



Wiltshire Local Plan

Wiltshire Sustainability Appraisal Scoping Report Appendix B

February 2019

Appendix B. Baseline Information

1 Air Quality

1.1 Baseline Information

- 1.1.1 The collection of baseline information ensures that the sustainability appraisal process is based on a sound evidence base and provides the basis for predicting and monitoring any environmental or sustainability effects that may be identified during the sustainability appraisal stages. It is made clear in the sustainability appraisal guidance that a practical approach to the collection of baseline information is essential as there are opportunities to update the sustainability appraisal work in the future. The planning authority is encouraged to use existing data sources rather than to undertake original research.

1.2 Air Pollution

- 1.2.1 Air pollution can have a serious effect on people's health. Exposure to air pollution can have a long-term effect on health, associated in particular with premature mortality due to cardiopulmonary (heart and lung) effects. Air pollution also has negative impacts on our environment, both in terms of direct effects of pollutants on vegetation, and indirectly through effects on the acid and nutrient status of soils and waters.

Table 1.1 - Estimated Background Air Pollution Data

Indicator	Year	Kennet	North Wilts	Salisbury	West Wilts	Wilts
NO _x	2004	9.84	13.10	9.55	11.24	10.93
	2005	9.57	12.62	9.24	10.98	10.60
	2006	7.87	10.12	7.65	9.09	8.68
NO ₂	2004	7.72	10.32	7.49	8.84	8.59
	2005	7.50	9.99	7.24	8.64	8.34
	2006	6.17	7.96	6.00	7.13	6.81
PM ₁₀	2004	17.38	17.83	17.02	17.63	17.46
	2005	17.19	17.65	16.83	17.50	17.29
	2006	15.88	16.31	15.56	16.22	15.99
Benzene	2004	0.18	0.23	0.16	0.24	0.20
	2005	0.16	0.21	0.15	0.22	0.19
	2006	0.13	0.17	0.12	0.17	0.15
1,3-butadiene*	2001	0.08	0.11	0.07	0.10	0.09

Indicator	Year	Kennet	North Wilts	Salisbury	West Wilts	Wilts
	2003	0.07	0.09	0.06	0.09	0.08
SO ₂	2006	2.18	2.10	2.08	3.17	2.38
CO ₂	2006	0.20	0.22	0.19	0.21	0.21

Source: Environment Agency, individual local authorities

- 1.2.2 Air pollution has been improving year on year in Wiltshire across all of the indicators. This data is only available at local levels and comparisons are difficult. With year on year improvements and the rural nature of Wiltshire it can be assumed that performance in these indicators is good.
- 1.2.3 There are no automatic air monitoring sites in Wiltshire, the nearest being in Bristol and Bournemouth. These sites report on the number of days air quality is poor comparing both rural and urban areas. The figures for the south west region are illustrated below. The data suggests that air pollution is occurring more frequently in the rural areas compared to the urban areas of the south west.

Table 1.2 - Automatic Air Quality Sites: Number of days when Air Pollution was reported as Moderate or Higher in the South West

Rural Average 2000	Rural Average 2005	Urban Average 2000	Urban Average 2005
27 days	40 days	21 days	22 days

Source: Environment Agency

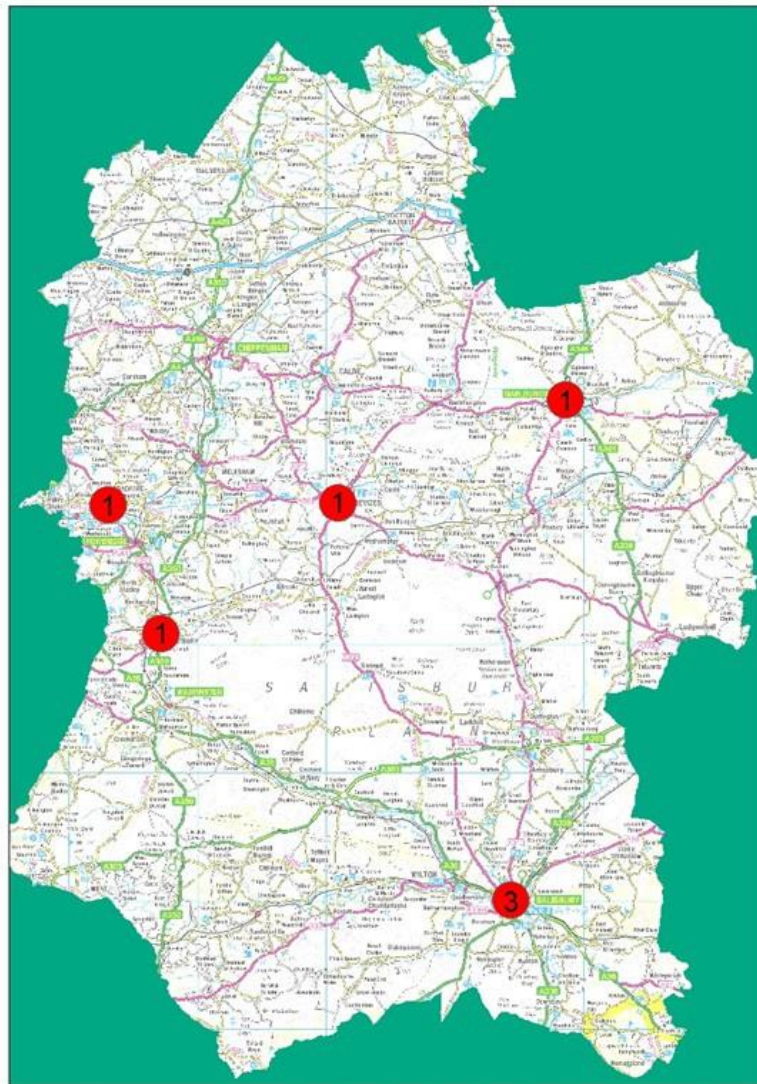
- 1.2.4 The Air Quality Strategy for England, Scotland, Wales and Northern Ireland (Defra, 2007) states that air quality in the UK is better in overall terms than at any time since the industrial revolution. However serious adverse effects can still arise and there are significant benefits to be gained from improving air quality further. Recent research has shown that some pollutants are more dangerous than previously thought and pollutants from sources such as cars, ships and industrial plants lead to levels of pollution which are still having a marked effect on our health and natural environment.

1.3 Air Quality Management Areas in Wiltshire

- 1.3.1 Air quality monitoring is undertaken across Wiltshire for a number of pollutants, but in the main for nitrogen dioxide. Where exceedences of the air quality objectives are identified the Council is legally obliged to declare an Air Quality Management Area (AQMA) for each affected area. Prior to Wiltshire Council being formed, West Wiltshire District Council declared two air quality management areas following consultation with the general public and then approval by West Wiltshire District Council Cabinet. These were created on the 26 November 2001. The AQMAs were declared due to exceedences in nitrogen dioxide. Salisbury District Council also had the need to declare three AQMAs due to exceedences in nitrogen dioxide. More recently an AQMA was declared in Calne in February 2013.
- 1.3.2 There are currently eight Air Quality Management Areas (AQMAs) in Wiltshire which have been declared in respect of the annual mean objective for nitrogen dioxide as follows:
- Westbury - the AQMA covers part of Haynes Road and Warminster Road
 - Bradford-on-Avon - the AQMA covers Market Street, Silver Street, Masons Lane and part of St Margaret's Street. The AQMA has also been declared in respect of the annual mean objectives for fine particulates
 - Salisbury - Salisbury District Council has also had to declare AQMAs and currently there are 3 AQMAs declared. The AQMAs cover the whole city centre, the A30 London Road between St Mark's roundabout and the railway allotments and Wilton Road between St Paul's roundabout and Skew Bridge which is part of the A36 trunk road and falls within the control of the Highways England.
 - Devizes – Shanes Castle
 - Marlborough – Herd Street and Barn Street

- Calne - within Curzon Street (The Square) & New Road

Figure 1.1 - Map of AQMAs in Wiltshire



1.4 The Role of Local Authorities

- 1.4.1 Local authorities have an important role to play in helping deliver the national strategy's air quality objectives and the mandatory European air quality limit values. Action taken at the local level can be an effective way of tackling localised air quality problems, leading to an overall improvement of air quality across the UK.
- 1.4.2 The Environment Act 1995 introduced the system of Local Air Quality Management (LAQM). Since then, local authorities have had to periodically review and assess the current, and likely future, air quality in their areas against national air quality objectives for seven air pollutants. Where any objective is unlikely to be met by the relevant deadline, local authorities must designate those areas as air quality management areas (AQMAs) and take action, along with others, to work towards meeting the objectives.
- 1.4.3 A brief review of the district council's most recent LAQM progress reports and assessments is given below:

1.5 2017 Air Quality Annual Status Report for Wiltshire

- 1.5.1 The air quality in Wiltshire is predominantly very good with the majority of the county having clean unpolluted air. However there are a small number of locations where the combination of traffic volume, road layout and topography has resulted in pollutants being trapped allowing concentrations

to increase to unacceptable levels.

- 1.5.2 There are two pollutants included within the Local Air Quality Management regime that are the cause of concern in Wiltshire; nitrogen dioxide (NO₂) and fine particulate matter (PM₁₀).
- 1.5.3 In general the trend has been toward improving air quality in the county of Wiltshire, however the picture for 2016 is mixed with some locations having shown a slight deterioration.
- 1.5.4 The 2017 Annual Status Report has highlighted a potential exceedance of the air quality objective for annual mean levels of nitrogen dioxide at a site at the northern end of Royal Wootton Bassett. It is the intention of the council to thoroughly investigate the levels of NO₂ in this area during 2017/8 and to report back to the local area board as soon as practicable as to whether it will be necessary to declare an Air Quality Management Area.
- 1.5.5 Report findings established that, with regards to Nitrogen Dioxide concentrations, the general 5 year trend for the Salisbury Automatic Monitoring located at Exeter Street (AM1) is down although the result for 2013 was higher than 2012. The general 5 year trend for the Automatic Monitoring located in St Margarets Street; Bradford on Avon (AM2) is slightly down. No trend data has been reported for the Calne Automatic Monitoring Station located on Sidmouth Street as it has only been in place for a year and Sidmouth Street, Devizes (AM3) is showing a decrease in NO₂ over the two years monitoring has been undertaken.
- 1.5.6 The diffusion tube monitoring results for 2016 confirmed that the AQMA's already declared within Wiltshire are all still valid with a number of exceedances at monitoring sites located within existing AQMA's. No monitoring has indicated that any of the existing Wiltshire AQMA's (Salisbury; Bradford on Avon; Devizes; Marlborough; Calne; Westbury) need to be revoked.
- 1.5.7 No AQMA is currently in place in Chippenham or Trowbridge.
- 1.5.8 Wiltshire Council does not undertake any Sulphur Dioxide (SO₂) or Benzene monitoring.

Table 1.3 - Air Quality Management Areas Declared in Wiltshire

	Kennet	North Wilts	Salisbury	West Wilts	Wilts
Areas declared	0	3	3	2	8

1.6 Air Quality Strategy for Wiltshire 2011-2015

- 1.6.1 The main aim of the strategy is:

'Wiltshire Council working collaboratively will seek to maintain the good air quality in the county and strive to deliver improvements in areas where air quality fails national objectives in order to protect public health and the environment'

- 1.6.2 The common factor in managing air quality in Wiltshire is the motor vehicle. The areas of poor air quality in Wiltshire are all traffic related and the Council recognises that tackling these areas is neither easy nor simple. In practice managing transport system, vehicle movements and the location of new developments will be the primary method of improving or maintain air quality. It will require working collaboratively and with local communities so that progress can be made.
- 1.6.3 Technological advances and improved fuels are expected to lead to improvements in local air quality. However the need to reduce increasing reliance on the private car and to provide access to improved public transport or other sustainable means of travel remains and needs to be addressed.

1.7 Air Quality and Planning

- 1.7.1 The planning systems across the UK for land use and transport planning are also an important part of an integrated approach to air quality improvements, particularly regarding new developments and emphasis on accessibility for public transport, park and ride schemes, walking and cycling. These can all help reduce the number of journeys made by car and the emissions to air.
- 1.7.2 At the national level the NPPF advises that planning policies should ensure that new development is appropriate for its location in order to avoid unacceptable risks from pollution and land instability. The Framework states that planning policies should comply with and contribute towards EU limit

values or national objectives for pollutants, taking into account the presence of Air Quality Management Areas and the cumulative impacts on air quality from individual sites in local areas. Planning decisions should ensure that any new development in Air Quality Management Areas is consistent with the local air quality action plan.

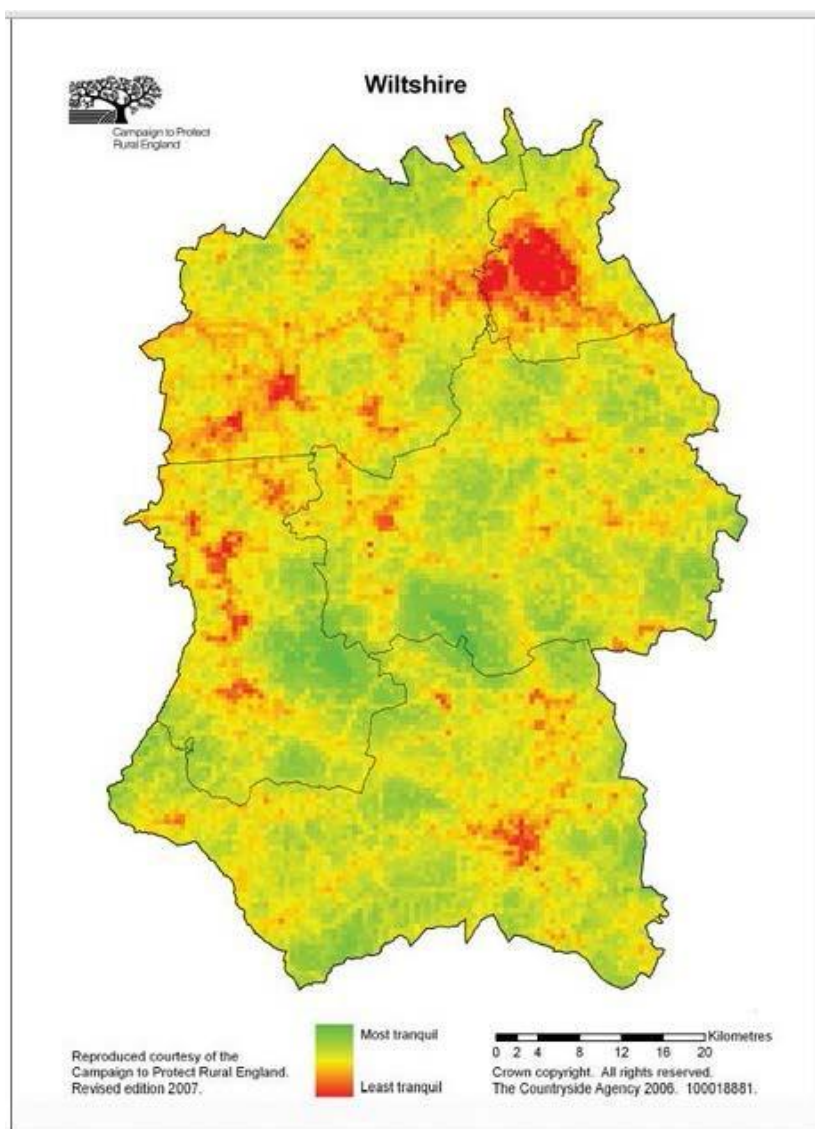
1.8 Air Quality and Climate Change

- 1.8.1 The importance of climate change as an environmental issue of global significance has increased enormously in the past few years. The Stern Report and the Energy White Paper highlighted the importance of the need to reduce global carbon emissions. Local planning policies need to be developed with a consideration of their impact on climate change and greenhouse gas emissions, and this is particularly true of air quality. Synergistic policies, beneficial to both air quality and climate change, should be pursued. For example, the energy efficiency of new buildings or reducing the use of private motor vehicles.

1.9 Noise Pollution Issues

- 1.9.1 Noise can have a significant effect on the environment and on the quality of life enjoyed by individuals and communities.
- 1.9.2 The impact of noise can be a material consideration in the determination of planning applications. The planning system has the task of guiding development to the most appropriate locations. It will be hard to reconcile some land uses, such as housing, hospitals or schools, with other activities which generate high levels of noise. The planning system should ensure that, wherever practicable, noise-sensitive developments are separated from major sources of noise (such as road, rail and air transport and certain types of industrial development). It is equally important that new development involving noisy activities should, if possible, be sited away from noise-sensitive land uses.
- 1.9.3 Development plans provide the policy framework within which these issues can be weighed but careful assessment of all these factors will also be required when individual applications for development are considered. Where it is not possible to achieve such a separation of land uses, local planning authorities should consider whether it is practicable to control or reduce noise levels, or to mitigate the impact of noise, through the use of conditions or planning obligations.
- 1.9.4 Some of the main sources of noise across Wiltshire are likely to include impacts from increasing levels of traffic on roads.
- 1.9.5 The Campaign to Protect Rural England (CPRE) has carried out research into tranquillity, including noise and visual intrusion.
- 1.9.6 According to the figures in the attached table, Wiltshire is significantly more tranquil overall than Swindon, although this is to be expected, as Swindon has considerably more urban areas and major roads in proportion to its land area. Wiltshire is less tranquil than the rest of the South West but more tranquil than England as a whole.

Figure 1.2 - Wiltshire Tranquillity Map (CPRE)



Source: <http://www.cpre.org.uk/resources/countryside/tranquil-places/item/1790-developing-an-intrusion-map-of-england>

1.10 Pollution from Lighting¹

- 1.10.1 Light pollution is caused by excess light radiating into areas where it is not wanted. The source is often street lighting, resulting in an orange glow around urban areas. It has been measured by the saturation of pixels in a satellite survey taken at night. Ephemeral sources were removed, to supply an accurate picture of normal light pollution levels.
- 1.10.2 On average the South West is the darkest region in England². Wiltshire is significantly more light polluted than the rest of the South West region, but is still better than the average for England. Nevertheless, 30% is still classified as one of the two darkest bands. Light pollution has also increased significantly across all regions. Wiltshire has increased almost the same amount as the rest of England, but significantly more than the South West, distancing itself from the rest of the region.

1.11 Land Contamination

- 1.11.1 When substances are introduced into or onto land where they would not normally be, the land could then be considered to be contaminated.

¹ <http://www.intelligencenetwork.org.uk/environment/waste-and-pollution/>

² <http://www.cpre.org.uk/media-centre/latest-news-releases/item/4314-new-interactive-maps-reveal-england-s-darkest-and-most-light-polluted-skies>

- 1.11.2 The term 'land contamination' covers a wide range of situations where land is contaminated in some way. In a small number of these situations where certain criteria are met, a site might be determined 'contaminated land' which has a specific legal definition set out in Part IIA of the Environmental Protection Act.
- 1.11.3 Throughout Wiltshire there are many sites that have been contaminated by previous use. Often this is associated with industrial processes or activities that have now ceased, but where waste products or remaining residues present a hazard to the general environment. There is also increasing pressure to reuse land which is affected by contamination, rather than develop greenfield sites such as farmland, parks or woodland.
- 1.11.4 The duty on local authorities is to periodically inspect the land within their administrative area for evidence of ground contamination that is causing, or has the potential to cause, significant harm to environmental receptors.
- 1.11.5 In 2010, Wiltshire Council produced an Inspection Strategy for Contaminated Land. It states that the process of inspecting and identifying contaminated land is ongoing. Seven sites of potential concern have been identified to date and will require further investigation. Two sites have been declared as contaminated land and confirmed as 'special sites', which means that the Environment Agency (not the local authority) is responsible for taking action to address them.
- 1.11.6 Contaminated land is often found on sites previously used for industry, and these sites are now a priority for development. It is therefore anticipated that most contaminated land will be addressed through the planning process.

2 Biodiversity

2.1 Baseline Information

- 2.1.1 The collection of baseline information ensures that the sustainability appraisal process is based on a sound evidence base and provides the basis for predicting and monitoring any environmental or sustainability effects that may be identified during the sustainability appraisal stages. It is made clear in the sustainability appraisal guidance that a practical approach to the collection of baseline information is essential as there are opportunities to update the sustainability appraisal work in the future. The planning authority is encouraged to use existing data sources rather than to undertake original research.
- 2.1.2 Wiltshire contains a great diversity of habitat types, from its internationally important chalk grassland and chalk rivers, to large networks of standing open water, and ancient hunting forests. The richness of habitats in Wiltshire is reflected in the diversity of species which occur, including nationally important populations of Marsh Fritillary and farmland birds such as Stone Curlew.
- 2.1.3 High profile biodiversity sites within Wiltshire include North Meadow Special Area of Conservation, a traditional hay meadow home to a variety of wildflowers; the chalk streams and rivers of the Avon system; Parsonage Down National Nature Reserve, situated on the Salisbury Plain plateau; and the ancient forests of Savernake, Cranborne Chase and Braydon Forest.
- 2.1.4 Whilst Wiltshire is comparatively rich in terms of its biodiversity, its wildlife has declined at an alarming rate over the last 50 years in line with national trends. For example, lowland unimproved grassland, an important habitat type in Wiltshire, is now the single most threatened type of grassland habitat in the UK. Between 1934-1984 it is thought to have declined in extent by 97%. Species have also shown worrying declines, with groups such as farmland birds having declined on average by about 50% since the 1970s.

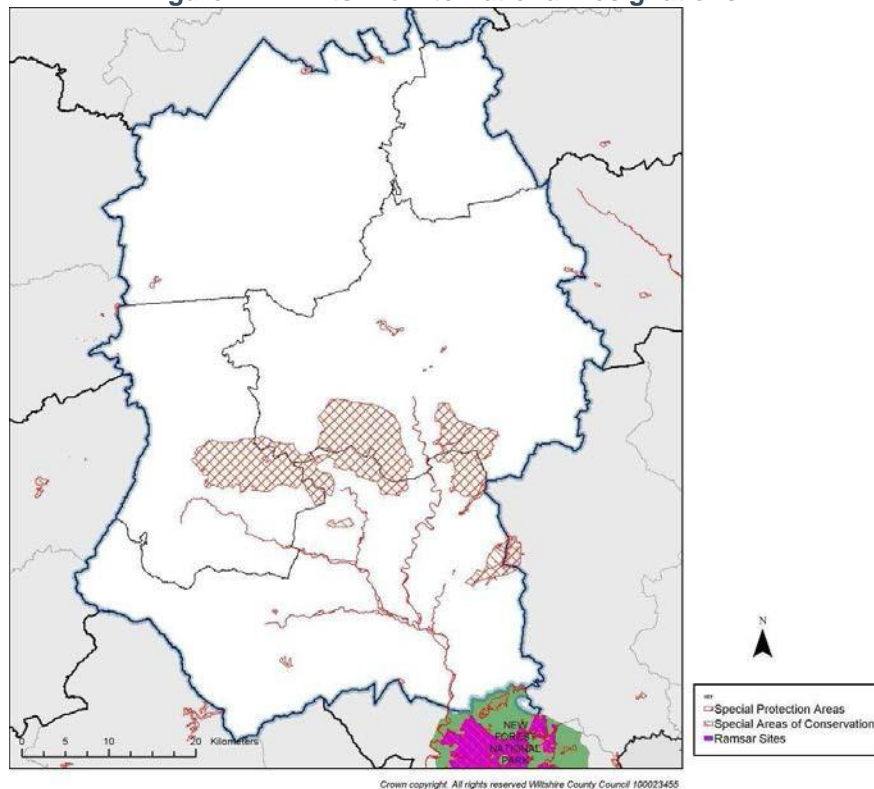
2.2 How can the planning process benefit biodiversity?

- 2.2.1 Development can affect all habitats in Wiltshire and the LDF can help ensure the protection and enhancement of biodiversity throughout the local authority area. The development documents that will be produced by Wiltshire Council will provide many opportunities to protect and enhance biodiversity, together with policy and legislation such as the biodiversity duty set out under the Natural Environment and Rural Communities (NERC) Act, 2006.
- 2.2.2 The design of major developments if done sympathetically can work towards many BAP targets through incorporating measures to enhance biodiversity and contributing to networks of multifunctional green space known as green infrastructure. Opportunities arise to further many BAP targets and actions through planning gain, which uses developer contributions for purposes including biodiversity enhancement.
- 2.2.3 The NPPF highlights the planning system's role in conserving and enhancing the natural and local environment. The Framework advises that LPAs should seek to conserve and enhance biodiversity by ensuring that development does not result in significant harm to local wildlife. The NPPF also encourages LPAs to promote opportunities to incorporate biodiversity in and around development.
- 2.2.4 The NPPG adds to the NPPF by stating that LPAs should seek opportunities to work with other partners including Local Nature Partnerships, to develop a strategic approach to protecting and improving the natural environment in line with local priorities and evidence. LPAs should also consider the opportunities that arise from development proposals to enhance biodiversity and contribute to wildlife and habitat connectivity in the wider area.

2.3 International Designations in Wiltshire

- 2.3.1 Internationally designated sites are of exceptional importance in respect of rare, endangered or vulnerable habitats and species, and benefit from a high level of protection.
- 2.3.2 There are several internationally designated sites within Wiltshire, as shown in Figure 2-1.

Figure 2-1 - Wiltshire International Designations



Source: Wiltshire County Council 2008

2.3.3 These are discussed in greater detail below.

Special Protection Areas

2.3.4 The European Commission (EC) Council Directive on the Conservation of Wild Birds – ‘The Birds Directive’ (79/409/EEC) requires measures to preserve, maintain or re-establish sufficient diversity and areas of habitats for all species of birds naturally occurring in a wild state. It applies special measures for the protection of listed, vulnerable and migratory bird species.

2.3.5 In part, these objectives are achieved by the establishment of a network of protected areas for birds, known as Special Protection Areas (SPAs). Member states have a duty to protect SPAs from deterioration and significant disturbance. Two SPAs cover parts of Wiltshire:

- Porton Down
- Salisbury Plain

2.3.6 Additionally, the New Forest SPA is close to Wiltshire’s south east boundary; this raises the prospect of cross boundary issues in the form of the potential impact of minerals and waste development within the vicinity of the New Forest SPA border. It should be noted that planning for the New Forest National Park is now the responsibility of the New Forest National Park Authority.

Natura 2000 Network

2.3.7 There are 14 Natura 2000 sites present wholly or partially within Wiltshire, including three SPAs, 10 SACs and one Ramsar (see below).

Table 2-1

Site	Feature of Interest
Salisbury Plain SPA / SAC	Stone curlew, hen harrier, hobby, quail. Calcareous grassland and juniper heath supporting marsh fritillary butterflies.
Porton Down SPA	Stone curlew

Bath & Bradford on Avon Bats SAC	Horseshoe and Bechstein's bats
Chilmark Quarries SAC	Horseshoe, barbastelle and Bechstein's bats
Great Yews SAC	Yew woodland
Kennet & Lambourn Floodplain SAC	Desmoulin's whorl snail
New Forest SPA / SAC	Dartford warbler (breeding), honey buzzard (breeding), nightjar (breeding), woodlark (breeding) and hen harrier (wintering). Wet and dry heathland, woodland, grasslands, and wetland mosaics of mires, ponds, streams and fens.
North Meadow and Clattinger Farm SAC	Lowland hay meadows
Pewsey Downs	Calcareous grassland
Prescombe Down SAC	Calcareous grassland supporting early genitian and marsh fritillary
River Avon SAC	Chalk river supporting Desmoulin's whorl snail, Atlantic salmon, bullhead, brook lamprey and sea lamprey

2.3.8 These sites support some of Europe's rarest habitats and species, and also provide some of the finest remaining examples of these wildlife resources. They are widely recognised as being of major importance to the UK's biodiversity and are major components in our ecological network. John Lawton's recent review of the UK's wildlife sites network has highlighted their importance and the need to increase their size and quality through favourable management in order to ensure that they remain strong components of the ecological network in the future.

