

APPENDIX 3

APPRAISAL OF ADOPTED STRUCTURE PLAN

CAMBRIDGESHIRE AND PETERBOROUGH STRUCTURE PLAN REVIEW – SUSTAINABILITY APPRAISAL

Review of the 1995 Adopted Structure Plan

Context

1. Two elements in the preparation for the sustainability appraisal of the Cambridgeshire and Peterborough Structure Plan Review have been completed to date:
 - initially a characterisation document was prepared, setting out the key features of the Structure Plan area and identifying the key issues that Cambridgeshire and Peterborough faces;
 - a sustainability appraisal framework, based on the characterisation document, was then developed and refined through consultations with the Local Agenda 21 sub group and local authority officers.

This framework will eventually be used to assess the extent to which the emerging Structure Plan Review conforms to the identified sustainability objectives for Cambridgeshire and Peterborough.

2. This report sets out the findings of the next component of the work, which was an assessment of the Structure Plan that was adopted in 1995 against the sustainability appraisal framework. The aim of this process was to indicate the overall sustainability of current Structure Plan policies, and identify areas where revisions may be required as part of the Review process. The appraisal of the adopted Structure Plan was in two parts:
 - the Aims and Guiding Principles of the adopted Structure Plan have been assessed against the Sustainability Objectives and Decision-making Criteria of the appraisal framework to determine whether they continue to reflect the sustainability issues facing Cambridgeshire and Peterborough;
 - the observed outcomes and recent trends across the Structure Plan area have been assessed, to determine whether policies are having a beneficial impact upon sustainability issues and identify where corrective action is required.

Methodology

Appraisal of Aims and Guiding Principles

3. To complete the first element of this task, the main Aims and Guiding Principles listed at the beginning of the adopted Structure Plan (pages 6-11) have each been assessed against the Sustainability Objectives identified in the appraisal framework, using the Decision-making Criteria to guide the assessment. The adopted Structure Plan also sets out specific objectives relating to each policy area (settlement, housing, industry and business,

shopping, transport, community services and infrastructure, energy generation and conservation, agriculture, minerals and waste management, rural and urban conservation, and tourism, recreation and leisure). These objectives have also been referred to, since they apply in greater detail the overall Aims and Guiding Principles of the adopted Structure Plan.

4. The contribution of every Aim and Guiding Principle to the achievement of each sustainability objective has been assessed. A relative assessment has been made, recording minor or major positive contribution, major or minor negative impact and those objectives on which there is no impact or an uncertain impact. A summary of the findings follows, with copies of the detailed assessment tables forming Appendix 4. The findings can be used as a baseline against which to assess the sustainability of the emerging Structure Plan Review.

Appraisal of progress towards sustainability

5. The sustainability appraisal of the adopted Structure Plan had a secondary element, which was to assess whether the specified Aims and Guiding Principles are beginning to influence development. Clearly, as the Structure Plan was only adopted in 1995, there has been little time for its policies to have influenced development patterns or fed down into Local Plan policies and proposals. However, monitoring the achievements of the Structure Plan is essential to assess ongoing changes. This report therefore considers each of the 'targets for environmental sustainability' set out in Table 1 of the adopted Structure Plan (pages 18-19). An assessment can then be made of how much progress has been made towards achieving each target.
6. Taken together, the outputs of the two above tasks will inform potential changes to be made to the aims, principles and objectives in the review of the Structure Plan. Changes made should enable the new plan to closely reflect and tackle the sustainability issues identified in Stage 1 of the study.

Summary of findings for each Aim and Guiding Principle (The full text of each Guiding Principle is included in the individual appraisal tables)

