



Centre for Sustainability

**Dacorum Local Development  
Framework  
Core Strategy – Consultation Draft**

Sustainability Appraisal Report

Appendix C – Sustainability Appraisal Framework

November 2010

## **Appendix C – The Sustainability Appraisal Framework**

This appendix provides the detailed Sustainability Appraisal Framework used to assess the Core Strategy. The sustainability objectives outlined in the Framework have been arranged under the SEA/SA topics.

Objective	Criteria	Indicators (bold indicates existing ~)
<b>Biodiversity</b>		
<p>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</p>	<p>To protect, maintain and enhance designated wildlife and geological sites (international, national and local) and protected species to achieve favourable condition</p>	<p><b>Herts QoL WH6 Condition of SSSIs (contextual indicator) and HBRC number, area and condition of SSSIs</b></p> <p><b>HBRC Change in areas designated for their intrinsic value</b></p> <p><b>HBRC Change in Priority Habitats</b></p> <p><b>Herts QoL WH3 Wildlife Sites and HBRC number and area of Wildlife Sites</b></p> <p><b>HBRC no. of Wildlife Sites lost or degraded by development or gained/secured by agreements</b></p> <p><b>Herts QoL WH1 Water voles</b></p> <p><b>Herts QoL WH2 Birds (contextual indicator)</b></p> <p><b>Herts QoL WH4 Pipistrelle bats</b></p> <p><b>Herts QoL WH5 Butterflies</b></p> <p><b>HBRC distribution/change of key species in Herts</b></p> <p><b>HBRC distribution/change of protected species in Herts</b></p> <p><b>COI 8 Changes in areas and</b></p>
	<p>To restore characteristic habitats and species, to achieve BAP targets</p>	
	<p>To support farming and countryside practices that enhance wider biodiversity and landscape quality by economically and socially valuable activities (e.g. grazing, coppicing, nature reserves)</p> <p>[not applicable to urban boroughs, such as Watford]</p>	

Objective	Criteria	Indicators (bold indicates existing ~)
		<p><b>populations of biodiversity importance</b></p> <p>% woodland cover in District</p> <p>Percentage of wildlife sites accessible by sustainable modes of travel</p> <p>Number of visitors to wildlife sites</p>
<b>Water</b>		
<p>2. To protect, maintain and enhance water resources (including water quality and quantity) while taking into account the impacts of climate change</p>	<p>To raise awareness and encourage higher water efficiency and conservation by for instance promoting water reuse in new and existing developments</p> <p>To ensure water consumption does not exceed levels which can be supported by natural processes and storage systems</p> <p>To improve chemical and biological quality and flow of rivers and encourage practices which reduce nitrate levels in groundwater</p> <p>To improve flow of rivers</p> <p>To reduce the number and severity of pollution incidents</p> <p>To maintain or restore the integrity of water dependent wildlife sites in the area</p>	<p>Level of awareness of water issues and the need for water saving (contextual indicator)</p> <p>Average household water consumption per capita</p> <p>Commercial water consumption</p> <p>Proportion of housing (existing and new development) with installed water efficient devices/water metres</p> <p><b>Herts QoL WR3 River quality objectives</b></p> <p><b>EA Biological and chemical river quality (contextual indicator)</b></p>

Objective	Criteria	Indicators (bold indicates existing ~)
		Number and severity of pollution incidents to surface water and groundwater
3. Ensure that new developments avoid areas which are at risk from flooding and natural flood storage areas	To avoid developments in areas being at risk from fluvial, sewer or groundwater flooding (for instance natural flood plains) while taking into account the impacts of climate change	Number of properties at risk from flooding
	To ensure that developments, which are at risk from flooding or are likely to be at risk in future due to climate change, are sufficiently adapted	Proportion of runoff from new developments which is directed into Sustainable Urban Drainage Systems (SUDs) <sup>1</sup>
	To promote properly maintained sustainable urban drainage systems to reduce flood risk and run off in areas outside Source Protection Zones 1 (SPZ)	
<b>Soil</b>		
4. Minimise development of land with high quality soils and minimise the degradation/loss of soils due to new developments	To safeguard high quality soils, such as agricultural land grades 1, 2 and 3a) from development [Might not be applicable for urban boroughs, such as Watford]	Amount of high quality agricultural land degraded/lost to development
	To limit contamination/degradation/loss of soils due to development	Area/percentage of contaminated land remediated  Number of development sites having a policy to safeguard soils  Area of proposed new developments on greenfield sites
<b>Climatic Factors</b>		

<sup>1</sup> Sustainable Urban Drainage Systems (SUDS) are management practices and physical structures designed to drain surface water in a more sustainable way than conventional systems.

