements.   | ✓           | Level of Greenfield development is unknown a this stage so a judgment on Option 2 impacts on this objective can not be made.   |   |



| Option (abridged)   | Performance        | Commentary/explanation   |
|---|--------------------|--|
| 2) Maximise Urban Capacity and allow Greenfield site consumption.   | ?                  | Development of greenfield sites under Option 3 could result in loss of public open spaces which will have a detrimental impact on the quality of the built environment.  |
| 3) Seeks to utilise Greenfield sites prior to consideration of greenbelts.  | X                  |  |
| 4) Strategy considers limited utilisation of land, beyond the green belt, in the open countryside to meet local demands, subject to sustainability considerations.  | -                  |  |
| <p>Two Options to address open space provision are suggested.</p> <p>1) (Question 52) : Retain and protect open space from all developments</p> <p>2) (Question 53): Can some open land be lost to improve the quality of other open space or alternative provision made?</p> | <p>✓✓</p> <p>✓</p> | Retaining and protecting open space will bring commercial benefits and help provide a good quality environment which encourages investment by helping to retain existing businesses and attracting more potential investors to the District. |
| <p><b>Issue 8.1 Location of new retail space</b></p> <p><b>Issue 8.4 Type of land use at the town centre - Mixed or protected development</b></p> <p><b>Issue 8.5 Type of Land-use in the Local Centres</b></p>   |                    |  |
| 1 (Question 29, Question 32): Adopt sequential approach to locate new retail spaces, i.e., utilise existing town centre area, followed by edge-of-centre locations and out-of-centre locations.   | ✓                  | Additional retail premises will help strengthen the town's economy and provide employment opportunities.   |
| 2 (Question 30): Create opportunity for local retail shopping in business area (Maylands area)  | -                  |  |

| Option (abridged)  | Performance                | Commentary/explanation   |
|--|----------------------------|--|
| <p>3. The Issues and Options Paper presents Options for location of commercial shops, non-shops and offices. Three Options are proposed:</p> <p>1) Allow non-shop use in Office areas</p> <p>2) Encourage mixed land use</p> <p>3) Retain and protect office use in town centres.</p>  | <p>?</p> <p>?</p> <p>✓</p> | <p>Further information is required on the location of development under Options 3 (1) and (2) before a judgement can be made.</p> <p>Option 3 (3) would protect land for office uses and help reduce unemployment.</p>   |
| <p>4. Two Options to direct future development of local centres are discussed in the strategy:</p> <p>1) Retain and protect shopping facilities in local centres</p> <p>2) Support a more flexible approach to non-shop uses in local centres</p>  | <p>✓</p>                   | <p>Both Options would help revitalise local centres as they target development in highly accessible locations.</p>   |
| <p><b>Issue 6.1, 6.2, 6.3 : Housing needs – New development and densification</b></p>  |                            |  |
| <p>The Issues and Options Paper aims to provide a balance between the demand and supply of affordable housing, while considering Greenfield sites.</p>   |                            |  |
| <p>1) Housing Growth Scenarios:</p> <p>A) Adopting RSS 14 recommendation of 6300 dwellings without a need to review the Green belt.</p> <p>B) Council's estimate of housing need- 7100 dwellings- to be achieved by maximising the Urban Capacity and utilise some green field sites.</p> <p>C) RSS 14 original proposal of 8,200 dwellings which may require utilisation of more Greenfield sites.</p> <p>D) 10,000 dwellings, suggested by RSS 14 objectors.</p> | <p>✓</p> <p>✓</p> <p>✓</p> | <p>A steady supply of housing is necessary to generate vitality of town centre areas and facilitate continued economic prosperity and helps support local shops and services required by local residents. However, housing without the supporting employment opportunities, could lead to an increase in out-commuting. However attention should be given to ensuring that new housing should be designed to a high quality and include a variety of dwelling types and sizes.</p> <p>The link between housing and employment growth will need to be monitored to ensure a housing/employment balance.</p> |