7. The following paragraphs outline the key findings in relation to each of the adopted Structure Plan's Aims and Guiding Principles. The text identifies those areas in which the adopted plan should be having a positive impact on sustainability and those areas in which there may be potential conflicts or a negative effect.
8. **Aim 1: to sustain and improve the quality of the environment for the benefit of present and future generations.** Stating this aim, which covers environmental quality both now and in the future, at the outset of the Structure Plan is an extremely positive sign of sustainability. Inevitably the aim is fairly general, but it is supported by later aims and principles. Guiding Principle 1 provides particular support, as do the more specific objectives in chapters such as 'Rural and Urban Conservation' and 'Energy Generation and Conservation.' Aim 1 focuses heavily on the environment and generally scores well on the sustainability objectives dealing with environmental

protection and the use of natural resources. However, the likely impacts on biodiversity and pollution levels are unclear as the Aim focuses on sustaining and improving the environment for present and future generations rather than conserving habitats and species for their own intrinsic value. The main point of conflict for this aim under the sustainability objectives is that it may inhibit economic growth and investment. Current Government guidance seeks approaches to sustainability that integrate environmental, economic and social objectives. Consequently the Structure Plan Review will need to address the interlinkages between environmental, social and economic issues in more detail, in addition to focussing on environmental protection.

9. **Aim 2: to make adequate provision for housing, jobs, services, and facilities, with priority for population living and working within the County.** Aim 2 is specifically directed at meeting local needs and should positively contribute to the achievement of the sustainability objectives addressing social disparity issues. However, Aim 2 makes no reference to locational/concentration aspects of development, which can have important implications for sustainability. This issue is picked up in Policy SP3/1, but could be further emphasised. Location of development will influence the extent to which services and facilities are accessible to all sectors of the community. Locational factors including potential development of clusters, continued emphasis on the north and east of the Structure Plan area and enhancement of rural vitality will all need to be addressed in the Structure Plan review. Furthermore, the Aim does not define 'adequate provision', which could potentially mean a large scale of development which could have negative impacts for sustainability. Depending on the extent, location and type of development, this Aim could be highly sustainable particularly in social and economic terms, so long as a careful balance between jobs, housing and services is achieved to secure maximum sustainability benefits. It could conflict though with those objectives relating to conservation of urban and rural environments, and species and habitats. Finally new development must be satisfactorily located in relation to likely climate change. A long term strategy begun now will potentially eliminate significant flooding problems over the lifespan of any new development.
10. **Aim 3: to improve the quality of life in those parts of the County, and for sections of the community, which are relatively disadvantaged.** This ambitious Aim seeks to address environmental, economic and social issues, all of which affect quality of life. It also seeks to direct positive improvements towards those areas most in need. Aim 3 should have a positive impact on most social issues, such as improving access to employment opportunities, housing and access to services and facilities, all of which are crucial elements in quality of life. However, quality of life also includes other facets, such as access to a high quality natural environment. The aim lacks detail on how it will be implemented and is unclear about which elements of quality of life will be improved. Improvements in quality of life are often dependent on income and the state of the economy. Better quality of life for the relatively disadvantaged requires action to target economic growth to disadvantaged areas, but the aim does not make it clear how this could be achieved. As an opening statement on quality of life, the

Aim is welcome. Subsequent objectives within individual chapters provide more detailed guidance on the type of improvements sought.

11. **Aim 4: to protect high quality agricultural land, and to reduce the rate of consumption of non-renewable resources of all kinds.** This fourth Aim begins to address more focussed and specific land use issues than the first three aims. The likely impacts on the sustainability objectives are generally easier to identify. Protection and continued use of agricultural land could have positive or negative impacts on biodiversity and water quality, depending on the intensity of agricultural methods and practices. This issue could be addressed in the Aim. For Cambridgeshire and Peterborough, potentially the most significant area of conflict between this Aim and the sustainability objectives arises in relation to the climate change issue. There is considerable uncertainty how climate change will manifest itself at the local level, but the potential for increased risk of fluvial flooding should be considered in an area that is characterised by its low-lying land levels. In addition, protection of agricultural land could potentially conflict with a long term strategy for accommodation of climate change, which may include provision of replacements for lost habitats and managed retreat in response to sea level rises, although how far this could affect north Cambridgeshire is uncertain. The aim also seeks a reduction in the rate of consumption of non-renewable resources. The 'sustained economic growth' sought by the objectives and decision-making criteria relating to the economy may require significant consumption of non-renewable resources. Potentially this could conflict with Aim 4, although efficiency in resource use will be encouraged which may aid competitiveness. It may also support growth of green technologies. Individual chapter objectives address resources issues (e.g. Transport and Energy Generation and Conservation) and protection of agricultural land (Agriculture). The Agriculture chapter objectives also tie in positively with rural economy issues.
12. **Aim 5: to protect and conserve water resources and water in the environment.** Cambridgeshire and Peterborough contains many wetland areas and this aim should be particularly beneficial for the Fenland environment, where water is an integral feature. In many respects the Aim scores highly in this sustainability assessment. An holistic approach to water issues must be taken, including catchment management plans, availability of water to meet man's and environmental needs, climate change implications and flooding issues. The Environment Agency has indicated that sufficient water resources are available to meet the requirements of development over the next Structure Plan period. Little further guidance on water resource protection is given by subsequent chapter objectives, although policies SP8/4 and SP8/5 provide additional details. This issue, and related climate change matters, will need to be fully addressed in the Structure Plan Review.
13. **Aim 6: to conserve and improve the urban and rural environment.** This Aim scores fairly positively in sustainability terms, although it does not make specific reference to the importance of nature conservation. It should have a particularly beneficial effect on local character and distinctiveness as well as people's day-to-day environment. Conservation of buildings may limit