2.3.9 These sites are afforded the strictest protection under the Habitats Regulations (2010) and can be sensitive to the effects of certain developments due to their size, nature or location, even when situated at a significant distance from the designated areas. In particular, those sites which are potentially susceptible to impacts as a result of development include:

- Increased recreational disturbance upon breeding birds on Salisbury Plain and in the New Forest
- Loss of bat roosts, habitat loss / fragmentation and lighting in the areas around the Bath and Bradford on Avon Bats SAC sites
- Physical damage to habitats of the River Avon SAC
- Water pollution issues associated with additional discharge from sewage treatment works discharging in the River Avon SAC
- Water shortages to accommodate increased abstraction in the River Avon SAC catchment

Special Areas of Conservation

2.3.10 The 'birds directive' has been partially amended by The EC Council Directive on the Conservation of Natural Habitats of Wild Fauna and Flora – 'The Habitats Directive' (94/43/EEC) - this extends the principle of protection to habitats, plus plant and animal species. The habitats directive requires measures to maintain or restore natural habitats and wild species at a favourable conservation status, giving effect to both site and species protection objectives.

2.3.11 In part, this is achieved by the establishment of a network of protected areas for these habitats and/or species, known as Special Areas of Conservation (SACs). Ten SACs have been approved within (or partially within) Wiltshire:

- Salisbury Plain
- River Avon System
- New Forest

- Kennet and Lambourn Flood Plain
- North Meadow and Clattinger Farm
- Chilmark Quarries
- Bath and Bradford on Avon Bats
- Great Yews
- Prescombe Down
- Pewsey Downs

Ramsar Sites

- 2.3.12 A 'Ramsar site' is land listed as a 'wetland of international importance'. There are currently no Ramsar sites designated within Wiltshire. However, large parts of the New Forest National Park, which borders south east Wiltshire, are protected by the Ramsar status (as well as being a SPA and SAC). This should be factored into the appropriate assessment of the LDF.

Table 2-2 - International Designations in Wiltshire

Indicator	Kennet	North Wilts	Salisbury	West Wilts	Wiltshire
Area of SAC (%)	9.58	0.21	6.82	11.26	6.79
Area of SPA (%)	9.34	0.00	5.54	11.21	6.26

2.4 National Designations in Wiltshire

- 2.4.1 There are many sites within Wiltshire designated for their national biodiversity importance, ranging between Sites of Special Scientific Interest (SSSIs), National Nature Reserves and Ancient Woodland.

Table 2-3 - National Designations in Wiltshire

Indicator	Kennet	North Wilts	Salisbury	West Wilts	Wiltshire	SW	England
Area designated as National Nature Reserve (%)	0.41	0.05	0.57	0.00	0.31		
Area of SSSI (%)	11.33	0.90	9.33	13.18	8.55		
Area of SSSI (Ha)	10954	691	9371	6812	27828		
SSSIs in favourable condition (%)	67.90	70.70	43.20	47.00	57.20	50.5	44.4
SSSIs in recovering unfavourable condition (%)	21.30	25.20	37.70	46.20	32.60	32.5	38.9
SSSIs in declining unfavourable condition (%)	6.80	4.10	10.50	5.70	6.78	5.4	5.1
SSSIs in recovering unfavourable no change (%)	4.00	0.10	8.60	1.10	3.45	11.52	11.57

Source: Natural England and Wiltshire County Council

Sites of Special Scientific Interest

- 2.4.2 There are 168 SSSIs in Wiltshire covering over 29,000ha of calcareous grassland, lowland meadows, broadleaved woodland, streams, rivers, standing waters and a wide variety of other habitat types which also support important populations of British wildlife. This network of sites is of national importance, providing a representative sample of our most important wildlife and geological sites. Wiltshire's proportion of the SSSI network has suffered significant declines in the past, with 77% currently in unfavourable condition, however recent investment in the network and the efforts of Natural England have ensured that almost all of those sites are now recovering, with only 0.52% of the SSSI network in Wiltshire in unfavourable declining condition.
- 2.4.3 Damage to SSSIs as a result of development is understood to be very rare in Wiltshire due to strict compliance with the statutory procedures required by Section 28, as set out in Circular 06/2005.

Table 2-4 - Natural England SSSI Condition Summary - 1 March 2014

% Area meeting PSA target	% Area favourable	% Area unfavourable recovering	% Area unfavourable no change	% Area unfavourable declining	% Area destroyed / part destroyed
97.46%	22.80%	74.66%	1.94%	0.60%	0.00%

Source: <http://www.sssi.naturalengland.org.uk/Special/sssi/reportAction.cfm?Report=sdrt18&Category=C&Reference=1046>

National Nature Reserves

- 2.4.4 SSSIs which are owned by Natural England are known as National Nature Reserves (NNRs).
- 2.4.5 These are established to protect the most important areas of wildlife habitat and geological formations in Britain, and as places for scientific research. They are designated under the National Parks and Access to the Countryside Act 1949 and the Wildlife and Countryside Act 1981. There are six NNRs in Wiltshire:
- Fyfield Down
 - North Meadow
 - Parsonage Down
 - Pewsey Downs
 - Prescombe Down
 - Wylde Down

Ancient Woodland

- 2.4.6 Land that has been continually wooded since AD1600 or earlier is classed as ancient woodland. Although not protected by legislation, ancient woodland is recognised and awarded protection in the NPPF (paragraph 118) which states:

'Planning permission should be refused for development resulting in the loss or deterioration of irreplaceable habitats, including ancient woodland and the loss of aged or veteran trees found outside ancient woodland, unless the need for, and benefits of, the development in that location clearly outweigh the loss;'

- 2.4.7 Ancient woodland is also afforded weight in the government policy statement: Keepers of time – A Statement of policy for England's ancient and native woodland (DEFRA and Forestry Commission, 2005).
- 2.4.8 Approximately 3.7% of the plan area is covered by ancient woodland. It is particularly valuable for biodiversity as a rich habitat for wildlife, and is home to more species of conservation concern than any other habitat. Ancient woodland supports some 232 species (outlined in the UK Biodiversity Action Plan, 1994). These ecosystems cannot be recreated, therefore the loss of ancient woodland (and aged or veteran trees found outside of ancient woodlands) should be avoided.
- 2.4.9 Possible mitigation measures to avoid adverse impacts upon ancient woodland include:
- exclusion zones

- the creation of buffer strips of new native woodland or other semi-natural habitats
- working with local communities

Table 2-5 - Ancient Woodland in Wiltshire

Indicator	Kennet	North Wilts	Salisbury	West Wilts	Wiltshire
Area of ancient semi-natural woodland (%)	3.55	2.61	5.37	3.55	3.89
Area of ancient semi-natural woodland (Ha)	3,435	2,000	5,394	1,834	12,663

2.5 Local Designations in Wiltshire

- 2.5.1 There are numerous sites within Wiltshire which have regional/local biodiversity importance, such as Regionally Important Geological and geomorphological Sites (RIGS), County Wildlife Sites and Local Nature Reserves. Locally designated sites, although not of the same status as international or national sites, have an important role to play in contributing to overall national biodiversity targets, the quality of life and well-being of the community, and in supporting research and education.

Sites of Nature Conservation Importance (SNCI)

- 2.5.2 The term Sites of Nature Conservation Importance (SNCI) incorporates Regionally Important Geological and geomorphological Sites (RIGS) and County Wildlife Sites.
- 2.5.3 Although they have no statutory status, RIGS are considered to represent the most important examples of geology and geomorphology outside of SSSIs (English Nature, 2006). Established in 1990 by the Nature Conservancy Council, RIGS are designated by locally developed criteria, and are of local importance that should be considered as a material consideration in planning matters. RIGS are designated according to their value for: education, scientific study, historical value, and aesthetics.
- 2.5.4 There are 60 RIGS in Wiltshire and Swindon, covering an area of 141 hectares.
- 2.5.5 Wiltshire and Swindon contain around 1,500 County Wildlife Sites, covering 20,509 hectares which, together with SSSIs, comprise the critical core of Wiltshire and Swindon's biodiversity. Although County Wildlife Sites do not receive statutory protection, they have received protection through development plan policies. The Local Area Agreement for Wiltshire (June 2008) contains an action for targeted conservation and enhancement of Wiltshire's biodiversity in line with the Wiltshire Biodiversity Action Plan and the South West Nature Map; in particular improving monitoring, advice, and management of County Wildlife Sites, where possible through community action.

Table 2-6 - Local designations in Wiltshire

Indicator	Kennet	North Wilts	Salisbury	West Wilts	Wiltshire
Area designated as LNR (%)	0.02	0.00	0.03	0.10	0.03
Area designated as County Wildlife Site	337	259	443	162	1168
Area of RIGS (%)	0.07	0.03	0.02	0.15	0.05
Area of RIGS (HA)	68	20	16	75	180

Source: Wiltshire Council

Local Biodiversity Action Plans

- 2.5.6 The targets and actions within Biodiversity Action Plans (BAPs) are a 'material consideration' within the planning process, and provide guidance on how habitats and species can be conserved and enhanced.
- 2.5.7 The local BAPs - Wiltshire, Swindon, and Cotswold Water Park BAPs - give greater priority to habitat action plans rather than species actions plans. This is because, in the majority of cases, the main threats to wildlife are associated with the loss, degradation or fragmentation of the place in which it lives, and no species can exist in the wild independently of its habitat. The habitat action plans and species action plans describe the habitat or species under consideration, provide information on national and local status and on current factors affecting this status, and identifies objectives and targets alongside the actions required.
- 2.5.8 Published in 2008, the Wiltshire BAP (incorporating Swindon) incorporates 10 habitat action plans, one habitat information note and one species action plan. Priority will be given to conserving and enhancing those habitats and species that have been identified in the Wiltshire BAP:
- Woodland
 - Wood pasture, parkland and ancient trees
 - Rivers, streams and associated habitats
 - Standing open water
 - Farmland habitats
 - Orchards
 - Calcareous grassland
 - Unimproved neutral grassland
 - Built environment
 - Ancient and species rich hedgerows
 - Heathland Information note
 - Bats (species)

County Wildlife Sites

- 2.5.9 There are approximately 1,560 County Wildlife Sites (CWSs) in Wiltshire covering approximately 21,000ha of semi-natural habitats including most of our main rivers, ancient woodlands, our best wildflower meadows and the wetlands of the Cotswold Water Park. Although our CWSs are recognised for being of county significance for wildlife, many of them are as rich in wildlife and as valuable as SSSIs; the CWS network is intended to be a comprehensive collection of our best wildlife sites, whereas the SSSI network is only a representative sample of the best examples of certain habitats and species. The CWS network therefore represents an incredibly important resource for Wiltshire's wildlife; however it does not receive any statutory protection and is vulnerable as a result. The Community Areas of Tidworth, Westbury, Warminster and Amesbury have over 20% of their area classified as rich in wildlife. The Community Areas of Melksham and Trowbridge Community Area have less than 5% of their areas classified as wildlife rich.
- 2.5.10 The Wiltshire and Swindon Wildlife Sites Project undertakes monitoring of the CWS network and offers advice to private landowners about the special value of their land and how to manage this favourably; 54% of the CWS network is known to be under positive management. The network is also regularly updated as sites are de-notified as they become damaged, destroyed or degraded, but new sites are also added as they are discovered. Five sites were denotified in 2008-09, four in 2009-10 and 11 in 2010-2011 as a result of degradation and development.
- 2.5.11 Professor Sir John Lawton's recent review of England's wildlife sites *Making Space for Nature* has identified and stressed the importance of local wildlife sites, but also reports that they are often neglected, poorly managed, damaged or lost. Among his recommendations Professor Lawton advises that planning policy and practice should provide greater protection to local wildlife sites. DEFRA has also stressed the importance of local wildlife sites in providing refuges for wildlife, representing local character and distinctiveness, and playing a significant role in meeting national biodiversity targets, and also recommends that Development Plan Documents should include criteria

based policies on the protection of local wildlife sites³.

2.5.12 CWSs are currently afforded protection in local plan policies. These policies aim to protect the CWS network from the adverse effects of development unless the reasons for the proposal outweigh the value of the site, in which case they allow mitigation /compensation measures to be conditioned as part of any permission granted. While these policies tend to protect CWSs from direct damage or loss, Wiltshire Council officers have identified a number of weaknesses associated with their implementation which have led to the damage or degradation of CWSs:

- Indirect and offsite effects such as trampling, fly-tipping, fires, isolation, pollution and disturbance are not recognised, making it difficult to control such impacts through conditions or obligations.
- Restoration potential is not recognised. Some CWSs have become degraded through lack of appropriate management but could be restored through favourable management. These areas are undervalued and as such are often lost to development and with it any restoration potential. Development can represent an opportunity to restore CWSs to favourable condition; however there is currently no driver to do so.
- Lack of commitment to manage a CWS appropriately can lead to long-term neglect, degradation and damage. The presence of a CWS in or next to a development should be seen as a community asset, and a commitment should be made maintain such areas responsibly.

2.5.13 Wiltshire Council has adopted NI197 as an indicator to measure its performance against the government's national priorities. The indicator is intended to measure the active management of local sites as a measure of movement towards the target of improving biodiversity. Wiltshire Council has achieved its target of increasing the number of sites in favourable management for the past three years; development could provide opportunities to bring further sites into favourable management to deliver these targets.

Local Nature Reserves (LNR)

2.5.14 Local Nature Reserves (LNRs) are for both people and wildlife. They offer people special opportunities to study or learn about nature or simply to enjoy it. All district and county councils have powers to acquire, declare and manage LNRs. To qualify for LNR status, a site must be of importance for wildlife, geology, education or public enjoyment. Some are also nationally important Sites of Special Scientific Interest. LNRs must be controlled by the local authority through ownership, lease or agreement with the owner. The main aim must be to care for the natural features which make the site special.

2.5.15 The following table lists LNRs in Wiltshire and LNR type and area:

Table 2-7

Local Nature Reserve	LNR Type	Area (Ha)
Avon Valley Reserve	Urban Fringe	20.19
Bemerton Heath and Barnards Folly	Urban Fringe	11.63
Conygre Mead	Urban Fringe	2.53
Corston Quarry and Pond	Rural	0.5
Drews Pond Wood	Urban Fringe	3.87
Jubilee Lake	Urban Fringe	4.01
Mortimore's Wood	Urban Fringe	1.44
Oakfrith Wood	Rural	14.52
River Wylfe	Not Known	4.22
Smallbrook Meadows	Urban Fringe	6.14

Source: Natural England

³ DEFRA (2006) *Local Sites: Guidance on Their Identification, Selection and Management*

- 2.5.16 Total area LNR in Wiltshire therefore is currently 69.05Ha. Accessible Natural Greenspace Guidance⁴ states that there should be at least one hectare of LNR per 1000 population - Wiltshire's population is estimated at 456,100⁵ so this works out at 0.15Ha LNR per 1000 population. This figure is relatively low compared with many of Wiltshire's neighbouring authorities; however it does not take into account the wide range of other publicly accessible areas of open space that Wiltshire's residents have access to.

Protected Road Verges

- 2.5.17 Wiltshire's Protected Road Verges (PRVs) scheme also identifies road verges which are of important nature conservation value due to the presence of rare or notable species, the presence of valuable habitats, functions as a wildlife corridor linking other wildlife sites, geological features or areas of community value. Given their proximity to the local road network, PRVs can be impacted by development where this requires new or upgraded road junctions or any widening of the carriageway.
- 2.5.18 There are approximately 50 PRVs in Wiltshire and they are monitored by volunteers. The road verge monitors keep a check on the condition of their verges and are responsible for monitoring the botanical / biological interest. Reports from all the monitors are collated annually and used as a basis for ongoing management of the verges.

Local Geological Sites

- 2.5.19 Local Geological Sites (LGSs) are currently the most important places for geology and geomorphology outside of geological SSSIs. LGSs (formerly Regional Sites of Geological Importance or RIGS) are selected in a different way to Earth science SSSIs, which are chosen by Natural England on a national basis, while LGSs are selected on a local or regional basis using four nationally agreed criteria:
- The value of the site for educational purposes in lifelong learning;
 - The value of the site for study by both professional and amateur Earth scientists;
 - The historical value of the site in terms of important advances in Earth science knowledge, events or human exploitation; and
 - The aesthetic value of a site in the landscape, particularly in relation to promoting public awareness and appreciation of Earth sciences.
- 2.5.20 The concept of RIGS was first initiated by the Nature Conservancy Councils (NCC) in 1990. RIGS sites started life as SSSIs which were denotified after the Geological Conservation Review (1997-1990), however the statutory agencies wished to secure their conservation in another form. RIGS sites are those which, whilst not benefiting from national statutory protection, are nevertheless regionally or locally representative sites where "consideration of their importance becomes integral to the planning process".
- 2.5.21 There are currently 58 LGSs in Wiltshire which include exposures of limestone, chalk, sand, gravel, sandstone and clay. Wiltshire Geology Group is currently undertaking a project to monitor the condition of all of these sites, which has revealed that almost all of them are in declining condition, and indeed five sites were lost and denotified during the period 2009-10. LGSs are likely to be significantly under recorded, and there are likely to be many more important sites within Wiltshire which have not yet been discovered.
- 2.5.22 LGSs can be affected by a wide range of development through covering or damaging exposures or contributing to the encroachment of vegetation through landscape management practices, however the greatest threats tend to be posed by mineral and waste developments. At the same time, development can provide opportunities to re-expose sites in poor condition, identifying previously unknown but significant features during environmental assessments, and making a contribution to accessibility and long-term management of such sites.
- 2.5.23 Each of the local plans and the Structure Plan offers a degree of protection to RIGS / LGS through inclusion of policies on local sites such as County Wildlife Sites. There are no known instances where development proposals have resulted in the damage or loss of geological features, and it is not therefore possible to comment on the effectiveness of these policies. However it is worth noting that while the policies afford protection from damage through development, they do not include any driver for positive management or access which might enhance and secure our known geodiversity for the future.

⁴ 'Nature Nearby' - Accessible Natural Greenspace Guidance (Natural England, 2010)

⁵ Office for National Statistics (ONS) 2009 Mid-year population estimates

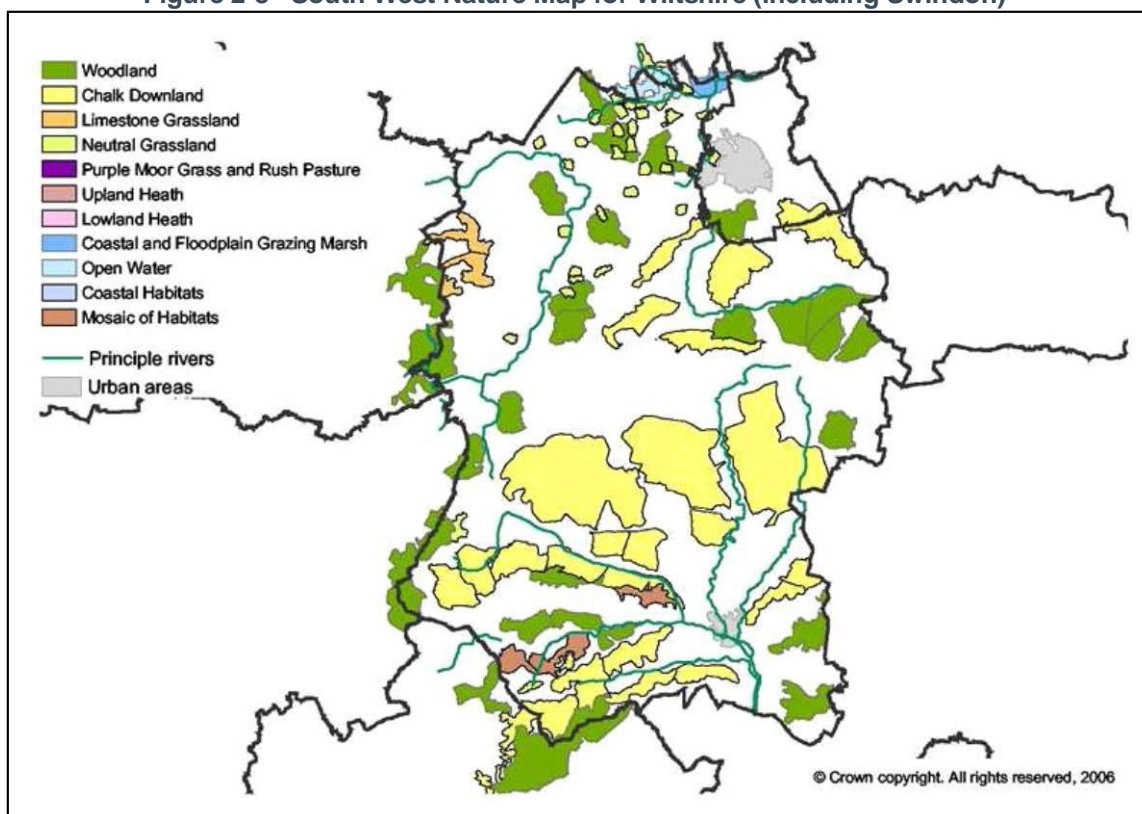
2.6 Disturbance

- 2.6.1 Development has the potential to cause disturbance of the natural environment within the site itself, however such effects can also occur at significant distances from the development site. Such disturbances can range from short-term or one-off events to long-term, permanent effects. Examples include:
- Damage to habitats through trampling, mountain biking, fires, fly-tipping, litter, dog fouling etc;
 - Disturbance of wildlife during construction through noise and vibration
 - Predation of domestic cats upon wildlife such as nesting birds and water vole;
 - Recreational disturbance of sensitive fauna, particularly by dog walkers;
 - Pollution and siltation of waterbodies / courses from run-off;
 - Disturbance of nocturnal fauna through the use of artificial lighting⁷⁹;
 - Visual disturbance and mortality from wild farms; and
 - Mortality caused by increased traffic or new roads.
- 2.6.2 Although such effects can be significant especially in combination, they are often overlooked in environmental assessments, and can often be reduced through the use of method statements, design / landscape schemes and planning obligations. Some disturbance impacts are an inherent part of the proposed change of use and cannot be fully overcome, however such impacts should be made clear in the proposals, in order that they can be weighed against the benefits of development during the decision-making process.
- 2.6.3 The Habitats Regulations Assessment (HRA) for the Wiltshire 2026 consultation document carried out in 2009 identified the potential impacts of anticipated development upon the Salisbury Plain and New Forest SPAs. Research has shown that stone curlew is very sensitive to recreational disturbance, particularly from dog walkers, and that the vast majority of regular visitors live within 15km of the plain. The HRA therefore concluded that proposed housing within this 15km radius of the plain could potentially impact upon stone curlew breeding success through increased recreational disturbance.
- 2.6.4 Recreational disturbance has also been confirmed as having a significant effect upon the breeding success of the Dartford warbler and nightjar, and development in the south of the county could potentially increase recreational disturbance on these species in the New Forest. Potential mitigation measures have been identified to reduce and offset this recreational pressure through:
- Habitat mitigation / enhancement measures to increase the number of suitable nest sites;
 - Provision of Suitable Alternative Natural Green Spaces (SANGS); and
 - Securing management measures including access control.
- 2.6.5 Delivery of these measures would need to be secured through partnership working with organisations such as the New Forest National Park Authority, Defence Infrastructure Organisation and the Wessex Stone Curlew Project, and funded by developer contributions.

2.7 South West Nature Map

- 2.7.1 There is significant effort underway throughout the south west region to conserve biodiversity, but major challenges lie ahead if we are to stop further losses, re-establish lost wildlife and enable it to adapt to the pressures of climate change. The South West Nature Map shows the best areas to maintain and expand (through restoration and/or re-creation) terrestrial wildlife habitats at a landscape scale.

Figure 2-8 - South West Nature Map for Wiltshire (including Swindon)



Source: South West Observatory 2006.

- 2.7.2 Nature Map was produced by the South West Regional Biodiversity Partnership. It selects landscape scale blocks of land, known as Strategic Nature Areas (SNAs), to improve habitat networks and to sustain wildlife within them. SNAs will contain a mosaic of habitats, building on existing core areas and co-existing with other land uses, such as agriculture and recreation. The principal rivers are also included on the Nature Map as important linear features for biodiversity.
- 2.7.3 Re-establishing biodiversity in the areas identified by Nature Map will require a strategic approach to forward planning and development control, in order to link, buffer and recreate wildlife habitats.
- 2.7.4 More information on how the Nature Map can be incorporated into the development document can be found in South West Nature Map - A Planners Guide (Biodiversity South West, 2007).

2.8 Wiltshire Core Strategy Habitats Regulations Assessment (HRA) March 2013

- 2.8.1 The HRA assesses any impacts of the Core Strategy against the conservation objectives of sites of European importance for nature conservation in, and outside Wiltshire, to ascertain whether it would adversely affect the integrity of any sites concerned. Wiltshire Council appointed WSP Environmental Consultants to undertake the HRA requirements for the Wiltshire Core Strategy. WSP prepared earlier drafts of the reports that examined options for growth in 2009 and earlier drafts of the Core Strategy in 2011 and February, 2012. It is important that the sustainability appraisal takes account of HRA findings in order that consideration can be given to mitigating any adverse effects.
- 2.8.2 The findings of the March 2013 HRA have since been reviewed in light of the proposed modifications to the Core Strategy. The Likely Significant Effects of the proposed modifications are detailed in the February 2014 HRA.

2.9 Wiltshire Core Strategy – Habitats Regulations Assessment (HRA) 28 February 2014

- 2.9.1 The findings of the previous Wiltshire Core Strategy Habitats Regulations Assessment (HRA) have been reviewed in light of all modifications proposed since that assessment was carried out (March 2013). An in combination assessment has also identified any plans or projects which have been

subject to HRA since March 2013.

2.9.2 The scope of the 2014 HRA update is as follows:

- The starting point is the March 2013 HRA and the pre-submission documents which that assessment was based upon.
- The update HRA focuses on relevant changes, rather than repeat the findings of the March 2013 HRA where there are no significant changes.
- This assessment incorporates the finding of the August 2013 HRA review.
- It assesses the effects of all proposed modifications to the plan made since the March 2013 assessment, including both the post-hearing modifications and those presented in EXAM/90.
- It updates the in-combination assessment based on knowledge of any relevant plans or projects at the current time.

2.9.3 The Likely Significant Effects (LSE) of the proposed modifications include:

- Water abstraction – increased abstraction required to supply the additional proposed housing would increase LSE upon the River Avon SAC and Kennet and Lambourne Floodplain SAC. It cannot currently be concluded that the WCS modifications would not have any adverse effect upon these sites until the water companies confirm that this supply could be met within licensed headroom.
- Water pollution (Phosphate) – the increased housing numbers will result in an increased requirement for wastewater discharge, which could have LSE upon the River Avon SAC through increased phosphate levels. It cannot currently be concluded that the WCS modifications would not have any adverse effect upon these sites until Wessex Water confirms that this wastewater treatment could be met within licensed headroom.
- Recreation – the proposed modifications would increase recreational pressure at Salisbury Plain SPA and New Forest SPA. For both of these sites it is anticipated that the increases are relatively modest and the existing mitigation strategies remain valid and effective and it can be concluded that the modified WCS (alone) would not affect the integrity of these sites.
- Habitat Loss and modification – increased housing at Bradford on Avon, Corsham and Westbury could result in habitat loss / modification which would impact upon the Bath and Bradford Bats SAC, however it is concluded that this would be effectively addressed through the Council's guidance document and would not affect the integrity of the SAC. Increased housing at
- Trowbridge could have LSE upon the Bechstein's populations at Biss / Green Lane Woods, however this will be dependent upon the future distribution of housing, to be determined through a subsequent DPD and the effects of that housing is most appropriately Assess through the HRA accompanying that DPD.
- Nitrogen deposition – there is potential for the additional housing to result in increased atmospheric pollution from traffic, however it is concluded that this would not have an adverse effect upon any Natura 2000 sites.
- The in combination assessment identified several in combination LSE from recent Local Plan documents, however none of these in combination LSE were considered to result in an adverse effect upon the integrity of a Natura 2000 site.
- The army rebasing masterplan is likely to have in combination LSEs with the WCS in respect of water abstraction, phosphate on the River Avon SAC and recreational disturbance.