Objective	Criteria	Indicators (bold indicates existing ~)
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>	To minimise greenhouse gas emissions (particularly CO <sub>2</sub> ) for instance through more energy efficient design and reducing the need to travel	<b>NAIE Emissions of greenhouse gases (particularly CO<sub>2</sub>) per capita grouped per type of source</b> <b>BV 63 Energy efficiency - average SAP rating of authority dwellings</b> <b>BV 80a (i) Actual/'Typical' energy consumption LA buildings - electricity</b> <b>BV 80a (ii) Actual/'Typical' energy consumption LA buildings - fossil fuels</b> <b>Herts QoL EN1 Energy efficiency in homes - overall reduction in CO<sub>2</sub> emissions %</b> <b>Herts QoL EN2 Energy efficiency in public buildings</b>
	To promote increased carbon sequestration e.g. through increases in woodland cover	
	To adopt lifestyle changes which help to mitigate and adapt to climate change, such as promoting water and energy efficiency (through for instance higher levels of home insulation)	
6. Ensure that developments are capable of withstanding the effects of climate change (adaptation to climate change)	To promote design measures which enable developments to withstand and accommodate the likely impacts and results of climate change (for instance through robust and weather resistant building structures)	Percentage of new developments considered to be 'climate change proof' (For indicators regarding renewable energy see section on material assets)
<b>Air Quality</b>		
7. Achieve good air quality,	To reduce the need to travel by car through planning settlement patterns and economic activity in a way that	<b>NAIE Levels of key air pollutants (e.g. Benzene, 1,3-Butadiene,</b>

Objective	Criteria	Indicators (bold indicates existing ~)
especially in urban areas	reduces dependence on the car and maintains access to work and essential services for non-car-owners	<b>CO<sub>2</sub>, Lead, NO<sub>2</sub>, PM10, SO<sub>2</sub>) within the local authority area, and within the East of England</b> <b>Herts QoL QoL27 Air Pollution</b> <b>Herts QoL TR1 Volume of motor traffic</b> <b>Herts QoL TR2 Modal split</b> Number of days when air pollution reported as moderate or higher within the local authority area Number of designated AQMAs
	To integrate land use and transport planning by for instance: <ul style="list-style-type: none"> <li>▪ Promoting Green Transport Plans, including car pools, car sharing as part of new developments</li> <li>▪ Ensuring services and facilities are accessible by sustainable modes of transport</li> </ul>	
	To ensure that development proposals do not make existing air quality problems worse	
	To address existing or potential air quality problems	
<b>Material Assets</b>		
8. Maximise the use of previously developed land and buildings, and the efficient use of land	To concentrate new developments on previously developed land (PDL)	<b>COI 1(a) &amp; (c) Amount of land developed for employment by type and percentage which is on previously developed land</b> <b>COI 1(b) Amount of land developed for employment by type, which is in development and/or regeneration areas defined in the LDF</b> <b>COI 2(b) Percentage of new and converted dwellings on previously developed land</b> <b>COI 2(c) Percentage of new</b>
	To avoid use of Greenfield sites for development	
	To maximise the efficient use of land and existing buildings by measures such as higher densities and mixed use developments	
	To encourage the remediation of contaminated and derelict land and buildings	

Objective	Criteria	Indicators (bold indicates existing ~)
		<p><b>dwelling completed at: less than 30, between 30 and 50 and above 50 dwellings per hectare</b></p> <p><b>Herts QoL LU3 Residential development on previously developed land</b></p> <p><b>BV106 % of new homes built on previously developed land</b></p>
<p>9. To use natural resources, both finite and renewable, as efficiently as possible, and re-use finite resources or recycled alternatives wherever possible</p>	<p>To encourage maximum efficiency and appropriate use of materials, particularly from local and regional sources</p>	<p>Amount and percentage of secondary and recycled materials (including minerals and aggregates) used in construction</p> <p><b>BV82a Household waste - percentage recycled</b></p> <p><b>BV82b Household waste - percentage composted</b></p> <p><b>BV82c Household waste - percentage of heat, power and other energy recovered</b></p> <p><b>BV82d Household waste - percentage landfilled</b></p> <p><b>BV84 Kg of household waste collected per head</b></p> <p><b>Herts QoL WS1 Household waste per capita</b></p> <p><b>Herts QoL WS3 Percentage of</b></p>
	<p>To require new developments to incorporate renewable, secondary, or sustainably sourced local materials in buildings and infrastructure</p>	
	<p>To safeguard reserves of exploitable minerals from sterilisation by other developments</p>	
	<p>To promote renewable energy sources as part of new or refurbished developments</p>	
	<p>To increase recycling and composting rates and encourage easily accessible recycling systems as part of new developments</p>	
	<p>To promote awareness regarding waste/recycling and renewable energy issues through education programmes in schools and the community</p>	