the potential to make better use of urban land and to implement energy efficiency measures. It could also limit economic growth, although conversely attractive environments can stimulate inward investment. This Aim is closely linked to Aim 5 in that protection of surface and ground water resources may preclude development in some parts of urban areas and limit effective use of urban land. Conflict may also arise between this Aim and efforts to manage the risk of flooding posed by climate change. The broad implications of this Aim are picked up in detail directly by Guiding Principle 7, and further developed by specific objectives in the Rural and Urban Conservation chapter.

14. **Aim 7: to encourage energy efficiency.** This is another focussed Aim, which should directly help to achieve a number of the sustainability objectives. There are few potential areas of conflict between this Aim and the sustainability objectives. However, the aim could be improved by specifically addressing related issues, such as renewable energy. A dedicated chapter on energy generation and conservation provides clear support for this Aim and overall energy sustainability issues.
15. **Guiding Principle 1: Sustainable development.** This Guiding Principle specifically seeks sustainable development, with a strong emphasis on the environment. It should have positive sustainability impacts relating to issues such as nature conservation, pollution and the built and rural environment. The definition of sustainability within the Guiding Principle predates the recent government emphasis on synergy between environmental, economic and social considerations. The sustainability objectives and decision making criteria revealed particular concerns about the impact of possible restrictions, for environmental reasons, on economic growth and the availability of development land.
16. **Guiding Principle 2: Economic development and employment.** This Guiding Principle should generally have positive economic impacts. Selective dispersal of investment in jobs to centres in the north and east could also potentially help to achieve greater social equality. However, this Guiding Principle ignores deprived wards in the south and east. The principle appears to be sustainable in terms of many of the environmental objectives, because it should remove some of the development pressures and congestion experienced in the south and west. However, this principle could conflict with those sustainability objectives that seek to reduce the length and number of motorised journeys and to improve transport systems to support economic growth. Therefore travel and transport issues need to be better addressed in this Guiding Principle, although they are picked up by more detailed objectives in the Transport chapter. There is also a potential issue regarding flood risk and accommodating climate change, as the north and east of the Structure Plan area is that which is most liable to increased flooding.
17. **Guiding Principle 3: Areas of disadvantage.** Although Guiding Principles 3, 4 and 5 have been assessed individually, in many ways they work together. Guiding Principle 3 tackles areas of disadvantage, and closely relates to the first sustainability objective in the framework. It is closely tailored with Guiding Principle 4, which seeks to direct the rate and location of growth,

and with Guiding Principle 5, which addresses the concentration of development. Guiding Principle 3 generally scores well on 'Social Progress' objectives. In addition it should have a very sustainable economic impact, as it steers growth and investment towards the areas most in need. The Guiding Principle fails to tackle more localised disparities within a city or between a town and its surrounding rural area, and may constrain economic growth in the more vibrant south and east.