2.10 Wiltshire Housing Site Allocations Plan – Habitats Regulations Assessment (HRA) June 2017

2.10.1 A Habitats Regulations Assessment (HRA) of the Wiltshire Housing Site Allocations DPD has been carried out by Wiltshire Council in accordance with the provisions of Regulation 61 and 102 of the Habitats Regulations. The HRA has been carried out iteratively alongside the development of the plan itself. The plan comprised three main stages:

1. Settlement level screening assessment; this was carried out at Stage 3 of the site selection process in order to inform the sustainability appraisal. This was carried out at a settlement level,

rather than individual sites to identify locations where HRA issues were likely to be a significant constraint to growth.

2. Policy Level Screening Assessment: this was carried out at Stages 4 and 6 of the site selection process. Individual policies were screened for likely significant effects alone and in combination in order to establish the scope of the appropriate assessment. The application of established mitigation measures was also considered at this stage.
3. Appropriate Assessment: this was carried out at Stages 4 and 6 of the site selection process. The effects of the plan as a whole on the integrity of relevant individual Natura 2000 sites (alone and in combination) was considered and the need for any additional / updated mitigation measures such as policy caveats and mitigation strategies.

2.10.2 The HRA identified the following likely significant effects of the plan that were subject to appropriate assessment.

- Salisbury Plain SPA (Recreational Pressure) - Allocations at Warminster, Market Lavington, Bratton, Ludgershall and Durrington lie within the visitor catchment of the SPA and will all contribute to increased recreational pressure on Salisbury Plain SPA, particularly when considered in combination with other planned growth and projects such as the Army Basing Programme (ABP). The Council has an existing Salisbury Plain Mitigation Strategy which deals with this issue and was agreed with Natural England in 2012. New evidence indicates that recreational pressure from projected growth up to 2026 would be higher than was originally expected in 2012. However it is considered that the general approach to mitigation remains effective and that the existing strategy can accommodate any potential uplift in growth during the plan period. As such it can be concluded that the plan would not have an adverse effect on the integrity of the SPA. It is nonetheless recommended that the Salisbury Plain Mitigation Strategy be updated in light of new evidence and changes to projected growth in the visitor catchment of the SPA.
- River Avon SAC (Phosphate) - Certain stretches of the River Avon SAC⁶ are particularly sensitive to increasing levels of phosphate as a result of both diffuse sources e.g. agriculture, and point sources e.g. sewage treatment plants (STWs). As a consequence several stretches of the SAC are in unfavourable condition and the river is currently failing its conservation targets. Development has the potential to exacerbate this situation and the Council, Natural England and the Environment Agency, have therefore jointly produced a Nutrient Management Plan (NMP), in order to demonstrate how levels of growth proposed by the Core Strategy can be delivered without compromising the conservation targets in the long term.

Modelling undertaken to support this housing allocations document demonstrates that housing delivery has exceeded growth anticipated in the NMP and this is further increased by the proposed allocations at Warminster, Salisbury and Durrington. Further refinement of the model is required in order to identify the implications for the NMP targets in specific stretches of the river but the Lower Avon sub-catchment is anticipated to be particularly vulnerable due to its position at the bottom of the catchment. Mitigations options are available and the Council is working with Natural England and the Environment Agency to develop these as part of an Annex to the NMP. Development will be required to be in accordance with this document which will be finalised before further allocations are approved. It can therefore be concluded that the plan will not compromise the delivery of the NMP targets and that it will not have an adverse effect on the integrity of the SAC through increasing phosphate inputs subject to the effective implementation of the NMP.

- River Avon SAC (Abstraction) - Certain stretches of the River Avon SAC catchment are particularly sensitive to increasing levels of abstraction. Effects of allocations at Durrington could be significant, particularly when considered in combination with the effects of the Army Basing Programme. It is understood that a review of military and public water abstractions in this area is due to be carried out by the end of 2019, and that abstraction limits are likely to be tightened as a result. If this occurs, it is unlikely Wessex Water would be unable to supply the proposed development as an infrastructure solution would probably be implemented during the period 2021-257. It may therefore be concluded that the plan would

⁶ Please note this relates to the Hampshire Avon catchment in the south of the county, rather than the Bristol Avon catchment in the north of the county

⁷ Most likely to involve an extension to Wessex Water's integrated grid to import water from Amesbury implemented as part of AMP7

not have an adverse effect on the integrity of the SAC through increased water abstraction. However it is recommended that the potential need for infrastructure improvements should be recognised in the supporting text to policies H3.5, H3.6 and H3.7.

- Bath and Bradford on Avon Bats SAC (Habitat Loss / Deterioration) - Several of the allocations at Trowbridge are within areas likely to be used by bat species which are features of this SAC. The allocations are likely to contain habitat features used by these species and development could lead to their deterioration through physical loss as well as lack of or inappropriate habitat management and higher ambient light levels. These effects become more significant when the effects of the plan are considered as a whole due to the potential for significant loss and deterioration at a landscape scale. It is recommended that the need to protect important habitat features is expressly stated in the relevant policies (H2.1, H2.2, H2.4, H2.5, and H2.6). The Council will also need to develop and implement a Trowbridge Recreation Management Mitigation Strategy before development comes forward to address the residual uncertainty, particularly due to effects of growth at a landscape scale. It may be concluded that the plan would not have an adverse effect on the integrity of the SAC through habitat loss / deterioration, subject to the implementation of these mitigation measures.
- Bath and Bradford on Avon Bats SAC (Recreational Pressure) - Recent evidence has shown that housing expansion on the eastern edge of Trowbridge is generating increased visitor pressure at ancient woodlands which support an important colony of Bechstein's bats associated with the SAC. Further allocations at the town could exacerbate this, particularly when considered in combination with planned growth such as the Ashton Park Urban Extension. The options closest to the woodlands, and therefore most likely to contribute to the number of visits, have been removed from the plan and the Council is currently preparing a Trowbridge Recreation Management Mitigation Strategy to address any residual effects in relation to this issue. It is therefore concluded that the plan would not have an adverse effect upon the SAC through increased recreational pressure, subject to the implementation of that mitigation strategy.

3 Climatic Factors

3.1 Baseline Information

- 3.1.1 The collection of baseline information ensures that the sustainability appraisal process is based on a sound evidence base and provides the basis for predicting and monitoring any environmental or sustainability effects that may be identified during the sustainability appraisal stages. It is made clear in the sustainability appraisal guidance that a practical approach to the collection of baseline information is essential as there are opportunities to update the sustainability appraisal work in the future. The planning authority is encouraged to use existing data sources rather than to undertake original research.

3.2 Introduction

- 3.2.1 Evidence for the existence of climate change is now overwhelming and there is no doubt that rises in global temperature is the result of increased human greenhouse gas emissions. Pre-industrial concentrations of atmospheric carbon dioxide (CO₂) were 280 parts per million (ppm), whereas in 2005, values were 379 ppm. Furthermore, the hottest 10 years to be recorded have occurred since 1991 and in the same period global sea levels have risen by approximately 20cm.

3.3 Predicted Effect of Climate Change in the UK

- 3.3.1 The UK government published Climate Predictions in 2009 (UKCP09) and this includes detailed information on the most likely changes we will see in Wiltshire over the coming years, under a scenario of medium-level greenhouse gas emissions. This information represents the area's best estimate for climatic changes.
- 3.3.2 These predictions, represent the average over a period of thirty years. That means that any extreme weather events will be excluded. UKCP09 is unable to calculate precisely what these will be, but predicts that their incidence and severity will increase.

Table 3-1

Likely changes in temperature and precipitation in Wiltshire under medium emissions scenario (as a range between minimum and maximum predicted values)			
	2020s	2050s	2080s
Increase in annual mean temperature	1.2°C to 1.7°C	2.2°C to 2.9°C	3.1°C to 4.1°C
Increase in summer mean temperature	1.2°C to 2.0°C	2.3°C to 3.5°C	3.3°C to 4.9°C
Increase in winter mean temperature	1.0°C to 1.6°C	1.8°C to 2.6°C	2.4°C to 3.5°C
Increase in temperature of warmest summer day	0°C to 2.7°C	0.9°C to 4.4°C	1.2°C to 5.8°C
Annual precipitation stays roughly the same			
Decrease in summer mean precipitation	1% to 15%	10% to 28%	13% to 34%
Increase in winter mean precipitation	2% to 10%	9% to 22%	12% to 29%
Increase in precipitation on wettest winter day	2% to 11%	6% to 21%	11% to 29%

Source: Wiltshire Climate Change Adaptation Plan: Level 1 Report - April 2010 – Appendix 4 Climate Change

Source: Wiltshire Climate Change Adaptation Action Plan - Level 1 report, Appendix 4: Likely climate changes in Wiltshire (April 2010)⁸

3.4 Climate Local Action Plan

- 3.4.1 Wiltshire Council are a signatory of the Climate Local Initiative, a successor to the Nottingham Declaration and 10:10 campaign. The initiative commits the council to continuing to identify ways of saving money on energy bills, attracting new jobs and investment, reducing flood risks and managing the impacts of extreme weather. As part of the initiative, we have developed a Climate Local Action Plan
- 3.4.2 There has been a series of unusual weather events, largely consistent with predictions of more frequent and extreme weather events due to climate change. In 2011, England had the warmest

⁸ <http://www.wiltshire.gov.uk/wccap-level-1-report-appendix-4-likely-climate-changes.pdf>

April and spring on record. It was also the second warmest autumn on record, with wildlife demonstrating spring-like behaviour in November due to the mild conditions.

3.4.3 The five major near-term weather variables in Wiltshire identified were:

- excessive rainfall & flooding;
- high wind speeds;
- snow, ice and freezing conditions;
- heatwaves and higher temperatures;
- droughts and water shortages.

3.4.4 The winters of 2010/11 and 2011/12 were exceptionally dry, with rainfall below average in 16 out of 25 months up to April 2012. The Environment Agency declared a drought in parts of north and eastern Wiltshire in March 2012 and the remaining areas of Wiltshire in April 2012. Following the wettest April to June period on record in the UK, the drought order was lifted in June 2012.

3.5 Current Policy and Regulatory Framework

3.5.1 Under the Kyoto Protocol, the UK must reduce its greenhouse gas emissions by 12.5 % below 1990 levels over the 2008 to 2012 commitment period. However, in 1997, the UK committed to go beyond its Kyoto Protocol target by setting a national (or 'domestic') goal to reduce CO₂ emissions by 20% below 1990 levels by 2010.

3.5.2 In the UK, two national policy drivers are particularly important. These are the *Climate Change Act (2008)*⁹, which sets a legally binding target to reduce carbon (an important GHG) emissions by at least 34 % by 2020 and the *UK Renewable Energy Strategy (2009)*¹⁰, which states that 15% of the energy we use should be derived from renewable sources by 2020 (within this target 30% of electricity should be derived from renewables and 12 % of heat).

3.6 Carbon Emissions in Wiltshire

3.6.1 Carbon dioxide makes up the largest proportion of greenhouse gas emissions in the UK, about 81% in 2015¹¹. Estimates of carbon dioxide emissions are published by the Department of Energy and Climate Change annually; the most recent figures for local areas are for 2015.

3.6.2 Between 2005 and 2015 total carbon dioxide emissions fell from 1610 to 1160 kilotonnes in Swindon Borough (28% decrease) and from 4427 to 3061 kilotonnes in Wiltshire (31% decrease). However, carbon dioxide emissions per capita in both Wiltshire and Swindon are higher than the regional and national figures, although they are following the same downward trend over time (see Table 3-6).

Table 3-2 - CO₂ Emissions per Capita

CO ₂ emissions per capita (tonnes) within the scope of local authorities							
	2005	2006	2007	2008	2009	2010	2011
Swindon	7.8	7.8	7.5	7.4	6.4	6.6	5.8
Wiltshire	8.1	8.2	7.9	7.7	7.0	7.2	6.5
South West	7.3	7.3	7.0	6.8	6.2	6.4	5.8
England	7.1	7.1	6.8	6.7	6.0	6.2	5.6
Source: Local and Regional CO ₂ Emissions Estimates for 2005-2011, DECC, July 2013 (Figures are emissions within the scope of influence of local authorities e.g. exclude emissions from motorways)							

Source: Wiltshire Intelligence Network¹²

3.6.3 The higher level of emissions in Wiltshire appears to be due to higher than average use of energy in homes, with more homes using 'other fuels' (such as coal and oil, which have greater carbon dioxide emissions) and fewer using gas, as well as higher emissions from road transport, particularly A roads. This is likely to be because Wiltshire's population is highly dispersed, with about half living in rural areas. Many areas are not connected to the mains gas supply and private vehicles are the primary form of transport.

⁹ Climate Change Act (HM Government, 2008)

¹⁰ UK Renewable Energy Strategy (Department for Energy and Climate Change, 2009).

¹¹ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/604350/2015_Final_Emissions_statistics.pdf

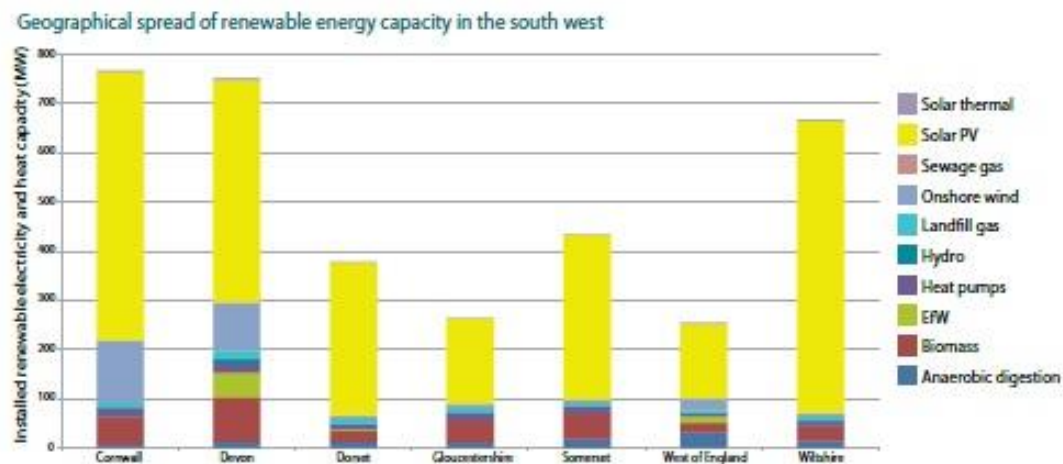
¹² <http://www.intelligencenetwork.org.uk/environment/climate-change-and-energy/>

- 3.6.4 These figures do not include emissions from motorways, diesel railways, land use, land use change and forestry, which are considered to be outside the local authority's scope of influence. Of these, the M4 motorway is the largest source of emissions in Wiltshire and Swindon.

3.7 Renewable Energy Production

- 3.7.1 Wiltshire Intelligence Network¹³ findings state that after several years of relatively slow growth in renewable energy production, there was a dramatic increase in 2011/12; the number of solar PV projects in Wiltshire and Swindon shot up from 347 in 2011 to 5,317 in 2012. Continued high growth in renewable electricity is predicted in the next few years as several large-scale projects, including land-based solar PV farms, are completed.
- 3.7.2 By contrast, in 2012, Wiltshire and Swindon had the lowest renewable heat capacity in the South West region.
- 3.7.3 According to the *South West Renewable Energy Progress Report 2016*¹⁴ published by Regen SW, over the period 2015/16 the south west grew by 3GW of renewable energy capacity, with 538 MW of renewable electricity and 198.4511MW of renewable heat. With 128,080 renewable energy projects, the region now generates 15 per cent of its electricity demand from renewables and produces almost 1673 GWh of renewable heat.

Figure 3-1 - Geographical Spread of Renewable Energy Capacity Across the South West



Renewable energy: a local progress report for England 2016

Source: South West Renewable Energy Progress Report 2016

3.8 Potential Trowbridge District Energy/Heat Network

- 3.8.1 A specific opportunity has been identified in Trowbridge for delivering a district energy/ heat network. Three factors make this proposal especially attractive, which are:
- A programme to substantially re-model County Hall, one of the main Wiltshire Council offices located close to the centre of Trowbridge is commencing in 2011
 - A new leisure campus may be developed on council owned land close to County Hall (this could provide an 'anchor' heat customer)
 - A number of sites have been identified through the Trowbridge Scoping and Vision Study (2010) which may be suitable for redevelopment. Connecting these sites to an energy/ heat network in Trowbridge may help to improve the overall viability of a scheme.

3.9 Climate Change Mitigation

- 3.9.1 According to the Stern Review, commissioned by the UK Chancellor of the Exchequer to examine the economics of climate change, the overall cost of climate change will be equal to losing between 5

¹³ <http://www.intelligencenetwork.org.uk/environment/climate-change-and-energy/>

¹⁴ <https://www.regensw.co.uk/renewable-energy-progress-reports>

and 20 % of global GDP, per year. However, if strong action is taken in the short term, the annual cost of mitigating climate change could be reduced to around 1 % of global GDP.

3.9.2 Climate change mitigation will require taking strong action to reduce greenhouse gas emissions. This should be viewed as an investment, incurred now and in the coming few decades, to avoid the very severe consequences of climate change in the future.

3.9.3 Climate change mitigation measures can be targeted at every sector of the economy, and include:

- reducing the need to travel by motor vehicles and the length of journeys;
- increasing the proportion of energy produced by renewable sources;
- designing buildings to meet changing seasonal weather patterns, for example increased summer temperatures and heavier winter rainfall;
- designing buildings in a more sustainable way, for example being more energy and water efficient and making use of more local materials;
- reducing flood risk and reducing the risk of storm surges;
- tighter building regulations;
- increased levels of microgeneration (that is embedded photovoltaic solar cells on roofs, heat pumps, micro-combined heat and power plants, or small-scale wind turbine generators);
- a stricter emissions cap for industry;
- measures to encourage the uptake of biofuels in petrol; and
- a renewed emphasis on encouraging and enabling the general public, businesses and public authorities to help achieve the government's targets.

3.9.4 A number of key issues highlight the need for Wiltshire to reduce carbon emissions and deliver an increased level of renewable energy. These include:

- Wiltshire's per capita carbon emissions are greater than for either the South West or for the UK¹⁵. In the period from 2005 to 2007 the emissions in Wiltshire went up (by approximately 3.1 %) whereas for the South West overall they went down (by approximately 2.1 %); local carbon emissions have been steadily declining from 2007 to 2011 (achieving a 23% decline from 2005 to 2011), however per capita emissions remain higher than those for the South West¹⁶.
- In 2015, there were 23,965 fuel poor households in Wiltshire, making up 11.8% of all households; this is similar to the figure for the South West of 11.4%¹⁷.

3.9.5 The Wiltshire Sustainable Energy Planning Study¹⁸ assessed the potential for a range of renewable energy technologies across Wiltshire including large scale technologies such as wind, biomass, hydro and solar arrays. The Study concluded that there is potential for almost 30 % of the projected electricity demand in 2020 and over 9 % of the projected heat demand in 2020, to be derived from renewables in Wiltshire. The report suggests that an installed capacity of almost 367 MW would be needed to meet this level of electricity to be supplied from renewable.

Remodelling of private sector house condition survey data using BRE Housing Stock Models to provide information for each Community Area in Wiltshire (October 2010)¹⁹

3.9.6 Generally the housing stock in Wiltshire is better than the national average. The number of 'non decent' homes is greatest in rural areas. There are pockets of fuel poverty throughout Wiltshire. The percentage of households in fuel poverty is greatest in South West Wiltshire followed by the Pewsey Community Area.

¹⁵ Local and regional CO2 emissions estimates for 2005 - 2008 – Full dataset (DECC, 2010)

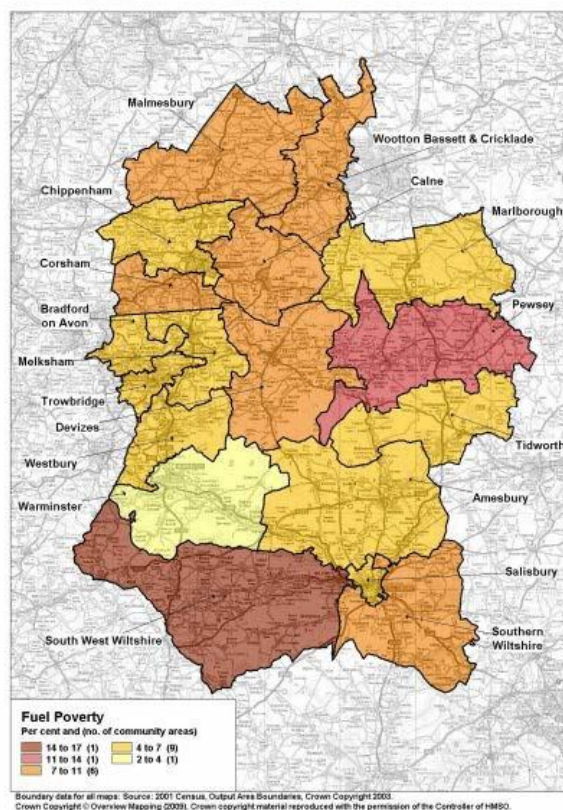
¹⁶ <https://www.gov.uk/government/publications/local-authority-emissions-estimates>

¹⁷ <https://www.gov.uk/government/statistics/sub-regional-fuel-poverty-data-2017>

¹⁸ <http://www.wiltshire.gov.uk/planninganddevelopment/planningpolicy/planningpolicyevidencebase/wiltshiresustainableenergystudy.htm>

Figure 3-2 - Percentage of Private Sector Dwellings in Fuel Poverty

Map 7: Percentage of private sector dwellings in fuel poverty



3.10 Climate Change Adaptation

- 3.10.1 Some climate change impacts over the next few decades will be unavoidable. Mitigation measures can only reduce the severity of climate change in the long term. Government and business therefore have a responsibility to strike a balance between investing in the cost of climate change adaptation and absorbing the cost of climate change impacts.
- 3.10.2 The Parliamentary Office of Science and Technology has set out examples of climate change adaptation, these include:
- reducing vulnerability. For example, by screening infrastructure proposals for climate risk;
 - improving disaster preparedness and recovery;
 - improving information available about the likely impacts and its dissemination;
 - taking action that is cheaper to do now than later. This might include modifying the design of long life investments like buildings;
 - taking action that has early benefits. Since the disadvantaged are often worst affected, investing in healthcare, economic development and education can help communities prepare for climate change as well as having inherent benefits avoiding irreversible damage, such as the loss of unique ecosystems; and
 - avoiding foreclosing future options.
- 3.10.3 At the local level research has been undertaken to inform the preparation of a Wiltshire Council Climate Change Adaptation Plan²⁰. It has been predicted, for example, that by 2050 Wiltshire will experience hotter summers with an increase in average summer temperature of between 1.1 – 5.4°C on the current average summer temperature. Average winter temperatures are also set to rise with an expected increase of between 0.9 - 3.8 °C on that which is currently experienced. Total annual rainfall is unlikely to change, however, the patterns of rainfall could shift with total summer rainfall likely to decrease by around 20% and winter rainfall predicted to rise by around 15%. ; this is based on the scenario developed by the Intergovernmental Panel on Climate Change (IPCC) and

²⁰ Wiltshire climate change adaptation plan (Wiltshire Council, 2012).

uses the United Kingdom Climate Projections 09 (UKCP09) tool developed by the Met Office Hadley Centre.

3.10.4 A review of best practice reveals four areas where planning policy can influence resilience to climate change, which are:

- Managing high temperatures;
- Managing flood risk;
- Managing water resource and water quality; and
- Managing ground conditions.

3.11 Ecological Footprint

3.11.1 The ecological footprint measurement is a technique for calculating global sustainability. A 'sustainable' ecological footprint has been calculated at 1.9 global hectares per person; which is described as the maximum footprint allowance without depriving future generations, anything above this is therefore unsustainable.

3.11.2 The ecological footprint for Wiltshire is higher than the average value for the UK of 4.64, both of which are significantly greater than the average global ecological footprint (Figure 3). Any future effort directed at climate change adaptation and mitigation, such as reducing the use of non-renewable energy and reducing vehicle journeys will help reduce the ecological footprint for Wiltshire.

Table 3-3 - Ecological Footprint 2006

Ecological footprint per person, 2006 (hectares per capita)	
Kennet	4.82
North Wiltshire	4.87
Salisbury	4.91
West Wiltshire	4.84
Swindon	4.67
South West	4.74
UK	4.64
Current global average	2.4
Sustainable level	1.9
Source: Stockholm Environment Institute, University of York	

4 Economy and Enterprise

4.1 Baseline Information

- 4.1.1 The collection of baseline information ensures that the Sustainability Appraisal process is based on a sound evidence base and provides the basis for predicting and monitoring any environmental or sustainability effects that may be identified during the Sustainability Appraisal stages. It is made clear in the Sustainability Appraisal guidance that a practical approach to the collection of baseline information is essential as there are opportunities to update the Sustainability Appraisal work in the future. The planning authority is encouraged to use existing data sources rather than to undertake original research.
- 4.1.2 Economy and enterprise is a key topic area of significance to both the LDF process and to sustainability more generally.
- 4.1.3 The local authority area for Wiltshire contains three Principal Settlements, as set out in the Wiltshire Core Strategy (2015); these are Chippenham, Salisbury and Trowbridge and should be the focus of both housing and employment development in the future. However, there is clearly a strong relationship with other Principal Settlements in neighbouring authorities, such as Bath, Bristol and Swindon.

4.2 Employment Sectors

- 4.2.1 In Wiltshire the proportion of manufacturing related employment has dropped slightly over the past few years and it is now slightly under the South West figures but still above the national average. This is indicative of the nature of businesses in Wiltshire. Strategies for Wiltshire have consistently looked to increase higher skilled employment opportunities in Wiltshire, finance, IT and other business activities. The sector with the highest proportion of employment opportunities is the services sector and the proportion of services related employment in Wiltshire has increased from 80.3% in 2007 to 84.3% in 2012, still below the national average but slightly above South West figures.

Table 4-1 – Employment by Occupation (April 2016 – March 2017)

Sector	Wiltshire (employee jobs)	Wiltshire %	South West %	Great Britain %
Soc 2010 major group 1-3	123, 500	49.5	45.3	45.5
1 Managers, directors and senior officials	34,300	13.7	11.6	10.7
2 Professional occupations	51,200	20.5	19.2	20.4
3 Associate professional &	38,000	15.2	14.5	14.2
Soc 2010 major group 4-5	53,100	21.3	21.9	20.7
4 Administrative & secretarial	25,100	10.0	10.27	10.2
5 Skilled trades occupations	28,000	11.2	11.74	10.4
Soc 2010 major group 6-7	37,900	15.2	16.3	16.7

6 Caring, leisure and Other Service occupations	21,100	8.4	9.0	9.1
7 Sales and customer service occs	16,800	6.7	7.3	7.5
Soc 2010 major group 8-9	35,000	14.0	16.4	17.1
8 Process plant & machine operatives	13,000	5.2	5.8	6.3
9 Elementary occupations	22,100	8.8	10.6	10.7

Source: Nomis 2017

4.3 Employment Opportunities

- 4.3.1 The employment rate in Wiltshire during the period April 2016 to March 2017 was 81.2%, above both the regional and national averages (77.6% and 74.2%) and above the 2016 figure of 80% (Nomis 2017).
- 4.3.2 In recent years the population of parts of Wiltshire has grown substantially, although this has generally not been matched by increases in employment opportunities. Consequently, out commuting has increased. Wiltshire has a low number of jobs compared to the number of resident working people: 0.9 jobs per person as compared to 0.97 jobs per person nationally, and so people are inclined to commute out of the area. (JSA for Wiltshire 2012/13)
- 4.3.3 In 2009, 1,715 business start-ups were recorded in Wiltshire against a total business base of 19,915. This is a start-up rate of 8.6% for the county and is broadly in line with that recorded for the whole South West region (8.7%). In contrast, business start-up rates across the UK were higher at 10.1%. In total, 2005 businesses closed in Wiltshire, a rate of 10.1%, which is lower than that experienced regionally (10.9%) and nationally (UK, 11.92%) this overall loss can be accounted for by the impact on the recession on the economy. The net loss between start-ups and closures was only 1.5% compared to 2.2% for the region²¹.