| Option (abridged)   | Performance | Commentary/explanation   |
|---|-------------|--|
|   | ✓           |  |
| 3) Housing Capacity and Location<br>A (Question: 11): Focusing development within Hemel Hempstead   | ✓✓          | Development under Option 3 A and C i will contribute to the viability and self sufficiency of the town centre.   |
| B (Question 12): Distribute housing requirement, beyond Hemel Hempstead.  | -           | With no information on the location and quality of greenfield sites, Option 3C (ii) is assessed to having uncertain impact. But loss of greenfield sites could have negative impact on the quality of the built environment. |
| C (Question 13): Options for housing development beyond 7100 dwellings:<br>i) Increase density at Hemel Hempstead town centre   | ✓✓          |  |
| ii) Extend to Greenfield sites within Hemel Hempstead   | ?           |  |
| iii) Extend to Greenfield sites around other existing settlements   | -           | The dispersed pattern of growth under Option iii will generally lead to increased distances between services and increase in car dependence. The growth is unlikely to support the revitalization of local centres.          |
| D (Question 14): Location for Greenfield extension, if necessary<br>i) Around Hemel Hempstead<br>ii) Around Berkhamstead<br>iii) Around Tring<br>iv) Settlements outside Green belt<br>v) Distributed among different settlements | ✓           | Development under all Options may have positive effects on the use of local goods, services and amenities.   |
| 4) Increasing density and Location<br>A (Question 13, 16) Increase housing densities, beyond 50 dwellings/ha, in all residential neighbourhoods   | ✓           | All Options recognise the significance of town centre-living to help strengthen the town's economy.  |

| Option (abridged)  | Performance              | Commentary/explanation   |
|--|--------------------------|--|
| B) Settlement considered for densification<br>i) Hemel Hempstead<br>ii) Berkhamsted<br>iii) Tring  |                          |  |
| <b>Issue 9.1 : Addressing traffic – to ease congestion</b>   |                          |  |
| 1) Develop town and local centres<br>2) Provide and improve public transport<br>3) Encourage cyclist and pedestrian access to town and local centres<br>4) Improve road infrastructure, without attracting more traffic<br>5) Design Green Traffic plans for local and major traffic generators.   | ✓✓<br>✓<br>✓✓<br>XX<br>✓ | Reducing congestion can help revitalise town centres and also help improve accessibility to jobs.<br><br>Provision of road infrastructure is likely to result in increase traffic levels and congestion and make the local/town centres less appealing to potential investors. |
| <b>Issue 9.3 Increasing Accessibility</b>  |                          |  |
| Five Options for improving accessibility to services are presented:<br>1) High density development near appropriate passenger transport interchange<br>2) Low cost, affordable housing close to basic amenities<br>3) Encourage live/work units<br>4) Improve and promote cyclist and pedestrian network<br>5) Consider accessibility to all, including the disabled | ?<br>?<br>?<br>✓<br>?    | Without further information on the precise locations of Options 1, 2 and 3 a judgement on their impact on town centre revitalisation can not be made.<br><br>Option 4 will help reduce congestion on local strategic routes.   |
| <b>Issue 10.1 Community facility provision</b><br><b>10.2 Education provision</b>  |                          |  |

| Option (abridged)   | Performance | Commentary/explanation  |
|---|-------------|---|
| <p>Three Options for provision of community facilities are proposed:</p> <p>1 (Question 41) Locate key community facilities in most accessible areas, both in towns and villages</p> <p>2 (Question 42): Seek alternative community uses for available community buildings along with enhancing existing community facilities.</p> <p>3 (Question 43): Seek contributions from new developments to meet demands for community facilities.</p> | ✓           | <p>The proposed community facilities will provide for further employment opportunities in town and local centres.</p>   |
| <p>Two Options for provision of education facilities are proposed:</p> <p>1 (Question 46): Provide extended school facilities in selected schools</p> <p>2 (Question 47): Utilisation of surplus school premise space for alternative social/community purposes.</p>  | ✓           | <p>Provision of extended education facilities will help improve the skills base of Dacorum's population and help develop a skilled workforce. .</p>   |
| <b>Issue 6.6: Delivering affordable housing</b>   |             |   |
| <p>Three Options on affordable housing location are proposed (Question 21):</p> <p>1. On Large sites</p> <p>2. On Greenfield sites</p> <p>3. On sites with high accessibility.</p>  | ✓           | <p>Meeting affordable housing targets will help improve the well being of the population and help reduce social exclusion, help provide housing for key workers and therefore provide businesses with a diverse workforce</p> |