18. **Guiding Principle 4: The rate and location of growth.** This Guiding Principle seeks protection for the environment in the south and west of Cambridgeshire, and the supporting text seeks redirection of growth to the north and east. Consequently a positive impact upon relative disparities should result. A selective and slower rate of growth should help to protect sensitive environments and the Guiding Principle generally scores well on environmental issues. The main concern relates to possible restrictions on investment and economic progress.
19. **Guiding Principle 5: Settlement pattern.** This guiding principle will have a beneficial impact upon general sustainability. It should enhance access to employment opportunities, services and facilities in urban areas. Concentrated development should help to protect undeveloped and agricultural land from development. This guiding principle also has positive implications for sustainable travel/transport systems and for reducing the need to travel. The main sustainability concern is that people living in rural areas may not benefit from the effects of this Guiding Principle, and the interpretation that is placed on allowing 'most communities' 'limited growth.'
20. **Guiding Principle 6: Transport policies.** In sustainability terms this Guiding Principle rates highly, with the exception of its support for road improvements. The Guiding Principle should contribute to the achievement of a significant number of the sustainability objectives and is well supported by a wide range of objectives in the subsequent Transport chapter. The emphasis on public transport is particularly positive. This should help improve access to jobs and services and therefore reduce social inequality. It should also help reduce reliance on the private car creating air quality improvements. In addition it will reduce CO₂ emissions and allow better use of urban land since less parking space will be needed. However, the guiding principle does not deal with the wider theme of reducing the need to travel. No indication is given as to how transport development, particularly road schemes, will be reconciled with the need to protect landscape, biodiversity and agricultural land. There is also potential for conflict with the sustainability objective relating to sustained economic growth. In order to avoid conflict, there is a need to ensure that any restriction in car usage is co-ordinated with improvements in public transport.
21. **Guiding Principle 7: Rural and urban conservation.** This Guiding Principle closely follows Aim 6. It should lead to improvements in the attractiveness of rural and urban environments, and enhance the quality and distinctiveness of the area's landscapes, townscapes and settlement settings. The Guiding Principle should also protect undeveloped and agricultural land from development pressures. Conservation of the countryside should

protect biodiversity, although nature conservation is not specifically addressed which represents a weakness. The implementation of flood protection measures to conserve historic buildings and features could conflict with the objective of sustainably accommodating the climate change process. Guiding Principle 7 may also limit availability of land for certain uses, such as the provision of housing and economic uses. Conservation of the built environment, particularly listed buildings, may restrict the potential for energy conservation measures to be implemented.

Targets for Environmental Sustainability

22. Since the adoption of the replacement Cambridgeshire Structure Plan in December 1995, four Annual Monitoring Reports have been published. These reports track the progress that is being made towards meeting the 'targets for environmental sustainability' and other objectives set out in the Structure Plan (such as housing completion rates, employment levels, etc.). Several topic areas are covered by a second document entitled 'Cambridgeshire and Peterborough's State of the Environment Report' (December 1998), including energy, agriculture, rural and urban conservation, and tourism, recreation and leisure.
23. The Structure Plan sets out eighteen 'targets for environmental sustainability', which cover air, water, energy, waste, transport, built environment, archaeology and rural environment. Full data for monitoring purposes has only been available for five targets: renewable energy; built environment; archaeology; waste; and biodiversity. The progress made towards the thirteen remaining targets has not been fully monitored due to insufficient information being available to draw meaningful conclusions. The following paragraphs summarise the progress that has been made towards the five targets for which full details are available.
24. **Renewable energy:** Target TE2 aims to increase the amount of electricity generated from renewable sources to 10MW by 2001 and 20MW or more by 2006. By 1998 a level of only 3.54MW had been achieved; however, a 31MW straw burning power station under construction will result in this target being exceeded.
25. **Built environment:** Target TB2 aims to conserve the built heritage. It would seem that progress is being made, as the number of listed buildings has continued to rise. The percentage of listed buildings at risk remains below the national average as desired by the target, although there is no data to indicate whether this figure is falling. The long term target is a figure of 4%.
26. **Archaeology:** Target TAR1 aims to ensure that all significant sites are properly managed and protected from damage. Between 1997 and 1999 the number of SAM's increased. This indicates success in conservation terms through additional designations, although does not necessarily cover management and protection from damage.
27. **Waste:** Target TD2 aims to increase the proportion of household and controlled waste that is recycled, reclaimed and recovered, although it has now been superseded by recent national targets. Progress has been made

towards Target TD2, but it will not be met in the given timescale. Cambridgeshire and Peterborough though is well ahead of the national average and has made considerable progress over the last few years. The Structure Plan review will need to take account of the revised national targets seeking steady increases in recycling. However, given the area's current success, the Cambridgeshire and Peterborough area should be capable of achieving more challenging targets.