Table 4-2 - Business Demography: Enterprise Births, Deaths & Survivals - Period: 2015²²

Variable	Measure	Wiltshire	South West	England
Births (Enterprises)	Count	2,550	26,155	344,385
Deaths (Enterprises)	Count	1,920	19,415	223,120

Source: Office for National Statistics Last Updated: 2015

4.4 Economic Activity

- 4.4.1 The economic activity rate is a good indicator of the health of the labour market in an area. Persons are economically active if they are either employed or unemployed in a particular period. Economically active people can thus be defined as those who supply or want to supply their labour to produce goods and services for the economy.
- 4.4.2 The economic activity rate in Wiltshire for the period April 2016 to March 2017 was 84.5%, slightly lower than the 2007 figure (82.5%), but above both the regional (80.8%) and national (78.0%) averages (see Table 4-11 - Key figures for economic deprivation).

²¹ Business start-up and closure rates, Wiltshire Council 2010

²² <https://www.ons.gov.uk/businessindustryandtrade/changestobusiness/businessbirthsdeathsandsurvivalrates>

- 4.4.3 In terms of economic inactivity in Wiltshire for the period April 2016 to March 2017, 33.2% of inactive people wanted a job, slightly less than in 2016 but a larger proportion than the regional (26.7%) and national (23.8%) averages. As with employment rates, unemployment is low in Wiltshire (as discussed further below) as is economic inactivity compared with the south west and the national picture.

Table 4-3 - Economic inactivity in Wiltshire April 2016-March 2017

	Wiltshire (level)	Wiltshire (%)	South West (%)	Great Britain (%)
All People				
Total	44,600	15.5	19.2	22.0
Student	9,400	21.0	26.3	26.3
looking after family/home	8,700	19.4	20.8	24.7
Temporary sick	#	#	2.3	2.0
Long term sick	11,800	26.4	20.7	22.1
discouraged	!	!	0.5	0.4
retired	6,800	15.2	16.8	13.4
other	5,800	13.1	12.7	11.1
Wants a job	14,800	33.2	26.7	23.8
Does not want a job	29,800	66.8	73.3	76.2

Source: Nomis 2017

4.5 Unemployment

- 4.5.1 In the period from April 2016 to March 2017, 3.2% of Wiltshire's population was unemployed, lower than both the average for the South West and for Great Britain (respectively 3.9% and 4.7%) and lower than the 2016 rate.
- 4.5.2 According to the JSA for Wiltshire 2012/13, unemployment levels in Wiltshire rose significantly during the recession, particularly male unemployment. However, overall rates have been much lower than those found nationally and amongst neighbouring counties. Unemployment levels were expected to continue to increase in the short-term as the level of people being made redundant, particularly from the public sector, outstrips the capacity of the private sector to provide new jobs. The effective support of those made redundant to gain new skills and to re-train is therefore important and new programmes will be required. High NEET and youth unemployment rates, however, are of major concern. Employment opportunities for those under 25 years old have been limited due to competition from more experienced workers released into the labour market as the economy has restructured.

4.6 Claimant Count

- 4.6.1 The Claimant Count is based on the number of people claiming Jobseekers Allowance (JSA) and is taken from monthly records. Claimant Count rates express the number of JSA claimants as a percentage of working age people in an area. The Claimant Count for Wiltshire in August 2017 was

0.9%, below both the regional (1.3%) and national (1.9%) averages.

- 4.6.2 There is a difference between the claimant count rate and the unemployment rate, representing a few thousand working age people who could possibly be regarded as part of the 'hidden unemployed'. The 'hidden unemployed' do not claim or may not be entitled to Jobseekers Allowance (JSA) and are therefore excluded from official unemployment statistics that are based on the Claimant Count.

Table 4-4 - Key Figures for Economic Deprivation

		Wiltshire	South West	England
Economic Activity Rate; Aged 16-64 (Apr12-Mar13)	%	80.2	78.8	77.3
Employment Rate; Aged 16-64 (Apr12-Mar13)	%	74.6	73.9	71.1
Unemployment Rate; Aged 16-64 (Apr12-Mar13)	%	5.3	6	7.8
All People of Working Age Claiming a Key Benefit (Aug 2010)	%	10	13	15
Jobseeker's Allowance Claimants (Aug 2010)	%	2	2	4
Incapacity Benefits Claimants (Aug 2010)	%	4	6	7
New Personal Insolvencies (Jan11-Dec11)	Rate per 10000	26.4	30.4	26.7

Source: Office for National Statistics; Insolvency Service

- 4.6.3 According to the JSA for Wiltshire, claimant count levels across all three geographies rose sharply from the summer of 2008 as the economic downturn took hold. The highest levels were experienced during 2009 and early 2010, with levels dropping since then
- Wiltshire claimant count levels are consistently below those found in the South West and England, although the trends experienced since the onset of the recession have mirrored them. The local economy is, therefore, closely tied into the general cycle of trends, but it has demonstrated its overall resilience through rates being appreciably lower.
 - The claimant count amongst the young is a concern with 30.3% of all claimants falling into the 18-24 age bracket. This is higher than that experienced regionally and across England. It is even more acutely felt by young men in Wiltshire at 31.3% who are also more likely to be claiming for over six months, compared to females and males across the three geographic areas.

4.7 Commercial Property in Wiltshire

- 4.7.1 During the period May 2007 to May 2008, the overall availability of office floor space within Wiltshire increased by 8.52% from a total of 545,107 sq ft to 591,569 sq ft; whilst the number of individual units available actually fell from 146 to 124. At District level, the picture was more mixed with Salisbury District seeing quite a dramatic rise in the availability of office premises (69.65%) and North Wiltshire also experiencing a significant increase (10.83%), whilst Kennet and West Wiltshire both witnessed quite a sharp decline in the availability of office premises (44.46% and 20.49% respectively).
- 4.7.2 The sharp rise in office premises availability seen in Salisbury between May 2007 and May 2008 can be principally attributed to the entrance of 66,062 sq ft of floor space coming onto the market at Solstice Park and 23,641 sq ft of floor space becoming available at Minton Distribution Park in Amesbury.
- 4.7.3 Between May 2007 and May 2008, the number of industrial units available across Wiltshire fell quite sharply from 201 to 139, with total available industrial floor space falling from 1,043,356 sq ft to

809,003 sq ft; which is a 22.46% decrease. This trend was matched at District level, with the availability of industrial premises falling by 71.01% in Kennet, 28.07% in West Wiltshire, 25.68% in Salisbury, and by 6.53% in North Wiltshire.

- 4.7.4 During the period Spring 2007 to Spring 2008, average commercial rents for office premises rose quite sharply in Salisbury by 19.92% (from £7.28 per sq ft to £8.73 per sq ft). Average commercial rents for office premises rose more modestly in both Chippenham and Trowbridge, with rises of 1.82% (from £7.70 per sq ft to £7.84 per sq ft) and 1.63% (from £9.23 per sq ft to £9.38 per sq ft) respectively. In contrast, the average commercial rent figure for office premises in Devizes fell across the Spring 2007 – Spring 2008 period by 2.97%, from £9.23 per sq ft to £9.38 per sq ft. Tourism in Wiltshire
- 4.7.5 The baseline data for this section is derived from Visit Wiltshire's 'regional value of tourism in the UK: 2013'
- 4.7.6 The South West region has one of the highest proportions of their economic output that can be directly attributed to tourism spend (4.5%) in Britain, only outpaced by Wales (4.9%), However within the South West region, after Gloucestershire, Wiltshire is the County in the south west with the least number of visits and that with the lowest visitor spend.
- 4.7.7 Key facts about tourism in Wiltshire²³:
- 2015 was another record year for Wiltshire tourism, the fourth record year in a row. Staying visits, visitor spend and economic impact are all at record levels.
 - Wiltshire's visitor economy is worth £1.53bn (+4%) per annum and supports over 29,000 jobs.
 - Tourism contributes £860m GVA per annum to Wiltshire's economy.
 - Mainly driven by a reduction in the number of short-stay day visitors, the total number of visitors to Wiltshire in 2015 was down 1.5% to 19.6m visitors.
 - Wiltshire attracted a record 1.84m staying visitors in 2015 (+5%), spending a record £368m (+4%).
 - Total annual tourism business turnover and GVA have increased by 35% since 2011 to £1,530m and £860m respectively.
 - Wiltshire's 17.7 million day visits generated £668m in day visitor expenditure.
- 4.7.8 In 2016, the total number of nights spent in Wiltshire was around 20.14 million. The total visitor related spend was £1.34 billion²⁴.
- 4.7.9 It is important that any future growth in the tourism sector is sustainable. The Tourism Strategy for the South West Towards 2015, Shaping Tomorrow's Tourism suggests that quality should be placed as a priority over quantity. In this way the value of visitors to the region should grow rather than just the volume.

4.8 Earnings and Commuting

- 4.8.1 As shown in Table 4.14, Wiltshire has a high proportion of people of working age in employment compared to the national average.
- 4.8.2 According to the JSA for Wiltshire 2012/13, The largest cohort of the economically inactive in the county is the retired at 28.4% which is significantly higher than across the South West (21.3%) and Great Britain 16.9%)². The county has an ageing population which, coupled with a below average number of people working in the care sector and services, is a concern.
- 4.8.3 Wiltshire has a much higher proportion of people (49.2%) employed as managers, professionals and associate professionals than that found regionally (42.7%) and nationally (43.3% GB). As a result, it also has a much higher proportion of working age residents qualified to NVQ 3 and above than found regionally and across Great Britain. Overall, the number of residents at all qualification levels at NVQ1 or above exceeds those found across the South West and nationally.
- 4.8.4 With a higher than average education and higher skilled occupation profile, the average earnings of

²³ <https://www.visitwiltshire.co.uk/dbimngs/Value%20of%20Tourism%20-%20Economic%20Impact%20Highlights%202015.pdf>

²⁴ <https://www.visitbritain.org/nation-region-county-data>

residents is also higher, particularly for males. However, the reverse is the case when earnings by workplace are considered. This is due to out-commuting by the higher skilled residents to better paid jobs in surrounding towns and cities.

Table 4-5 - Earnings by Residence (2016)

	Wiltshire (pounds)	South West (pounds)	Great Britain (pounds)
Gross weekly pay			
Full-time workers	522.3	513.2	541.0
Male full-time workers	567.3	557.3	581.2
Female full-time workers	458.5	445.0	481.1
Hourly pay - excluding overtime			
Full-time workers	13.08	12.80	13.66
Male full-time workers	13.64	13.47	14.25
Female full-time workers	12.21	11.78	12.84

Source: Nomis 2017

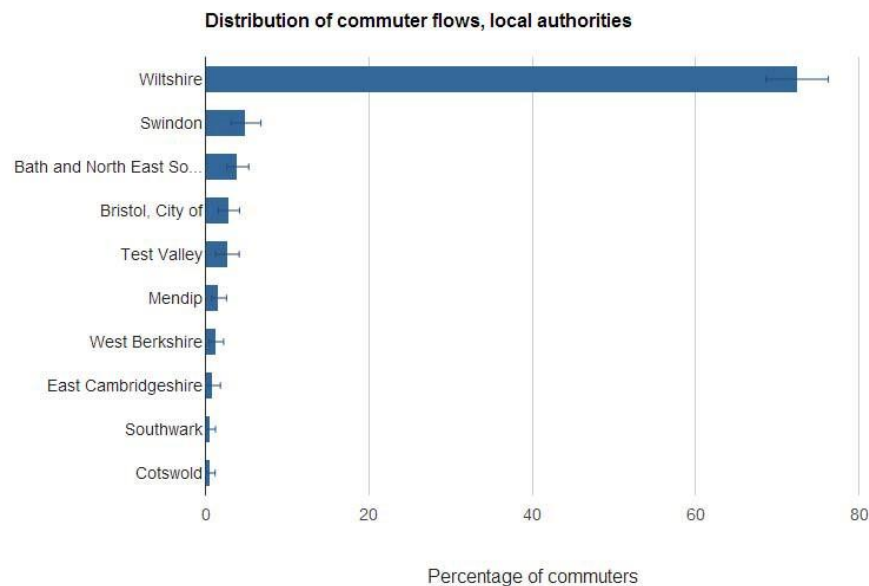
Table 4-6 - Earnings by Workplace (2013)

	Wiltshire (pounds)	South West (pounds)	Great Britain (pounds)
Gross weekly pay			
Full-time workers	475.4	480.0	517.8
Male full-time workers	513.3	519.9	558.3
Female full-time workers	413.6	421.4	459.6
Hourly pay - excluding overtime			
Full-time workers	11.64	12.07	13.07
Male full-time workers	12.31	12.77	13.66
Female full-time workers	10.95	11.15	12.26

Source: Nomis 2013

- 4.8.5 The pattern of out commuting in professional services in Wiltshire is reflected in these indicators where people in residence earn higher than the national average where as by work place the result for Wiltshire is lower than the national average. Overall there is significantly less people on job seeker allowance in Wiltshire than the national average.

Figure 4-1 - Outward Commuting flows from Wiltshire Residents in 2011



Copyright 2013 © Office for National Statistics

Source: Office for National Statistics²⁵

4.9 Deprivation

- 4.9.1 Our county is diverse with great wealth alongside areas of deprivation. We have a large retired population, our children are at a median for achievement at school and overall are reasonably healthy away from deprived areas. However, the deprivation in urban areas is clearly visible, especially in our market towns. This contrasts sharply with the hidden deprivation in our rural areas where there are high levels of poverty and very limited access to services.
- 4.9.2 Significant areas of Wiltshire are in the 5% most deprived in England. In urban areas, four wards in Swindon experience very high levels of deprivation and there are two areas in the Wiltshire Local Authority that are in the 5% most deprived, Trowbridge Adcroft and Salisbury Bemerton.
- 4.9.3 Rural poverty is hidden but significant. The cost of living in rural areas is significantly higher than in urban areas. Housing is less affordable and services are harder to access. The distance to the nearest shop is often much further and the cost of basic services often higher.
- 4.9.4 Deprived people do not necessarily live in deprived areas. The majority of people claiming benefits do not live in areas identified as disadvantaged. Pockets of serious deprivation exist within apparently wealthy communities, but are statistically invisible and therefore services and facilities are not provided for them.

Table 4-7 Average IMD Score by Area Board: Wiltshire Uncovered Report 2014

Average IMD Score by Area Board ²⁶			
Trowbridge	80.10	Pewsey	55.11
Salisbury	74.55	Chippenham	55.00
South West Wiltshire	67.83	Amesbury	54.79
Westbury	63.27	Corsham	50.74
Melksham	61.32	Calne	50.43
Devizes	59.64	Southern Wiltshire	48.59
Tidworth	58.46	Marlborough	48.09

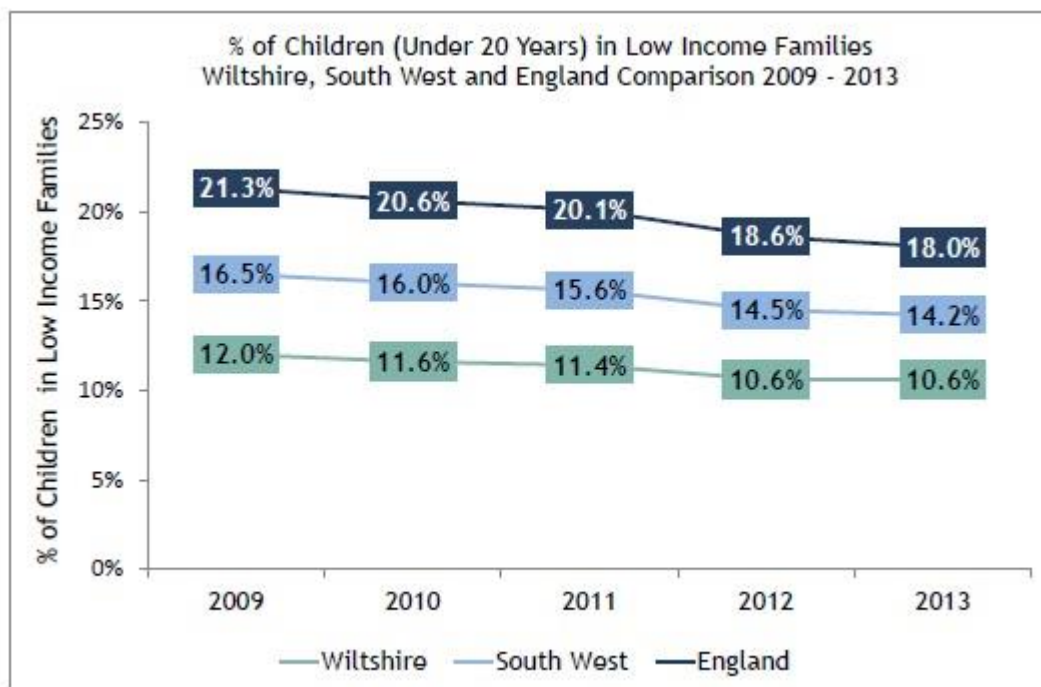
²⁵ http://www.neighbourhood.statistics.gov.uk/HTMLDocs/Commute_APS_Chart/APS_2010_11.html

²⁶ Wiltshire Uncovered Report 2014

Warminster	58.03	Malmesbury	38.29
Bradford on Avon	56.37	Royal Wootton Bassett & Cricklade	38.24

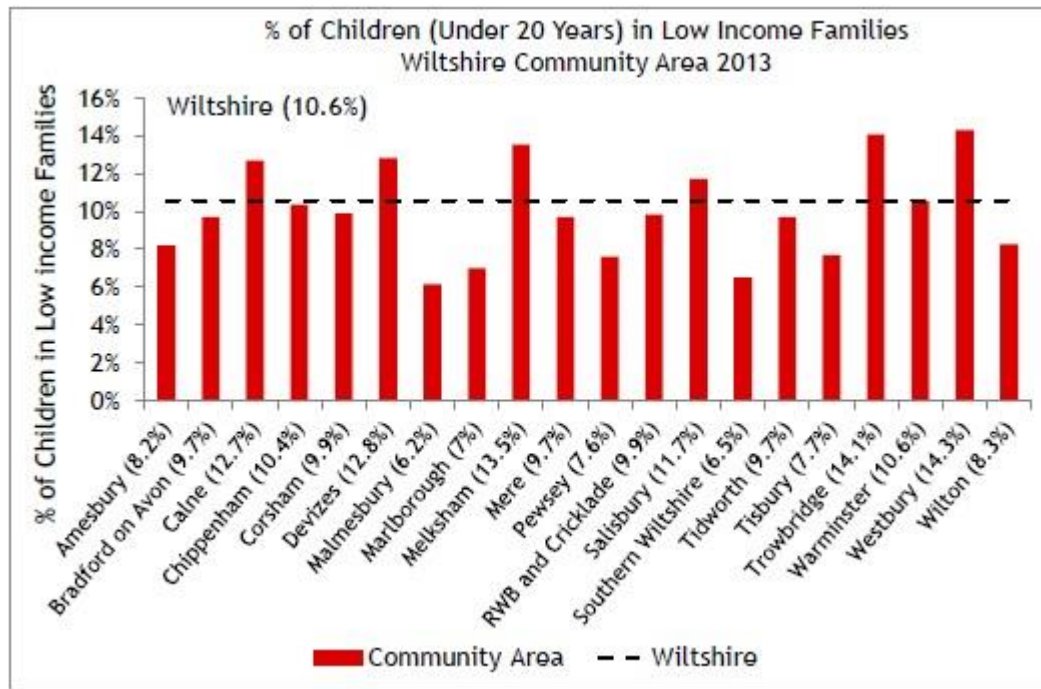
- 4.9.5 The JSA for Wiltshire 2012/13 provides an update following the publication the Indices of Deprivation 2010 (ID2010) Whilst Wiltshire continues to compare favourably against the national benchmark, the county has seen an increase in relative deprivation since the ID 2004.
- 4.9.6 For the first time, Wiltshire now has one LSOA in the 10% most severely deprived in England; Salisbury St Martin - central. This area is now also in the 10% most deprived in England with regards to health deprivation and disability.
- 4.9.7 The ID 2010 indicates that the total number of income deprived people in Wiltshire was around 39,100 as at 2008. This represents an increase from around 6.9% of the total population for the ID 2004 to 8.6% of the population for the ID 2010. The majority of this increase took place between the ID 2004 and 2007 i.e. between the years 2001 and 2005 and so prior to the onset of the recession.
- 4.9.8 The percentage of children under 20 years of age living in poverty in Wiltshire has stabilised at 10.6% in 2012 and 2013 after having shown a gradual reduction since 2009. Between 2009 - 2013 (the most recent data available), proportional levels of children living in low income families in Wiltshire have remained below that reported both regionally and nationally.

Figure 4-2 Percentage of Children in Low Income Families: JSA 2013



- 4.9.9 According to the latest figures from the HMRC (2013), 10.6% of children and young persons aged 20 years or below in Wiltshire are living in low income families. This is equivalent to 10,770 children and young people across the county. Calne, Devizes, Melksham, Salisbury, Trowbridge and Westbury Community Areas experienced higher proportional levels of children living in low income families than that across Wiltshire in 2013 whilst Amesbury, Malmesbury, Marlborough, Pewsey, Southern Wiltshire, Tisbury and Wilton experienced lower levels.

Figure 4-3 Percentage of Children in Low Income Families in Wiltshire Community Areas: JSA 2013



4.10 The Swindon and Wiltshire LEP - Strategic Economic Plan March 2014²⁷

- 4.10.1 The Swindon and Wiltshire Strategic Economic Plan (SEP) sets out a vision and a transformational economic growth programme for the Swindon and Wiltshire areas. By 2026, the LEP want Swindon and Wiltshire to be recognised as one of the UK's leading hubs of innovation, home to more world-class businesses and entrepreneurs, with a digital infrastructure second to none and a thriving network of Higher Education centres. Their aim is for the area to be known as the heart of the British Army where new Garrison Town communities have expanded sustainably to accommodate returning troops and where investment by the Military has generated significant new economic opportunities.
- 4.10.2 The SEP has been developed over an intensive six-month period and builds on a considerable amount of work undertaken by the LEP, the Unitary Authorities and other local stakeholders. The LEP consulted widely with local business to understand their needs and developed a large body of evidence to understand the local opportunities and barriers to economic growth.
- 4.10.3 The LEP are bidding for £275m of Local Growth Funding between 2015/16 and 2020/21 to bring forward existing growth plans, and to capitalise on a number of exciting new opportunities.
- 4.10.4 In 2015/16, the call on the Local Growth Fund is £44.7m to deliver projects worth £719m with local public sector contributions of £41m and over £522m of private sector investment leveraged. The total call on the Local Growth Fund for these projects to 2021 is £152.4m. The projects where delivery can start in 2015/16 are:

Swindon:

- Eastern Villages Infrastructure
- Sustainable Energy
- Sustainable Transport (LSTF)

A350 Corridor:

- A429 Malmesbury Access Improvements

²⁷ <http://www.swlep.biz/resources/document635319476627486000.pdf>

- Corsham Digital Community
- Chippenham: Langley Park; Transport Package; A350 North
- Bypass Improvements
- Melksham Growth Strategy
- Trowbridge Transport Package
- Westbury Bypass Feasibility
- Connecting Wiltshire (LSTF)

South Wiltshire:

- Porton Science Park
- Salisbury Transport Package

Skills:

- Creating Growth through Knowledge (City Deal)
- Swindon College – Sustainable Technologies
- Wiltshire College – Salisbury Campus
- Wiltshire College – Lackham Campus

4.10.5 The main aim of the LEP is to promote Swindon and Wiltshire as the perfect location for businesses to develop and thrive. To achieve this, the LEP priorities include:

- Encouraging inward investment
- Stimulating growth in the local economy
- Creating jobs and skills
- Building upon the existing economic infrastructure

4.10.6 The LEP have identified three growth zones where there is greatest capacity to support sustainable future growth:

- Swindon – where our Growth Deal will focus on the Town Centre, Wichelstowe and the New Eastern Villages;
- A350 Corridor – where our Growth Deal will focus on supporting growth around Malmesbury, Corsham, Chippenham, Melksham and Trowbridge;
- South Wiltshire – focusing on Porton, Salisbury and our Garrison Towns.

4.11 Economic Impact of the Economic Downturn in Wiltshire

4.11.1 An update report was published in May 2011 entitled 'Economic impact of the economic downturn in Wiltshire'. This report presents the findings from an ongoing analysis which monitors and explores the economic impact of the 2008 UK and global economic 'downturn' on, and across, the Wiltshire economy.

4.11.2 The analysis explores both the Wiltshire workplace economy (and its constituent workplace sub-economies) and also its resident-based economy (and its constituent resident-based sub-economies). However, this update does not cover the widespread redundancies which appear to have occurred at the end of the 2010/2011 financial year. Many of these redundancies will be the result of the large-scale UK Government cuts to public services announced through 2010, and which are often timed to coincide with funding and financial planning regimes, most of which conform to the financial year.

Workplace Economy Impact

4.11.3 Driven almost exclusively by Services as opposed to Blue Collar sectors, 2010 marked a period of good recovery in the Wiltshire workplace economy with the area recovering approximately one third of the ground it lost from the Downturn in 2008 and 2009. However, the impact of the Downturn has still

left Wiltshire workplaces with a (net) total of 4,500 people less at the end of 2010 than they had at the end of 2007 (a 2.2% decline). Wiltshire's GVA has declined by around 5% as a result of the Downturn.

- 4.11.4 Overall, the Wiltshire workplace economy appears, so far at least, to have been slightly worse affected by the economic Downturn than Great Britain, but significantly worse affected than the South West, which appears to have weathered the Downturn reasonably well (at least compared nationally).
- 4.11.5 Within Wiltshire, the ongoing effects of the Downturn have been felt almost exclusively in the West Wiltshire workplace economy. Of the 3 remaining pre-2009 district economies of Kennet, North Wiltshire and Salisbury, these workplace economies have managed to at least stabilise (if not recover somewhat), since the end of 2009.
- 4.11.6 The most affected workplace economies within Wiltshire continue to be Trowbridge, Salisbury, Westbury and Corsham. The remaining urban areas of Wiltshire have been recovering or stabilising (such as Chippenham, Melksham, Wootton Bassett, Warminster and Calne) or indeed have managed to weather the Downturn relatively well throughout (Amesbury, Devizes, Marlborough and Pewsey). The rural workplaces of the former districts of North and West Wiltshire also continue to be affected by the Downturn, certainly more than the rural areas of Kennet and Salisbury, which appear little affected by the Downturn overall.