Objective	Criteria	Indicators (bold indicates existing ~)
		<p><b>waste recycled</b></p> <p>Proportion of developments which incorporates design measures to facilitate sustainable household waste management</p>
<b>Cultural Heritage</b>		
<p>10. To identify, maintain and enhance the historic environment and cultural assets</p>	<p>To safeguard and enhance the historic environment and restore historic character where appropriate, based on sound historical evidence</p>	<p><b>Number of Listed Buildings at Risk</b></p> <p><b>Number</b> and condition of <b>Scheduled Ancient Monuments (SAMs)</b></p> <p><b>Number</b> and condition of <b>Registered Parks and Gardens</b></p> <p><b>Number of Conservation Areas</b></p> <p><b>% of Conservation Areas with character appraisals</b></p> <p>Percentage of historic buildings and structures open to the public</p> <p>Numbers of historic assets taken from the 'at risk' category</p> <p>Number of historic assets restored/reused</p> <p>Number of locally important buildings to be demolished</p> <p>Changes inconsistent with historic</p>
	<p>To promote local distinctiveness by maintaining and restoring historic buildings and areas, encouraging the re-use of valued buildings and thoughtful high quality design in housing and mixed use developments – to a density which respects the local context and townscape character, and includes enhancement of the public realm</p>	
	<p>To promote public education, enjoyment and access of the built heritage and archaeology</p>	

Objective	Criteria	Indicators (bold indicates existing ~)
		landscape Quality in the built environment as measured by public perception surveys A measure of increased public access or interpretation of sites
<b>Landscape &amp; Townscape</b>		
11. To conserve and enhance landscape and townscape character and encourage local distinctiveness	To protect and enhance landscape and townscape character	<b>CQC Changes inconsistent with (local) landscape character</b> Area of designated landscapes affected by/lost to development <b>CPRE Light pollution and tranquility mapping</b>
	To evaluate the sensitivity of the landscape to new/inappropriate developments and avoid inappropriate developments in these areas	
	To protect 'dark skies' from light pollution, and promote low energy and less invasive lighting sources while considering the balance between safety and environmental impacts	
	To minimise the visual impact of new developments	
<b>Population and Human Health</b>		
12. To encourage healthier lifestyles and reduce adverse health impacts of new developments	To promote the health advantages of walking and cycling and community based activities	Length and condition of cycle / footpath network
	To identify, protect and enhance open spaces, such as rivers and canals, parks and gardens, allotments and playing fields, and the links between them, for the benefit of people and wildlife	Number and condition of sports facilities <b>COI 4(c) Percentage of eligible open spaces managed to green</b>

Objective	Criteria	Indicators (bold indicates existing ~)
	To include specific design and amenity policies to minimise noise and odour pollution, particularly in residential areas	<b>flag award standards</b> Percentage of population with access to public open space <b>Herts QoL NO1 Noise complaints received per 1000 population</b> <b>Herts QoL NO2 Source of noise complaints</b>
	To narrow the income gap between the poorest and wealthiest parts of the area and to reduce health differential	
13. To deliver more sustainable patterns of location of development	To reduce the need to travel through closer integration of housing, jobs and services	Percentage of health facilities accessible by sustainable modes of travel <b>Herts QoL TR2 Modal split</b> Accessibility modelling
	To promote better and more sustainable access to health facilities	
<b>Social Factors</b>		
14. Promote equity & address social exclusion by closing the gap between the poorest communities and the rest	To include measures which will improve everyone's access to high quality health, education, recreation, community facilities and public transport	<b>Index of Multiple Deprivation</b> <b>BV156 % of local authority buildings suitable for and accessible by disabled people</b> <b>BV170a Number of visits to/usage's of museums per 1,000 population</b> <b>BV 117 Visits to libraries Number per capita</b> <b>Herts QoL SE3 Transport: access to public services</b>
	To ensure facilities and services are accessible by people with disabilities and minority groups	
	To encourage people to access the learning and skills they need for high quality of life	
	To ensure that the LDF does not discriminate on the basis of disability, ethnic minority, or gender.	