28. **Biodiversity:** Target TR4 aims to protect the Structure Plan area's biodiversity. The annual monitoring report concludes that progress has been made towards meeting this target. This conclusion is based on the fact that 26 Habitat Action Plans and 19 Species Action Plans have been drawn up across Cambridgeshire and Peterborough.
29. Data is likely to become available for assessing progress towards the targets relating to landfill and transport. The former will be provided by annual surveys of waste arisings, which the two Waste Planning Authorities intend to continue to undertake. Data relating to commuting distances and modes will be available in the future from regular surveys being undertaken for the 'travel to work initiative' and from the forthcoming 2001 census.
30. However, there are a number of areas where methods of data collection will need to be established. Improved data collection is needed to monitor air quality. Currently, the only pollutant that is comprehensively monitored throughout the Structure Plan area is nitrogen dioxide. This data indicates that nitrogen dioxide levels are falling. The available evidence suggests that other forms of air pollution are also decreasing. Similarly improved data collection by the Environment Agency is needed to monitor the targets relating to water (e.g. percentage of river miles in different quality categories); for the targets relating to the rural environment; and for monitoring the energy target relating to CO₂ emissions.
31. Generally the findings of monitoring seem to indicate positive moves towards key targets. Some issues have not been assessed. For instance, the Aims and Guiding Principles seek to redirect growth to the north and east of the Structure Plan area. Such a shift in new development could help to achieve some sustainability objectives. However, such changes in growth patterns have proved difficult to monitor and a successful assessment method has yet to be found. In other cases, such as recycling, where considerable progress has been made there is still scope for improvement. Even achieving TD2's target of 25% of waste to be recycled by 2000, would still leave 75% to be disposed of by other means.
32. Consideration should also be given to the ease of measurement of progress towards each target. For example, target TB1 aims to improve the environment of existing townscapes and the design quality of new development. However, the annual monitoring report recognises that assessment of this target is difficult.

Sustainability Issues for the Structure Plan Review

33. The adopted Structure Plan sets out seven initial Aims. The Aims are brief and general, and inevitably therefore do not fully cover the range of sustainability objectives identified in the sustainability appraisal framework for the Structure Plan review. However, it is clear that considerable emphasis was placed upon environmental sustainability in drafting the adopted Structure Plan. The positive focus upon sustainability, the environment and future generations in the opening aim form a welcome emphasis from the outset. The Guiding Principles develop the Aims, and are themselves expanded by the objectives of the individual chapters. The Aims, Guiding Principles and objectives all act as the framework for individual policies (which have not been subject to detailed appraisal). It is important, therefore, that this framework sets out a clear message for achieving sustainability for the policies that follow.
34. This appraisal has raised a number of key sustainability issues that should be addressed by the Structure Plan Review:
- **Sustainability:** In national policy terms, the definition of sustainability has moved on from that set out in Guiding Principle 1 of the adopted Structure Plan. Recent Government guidance and publications stress the need for sustainability in economic growth and social progress. The Structure Plan's heavy emphasis upon environmental concerns has been replaced by a national emphasis on synergy between the environment, economy and social issues. The Structure Plan must address this change in emphasis and particularly consider the level of economic growth that is considered sustainable for Cambridgeshire and Peterborough area. Unlike many other parts of the country, it may be felt that commercial pressure for continued economic growth, especially in the Cambridge sub-region, should be restrained.
 - **Brownfield land:** Another fairly recent national policy development has been the increased emphasis on development of brownfield land as opposed to greenfield. Although this issue was reflected in Policy SP3/6 of the adopted Structure Plan, prior to the recent government guidance, the Review document should increase the prominence of this theme and prioritise both concentrated urban development and brownfield development. Brownfield land availability is fairly limited in Cambridgeshire, and conservation issues may limit urban redevelopment. There are a number of developments though, such as Hampton in Peterborough and some former Ministry of Defence sites to the south of Cambridgeshire, where significant areas of brownfield land have been or are being redeveloped.
 - **Density:** Maximising urban brownfield development at appropriate densities will be essential in ensuring the sustainability of future built development across the Structure Plan area. The Structure Plan review should address density issues to ensure that the most effective use is made of the urban land targeted by adopted Structure Plan aims and objectives. Density is closely linked to accessibility.