Resident Economy Impact

- 4.11.7 In December 2007, Wiltshire had around 2,300 claimant unemployed, equivalent to 0.8% of the WAP. Three years later Wiltshire unemployment had risen to 1.9% of the WAP, a rise of 3,200 (1.6%).
- 4.11.8 The impact of the downturn occurred most significantly in Wiltshire (as regionally and nationally) through 2008 and 2009. In 2010, however, there was substantial recovery in the resident economy of Wiltshire (again, as with regionally and nationally).
- 4.11.9 The good progress of recovery of Wiltshire in 2010 has once again helped to open a slight gap between its (lower) rate of unemployment and that of the region, and to restore the traditional gap between the Wiltshire (lower) rate and the national rate. The previous downturn update showed that both these gaps were under threat of closing.
- 4.11.10 Within Wiltshire, unemployment volume increases tend to reflect the relative size of the resident population in general. For example, claimant unemployment volumes have risen most in Trowbridge, Chippenham and Salisbury. However, absolute percentage changes in unemployment tend to be highest in those Community Areas where claimant unemployment volumes are traditionally the lowest. It is also noticeable that these Community Areas are, in general, characterised by relatively low levels of indigenous workplace employment activity and high net out-commuting and a location of the periphery of Wiltshire.
- 4.11.11 In total, it is estimated that Wiltshire earnings fell from £5,551 million in December 2007 to £5,493 million in December 2010, a volume loss of around £58 million, and equivalent to a decline of 1.0%. The Wiltshire earning loss is less than that experienced regionally, which saw a 1.2% decline in earnings, and quite substantially lower than that seen nationally, a 1.5% decrease.
- 4.11.12 The nature of job losses across Wiltshire, in terms of broad skills levels at least, has been in line with trends seen nationally and regionally; around 30% of losses are skilled jobs and around 70% are unskilled jobs. West Wiltshire has displayed the largest share of skilled job losses, whilst North Wiltshire has displayed the lowest share of skilled job losses. In fact, the North Wiltshire economy, with its relatively small percentage of skilled losses and commensurately larger proportion of unskilled losses, stands out from the general trends seen across the rest of Wiltshire, and also nationally and regionally.
- 4.11.13 By gender, the nature of job losses across Wiltshire overall has also been broadly in line with trends seen nationally and regionally; just over two thirds of downturn losses are males and just less than one third are females. The nature of job losses by age across Wiltshire has also been broadly in line with trends seen nationally and regionally with around one quarter of losses being young people (aged 16 to 24), three fifths or so being middle-aged (aged 25 to 49), and one fifth being older (aged over 50). Within Wiltshire, the highest proportions of young people job losses were experienced in Wootton Bassett, Amesbury, Marlborough, Pewsey and Tisbury. Devizes is notable for having a very low proportion of younger job losses.
- 4.11.14 In terms of changes in the duration of unemployment, of Wiltshire's total change in unemployed since the end of 2007, some 74% of the change in unemployed comprises shorter term unemployed and

27% is longer term unemployed. Such proportions are almost identical to those displayed by the South West region as a whole, but slightly different to those nationally, where a somewhat lower proportion of the change in unemployed is shorter term and somewhat more are longer term.

4.12 Economic Impacts of the Military Changes in Wiltshire

- 4.12.1 Military personnel in Wiltshire presently constitute around 3.2% of the total population and including dependents the total is estimated to be around 30,000 (6.4%). This total is expected to increase over the next five years. Military personnel and dependants are estimated to constitute over 20% of the total population in Tidworth, Bulford, Durrington, Upavon, Warminster East, Lyneham, Nettleton and Colerne wards, with this figure reaching 75% in Tidworth. The population in the most strongly military-influenced wards is dominated by younger adults (particularly males) and these areas also show higher than average proportions of pre-school and primary school children.
- 4.12.2 A significant change to Wiltshire's military population was announced by the MOD on 5th March 2013. This outlined the future basing of the British Army and confirmed a growth of 4,000 military personnel within the Salisbury Plain area. By 2020, the Army will be predominantly UK-based, with the 'Reaction Forces' centred in the Salisbury Plain Training Area.
- 4.12.3 The military presence in Wiltshire is set to undergo a number of changes in the period to 2030. There is a need to accommodate troops being repatriated from Germany as parts of the German defence estate are closed and to improve affordability, with the aim to concentrate personnel on fewer, larger sites that can better deliver military capability.
- 4.12.4 RAF Lyneham in North Wiltshire is currently the largest RAF base in the South West region, but will be closing in its current form in 2012 with all personnel and functions transferring to RAF Brize Norton in Oxfordshire. The site is being considered for military re-use as a main operating base for Joint Helicopter Command, although no decision on this had been made at the time of writing.
- 4.12.5 In a third major change, the army headquarters currently based at Wilton and Upavon merged in 2008 to form the new HQ Land Forces. The personnel associated with this combined organisation will be relocating to Andover, Hampshire. The site at Upavon is most likely to be retained for military use, while the Wilton site is classified as disposal and is therefore expected to be released.

4.13 Wiltshire Workspace and Employment Land Strategy (2009/10)

- 4.13.1 Commissioned by the Wiltshire Strategic Economic Partnership and undertaken by DTZ, the Wiltshire Workspace and Employment land Strategy (WWELS) provides a market facing assessment of the demand for and supply of employment land, sites and premises in the Wiltshire sub-region. The WWELS quantifies the level and type of employment land and sites and premises required in Wiltshire to support the continuation of strong economic growth over the period to 2026. It is an essential piece of evidence to support the economic strategy within the Wiltshire core strategy.
- 4.13.2 The Strategy identifies growth of 27,570 jobs across Wiltshire over the plan period (of which 10,900 will be delivered in South Wiltshire). A total of 178 hectares of new employment land is proposed across Wiltshire (including approximately 50 hectares within South Wiltshire). This is in addition to that already committed (built out or planned for) since 2006 and will provide a range of sites and choice of locations across Wiltshire. The Strategy seeks to balance the geographical benefits that attract employment development to Wiltshire and the economic potential of individual places within Wiltshire
- 4.13.3 WWELS focuses on understanding the role of the principal settlements, namely:
 - Chippenham, Salisbury and Trowbridge and of market towns and a wider range of economic activity in rural areas; and
 - it considers the role of town centres in accommodating employment uses, including exploration of more innovative options.
- 4.13.4 Although the WWELS was developed within the framework provided by the draft South West Regional Spatial Strategy, the analysis about individual places remains relevant, as the focus of the Draft RSS on Strategically Significant Cities and Towns (SSCTs) identified Chippenham, Salisbury and Trowbridge as locations with an existing concentration of businesses where there is a realistic ambition to deliver new strategic opportunities for employment.
- 4.13.5 The overall scale of new development which the document considered appropriate at these

settlements was:

- Chippenham between 30.5 and 39 ha
- Salisbury between 30.5 and 39 ha
- Trowbridge between 29.0 and 37 ha

- 4.13.6 WWELS also identified those market towns with the potential to accommodate employment land based on their location, access, existing level of employment provision and levels of vacancy in the existing stock. These were Amesbury, Calne, Devizes, Melksham, Warminster, Westbury and Wootton Bassett. Within these towns it was considered between 73 and 98ha of additional employment land should be provided.
- 4.13.7 The WWELS study identified that other market towns had an important local employment role and supported their surrounding rural areas. These included Bradford on Avon, Corsham, Cricklade, Downton, Malmesbury, Marlborough, Mere, Pewsey, Tidworth, Tisbury, and Wilton. These were not considered appropriate for large scale employment growth. Lyneham, Porton Down and Ludgershall were also considered by the WWELS study, and were identified as being dominated by defence related activity and therefore required separate consideration.
- 4.13.8 In addition to assessing economic role of places within Wiltshire and their potential to contribute to the wider Wiltshire economy, the WWELS also assessed the theoretical demand for employment land in Wiltshire. This comprised an allowance for future job growth (94.6 ha), an allowance for change in the existing employment stock (76.1 ha), and an extra allowance to offer choice (17.1 ha).
- 4.13.9 Summarised below is the intelligence gathered about each town which will be important for assessing significant effects through the sustainability appraisal:

Chippenham

- 4.13.10 Chippenham is one of the largest towns in Wiltshire, and is identified as a strategic employment location. The town has been successful in retaining international employers in the manufacturing and service sector, including ICT services, rail systems and logistics. Chippenham has excellent transport links, being in close proximity to the M4 and on the main Bristol to London railway route and, as such, it is an attractive location to employers, but this also leads to significant levels of out-commuting. However, there is currently a shortfall in suitable land for employment growth and a failure to respond to this issue would result in existing and prospective employers moving elsewhere.

Trowbridge

- 4.13.11 Trowbridge has been identified as a location for new strategic employment growth. The town has a strong industrial heritage and as the County Town of Wiltshire maintains an important strategic role. It has good transport links to many nearby settlements including Bath and Bristol and is only 30 minutes from the M4. The town has good rail connectivity to the west, via Bath and Bristol and the south, via Westbury and Southampton. The strategically important A350 links Trowbridge with the M4 and the south coast. Trowbridge plays an important role as an employment, administration and service centre for Wiltshire. The regeneration of the central area of Trowbridge is a priority for the Council, the Town Council and local businesses.

Bradford-on-Avon

- 4.13.12 Bradford-on-Avon is not identified as a strategic location for employment. It has been noted that Bradford-on-Avon faces a particular issue of the loss of employment land for housing. However, the current mix of small employers should ensure that Bradford-on-Avon is resistant to mass job losses resulting from a single business closure. The high levels of out commuting indicate that development of business and employment should be encouraged to meet local needs.

Calne

- 4.13.13 Calne has been identified as a location for new strategic employment growth. This recognises that Calne has a number of large scale employment locations which have the benefit of potential expansion land and has successfully attracted a number of large employers in the past. Although transport in and around Calne suffers from some ongoing problems, easy access to the M4 should help the town attract new employers and address relatively high levels of out commuting and low population to job ratio. There is no dominant employer in Calne and further capacity is available for new businesses and employment development.

Corsham

- 4.13.14 Corsham has not been identified as a location for new strategic employment growth. Corsham has a large existing employment base for a town of its size that has historically been based on the presence of the Ministry of Defence. A rationalisation of MoD operations has seen the construction of Basil Hill Barracks which will help develop a specialist cluster of new technologies with opportunities identified at Spring Park for specialist employment development. The town continues to be a net importer of workers (more jobs available than total resident workers) yet sees relatively high levels of out commuting.

Devizes

- 4.13.15 Devizes is identified as a location for strategic employment growth. The town retains a large and varied employment base and should be resistant to job losses from a single business closure. Devizes has a good record of attracting employers, although given its location and transport access these have tended to be small to medium business catering for local networks. The success of Devizes as an employment location and the status of the town should enable it to continue to be a strategic location for new employment growth outside the principle employment growth areas of Wiltshire.

Malmesbury

- 4.13.16 Malmesbury is not identified as a location for new strategic employment growth.
- 4.13.17 However, it is clear that retention of the town's existing employment base is critically important to the success of the town. In the recent past Malmesbury has had a significant level of self containment. However, this has been based on a single large local employer and indications show that a reduced workforce may have seen some restructuring of employment provision. Malmesbury has a relatively small employment base and provision of employment should look to small to medium employers to increase variation of the town's employment base.

Marlborough

- 4.13.18 Marlborough is not identified as a location for new strategic employment growth.
- 4.13.19 Marlborough has a relatively small but varied employment base with a reasonable level of self containment. The Marlborough Business Park has provided an important new location for employment growth and new business in Marlborough. Marlborough has some unusual employment patterns with a strong representation by the education sector. There is no indication that this sector will weaken in the planning period.

Melksham

- 4.13.20 Melksham is identified as a location for new strategic employment growth. It is located on the A350 and forms part of the key A350 employment growth area. The number of jobs in Melksham is relatively low considering the size of the population. This may be due to some restructuring of the employment mix in Melksham. Historically, Melksham has been able to attract large employers but over reliance on a single employer leaves the town vulnerable to mass job losses. Nevertheless, there are good opportunities to expand the employment base.

Tidworth

- 4.13.21 Tidworth/Ludgershall is not identified as a location new strategic employment growth. The employment mix in the town is dominated by the Army and this causes a number of unusual commuting patterns with a high percentage of people walking to work and relatively good level of self containment. Nevertheless, there remains significant out-commuting with limited employment beyond jobs associated with the MoD. New employment at Tidworth and Ludgershall should concentrate on providing alternative employment opportunities to vary the job market.

Warminster

- 4.13.22 Warminster has been identified as a location for new strategic employment growth. It is one of the larger market towns but has few jobs and this together with its location on the A36/A350 and rail link offer scope for future employment provision. The MOD continues to be the largest employer in the town. The West Wiltshire Employment Land Assessment (published in 2007) states that Warminster has seen high volumes of empty units over the last few years, but that the redevelopment of the town has stimulated more demand in the town centre. There is a large amount

of existing employment land around Warminster with a good potential for medium and long term growth given high levels of demand. Warminster therefore has the capacity to enhance its contribution to the employment base within Wiltshire.

Westbury

4.13.23 Westbury has been identified as a location for new strategic employment growth.

4.13.24 The town's location between Warminster and Trowbridge allied with its position as a junction for rail travel makes it an accessible location and enhances its catchment. The employment base in Westbury should be relatively resistant to changes, but the recent growth in housing has not as yet been matched by employment growth and there are large existing employment allocations that need to be retained and developed to create a better balance in the town.

Wootton Bassett

4.13.25 Wootton Bassett has been identified as a location for new strategic employment growth. The town has a smaller employment base than might be expected for a town of its size and it clearly acts as a dormitory settlement to Swindon. A large number of MOD personnel live in Wootton Bassett, and the issue of RAF Lyneham and other MOD sites closing must be considered. However, the town has a varied employment base beyond the MOD and should be relatively resilient to mass job losses.

4.14 Wiltshire Workspace and Employment Land Review 2011

Recommendations

4.14.1 Whilst Wiltshire Council has more than enough employment land allocated, viability factors are prohibiting development. In the absence of grant assistance, the Council will need to look at more innovative forms of intervention if it wishes to bring forward development itself. These might include:

- Outright disposal of assets – one simple approach to funding future investment in employment land and buildings is to dispose of existing assets to investors and to plough this back into economic development initiatives.
- Investment of assets in a joint venture vehicle with the private sector – one model often used by local authorities is to tender for a JV partner to deliver a masterplan. The business model relies heavily on the use of selling Council land to generate receipts to assemble sites for onward sale to private developers
- Community Infrastructure Levy – Infrastructure requirements for unlocking strategic sites could potentially be funded, or part funded, through CIL. This could include funding for large infrastructure items like new roads or flood relief schemes.

4.14.2 To counter concerns of employment land being held back by owners seeking higher returns from other uses, the Council could consider more stringent criteria to prove the site had been effectively marketed for employment use before release would be permitted.

4.14.3 Planning policy could benefit the local economy by being more flexible in its approach to allocating employment land. In an economy such as Wiltshire, much of the demand will come from local expansion. It is difficult to predict over a twenty year period which firms will expand and which will not and hence make specific allocations to allow for all eventualities.

4.14.4 Therefore a positive policy permitting development for expansion purposes unless there are good reasons not to, would be a useful addition to supporting local economic development.

4.14.5 Lastly, the council should continue to monitor the take up of land to ensure that there is always a suitable quantum of deliverable sites for at least five years.

4.15 Wiltshire Core Strategy Retail Review 2015²⁸

4.15.1 There is no capacity for additional convenience goods floorspace in Trowbridge, Marlborough, Melksham, Tidworth, Westbury and Wootton Bassett.

4.15.2 In most cases the levels of available additional floorspace capacity have been reduced. Whilst this is sometimes due specific commitments which have occurred since the 2011 study (see Table 9 at

²⁸ <http://www.wiltshire.gov.uk/wiltshire-core-strategy-retail-review-draft-feb2015.pdf>

Appendix 5 and below), the changes in forecast population growth levels, the increase in online sales and lower retail expenditure growth levels are a significant contributor to this change.

- 4.15.3 Salisbury's capacity has reduced by just under 40% by 2026. However there remains potential for a significant expansion of comparison goods floorspace in Salisbury should the commercial market be able to deliver a city centre scheme.
- 4.15.4 The level of capacity in Trowbridge has reduced significantly. Not only is this due to the above trends, but also due to some loss of market share to other surrounding settlements (via commitments) but also due to new commitments. In addition, this latest analysis does not model a one percentage point increase in market share that the 2011 study allowed for. Whilst a one percentage point increase does not, on face value, seem like a significant increase, it is equivalent to a rise of one fifth in Trowbridge's market share. Despite this lower capacity, Trowbridge has benefitted from substantial new comparison goods floorspace in recent years including the Shires Gateway scheme and the non-food floorspace within the Sainsburys and committed Morrisons store.
- 4.15.5 Chippenhams capacity has also fallen due to commitments, although it remains reasonably high and able to support substantial new retail floorspace development.
- 4.15.6 In relation to other settlements, the lower capacity levels are modest and suggest that only small levels of new comparison goods floorspace can be provided for. Notable reductions in capacity include Calne and Melksham where new supermarkets and their comparison goods floorspace will expand choice and competition.

5 Education and Skills

5.1 Baseline Information

- 5.1.1 The collection of baseline information ensures that the sustainability appraisal process is based on a sound evidence base and provides the basis for predicting and monitoring any environmental or sustainability effects that may be identified during the sustainability appraisal stages. It is made clear in the sustainability appraisal guidance that a practical approach to the collection of baseline information is essential as there are opportunities to update the sustainability appraisal work in the future. The planning authority is encouraged to use existing data sources rather than to undertake original research.

5.2 Learning and Skills

- 5.2.1 The baseline is primarily derived from the Joint Strategic Assessment for Wiltshire 2012-13, the latest county wide assessment.
- 5.2.2 Relatively high levels of education, skills and training deprivation in Wiltshire are primarily due to educational deprivation among children and young people, rather than adult skills; 64 of Wiltshire's 281 LSOAs are within the 30% most deprived in England for the children and young people deprivation sub-domain, compared to 38 for the adult skills sub-domain.
- 5.2.3 The main drivers of high relative deprivation for this domain appear to relate to achievement at Key Stages 2 and 4 and also the secondary school absence rate.
- 5.2.4 The education, skills and training domain saw the largest increase in the number of Wiltshire LSOAs in the most deprived 20% and 30% nationally between the ID 2004 and ID 2010; an increase of 12 LSOAs within the 20% most deprived and 18 LSOAs within the 30% most deprived in England.

5.3 Skills Gaps in Wiltshire

- 5.3.1 The Swindon and Wiltshire LMI summary (2014) estimated that 18% of all vacancies in Wiltshire and Swindon are 'hard-to-fill'. This is one of the lowest figures in England, and is much lower than the England average of 28 per cent. A shortage of suitably skilled workers is seen as the main reason for hard-to-fill vacancies, reflecting the England-wide picture. Employers in the LEP area also reported a lack of relevant work experience among applicants for the types of job on offer, as well as a lack of the required attitude or motivation. Overall, 'skill-shortage' vacancies represent 13 per cent of all vacancies in the LEP area, much lower than the England-wide figure of 22 per cent.
- 5.3.2 The main causes of skills gaps are lack of experience or because staff have been recently recruited. In the area, 11% of all businesses experience skills gaps, this is lower than the England average of 15%, this represents 3% of the workforce (as compared to 5% for the rest of England). In 2015²⁹ there were 1900 establishments (12% of all employers) that reported having skills gaps in their work force. This proportion compares well with Wiltshire's statistical neighbours (14.6%) and (National (14%). The incidence of skills gaps in Wiltshire were reported as follows: 3% of managers, 2% of professionals, 3% of administrative/clerical staff, 2% of skilled trades, 1% of caring, leisure and other services staff, 2% of sales and customers service staff, 1% machine operatives and 3% of elementary staff. Overall that's 4% of high-skilled jobs, 5% of middle-skilled jobs, 3% of service-intensive and 3% of labour-intensive jobs.
- 5.3.3 Of the vacancies that were advertised 28.8% (1630 vacancies) were reported as hard to fill vacancies due to skills shortages. This is a significant increase since the last survey, which has seen Wiltshire's skill-shortage vacancies almost double in 2 years. Swindon and Wiltshire LEP has the 3rd highest density of skill-shortage vacancies in the country, which is in stark contrast since the last survey where Swindon Wiltshire LEP had the lowest rate in the UK at 13.0%.
- 5.3.4 Apprenticeships can help businesses across all sectors by offering a route to harness fresh new talent. Apprenticeships can make organisations more effective, productive and competitive by addressing skills gaps directly, even in uncertain economic times.

²⁹ <https://workwiltshire.co.uk/policies-data/data-dashboard/business-skills-routes-to-employment/#skillsgap>

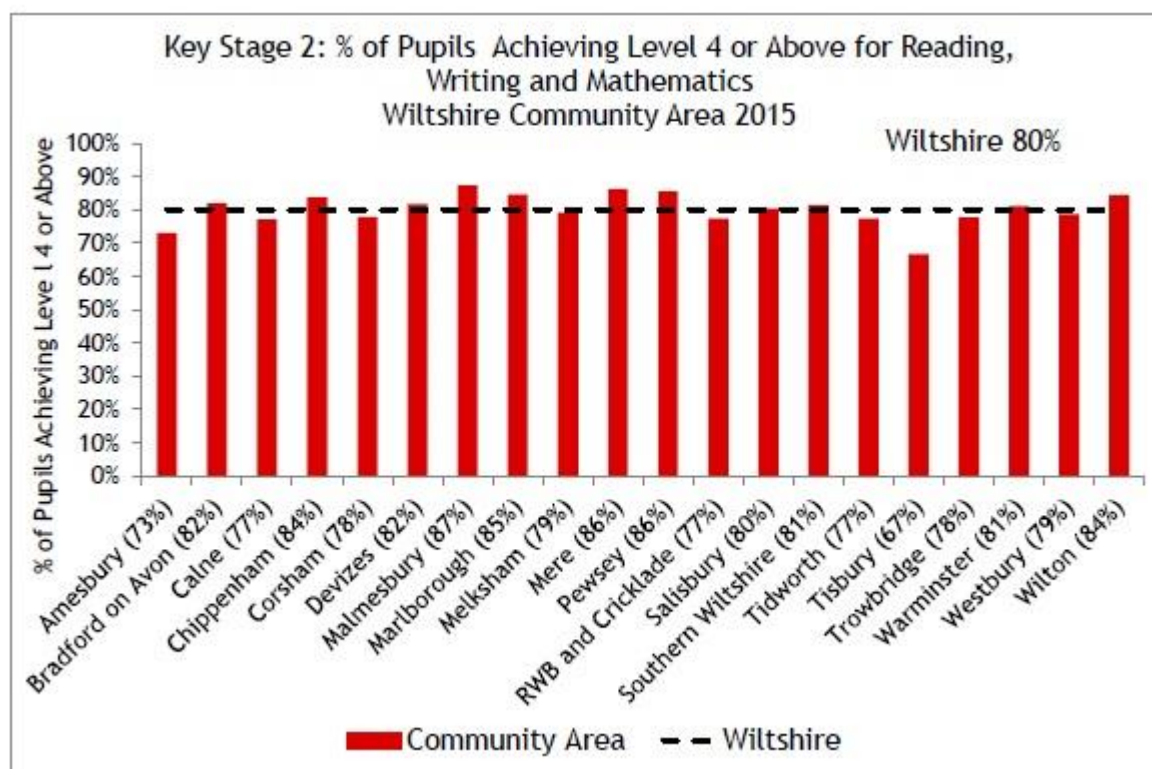
5.4 Children and Young People

- 5.4.1 The basis for the following section of the baseline is derived primarily from the 2008 Annual Performance Assessment (APA) of services for children and young people for what was then Wiltshire County Council. This is the most recent assessment available of services for children and young people in the county. Education for Swindon is the responsibility of Swindon Borough Council and is not included in this section.
- 5.4.2 Wiltshire Council provides adequate services for children and young people and meets only minimum requirements, although its contribution is good in two of the six outcomes assessed. The council's capacity to improve, including its management of services, is adequate. The council has some good plans and has set itself challenging targets. It has had some successes in improving outcomes for vulnerable groups of young people and children which were areas for development in the 2007 APA, but progress is mixed. The council has been successful in reducing the numbers of young people not in education, employment or training but there is more limited progress in other areas for example in relation to the provision of child and adolescent mental health services. The council has strengthened its range of partnerships which are particularly successful in providing for the youngest children and giving parents and young people a voice, but the sustained positive impact of initiatives and plans across all of its children's and young people's services is not yet evident. The council's self-assessment of progress is too generous.

5.5 School Attainment

- 5.5.1 According to the JSA for Wiltshire 2015/16 educational achievement in Wiltshire is generally in line or better than similar areas, though the gap between the attainment of children in vulnerable groups and their peers is too large and should be narrowed. Key Stage 2 results for primary school children have improved. This is partly due to the use of the 'Every Child Matters' one-to-one programmes providing targeted support. Key Stage 4 results have also improved. A virtual school head teacher is in place for children in care to help focus on their progress. The gap between the attainment of children in receipt of free school meals and their peers has narrowed, but there is still work to do to improve attainment of vulnerable groups in general.

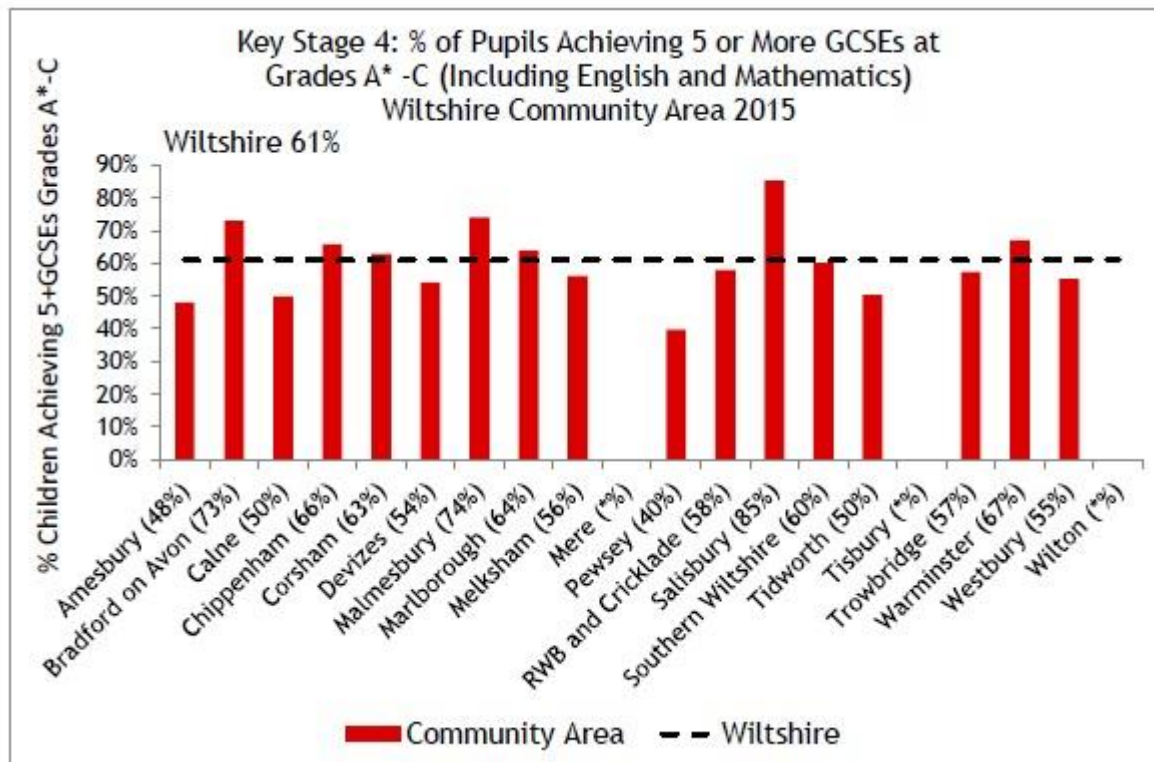
Figure 5-1 Key Stage 2 achievement in Wiltshire Community Areas: JSA 2015



- 5.5.2 Good housing contributes to a healthy community, better education and an improved economy and is linked to health and wellbeing, impacting on both physical and mental health.