Objective	Criteria	Indicators (bold indicates existing ~)
		<p><b>COI 3(b) Percentage of new residential development within 30 minutes of a GP, hospital, primary &amp; secondary school, employment and major health centre</b></p> <p><b>Herts QoL ED1 GCSE performance</b></p> <p><b>Herts QoL ED2 Adult education level 2*</b></p> <p><b>Herts QoL QoL9 Young people with Level 2 qualifications</b></p> <p><b>BV38 % of pupils achieving 5 or more GCSEs at grades A* - C or equivalent</b></p> <p>% pensioners in households with below average income</p> <p>% children in households with below half average income</p>
15. Ensure that everyone has access to good quality housing that meets their needs	Promote a range housing types and tenure, including high quality affordable and key worker housing	<p><b>COI 2(d) Affordable housing completions</b></p> <p><b>BV184a LA homes which were non-decent at start of year</b></p> <p><b>BV184b Change in proportion on non-decent homes (negative means deterioration in stock)</b></p>

Objective	Criteria	Indicators (bold indicates existing ~)
		<b>Herts QoL HS1 Affordable housing (house price/earnings affordability ratio)</b> <b>Herts QoL HS2 Statutorily unfit homes</b> <b>Herts QoL HS3 Homelessness</b>
16. Enhance community identity and participation	To recognise the value of the multi-cultural/faith diversity of the peoples in the region	Number of community facilities per 10,000 population
	To improve the quality of life in urban areas by making them more attractive places in which to live and work, and to visit	Town centre health checks
	To encourage high quality design in new developments, including mixed uses, to create local identity and encourage a sense of community pride	CABE design review of schemes with significant impacts (if conducted)
17. Reduce both crime and fear of crime	To reduce all levels of crime with particular focus on violent, drug related, environmental and racially motivated crime	<b>BV126a Burglaries No. per 1,000 households</b>
	To plan new developments to help reducing crime and fear of crime through thoughtful design of the physical environment, and by promoting well-used streets and public spaces	<b>BV127a Robberies per 1000 population and percentage detected</b>
	To support government-sponsored crime/safety initiatives, maximising the use of all tools available to police, local authorities and other agencies to tackle anti-social behaviour	<b>BV127b violent offences committed in a public place per 1,000 population</b> <b>BV127c violent offences committed in connection with licensed premises per 1,000 population</b> <b>BV127d violent offences</b>

Objective	Criteria	Indicators (bold indicates existing ~)
		<p>committed under the influence per 1,000 population</p> <p><b>BV128a Vehicle crimes No. per 1,000 population</b></p> <p><b>BV174 Number of recorded racial incidents per 100,000 population</b></p> <p>Fear of crime statistics</p>
<b>Economic Factors</b>		
18. Achieve sustainable levels of prosperity and economic growth	To support an economy in the Authority which draws on the knowledge base, creativity and enterprise of its people.	<b>Herts QoL EC1 Percentage rise in GVA</b>
	To promote and support economic diversity, small and medium sized enterprises and community-based enterprises	<b>Herts QoL UN1 Long term unemployment</b>
	To support the economy with high quality infrastructure and a high quality environment	<p><b>Herts QoL QoL1 Proportion of people of working age in employment</b></p> <p><b>COI 1(f) Amount of employment land lost to residential development</b></p> <p>Business start up failures</p>
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	To encourage local provision of and access to jobs and services	<b>Herts QoL QoL5 The percentage increase/decrease in the number of local jobs</b>
	To improve the competitiveness of the rural economy [not applicable for urban boroughs, such as Watford]	<p>In/out commuting balance</p> <p>Rate of growth of businesses (urban</p>

Objective	Criteria	Indicators (bold indicates existing ~)
		and rural)
20. Revitalise town centres to promote a return to sustainable urban living	To promote the role of local centres as centres for sustainable development providing services, housing and employment, drawing on the principles of urban renaissance	<b>COI 4(b) Percentage of completed retail, office and leisure development in town centres</b>
	To encourage well-designed mixed-use developments in the heart of urban areas, create viable and attractive town centres that have vitality and life, and discourage out-of-town developments	