- **Sequential approaches:** Following on from the brownfield land issue, sequential approaches prioritise use of the most suitable land in sustainability terms. Whilst the adopted Structure Plan seeks concentrated development in urban areas, it could be more specific in developing a hierarchy of acceptability based on accessibility and location within urban areas.
- **Rural and disadvantaged areas:** The adopted Structure Plan places considerable emphasis on achieving benefits for areas to the north and east, and on reducing development pressure and protecting the environment to the south and west. Whilst this emphasis will help to reduce disparities at a broad scale, it will not tackle localised urban/rural differences or the problems of disadvantaged wards in the south and west of the Structure Plan area. Accessibility is a key issue, with the transport objectives stressing the importance of linking jobs, housing and services. Such efforts may not be as fruitful in rural areas and a specific approach to maintaining and diversifying the rural economy must be put in place.
- **Climate Change:** Although the adopted Structure Plan recognises the likely climate change process, little emphasis is placed by the Aims, Guiding Principles or chapter objectives on tackling resultant problems. Given that the characterisation work revealed that the Fenland area could be one of the most affected areas of England, the Structure Plan Review must begin to develop a long term approach to sustainably managing the causes and impacts of climate change and sea level rise. This approach should incorporate assessment of the likely impacts and consider the appropriate balance between flood defence measures and managed retreat. The land use planning system must also consider the appropriateness of new development locations, taking account of any likely climate change impacts over the lifetime of the development. Close coordination with management plans produced by other bodies, such as the Environment Agency will be essential.
- **Nature conservation:** Although several of the Aims, Guiding Principles and chapter objectives deal with protection of the environment generally, they are not too specific about wildlife and habitat issues. A view needs to be taken as to whether nature conservation should be primarily for the benefit of humans or whether it is important to conserve nature for its own sake. Monitoring the number of designated sites is relatively easy, but the reviewed Structure Plan's policies and targets should attempt to address more general conservation issues such as non-designated sites, wildlife resources as a whole and habitat creation.
- **Waste:** Although the Structure Plan Aims deal with pollution in a general way, waste issues receive no detailed consideration in the Aims or Guiding Principles. Recent years have seen the development of the waste hierarchy and the proximity principle. There is also an increasing focus on improving the levels of recycling that have been achieved over recent years. Although Cambridgeshire and Peterborough recycling levels are considerably in excess of the national average, considerable efforts

will be required to reach the Government's future targets. The revised Structure Plan should set out a clear broad strategy, feeding into the Waste Local Plan, for dealing in a sustainable manner with the area's waste.

- **Targets:** The targets for the adopted Structure Plan focus upon environmental issues. Use of a broader definition of sustainability will inevitably require expansion in the range and type of information collected for monitoring purposes. It is important that the Structure Plan review identifies relevant monitoring criteria, which cover the range of sustainability issues and are easily assessed.

35. In conclusion, many positive sustainability features are incorporated within the existing Structure Plan. All the sustainability objectives within the assessment framework have been successfully picked up by one or more of the Aims and Guiding Principles. In many ways it seems that the Structure Plan pre-empted much of the recent policy guidance on sustainable development. In terms of implementation trends, the Structure Plan appears to be playing its part in achieving a sustainable future for Cambridgeshire and Peterborough. Whilst the signs are positive, there is clearly a long way to go before development across Cambridgeshire and Peterborough can be considered truly sustainable. The Structure Plan review will play a key role in moving forward the basis set out in the current adopted plan.