- 5.5.3 In 2009, Wiltshire's educational results were good for four year olds and generally good for 16 year olds. However, results for 11 year olds and pupils from vulnerable groups for both 11 and 16 year olds were not good. The percentage of pupils with Special Educational Needs achieving Key Stage 2 in English and mathematics was 54.5% lower than pupils without Special Educational Needs. This gap was larger than for comparator authorities or England.
- 5.5.4 The 2010 GCSE or equivalent results reveal that Wiltshire performed below the national and regional average with 70.8% of pupils in their last year of compulsory education (15/16 year olds) achieving 5+ GCSEs at grades A* to C. In 2015, the percentage of pupils in Wiltshire achieving 5 or more GCSE's including English and Mathematics at grades A*-C at the end of secondary school (Key Stage 4) was higher than that reported both regionally and nationally and has improved when compared against the previous year. Improvements shown in 2015 mean that Wiltshire now ranks in the top 25% of all Local Authorities in England

Figure 5-2 Key Stage 4 achievement in Wiltshire Community Areas: JSA 2015



5.6 Qualifications of Working Age Population

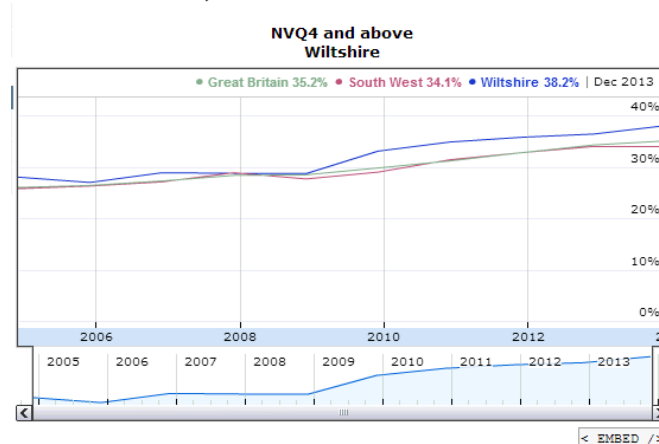
- 5.6.1 Wiltshire has a higher proportion of its working age population with qualifications at NVQ levels 3 and 4+ than nationally and regionally (see Table 5-2 below). In addition, the County has a relatively low share of its working age population no qualifications; 4.1% compared with the regional figure of 5.1% and UK figure of 8.0%.
- 5.6.2 There could be a variety of reasons to explain an increase in qualifications; these include:
- the strengthening of the college network in Wiltshire to deliver increasing numbers of higher level NVQ qualifications as well as degrees in association with neighbouring Universities;
 - the impact of the recession in encouraging young people to remain in education; and
 - larger numbers of graduates returning to the parental home whilst they look for work as well as the general attractiveness of the county as a place to live.
- 5.6.3 Since 2009 there has been a steady increase in people qualified to NVQ4 and above, still above regional and national levels.

Table 5-1 - Qualifications (Jan 2016-Dec 2016)

	Wiltshire (numbers)	Wiltshire (%)	South West (%)	Great Britain (%)
NVQ4 and above	121,100	42.1	37.8	38.2
NVQ3 and above	179,900	62.6	59.4	56.9
NVQ2 and above	232,200	80.8	78.1	74.3
NVQ1 and above	262,400	91.3	89.8	85.3
Other qualifications	13,200	4.6	5.1	6.6
No qualifications	11,900	4.1	5.1	8.0

Source: ONS annual population survey

Figure 5-3 - NVQ 4 and above, Wiltshire - Time Series



Source: Nomis

5.7 Young People not in Employment, Education or Training (NEET)

- 5.7.1 The NEET figure for Wiltshire, based on the period November 2010 to January 2011 was 6.8% and equates to 732 young people based on a total 16-18 cohort of 12,500. This is appreciably higher than that found nationally, regionally and compared to a defined group of other local authorities known as "Statistical Neighbours" which are similar to Wiltshire in terms of size, economy, rural to urban mix and education attainment of young people (see table below).

Table 5-2 NEET statistics

Location	%16-18 year olds, January 2011			NEET average Nov 2010-Jan 2011
	Not known	In learning	NEET	
Wiltshire	3.9%	81.3%	6.8%	6.8%
South West	2.4%	83.6%	5.3%	5.3%
England	3.9%	84.1%	5.9%	6.0%
Statistical neighbours	3.5%	82.0%	5.3%	5.5%

Source: DfE January 2011

- 5.7.2 Of the 732 16-18 year olds NEET in January 2011, 169 (17%) were not able to take up employment or learning, the majority of these were expectant or young mothers. This is only slightly higher than the averages in other areas. A number of those who are NEET and available have a job or education place lined up to start the following month (i.e. they are not doing nothing).

- 5.7.3 In terms of NEET performance as measured as an average between November 2010 and January 2011 average, levels for the South West, England and Statistical Neighbour averages were slightly down over last year. In contrast, the average compared to the previous year for Wiltshire, Devon, North Somerset, Plymouth, Torbay (South West region neighbours) and Shropshire (statistical neighbour) all increased slightly.
- 5.7.4 The NEET group however is not static in terms of the same young people being NEET all the time and there is churn each month in terms of joiners and leavers; for example, in January 2011, 105 16-18 year olds joined the NEET cohort and 102 left. Further education (college and 6th forms) contribute more young people to NEET than they recruit from NEET (apart from September which is the start of the academic year) but the pattern with employment shows that as many join NEET from employment, many leave NEET into employment. This indicates that many jobs taken by 16-18 year olds are often temporary; either genuinely short contract or seasonal jobs or the young people move between jobs until they settle.
- 5.7.5 This analysis highlights a few specific issues for Wiltshire. The county has a higher than average number of expectant young mothers in the NEET cohort suggesting that additional work in schools and with youth groups could be undertaken. The recent recession has greatly reduced the job opportunities available to the young and the availability of even seasonal and temporary jobs is expected to be limited and subject to increased competition. All work experience is valuable, however temporary and seasonal work will afford variable experiences in terms of quality and training received. Finally, in times of economic downturn, more young people may be expected to stay in education as they cannot compete in the job market. Entry into higher education however may be less attractive given the increase in University tuition fees which may offset increased NEET levels to some extents but may lead to higher levels of 'unemployment' at aged 18 and over. It will never be possible to eradicate the NEET status but Wiltshire should look to try and establish a steady rate of NEET and EET within the economic system.

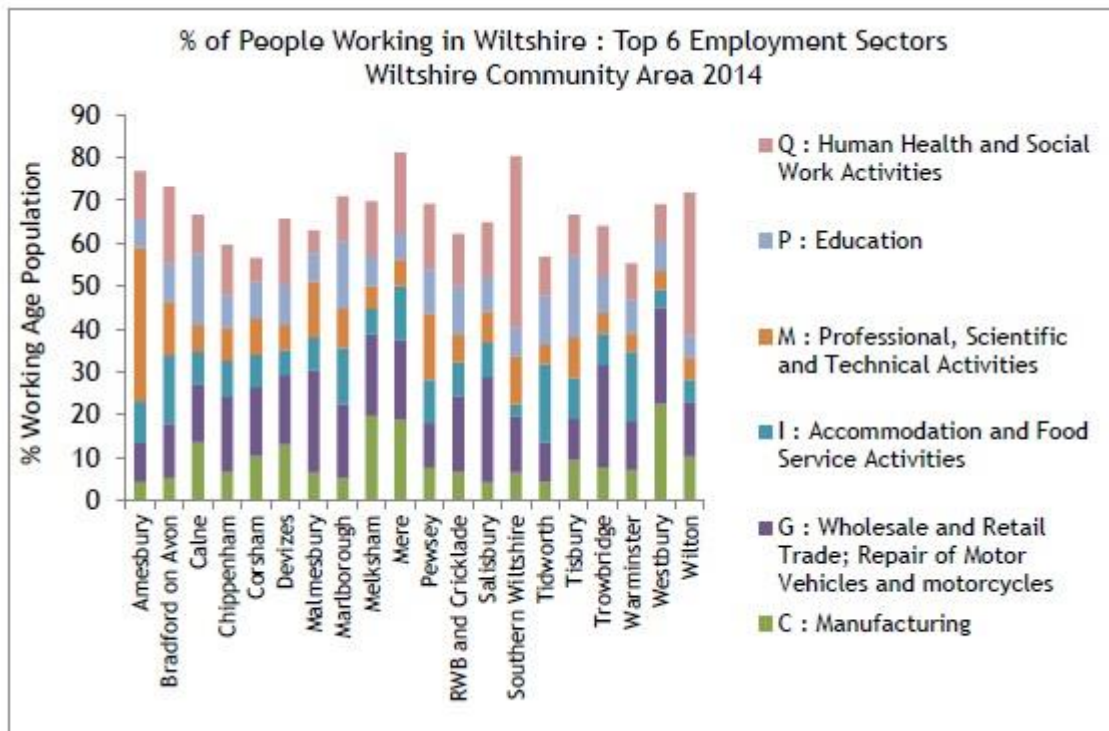
5.8 Workplace Skills

- 5.8.1 Traditionally, Wiltshire has been dominated by low value, low skilled manufacturing and service sectors, but this is unsustainable in the future. As a result it has become an attractive county for the higher skilled and higher paid in which to live, but not to work. In addition, a large proportion of employment in the county is within the public sector and this will fall as government cuts are realised.
- 5.8.2 By broadening the employment base, the aim is to address these weaknesses and develop a sector profile which will be competitive in the future and also offer quality employment opportunities for all residents and thereby reduce out-commuting.
- 5.8.3 The skills base of Wiltshire is relatively polarised with a high proportion of residents with high skills levels, but equally a significant proportion with poor basic skills and, as a result of the recession, increasing unemployment levels and a worsening 'not in Employment, Education or Training' (NEET) issue amongst young people.

5.9 Skills Inequalities

- 5.9.1 According to the JSA for Wiltshire 2012/13, the differences between resident and workplace earnings continue. Average earnings for full-time workers living in Wiltshire continue to be much higher than those paid by workplace, equating to a 7.7% difference compared to just 1.9% across the region (Figure 3.2).
- 5.9.2 The difference between residence and workplace pay locally is accounted for by higher skilled workers commuting out of the county to higher paid jobs in surrounding towns and cities; approximately 65% of the net out-commuting losses in Wiltshire stem from travel to jobs in higher level occupations such as managers, senior officials, professionals, associate professionals and technicians. That said, the overall increase in residence-based earnings has been more modest at 1%, compared to those found regionally and nationally (1.6% and 1.5% respectively).

Table 5-4 Top 6 Employment Sectors by Wiltshire Community Areas: JSA 2014



- 5.9.3 The underlying issue is that there are fewer higher skilled, higher paid employment opportunities in Wiltshire to meet the supply of residents who can work at this level. Wiltshire is an attractive county to live in and large parts of it can support daily commuting to jobs in surrounding areas. The Wiltshire Investment Service continues to work to attract new investment into the county in an attempt to redress this balance.

6 Healthy Communities

6.1 Baseline Information

- 6.1.1 The collection of baseline information ensures that the sustainability appraisal process is based on a sound evidence base and provides the basis for predicting and monitoring any environmental or sustainability effects that may be identified during the sustainability appraisal stages. It is made clear in the sustainability appraisal guidance that a practical approach to the collection of baseline information is essential as there are opportunities to update the sustainability appraisal work in the future. The planning authority is encouraged to use existing data sources rather than undertake original research.

6.2 Health

- 6.2.1 Wiltshire's population is relatively healthy compared to the average for England, with life expectancy higher than average for both males and females. The proportion of people claiming incapacity benefits is also low compared to the regional and national averages. The proportion of people in bad or very bad health is equally lower than average.

Table 6-1 - Key Figures for Health and Care

Variable	Measure	Wiltshire	South West	England
Verv Good Health (Persons, Mar11)	%	49.8 ⁷	46.9	47.2
Good Health (Persons, Mar11)	%	34.0 ⁷	34.6	34.2
Fair Health (Persons, Mar11)	%	12.1 ⁷	13.4	13.1
Bad Health (Persons, Mar11)	%	3.2 ⁷	4.0	4.2
Very Bad Health (Persons, Mar11)	%	0.9 ⁷	1.1	1.2
Under 18 Conceptions (Persons, Jan07-Dec07)	Rate per 1000	31.67	36.1	41.7
Infant Mortality (Live Births, Jan08-Dec10)	Rate per 1000	3.47	3.6	4.4
Life Expectancy at Birth; Males (Persons, Jan07-Dec09)	y	79.57	79.2	78.3
Life Expectancy at Birth; Females (Persons, Jan07-Dec09)	y	83.57	83.3	82.3
Incapacity Benefits (Persons, Aug10)	%	47	6	7
All Finished Admission Episodes (Admission Episodes, Apr07-Mar08)	Count	93,1857	1,302,377	11,999,765
Coronary Heart Disease (CHD); Diagnosis (Admission Episodes, Apr07-Mar08)	Count	7,1297	99,131	1,000,332
Cerebrovascular Disease (including Stroke); Diaagnosis (Admission Episodes, Apr07-Mar08)	Count	1,8067	23,209	187,962
Cancer (excluding non-melanoma skin cancer); Diaagnosis (Admission Episodes, Apr07-Mar08)	Count	9,4357	167,119	1,326,050
Hip Replacement; Operation (Admission Episodes, Apr07-Mar08)	Count	8527	9,912	69,434

Cataract; Operation (Admission Episodes, Apr07-Mar08)	Count	2,6077	39,638	326,758
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Source: Office for National Statistics; The NHS Information Centre for Health and Social Care

- 6.2.2 In the 2011 Census approximately 84% of the population of Wiltshire described their health as good or very good. Wiltshire has a lower Standardised Mortality Ratio (SMR) than the national average and life expectancy is rising.
- 6.2.3 Although indications show that the general health of Wiltshire's population is improving, an ageing population may have implications for the provision of services, housing and recreation. The figures are also indicative of an aging resident workforce and new employment opportunities will need to consider this factor.
- 6.2.4 Life expectancy at birth is often used as a measure of the overall health of a population. Life expectancy in all parts of England has increased over the last century and this general trend is continuing. The JSA for Wiltshire 2012/13 has slightly more up to date figures than those shown in Table 6-2. In Wiltshire in 2008-2010, life expectancy was 79.6 years for males and 83.7 years for females. These figures are higher, for both males and females, than those for England and the South West.
- 6.2.5 In 2010, there were 4,124 people resident in Wiltshire who died; 31% of these died from circulatory disease and 29.5% from cancer. In those aged under 75 cancer was the biggest killer; it accounted for 47% of deaths in this age group. All-age and under-75 mortality rates have declined in the last 10 years nationally and in Wiltshire.
- 6.2.6 The rates for Wiltshire continue to be lower than those for England. Mortality rates in both infants and under-15s have risen in Wiltshire since 2005-2007. National and regional rates for these indicators have decreased over the same period. However, Wiltshire remains below the national rates and similar to the South West
- 6.2.7 Physical inactivity is the 4th leading risk factor for global mortality accounting for 6% of deaths globally. People who have a physically active lifestyle have a 20-35% lower risk of cardiovascular disease, coronary heart disease and stroke compared to those who have a sedentary lifestyle. Regular physical activity is associated with many other health benefits. The Chief Medical Officer currently recommends that adults undertake 150 minutes (2.5 hours) of moderate activity per week, in bouts of 10 minutes or more. The proportion of persons participating in 30 minutes of physical activity 3 times per week in Wiltshire has been consistently higher than both England and the South West since 2005.
- 6.2.8 Melanoma is a serious type of cancer linked to exposure to ultraviolet (UV) light that develops when cells in the skin begin to develop abnormally. The rate of new cases of Melanoma in Wiltshire has risen over the last three years, from 24.98 per 100,000 persons in 2013 to 31.0 per 100,000 in 2015 and although local rates are lower than that reported across the South West region, they have been markedly higher than that reported nationally over the same time frame. Cancer is the single largest cause of death in England in under 75 year olds. To ensure that there continues to be a reduction in the rate of premature mortality from cancer, there needs to be concerted action in both prevention and treatment. In England the mortality rate from cancer has been slowly falling for a number of years. The rate in Wiltshire is below the national rate and the rate for the South West (124 per 100,000 compared to 142 and 131 respectively).

6.3 Children and Young People

- 6.3.1 Mortality rates in under- 15s have risen in Wiltshire in recent years from 37.8 per 100,000 in 2006-2008, to 43.6 per 100,000 in 2008-2010. This places Wiltshire below the national rate (45.5 per 100,000) but above the rate for the South West (38.0 per 100,000) but not significantly different in either case. However, national and regional rates have been decreasing between 2006-2008 and 2008-2010.
- 6.3.2 Mortality rates in infants (children under one) have also risen in Wiltshire in recent years. The infant mortality rate in 2008-2010 was 4.1 per 1,000 live births and has increased in each period since an historical low point of 3.2 per 1,000 in 2005-2007. Again, this places Wiltshire below the national rate (4.6 per 1,000) but above the rate for the South West (3.7 per 100,000) but not significantly different in either case. However, as for under-15s, the national and regional rates have been decreasing between 2005-2007 and 2008-2010.
- 6.3.3 Breastfeeding can make a major contribution to an infant's health and development, especially if

sustained for the first six months of life and can also positively impact on maternal health. The percentage of infants either totally or partially breastfed at 6-8 weeks in Wiltshire has consistently remained above that reported nationally since 2010/11. Whilst the prevalence has reduced across England since 2012/13, levels in Wiltshire have stabilised, with almost half of infants being partially or totally breastfed at 6-8 weeks.

- 6.3.4 Levels of excess weight in children aged 4-5 years in Wiltshire have remained below that reported across both England and the South West region since 2011/12. Although levels are lower than national and regional averages, excess weight in childhood still presents a significant public health challenge to our children's health and wellbeing because of the number of children it affects. 2014/15 saw a reduction in local levels of excess weight in children in Reception Year (to 20.3% compared with 22.1% the previous year). However, this is equivalent to almost one in five 4-5 year olds across the county.
- 6.3.5 Rates of hospital admissions as a result of accidental or deliberate injury in 0-14 year olds in Wiltshire have remained below that reported both regionally and nationally since 2011/12. 2014/15 also saw a slight reduction in recorded local rates when compared to the previous year (99 per 10,000 0-14 year olds in 2014/15 compared to 100 per 10,000 in 2013/14). However, accidents and injuries amongst children and young people represent a significant public health issue as they are a leading cause of ill health, disability and even premature death within younger populations that can often be prevented.
- 6.3.6 Despite experiencing a slight reduction in 2014/15 compared to the previous year, rates of hospital admissions as a result of accidental or deliberate injury in 15-24 year olds in Wiltshire have consistently remained significantly above that reported across both the South West region and England as a whole since 2011/12.
- 6.3.7 The Wiltshire Child Health Profile stated that in 2011, approximately 23 girls aged under 18 conceived for every 1,000 females aged 15-17 years in this area. This is lower than the regional average. The area has a lower teenage conception rate compared with the England average. In 2012/13, 1.4% of women giving birth in this area were aged under 18 years. This is similar to the regional average. This area has a similar percentage of births to teenage girls compared with the England average and a similar percentage compared with the European average of 1.2%

6.4 Road Safety

- 6.4.1 Across Wiltshire and Swindon there were 1477 recorded road traffic collisions in 2013 which resulted in 1995 casualties, 25 of which were fatalities. The overall cost of these casualties to the community is estimated to be £116 million. Overall, in the UK, there is a pattern of decreasing road casualties and road deaths, and this is reflected in the figures for casualties in Wiltshire. Figures indicate that car ownership and traffic continue to rise and thus the proportion of serious accidents is falling, showing a general improvement in road safety.
- 6.4.2 Between August 2009 to July 2010, according to Wiltshire Police records, there were 3,661 road traffic collisions on Wiltshire's roads. Of these, 2,745 were damage only, 896 injured and 20 fatalities. According to the Casualty Reduction Strategic Assessment 2010, the roads in the county that have the highest probability of a collision resulting in death or serious injury within Wiltshire are the A303, A338 and the A36.
- 6.4.3 When compared to similar authorities in the south west, Wiltshire has the second highest rate of killed and seriously injured casualties during 2009. However Wiltshire has had a 33% reduction in casualties for 2009 when compared with the 1994-1998 average. In Wiltshire and Swindon there were 325 killed and seriously injured casualties during 2009. In comparison there were 1752 casualties in the southwest overall and 26,906 casualties in the UK.
- 6.4.4 The number of serious and fatal casualties in Wiltshire has since then seen a reduction as highlighted in Table 6-3 below.

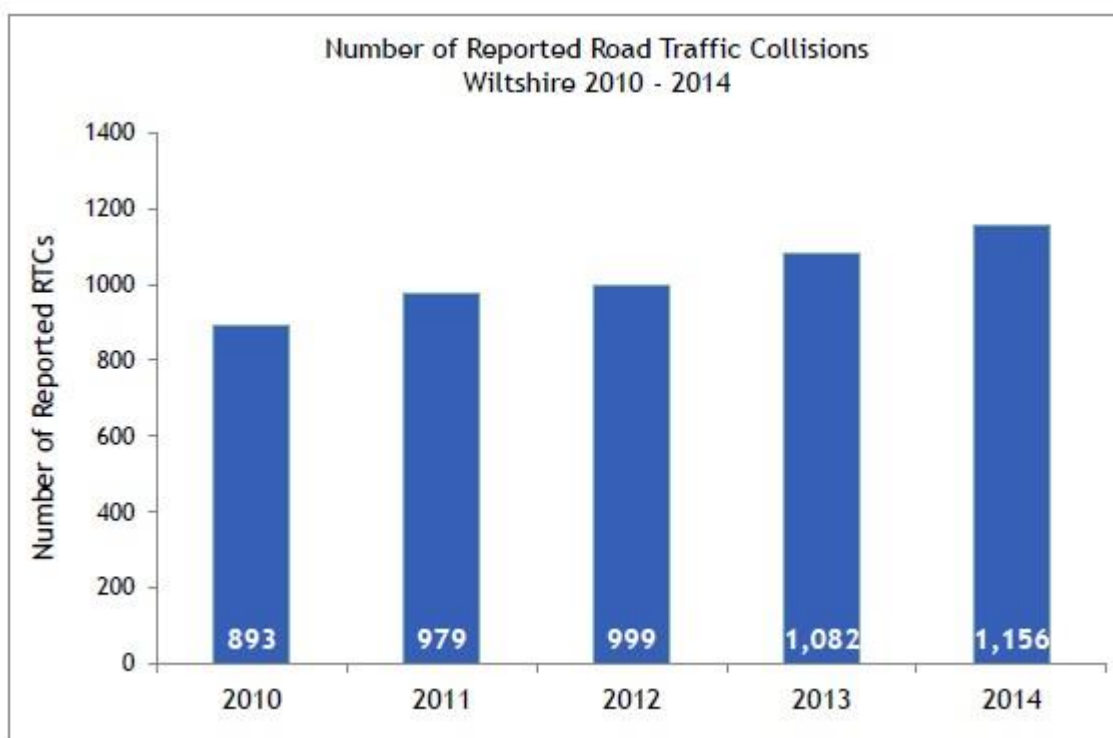
Table 6-2 - Casualties by Severity

Casualties by severity ^	2005	2006	2007	2008	2009	2010	2011	2012
Fatal	33.00	36.00	53.00	32.00	29.00	24.00	31.00	18.00
Serious	263.00	315.00	222.00	244.00	206.00	205.00	223.00	210.00
Slight	1826.00	1597.00	1355.00	1317.00	1104.00	1044.00	1102.00	1163.00

Source: Department for Transport

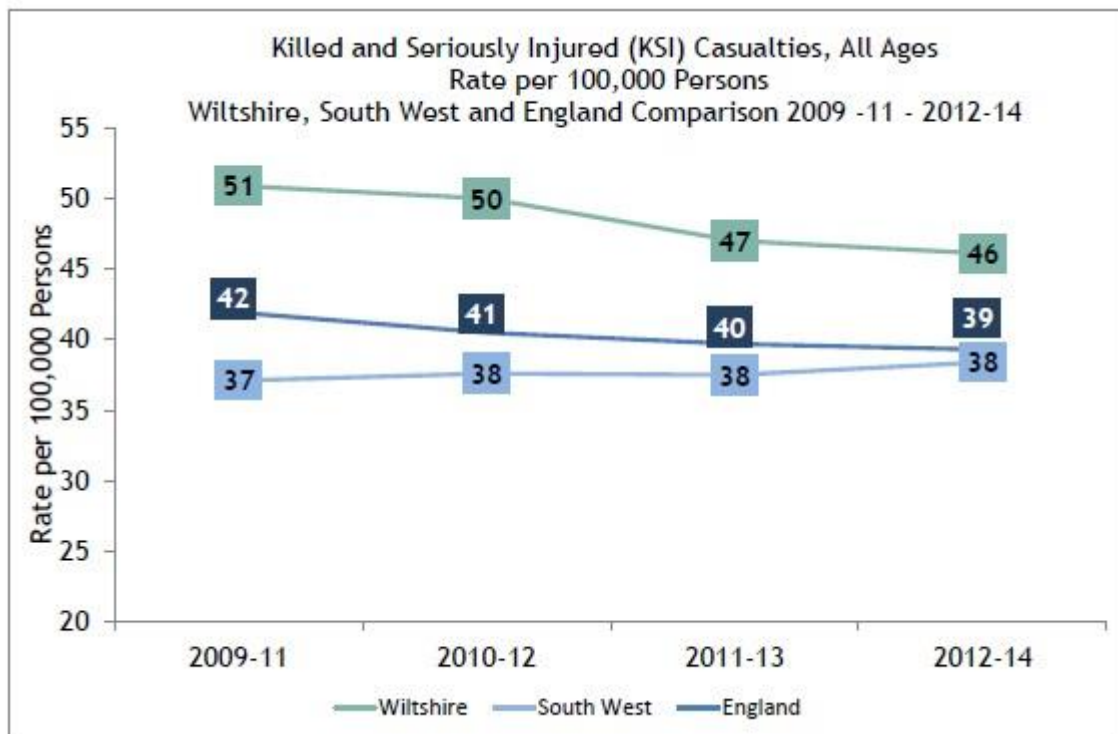
- 6.4.5 Salisbury and Trowbridge are two key areas of intensity for road traffic collisions. In addition there are quite clear high volumes of incidents along the main routes and trunk roads across the county. Predominantly the A350 running from the south through to the north of the county, the A303 and the M4. Junction 16 on the M4 (Wootton Bassett) also shows up as an area which has experienced a high volume of incidents.
- 6.4.6 The number of reported road traffic collisions in Wiltshire has shown a consistent annual increase, rising by almost 30% between 2010-2014.

Figure 6-1 Number of Reported Road Traffic Collisions: JSA 2014



- 6.4.7 Traffic collisions are a major cause of preventable deaths and morbidity, particularly in younger age groups. Although the rate of persons killed or seriously injured on roads in Wiltshire has consistently reduced in recent years (from 51 per 100,000 persons 2009-11 to 46 per 100,000 2012-14), local rates have remained significantly above those reported in both the South West as well as England.

Figure 6-2 Killed and Seriously Injured Casualties: JSA 2014



6.5 Sport and Recreation

6.5.1 Key findings from the JSA for Wiltshire 2012/13:

- 25.3% of adults in Wiltshire take part in sport and active recreation compared to the national average of 21.9%.¹
- 43% of adults do no sport or active recreation at all.
- 52.2% of adult residents in Wiltshire want to start playing sport or do a bit more.
- The number of visits to leisure centres in Wiltshire and attending sports development and physical activity sessions in 2011/12 was 3,262,046.
- 72.1% are satisfied with sporting provision in the area, compared to 69% nationally.⁴
- The increased population, coupled with an anticipated increase in demand of about 16% in the period to 2019, will see the demand for sports halls increasing from 20,350 visits per week in the peak period to 23,600. By 2019 the unmet demand across the county increases from 5.5 badminton courts to 7.9 badminton courts.
- The demand for swimming pools will increase from 25,250 visits per week in the peak period to 29,200. The level of unmet demand across the county will equate to the equivalent of about one 25m pool.

6.6 Obesity

6.6.1 The number of overweight and obese people has tripled over the last two decades and this number is still rising. It is likely that both these trends will continue in the future, and in particular the proportion of obese people within the population is likely to increase if they are not stimulated to keep active and provided with facilities for doing so. There is limited trend data on obesity.

6.6.2 Obesity amongst children in Wiltshire is relatively low and compares well with both the national figures and comparator authorities. However, there are hotspots where obesity levels are high. Healthy eating and exercise have a central part in ensuring good health. A healthy diet and exercise can contribute to improved self-esteem; promote concentration and the improved use of educational opportunities; and encourage fulfilling leisure activities.

- 6.6.3 Excess weight represents a significant public health issue as it is a major cause of premature mortality and avoidable ill health. Unlike with children (in the form of the National Child Measurement Programme), data in relation to adult weight is not routinely collected and we rely instead on estimates modelled on survey data. The most recent of these (The Active People Survey, conducted by Sport England) indicated that the prevalence of excess weight in adults over 16 years old in Wiltshire is 63.6%. This equates to almost 2 in 3 adults or 248,908 people across the county and is in line with that estimated for the South West (64.2%) as well as England (64.6%).
- 6.6.4 The following table taken from the JSA for Wiltshire 2012/13 shows that obesity levels in adults in Wiltshire are slightly higher than the regional and national averages.

Table 6-3 - Obesity Levels in Adults and Year 6 Pupils

Geography	Adult obesity		Year 6 obesity	
	Number	Rate	Number	Rate
Wiltshire	89,200	25.0%	7,080	15.7%
South West	1,048.6	24.7%	76,480	16.1%
England	10,106.3	24.2%	936,950	18.7%

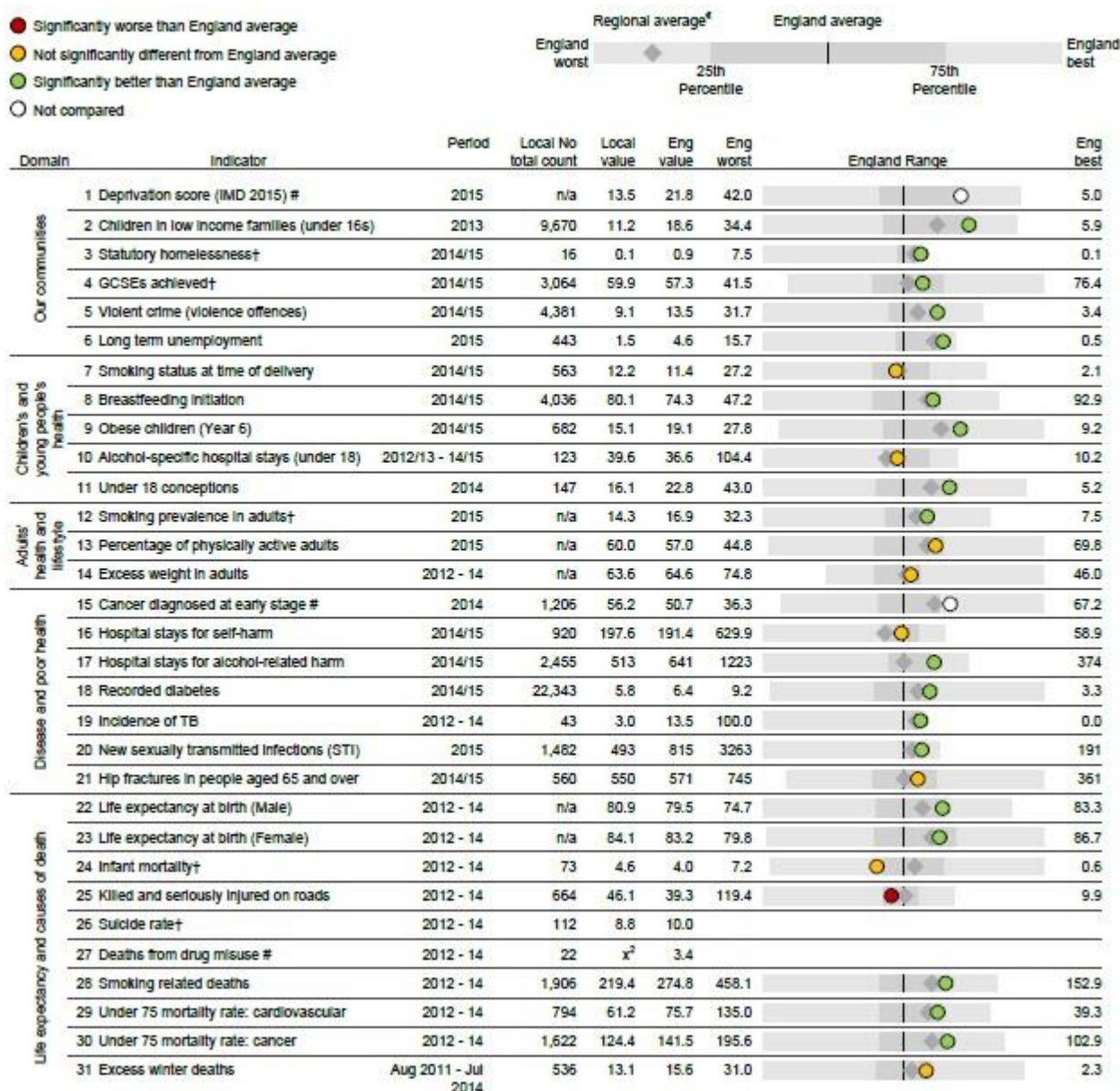
Source: Department of Health: Year 2006-2008 (adults) 2009/10 (Children)

6.7 Health Profile for Wiltshire 2016³⁰

- 6.7.1 The health of people in Wiltshire is generally better than the England average. Deprivation is lower than average, however about 9,670 children live in poverty.
- 6.7.2 Life expectancy for both men and women is higher than the England average.
- 6.7.3 Life expectancy is 6.0 years lower for men and 2.5 years lower for women in the most deprived areas of Wiltshire than in the least deprived areas.
- 6.7.4 Over the last 10 years, all cause mortality rates have fallen. The early death rate from heart disease and stroke has fallen and is better than the England average.
- 6.7.5 In Year 6, 15.1% of children are classified as obese, better than the average for England and the South West. Levels of teenage, pregnancy and breast feeding are better than the England average. Estimated levels of adult smoking are better than the England average. The rate of road injuries and deaths is worse than the England average. Rates of sexually transmitted infections, smoking related deaths and hospital stays for alcohol related harm are better than the England average.
- 6.7.6 Priorities in Wiltshire include drugs and alcohol, long term conditions, mental health, complex vulnerable families and long term social care/care home placements.
- 6.7.7 The chart below shows how the health of people in this area compares with the rest of England. This area's result for each indicator is shown as a circle. The average rate for England is shown by the black line, which is always at the centre of the chart. The range of results for all local areas in England is shown as a grey bar. A red circle means that this area is significantly worse than England for that indicator; however, a green circle may still indicate an important public health problem.

³⁰ http://fingertipsreports.phe.org.uk/health-profiles/2016/e06000054.pdf&time_period=2016

Figure 6-4 - Health Summary for Wiltshire



6.8 Rights of Way and Access to Greenspace

- 6.8.1 The Countryside and Rights of Way Act 2000 provides for public access on foot to certain types of land, amends the law relating to public rights of way, increases protection for Sites of Special Scientific Interest (SSSI), strengthens wildlife enforcement legislation, and provides for better management of Areas of Outstanding Natural Beauty (AONB). Wiltshire's network of public rights of way is over 6,100 km (3,790 miles) long, and together with 27,000 hectares (66,700 acres) of access land, provides access to a wide range of landscapes and communities.
- 6.8.2 The Wiltshire Open Space Study (2015-2026) made some assessment of open space in Wiltshire. It concludes that the starting point of any policy adopted by the Council should be that all open space should be afforded protection unless it can be proved it is not required. The distribution of open space varies across Wiltshire, however, there are identified shortages of at least one typology of open space in most areas. It is therefore recommended that priority is placed on protecting those open spaces where there is an existing shortfall of supply as highlighted in the area profiles.
- 6.8.3 Some of the key observations related to site enhancement include:
1. The importance of providing high quality provision and maintenance of formal facilities such as Parks and Recreation Grounds and Play Space.

2. The role of private sports spaces to some local communities and the need to provide opportunity for investment.
3. The need to ensure high quality open spaces are designed and provided through new development where feasible.
4. The importance of rights of way and natural green space within the Study area, and the need to maintain and enhance provision for biodiversity.
5. The role of open space in contributing to wider initiatives and strategies, for example providing background information for Wiltshire's green infrastructure strategy.
6. Extending and enhancing the network of green infrastructure including the connectivity between sites and improved accessibility to existing sites.

6.8.4 Urban greenspaces can provide excellent habitat for wildlife while also providing corridors and greenways to link habitats. They are also an important recreational resource for local residents.

Green Infrastructure (GI)

6.8.5 Wiltshire Council is beginning work on the preparation of a Wiltshire Green Infrastructure (GI) Strategy to meet the requirements of national and regional policies, the Wiltshire Local Area Agreement and to provide the framework and evidence base for more detailed GI policies to be included in the emerging Core Strategy. The Strategy will provide a long-term vision and strategic framework for the delivery of a planned, high quality, multi-functional network of GI across Wiltshire.

6.8.6 The objectives of the Strategy in terms of health and wellbeing are as follows:

- Develop opportunities to support healthy lifestyles through the provision of green routes for walking and cycling and multi-functional green spaces for sport, play, recreation and amenity;
- Improve the quality of life for Wiltshire's communities through place shaping and careful design that brings natural features into neighbourhoods, improving community health and well-being; and
- Provide high quality Green Infrastructure that strengthens the connectivity between Wiltshire's urban and rural landscapes, creating attractive and accessible places for people to enjoy direct and regular contact with the natural environment.

6.8.7 Access to good quality GI has been proven to improve both physical and mental health and well being, contributing to lower levels of obesity, reduced cognitive decline and reduction in health complaints and increase in life expectancy.

6.8.8 Evidence shows that those individuals with a good range of greenspace close to home, particularly children, are less likely to suffer from obesity and related health issues. Providing easily accessible green areas and routes can increase levels of walking, cycling and other physical activity within a community and can help meet the drive towards sustainable active communities. Without regular exercise, there is a decline of function in virtually every system of the body, which will eventually require support from the NHS and social care and would incur cost to society.

6.8.9 GI is also considered to have the potential to contribute to preventing and treating mental health in some cases; for example, there is an estimated 13% reduced risk of cognitive decline for every mile walked per week over a lifetime. Access to nature and more areas for recreation promotes lower blood pressure, reduces stress and attention fatigue and improves mental well being. Furthermore, enjoyment of natural and semi-natural areas can help people to relax and socially interact, allowing positive benefits to be gained from involvement with, and use of, urban green areas.

6.8.10 GI can also have positive benefits for crime and anti-social behaviour. Studies have shown that the presence of vegetation can halve the incidence of violent and property crimes in otherwise identical public housing, and that crime is lower in inner city areas with more areas of natural vegetation (Kuo and Sullivan, 2001) and natural surveillance.

6.9 Crime

6.9.1 Generally Wiltshire does not appear to be particularly deprived on the crime domain compared to the national picture and national statistics on crime show that the Wiltshire Police area continued to have the second lowest rate of recorded crime in England and Wales, and the lowest in the South West.

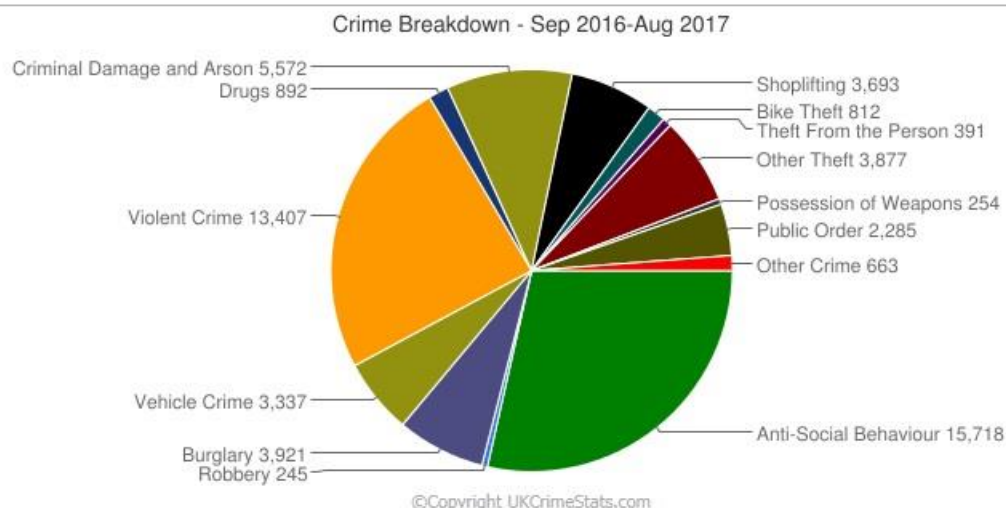
6.9.2 Currently, there are three large populated hot-spot areas, namely Salisbury, Chippenham and Trowbridge that are absorbing an intensive amount of resources from police and other agencies and

yet are still producing higher levels of crime and disorder than any other area. Of the total number of recorded crimes in Wiltshire between 2009 and July 2010, 3,416 occurred in Salisbury (15.2%), 2,760 were in Chippenham (12.3%) and 3,055 were in Trowbridge (13.6%).

- 6.9.3 Overall in the 12 months to September 2016, 39,158 crimes were recorded. This represents an increase of 12 per cent on the previous 12 months. This is a significant increasing trend, but it is in line with peers³¹.
- 6.9.4 In Wiltshire, all crime types are in line with the national average. However there are exceptionally low volumes of homicides, serious violence and arson occurring in the county. The volumes of homicide and arson are the lowest in the country, with most serious violence the sixth lowest.

Figure 6-5

Crime Plus ASB Breakdown for Wiltshire Police



- 6.9.5 The volume of vehicle offences has increased by 15 per cent in the 12 months to September 2016. This equates to 374 offences or approximately one extra per day. Nevertheless, Wiltshire remains in line with the average of its peers. This is due to Wiltshire previously having an exceptionally low volume of vehicle offences.

Table 6-4 - Notifiable Offences Recorded by the Police, Period: Apr '12 – Mar '13

Variable	Measure	Wiltshire	South West	England
Violence with Injury (Offences)	Count	2,0493	28,760	291,851
Violence without Injury (Includes Harassment and Assault) (Offences)	Count	1,6163	23,667	271,533
Robbery (Offences)	Count	403	1,895	63,888
Theft from the Person (Offences)	Count	1823	4,050	98,142
Criminal Damage and Arson (Offences)	Count	3,8653	49,723	493,620
Domestic Burglary (Offences)	Count	8013	13,856	219,205
Non Domestic Burglary (Offences)	Count	2,0883	20,430	219,523

³¹ <https://cms.wiltshire.gov.uk/documents/s125853/PCP%20Performance%20Report%20Q2%20201617.pdf>

Vehicle Offences (Includes Theft of and from Vehicles) (Offences)	Count	2,0273	27,166	368,222
Drug Offences (Offences)	Count	8593	15,794	191,692
Sexual Offences (Offences)	Count	4013	5,100	50,020

Source: Home Office: Last Updated: 12 February 2014

- 6.9.6 A hate crime is any crime committed against an individual or community that is motivated by prejudice or hostility in relation to disability, race, ethnicity, religion, belief or sexual orientation. The number of reported hate crimes in Wiltshire has shown a consistent annual increase over the last three years, rising by almost 70% between 2013/14 - 2015/16. The greatest volume of hate crimes were reported in the Salisbury and Trowbridge Community Areas.

6.10 Violence in the Community

- 6.10.1 Violence in the community can have a lasting impact on the health and wellbeing of those who fall victim to it, with the nature of offences ranging from minor to fatal. Over the twelve month period August 2009 to July 2010 Wiltshire county suffered 5,066 violent offences which is 11.16 crimes per thousand head of population. Of these, 4,665 were violent attacks against a person such as common assault, Actual Bodily Harm (ABH) and Grievous Bodily Harm (GBH); 328 were sexual offences and 73 were robberies.
- 6.10.2 The biggest threat of violence to the inhabitants of Wiltshire is caused by the night-time economy where excessive alcohol consumption can play a key role in the orchestration of aggressive behaviour.
- 6.10.3 At present Wiltshire has the third lowest rate when looking at 'violent crime' compared to its 15 most similar areas in England and Wales and the sixth lowest rate when compared against the category of 'most serious violent crime'.

6.11 Anti-Social Behaviour (ASB) and Criminal Damage

- 6.11.1 ASB often acts as an early warning sign of rising levels of crime. It is a problem of particular concern in Wiltshire because of the visible nature of its impact within communities. It is frequently the sign of community non-cohesion and more serious social problems, from which further crime types will develop if left untreated.
- 6.11.2 The volume of ASB continues to reduce. There were 5,104 incidents reported during quarter two of 2016. There were a total of 16,626 incidents reported in the 12 months to September 2016 which equates to a 17.7 per cent reduction on the 20,198 incidents recorded in the 12 months to September 2015.
- 6.11.3 In 2015/16, rates of recorded anti-social behaviour had reduced across the majority of Community Areas compared to the previous year with the exception of Salisbury and Trowbridge, which saw an increase, and rates in Bradford on Avon, Malmesbury and Tisbury saw no change.

6.12 Health Inequalities

- 6.12.1 Although Wiltshire is generally not a deprived area, the county has pockets of deprivation including three local areas that lie amongst the 20% most deprived in England. In addition, aspects of rural deprivation are difficult to quantify yet are of particular relevance in this county, in which proportionally more of the population live in a rural setting.
- 6.12.2 The health of people in Wiltshire is generally better than the England average. About 11% (9,700) of children live in low income families. Life expectancy for both men and women is higher than the England average.
- 6.12.3 In 2012-2014, life expectancy is 6.0 years lower for men and 2.5 years lower for women in the most deprived areas of Wiltshire than in the least deprived areas³². The gaps for males and females have

³² http://fingertipsreports.phe.org.uk/health-profiles/2016/e06000054.pdf&time_period=2016

widened since 2001.

- 6.12.4 There are a range of wider determinants of health that impact on inequalities including rurality, transport deprivation, service deprivation and housing deprivation. The increased needs of particular groups such as families, young people, the elderly, disabled persons and carers, the military, prisons, black and minority ethnic groups and gypsies and travellers and the way these are met can also affect the inequality gap.

6.13 Ageing Population

- 6.13.1 The changing age structure of the Wiltshire population will have a significant impact on the health and social care needs of the population, including:
- An increased burden of chronic diseases associated with old age
 - An associated increase in demand on health services, including increased numbers of hospital admissions
 - Increased uptake of adult social care services across all client groups.
- 6.13.2 An ageing population will also have an impact on neurological, rheumatologic and orthopaedic conditions, dementia and falls. There are around 41,300 carers in Wiltshire with 77% of these of working age and 20.5% aged over 65. The number of people in Wiltshire in a carer role is expected to increase with a shift in the population structure to that of an ageing population.
- 6.13.3 The fastest population increase has been, and will continue to be, in the number of people aged 85 years and over. There are currently more than twice as many females as males in this population group. The number of males aged 85 years and over is projected to increase by 103.2% during the period Census 2011 to 2026, compared to an increase of only 51.2% for females of the same age group over the same period. In total, the number of Wiltshire's residents aged over 85 years is projected to increase from 12,000 persons at Census 2011 to 20,180 persons by 2026.

6.14 Fuel Poverty

- 6.14.1 Wiltshire's private sector stock has a higher than national average percentage of households in receipt of benefits at 21% compared to 17% nationally. This is likely to indicate affordability issues and also has an impact on those households identified to be in fuel poverty; these are identified as households who spend more than 10% of their net household income on heating and hot water.
- 6.14.2 Not only do dwellings where fuel poverty exists represent dwellings with poor energy efficiency, they are, by definition, occupied by residents with low incomes, least likely to be able to afford improvements. It is estimated that 20,400 dwellings (12.1%) are in fuel poverty, which represents a substantial number of households and presents issues in terms of both energy efficiency and occupier health.
- 6.14.3 The council's Private Sector House Condition Survey (2009) showed that mains gas was present in just 68% of privately owned dwellings compared with 83% nationally. If it is assumed that these figures are representative of all housing, it means that Wiltshire has almost twice the number of dwellings without access to mains gas (32%) compared with the national average (17%). This is significant because carbon emissions from oil are much higher than the equivalent emissions from gas and oil is more expensive to heat a home.

7 Historic Environment

7.1 Baseline Information

- 7.1.1 The collection of baseline information ensures that the sustainability appraisal process is based on a sound evidence base and provides the basis for predicting and monitoring any environmental or sustainability effects that may be identified during the sustainability appraisal stages. It is made clear in the sustainability appraisal guidance that a practical approach to the collection of baseline information is essential as there are opportunities to update the sustainability appraisal work in the future. The planning authority is encouraged to use existing data sources rather than to undertake original research.

7.2 Heritage Assets

- 7.2.1 Wiltshire's heritage is unique and outstanding, ranging from pre-historic monuments such as Stonehenge, to links with the industrial revolution, including canal and railway structures. The landscape of Wiltshire as we see it today is the product of a series of major changes through which its character has been transformed by the interaction of natural and human or anthropogenic processes. This rich and historic landscape forms an important part of Wiltshire's rich natural heritage. Like most areas, the landscape of Wiltshire bears the imprint of successive periods of human inhabitation and land use. While the basic landforms have remained the same, the vegetation covering and land uses have been subjected to constant change, although some periods of change have been far more rapid and radical than others.
- 7.2.2 These changes are important not only from an archaeological perspective but also in determining the overall character of Wiltshire.
- 7.2.3 Wiltshire has a rich prehistory including numerous examples of Neolithic long mounds, including some 20 examples around Avebury to the east of Wiltshire. One of the most dramatic, the West Kennet long barrow, is some 113m in length and contains individual chambers constructed of sarsen slabs. Henge monuments are also part of this period, the most famous being Stonehenge, although it is only the bank and ditch that are Neolithic. Stonehenge is surrounded by other henge monuments, which vary considerably in their size, such as Durrington Walls and Woodhenge, both of which contained circular settings of timber posts. Huge henge enclosures such as at Avebury and at Hatfield Farm, Marden in the Vale of Pewsey were built, together with the circular mound of Silbury Hill.
- 7.2.4 Wiltshire has nearly 20,000 archaeological sites ranging from the prehistoric through to Roman and medieval times and the civil war battlefield at Roundway Down. There are also approximately 12,000 listed buildings, 37 historic parks and gardens, three Areas of Outstanding Natural Beauty (AONBs) and more than 200 conservation areas. The majority of the conservation areas in Wiltshire consist of the historic parts of towns and villages, but some include other special landscapes which can also be designated, such as the canal corridor at Wilcot. The high number of conservation areas reflects the importance of the county's heritage, much of which is recognised at national and international levels.
- 7.2.5 The north of Wiltshire contains many notable historic assets including the 7th century abbey, founded by St Aldhelm in Saxon times, at the heart of Malmesbury. The abbey is now the parish church and includes some of the finest Norman architecture and statuary in England. Many of the historic market towns have retained much of their architectural heritage and owe much of their prosperity to the wool trade and the quarrying of Bath stone. The northern area of Wiltshire also includes many historic railway structures including the Box railway tunnel completed in 1841 under the direction of Isambard Kingdom Brunel.
- 7.2.6 The town of Devizes to the east of Wiltshire has more than 500 listed buildings. The Kennet and Avon Canal was built between 1794 and 1810 to link Devizes with Bristol and London. The canal fell into disuse after the coming of the railway in the 1850s, but has been restored for leisure uses. Near Devizes the canal rises 237 feet (72 m) by means of 29 locks, 16 of them in a straight line at Caen Hill. Further to the east lies the Neolithic henge monument of Avebury. The monument contains the largest stone circle in Europe, and is one of the best known prehistoric sites in Britain. This ancient monument forms part of the Stonehenge, Avebury and Associated Sites World Heritage Site.
- 7.2.7 To the west lies the county town of Trowbridge. Like many Wiltshire towns Trowbridge has a rich

textile heritage. The canal that runs to the north of the town has also played a large part in the town's development. There is much of architectural interest in Trowbridge, including many historic assets associated with the textile industry, and the Newtown conservation area, a protected zone of mostly Victorian houses. Bradford on Avon is situated to the north of Trowbridge; its canal, historic buildings, shops, pubs and restaurants make it popular with tourists. The history of the town can be traced back to Roman origins. It has several buildings dating to the 17th century, when the town grew, again due to the thriving woollen textile industry.

- 7.2.8 The historic Salisbury City lies to the south of Wiltshire. The city is home to numerous medieval streets and alleyways coupled with rich architecture including many half-timbered buildings. Salisbury Cathedral has the tallest spire in Britain and stands in the largest medieval close in Britain. The Stonehenge element of Wiltshire's world heritage site is located just 8 miles north of Salisbury. One of the most famous sites in the world, Stonehenge is composed of earthworks surrounding a circular setting of large standing stones. It is at the centre of the most dense complex of Neolithic and Bronze Age monuments in England, including several hundred burial mounds.
- 7.2.9 Wiltshire has a significant military presence being home to 20 per cent of the entire British Army. This presence has greatly influenced both social and physical characteristics of Wiltshire including its heritage assets. RAF Chilmark, to the west of Salisbury, was a former armaments depot used in the Second World War and during the Cold War, with both surface and below ground storage facilities. It was established at the site of a stone quarry which itself had a long history of supplying stone for buildings such as Salisbury Cathedral. In addition to the military sites themselves are older buildings, such as Zouch Manor, and landscape features such as the water meadow known as the North-East Quadrant, Tidworth.
- 7.2.10 Wiltshire also contains numerous villages and rural settlements outside of the Market towns; these rural areas include many historic farm buildings. Even though the best examples are listed as being of special architectural and historic interest, there has been an alarming number of losses in recent years and surviving examples of threshing barns, granaries, malt houses, dovecotes and stables are becoming increasingly rare.

7.3 The Stonehenge, Avebury and Associated Sites World Heritage Property Statement of Outstanding Universal Value

- 7.3.1 A Statement of Outstanding Universal Value (OUV) was published in 2013. This document provides information on key issues and trends currently affecting the World Heritage Site which will need to be taken account of in the sustainability appraisal.
- 7.3.2 The Stonehenge, Avebury and Associated Sites World Heritage Property is internationally important for its complexes of outstanding prehistoric monuments. However, the presence of busy main roads going through the World Heritage Property impacts adversely on its integrity. The roads sever the relationship between Stonehenge and its surrounding monuments, notably the A344 which separates the Stone Circle from the Avenue. At Avebury, roads cut through some key monuments including the Henge and the West Kennet Avenue. The A4 separates the Sanctuary from its barrow group at Overton Hill. Roads and vehicles also cause damage to the fabric of some monuments while traffic noise and visual intrusion have a negative impact on their settings. The incremental impact of highway-related clutter needs to be carefully managed.
- 7.3.3 Development pressures are present and require careful management; impacts from existing intrusive development should be mitigated where possible.
- 7.3.4 At a local level, the Stonehenge and Avebury World Heritage Property is protected by the legal designation of all its key monuments. There is a specific policy in the Local Development Framework to protect the Outstanding Universal Value of the Property from inappropriate development, along with adequate references in relevant strategies and plans at all levels. The Local Planning Authority is responsible for continued protection through policy development and its effective implementation in deciding planning applications with the management plans for Stonehenge and Avebury as a key material consideration. These plans also take into account the range of other values relevant to the World Heritage Property. Avebury lies within the North Wessex Downs Area of Outstanding Natural Beauty: a national statutory designation to ensure the conservation and enhancement of the natural beauty of the landscape.
- 7.3.5 The World Heritage Property has effective management plans, coordinators and steering groups at both Stonehenge and Avebury but there is a need for an overall integrated management system for the Property. A review of the current system and governance arrangements should inform any future changes. Research Frameworks have been published for the World Heritage Property and are

regularly reviewed.

- 7.3.6 The A344 closed to the public in June 2013.

7.4 Archaeology

- 7.4.1 Wiltshire contains a wide range of important sites and buildings – some with local historic or architectural interest, others with internationally designated status. Such sites can make an important contribution to creating a true sense of place, local identity and distinctiveness, in both rural and urban areas.
- 7.4.2 Wiltshire contains approximately 20,000 known archaeological sites ranging from the prehistoric through to our early industrial past, including more than 1,500 scheduled ancient monuments. There is scope for new archaeological sites to be identified in the future.
- 7.4.3 One historic battlefield, the first civil war battlefield at Roundway Down, is located near Devizes. The battle of Roundway Down, which took place in 1643 is reportedly one of the most interesting and dramatic battles of the first civil war where an outnumbered cavalry force of no more than 1,800 defeated a balanced army of over 5,000.
- 7.4.4 The Stonehenge and Avebury World Heritage Sites are internationally significant and as a consequence present unique management challenges to ensure their universal values are maintained. There is an international obligation to protect, manage and present the sites for present and future generations.
- 7.4.5 World heritage sites are places of international importance for the conservation of mankind's cultural and natural heritage. There are 851 sites worldwide and 27 in the UK.
- 7.4.6 The sites at Stonehenge and Avebury were inscribed on the world heritage list in 1986 for their outstanding prehistoric monuments.
- 7.4.7 Stonehenge, the unparalleled stone circle, is dated 3000 BC – 1600 BC and is surrounded by a ceremonial landscape containing over 300 burial mounds and major prehistoric monuments. It covers an area of approximately 26 km². Avebury, like Stonehenge, is regarded as one of the most impressive and complex prehistoric sites in Britain and dates from 2800 BC, covering an area of 22.5 km².

7.5 Scheduled Ancient Monuments (SAMs) and the Wiltshire and Swindon Sites and Monuments Record

- 7.5.1 Wiltshire Council and Swindon Borough Council retain a service of maintaining and recording archaeology and negotiating with landowners and developers to ensure that ancient sites are not damaged or destroyed. A digital mapping system and computer database is used to maintain the Wiltshire and Swindon Sites and Monuments Record and to document archaeological information for the construction industry and other end-users.
- 7.5.2 The Wiltshire and Swindon Sites and Monuments Records database is compiled by the Wiltshire and Swindon History Centre and holds over 20,000 records. Archaeological sites and monuments that are considered to be of national importance are classed as Scheduled Ancient Monuments (SAM).

7.6 Heritage at Risk Register 2016: South West (English Heritage)

- 7.6.1 The Heritage at Risk register for the South West³³ identifies which of the region's most important grade I and II* listed buildings, scheduled monuments, registered parks and gardens, registered battlefields, protected wreck sites, conservation areas and industrial archaeology are threatened by development pressures, neglect or decay. 1,144 (16.4%) of the South West's 6,006 scheduled monuments are on the Register. The region has the highest number of scheduled monuments of any region and a significant proportion are at high risk.
- 7.6.2 The South West has one of the highest densities of listed agricultural buildings in the UK (0.77 per km²). The restructuring of the farming industry means that traditional farm buildings are often more susceptible to change than other types of historic building and sites. Across the South West around 6.1% of places of worship are on the risk register, compared to 6.3% nationally. Places of worship in

³³ Heritage at Risk Register 2016 South West (English Heritage, 2016)

rural areas are slightly more at risk as there are more grade I and II* places of worship in rural areas, and the communities they are in have fewer people to share the burden of care and finance.

- 7.6.3 In relation to Wiltshire, the register includes details of many grade I and II* listed buildings that are considered to be at risk, as well as many Scheduled Monuments. There were 1,144 Scheduled Monuments at risk in Wiltshire in 2016 (an decrease of 19 since 2015), many of which are barrows at risk due to arable ploughing/clipping and extensive animal burrowing. With regards industrial archaeology, the medieval moated site and Romano-British settlement at White Walls Wood, Easton Grey, Wiltshire is listed as a priority site.
- 7.6.4 There is one Registered Park and Garden II* on the register – Tottenham House and Savernake Forest. The condition is stated as 'extensive significant problems' and improving. Planning permission for hotel development, including building over Brown's walled garden and laying out a golf course, has lapsed.
- 7.6.5 The following were included in the Register 2016:
- Building and structure entries: 18 (16 in 2013)
 - Archaeology entries: 170 (239 in 2013)
 - Park and garden entries: 1 (1 in 2013)
 - Conservation area entries: 0 (1 in 2013)
- 7.6.6 Since 2015, the number of buildings at risk in Wiltshire has increased slightly with 2 more buildings on the register.

8 Inclusive Communities

8.1 Baseline Information

- 8.1.1 The collection of baseline information ensures that the sustainability appraisal process is based on a sound evidence base and provides the basis for predicting and monitoring any environmental or sustainability effects that may be identified during the sustainability appraisal stages. It is made clear in the sustainability appraisal guidance that a practical approach to the collection of baseline information is essential as there are opportunities to update the sustainability appraisal work in the future. The planning authority is encouraged to use existing data sources rather than to undertake original research.
- 8.1.2 The concept of inclusive communities embraces a range of issues relating to equality and social cohesion. These include access to housing, services and other opportunities, the needs of particular social groups and the level of active involvement in community activities.

8.2 Poverty and Deprivation

- 8.2.1 As a county, Wiltshire is not a deprived area, although the greatest concentrations of deprivation are in the towns. There are three small areas - two in Trowbridge and one in Salisbury – which are in the top 20% of deprived areas nationally; they are home to slightly more than 5,000 people. For the first time, Wiltshire now has one LSOA in the 10% most severely deprived in England; Salisbury St Martin – central.
- 8.2.2 Seven of the 10% most severely deprived LSOAs in Wiltshire are found in Salisbury Community Area; five in Chippenham; four in Trowbridge; three in Devizes and two in Melksham. Of rural parts of the county, the north and west appear generally less deprived when compared to south and east.
- 8.2.3 There is scattered deprivation across the whole rural area. Studies have shown that the rural areas of the county have deprived people in almost every community, but that rural areas are less deprived than the larger towns, with the only exception being with respect to access to key services, in particular for older people. This latter situation is partly a result of the geographical isolation of some communities, but also of the decline in many rural services over the last 30 years.
- 8.2.4 Of the 149 county and unitary authorities in England, Wiltshire ranked as the 132nd most deprived in the 2015 Indices of Multiple Deprivation. Wiltshire is ranked among the least deprived 50% in all domain summaries. It is ranked 91st in the scale of income deprivation and 93rd in the scale of employment deprivation. It is in the least deprived 10% in all four other summaries.
- 8.2.5 There are 281 LSOAs in Wiltshire and one area within the most deprived 10% nationally; this has worsened since 2007. The most deprived Wiltshire LSOA is in Salisbury St Martin – central.
- 8.2.6 The most prevalent form of deprivation in Wiltshire relates to barriers to housing and services. About 13% of the county's LSOAs are within the most deprived 10% in England in this domain, the majority in the east or the south of the county.
- 8.2.7 Levels of deprivation might not seem significant when compared with other parts of England. However, the variations within Wiltshire are major, with some of the most affluent areas in the county being located right next to the very deprived, those in the bottom 20% of the national score. In addition, rural deprivation is difficult to qualify; given the higher than average proportion of the population living in rural communities in Wiltshire, it is likely that small pockets of rural deprivation will exist that are not highlighted by the IMD.

8.3 Accessibility

- 8.3.1 The term 'accessibility' can be used in relation to the provision of essential services and facilities to all members of the community, and also in relation to the physical environment and the physical barriers people may face in being able to move about their communities. At the moment there is no consistent data to provide information about the number of residential properties within 500 metres of key local services (defined as a post office, food shop, GP surgery, primary school, bank, ATM and pub).

- 8.3.2 Wiltshire's communities include people from many different social, religious and cultural backgrounds and different sectors of the community generate different needs. Some groups only meet for worship, some also for teaching, whilst others might offer extensive social, welfare and cultural activities. Some groups have complex needs whilst others' needs are simple. Equalities legislation generally makes it unlawful to discriminate against particular groups of people in employment and in accessing adult education and training. Most laws make it unlawful to discriminate in delivering goods and services, including transport provision.
- 8.3.3 Many of the services and facilities in the authority area are provided by agencies and organisations other than the council. However, their operations need to be accounted for within the development plan process. Service infrastructure such as gas, electricity, water and telecommunications are today considered essential for the every day quality of life of the community. Other services, such as schools, day care, health care and cultural and recreational opportunities help to meet necessary and important social needs.
- 8.3.4 In terms of physical accessibility, development proposals should include appropriate provision to allow ease of access for everybody, including provision of facilities for disabled people. All members of the community should be able to access buildings and their environs in a convenient manner – this includes people with disability and those with diminished mobility.
- 8.3.5 'Access for All' policies are based on the principle of enabling everybody to move about their community without distinction between different categories of user. Such an inclusive approach has the potential to benefit a wide range of users, including wheelchair users, those with mobility, visual or hearing impairment, older people, those with hidden disabilities, those with learning difficulties, those with pushchairs and those encumbered by luggage or heavy shopping.
- 8.3.6 The ability of people to access places of work, learning, health care, shopping, leisure and exercise, and other opportunities can significantly impact on their way of life, and on their life chances. Schemes and initiatives to improve accessibility can encourage participation and retention in education, reduce inequalities in health and help people move from welfare into work.

Sustainable Community Strategy for Wiltshire 2007-2016

- 8.3.7 In September 2007, the Wiltshire Strategic Board published the Sustainable Community Strategy for Wiltshire. The Local Government Act 2000 made it a statutory duty to prepare a Community Strategy. More recently, the government has required them to be reshaped as sustainable community strategies, to re-emphasise the need for local leaders to develop a common vision for a more sustainable future for their area, through taking a more cross-disciplinary and integrated approach to social, economic and environmental issues.
- 8.3.8 Central and local government share the ambition to create sustainable communities, which embody the principles of sustainable development at the local level. These principles include taking local action to tackle global environmental challenges, while at the same time ensuring a vibrant local economy, good governance and a strong, responsible and healthy society.
- 8.3.9 The Sustainable Community Strategy provides the evidence for the Local Area Agreement outcomes in 2008. It also needs to be specific enough to inform, and be consistent with, the emerging LDF for Wiltshire. Further into the future, the strategy also needs to inform the government's new cross-agency method of assessing local performance, which will be known as the comprehensive area assessment.
- 8.3.10 It is very important that future development of the LDF and associated sustainability appraisal takes account of this strategy, in order that policies are developed that result in sustainable communities that benefit everyone.
- 8.3.11 The strategy aims to achieve strong and sustainable communities in Wiltshire that will be better able to rise to the future challenges and pressures facing the county. They will have the following features:
- Communities where people want to live and work. People are there by choice, and take pride in the distinctiveness of their towns and villages
 - Communities which are inclusive. People of different backgrounds, ages and beliefs feel a valued part of the community, not separate, marginalised or disadvantaged by, amongst other things, a lack of transport or affordable housing
 - Communities which are lively, busy places. People get together to tackle local concerns, to organise cultural events, and to socialise. People readily volunteer and feel encouraged to do so. There are many social 'networks' between individuals and families, which allow people to live active, varied and independent lives

- Communities where people feel safe, and are treated with respect
- Communities which possess the skills and businesses to remain competitive, and generate enough jobs to meet local employment needs
- Communities where children and young people enjoy life, and achieve their potential in and out of school
- Communities which have effective political processes, characterised by trust and openness, high political participation, and effective working relations between public, voluntary and business sectors
- Communities which actively promote the health of residents, and seek to reduce local health inequalities.

8.3.12 Strong and sustainable communities are also communities where current life styles do not threaten future ones. Such communities are informed about environmental issues, and are active in creating local solutions. In those communities, individuals, businesses and organisations will:

- actively minimise their household and commercial waste
- make travel decisions which minimise CO2 emissions, and the need to travel
- make purchasing decisions that reflect the actual human and environmental costs of producing, using, and eventually disposing of goods and products, including purchasing local goods and services where this makes sense
- adopt sustainable construction standards for new buildings, and seek to improve the
- energy efficiency of existing buildings
- protect and enhance land that has a high environmental or wildlife value
- use water, and energy, wisely and sparingly.

8.4 Recreation and Culture

8.4.1 The importance of sport, recreation, leisure, tourism, arts and culture is well recognised as having benefits for residents and visitors and for contributing to economic prosperity. It is also recognised that future developments to improve facilities in Wiltshire must protect and enhance the environment to ensure that any benefits are maximised for current and future generations.

8.4.2 Opportunities for recreation and leisure can positively affect individuals and communities, helping bring people together and reducing health inequalities. Wiltshire contains a wide variety of outdoor and indoor sports and leisure facilities, libraries, art galleries, museums, theatres and country parks to suit a wide range of tastes.

8.5 Rural Areas

8.5.1 Rural communities make up 50% of Wiltshire's population living in 95% of the geographic area. Rural areas are facing local challenges such as affordable housing, an ageing population, rural isolation, and lesser accessibility. Rural areas have undergone significant economic, social and demographic changes over the last thirty to forty years which has led to a countryside that is generally quite prosperous. Some key changes include the decline of the traditional sectors of employment and the in-migration of urban dwellers.

Rural Facilities Survey 2012

Journey to work, public transport³⁴:

8.5.2 114 (35%) settlements have a level 1 journey-to-work service, and a further 186 (57%) settlements level 2 service. Overall 300 (93%) of the settlements have access to a level 1 or a level 2 journey-to-work service.

³⁴ A Level 1 service requires that one service departs between 07:00 and 08:00 in the morning and another between 08:00 and 09:00. A return service must operate both between 17:00 and 18:00 and between 18:00 and 19:00. A Level 2 service requires that one service departs between 07:00 and 09:00 and a return service operates between 17:00 and 19:00.

- 8.5.3 45 of the large settlements (98%), 94 of the medium settlements (96%) and 161 of the small settlements (89%) have at least a level 2 journey-to-work service.

Post Office:

- 8.5.4 Nearly a quarter of the settlements surveyed have post offices located in them. 18 of these are independent post offices, and 62 of these are linked with another business, most commonly a general store.

Primary School:

- 8.5.5 Just over a third (34%) of the settlements surveyed has a primary school within them.
- 8.5.6 Three settlements (Bulford, Rowde and Market Lavington) each have two schools. In total 114 primary schools were found in the surveyed area.

General Food Shop:

- 8.5.7 38 of the large settlements (83%), 36 of the medium settlements (37%) and 14 (8%) of the small settlements have at least one general food shop. Overall, 27% of Wiltshire settlements have a general food shop.
- 8.5.8 In total, 67 out of the 324 rural Wiltshire Council settlements (21%) recorded three or four basic facilities. Two small villages (1%), 30 medium villages (31%) and 35 large villages (76%) have at least three basic facilities.
- 8.5.9 The survey concluded that since 1976, general stores, specialist shops and post offices have been in decline in the rural areas. While these stores have decreased mobile services have increased. Now large supermarkets can provide a near blanket mobile coverage of the whole rural area. However, to access these mobile services sufficient communication technology must be accessible. Two forms of communication, broadband and mobile phone coverage, have not yet reached adequate levels of provision in all rural settlements.
- 8.5.10 An alternative to the use of mobile services would be additional journeys to towns and other shopping centres. The reduction in fuelling stations in the rural areas could be taken as a sign that personal transport has not increased. However, the reduction in fuelling stations could also be taken as a sign that re-fuelling behaviours have changed; with more drivers re-fuelling in town locations where prices are known to be lower. Public transport provision has increased for the surveyed area and may have gone some way in protecting rural communities from the reduction in their local amenities.
- 8.5.11 Finally, the strong club and society presence and the mainly stable prevalence of places of worship, public houses and public halls may indicate a high level of cohesion in the rural communities.
- 8.5.12 Housing affordability has been an issue of concern for some Wiltshire residents who are contemplating entering the housing market for the first time. The average house price in rural Wiltshire was £295,800 in 2008 whilst in the urban area it was considerably lower at £195,800 (Land Registry 2008). Anecdotal evidence suggests that many younger people and those on lower incomes have been priced out of the villages and towns where they grew up. These trends raise a real threat to our ability to maintain and develop sustainable, mixed and inclusive rural communities.
- 8.5.13 Access to services in rural areas is also key to prosperous and sustainable communities. When essential services such as hospitals, education, food shop, post office or primary schools are not easily accessible, people run the risk of becoming socially excluded, especially if they have limited mobility and public transportation is poor. According to the last Census (2001) most households in rural areas will have access to a car or a van but about 12% do not (a total of 10,089 households).
- 8.5.14 The Commission for Rural Communities' Rural Data Series (2009) shows that:
- 8% of rural households in Wiltshire live more than 6kms from a principal GP site and 4% live more than 14kms from a hospital.
 - 2% of households in rural areas live more than 4km from a primary school, 31% live more than 6kms from a secondary school and 56% live more than 10kms from a principal job centre.
 - 4% of households are more than 4kms from a post office, 30% are more than 4kms from a convenience store, 37% are more than 4kms from a supermarket and 30% are more than 4km from a free cash machine.
 - Analysis was carried out on Wiltshire Council's People's Voice surveys and there is no

discernible difference between the responses of people living in rural areas and those living in urban areas. However the Wiltshire Household survey 2009 shows some marked differences:

- 73% of respondents in Wiltshire's rural areas felt that they were satisfied (very satisfied or fairly satisfied) with their home a place to live; a higher proportion than those living in urban areas (55%).
- 77% of respondents in Wiltshire's rural areas said that they felt safe (very safe or fairly safe) in their local area after dark; a higher proportion than those living in urban areas (50%).
- 42% of respondents in Wiltshire's rural areas felt that they were satisfied (very satisfied or fairly satisfied) with the local bus services; a lower proportion than those living in urban areas (51%).

8.6 House Prices in Wiltshire

- 8.6.1 Wiltshire is a popular area in which to live and its close proximity to several larger urban employment areas outside its boundary means that many people out-commute to better-paid jobs. This shows up in the difference between higher residence-based incomes, and somewhat lower Wiltshire work-based incomes. This same pattern feeds through into the affordability of house prices. Wiltshire has a higher house price to income ratio (9.5:1) than the nation (7.6:1) in 2016.
- 8.6.2 Wiltshire, along with Dorset and Bath and North East Somerset, has the biggest gap in the South West between the affordability of houses for resident and workplace employees. Latest figures show that due to the shortage of affordable housing in the county, 11,808 people are on the housing register in August 2010.

8.7 Health

- 8.7.1 The correlation between deprivation and poor health is well documented. In Type 2 diabetes, which is preventable in two thirds of people who have it, life expectancy is reduced by up to 10 years. It is estimated that around 90% of people with diabetes have type 2 diabetes, as opposed to type 1 diabetes, which is less preventable economic groups.
- 8.7.2 The rate of alcohol-related hospital admissions is higher in the south of the county, and there is a strong correlation with levels of deprivation, with almost twice the level of admissions in the more deprived areas in the county.

8.8 Local Involvement in Decision-Making

- 8.8.1 In resilient communities, residents have avenues open to them to express their opinions in a productive and positive manner. Results from the DCLG Place Survey 2008 showed that 31.7% of people in Wiltshire felt that they could influence decisions in their locality, compared to 29% nationally (NI 4). Although Wiltshire's results compare favourably with the national average, nevertheless, supporting local decision-making still features in the Resilient Communities Partnership Strategic Plan 2010-2013.

8.9 Neighbourhood Planning

- 8.9.1 As of June 2017, there are 68 designated neighbourhood areas in Wiltshire. There are 12 made Plans and a further 9 have been formally submitted to the council.
- 8.9.2 Made Neighbourhood Plans:
- Malmesbury, Brokenborough and St Paul Malmesbury Without
 - Compton Bassett
 - Downton
 - Freshford and Limpley Stoke
 - IdmistonAshton Keynes
 - Holt
 - Devizes
 - Potterne

- Urchfont
- Warminster
- Pewsey

8.10 Participation in Arts and Culture

- 8.10.1 Arts and culture make a significant contribution to the development of more resilient communities. A vibrant arts and culture community provides numerous benefits: enhances quality of life; creates jobs; acts as a catalyst for revitalising neighbourhoods and community development; builds opportunities for youth and education; and helps generate civic and community pride. In terms of return on investment in arts organisations, local research has shown that there is an £11 return for every £1 of public money invested.

9 Landscapes

9.1 Baseline Information

- 9.1.1 The collection of baseline information ensures that the sustainability appraisal process is based on a sound evidence base and provides the basis for predicting and monitoring any environmental or sustainability effects that may be identified during the sustainability appraisal stages. It is made clear in the sustainability appraisal guidance that a practical approach to the collection of baseline information is essential as there are opportunities to update the sustainability appraisal work in the future. The planning authority is encouraged to use existing data sources rather than to undertake original research.

9.2 Wiltshire's Landscape

- 9.2.1 The quality of the landscape is recognised in the three Areas of Outstanding Natural Beauty (AONBs) that cover 45% of Wiltshire, with a small part of the New Forest National Park accounting for another 1%. This compares well to England as a whole, where AONBs cover only 15% of the land and National Parks account for another 8%.
- 9.2.2 Salisbury Plain covers a further 11% of Wiltshire. It does not fall within a protected landscape as it is actively used for military purposes, but it is protected under UK and European law for its wildlife. It is the largest area of open chalk grassland in northwest Europe and provides irreplaceable space for wildlife to flourish. 55% of the UK's remaining chalk grassland is within Wiltshire.

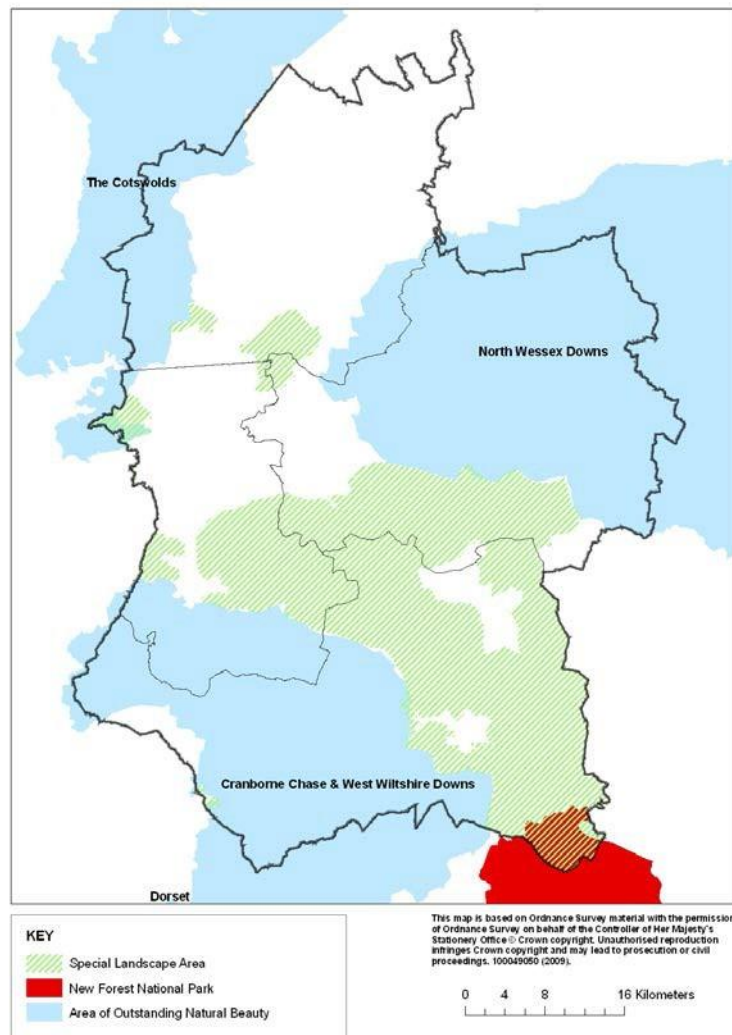
9.3 Designated Landscapes in Wiltshire

- 9.3.1 The landscape of Wiltshire is highly valued with approximately 73% being designated for its national or local landscape importance i.e. Area of Outstanding Natural Beauty, Special Landscape Area and Green Belt. In addition a small area to the south east of Wiltshire is part of the New Forest National Park (Figure 9.1).

Table 9-1 - Designated Landscapes in Wiltshire

	Total Area (ha)	AONB (% total area)	Green Belt (% total area)	SLA (% total area)	National Park (% total area)	Total (%)
East Wiltshire	96,670	66.3	-	20.6	-	86.9
North Wiltshire	76,770	22.8	2.3	4.2	-	29.3
South Wiltshire	100,410	46.1	-	46.0	3.1	95.2
West Wiltshire	51,690	29.4	10.0	30.8	-	70.2
Wiltshire	325,540	44.0	2.0	26.0	0.9	72.9
England	13,043,900	15.6	12.9	-	7.6	-

Figure 9.1: Designated Landscapes in Wiltshire



9.4 Areas of Outstanding Natural Beauty (AONB)

- 9.4.1 The AONB designation was first outlined in the National Parks and Access to the Countryside Act 1949, which also established the framework for national parks and the public rights of way network. The Countryside and Rights of Way (CROW) Act 2000 strengthened the conservation and management of AONBs in partnership with local authorities.
- 9.4.2 The primary purpose of the AONB designation is to conserve and enhance the natural beauty of the landscape, with two secondary aims: meeting the need for quiet enjoyment of the countryside and having regard for the interests of those who live and work there.
- 9.4.3 The landscape of Wiltshire incorporates parts of three separate AONBs. These areas account for approximately 44 % of Wiltshire. The three areas are Cranborne Chase and West Wiltshire Downs AONB, North Wessex Downs AONB and Cotswolds AONB.
- 9.4.4 Cranborne Chase and West Wiltshire AONB was designated in 1983 and forms part of an extensive belt of chalkland which stretches across southern England. In Wiltshire the downland is characterised by smooth rounded downs, steeply cut combs and dry valleys.
- 9.4.5 North Wessex Downs AONB was designated in 1972 and is the third largest AONB. The landscape is predominantly chalk downland with dramatic scarp slopes and moulded dip slopes, but also includes contrasting landscapes such as intimate secluded valleys, the Savernake Forest wooded plateau and the low lying Vale of Pewsey.
- 9.4.6 The Cotswolds AONB is made up of a limestone arc stretching across England. It is the largest AONB in England and Wales and the majority of its area, 81%, is located in the south west. A small section (6%) of the AONB falls within Wiltshire and is characterised by dip-slope lowland forming a broad tract of gently sloping undulating landform draining south east towards the Thames basin.

9.5 Green Belt

9.5.1 There are five purposes of including land in green belts:

- To check the unrestricted sprawl of large built-up areas;
- To prevent neighbouring towns from merging into one another;
- To assist in safeguarding the countryside from encroachment;
- To preserve the setting and special character of historic towns; and
- To assist in urban regeneration, by encouraging the recycling of derelict and other urban land.

9.5.2 A small section of the Bath/Bristol green belt extends into Wiltshire, known as the Western Wiltshire Green Belt. The purpose of the green belt is to check the unrestricted sprawl of urban development of Bristol and Bath and other towns and villages in the area. In Wiltshire the green belt safeguards the countryside against further encroachment and preserves the historic character of Bradford on Avon by preventing its coalescence with Trowbridge.

9.6 Special Landscape Areas (SLAs)

9.6.1 A special landscape area is a non statutory designation used by local government to identify naturally beautiful sensitive landscapes in order to protect them through policy from development or other man-made influences.

9.6.2 In Wiltshire there are seven special landscape areas covering 26% of the area. While they are highly valued locally it is acknowledged that roads, infrastructure development and minerals extraction may need to be accommodated in SLAs.

9.7 New Forest National Park

9.7.1 An area to the south east of Wiltshire now forms part of the New Forest National Park. This designation seeks to conserve the wildlife, physical characteristics, cultural heritage, landscape qualities and amenity interest of the New Forest.

9.7.2 The New Forest National Park Authority acquired its full statutory powers, functions and responsibilities in April 2006

9.8 Landscape Character

9.8.1 England has been divided into areas with similar landscape character, which are called National Character Areas (NCAs); previously known as Joint Character Areas (JCAs).

9.8.2 The Character of England Landscape, Wildlife and Cultural Features Map produced in 2005 by Natural England, with support from English Heritage, was an update to the 1996 map. This map subdivides England into 159 NCAs and provides a picture of the differences in landscape character at the national scale.

9.8.3 The State of the Countryside 2008 report (Commission for Rural Communities, 2008) found that for the period 1999-2003, 61% of England's countryside character areas were diverging; that is, the character of the area was being transformed, with new patterns of settlement developing. The remaining 39% of the character areas were judged as maintained with the precious character of settlement remaining predominant in the landscape.

9.8.4 In comparison The State of the Countryside 2004 report (Countryside Agency, 2004) found that about 42% of England's landscapes were either stable or showed changes that were consistent with existing character area descriptions and that 58% showed changes that were marked and inconsistent with these descriptions. This shows that the rate of change inconsistent with countryside character is increasing.

9.8.5 In December 2005 the Wiltshire Landscape Character Assessment (LCA) was published to provide a baseline for the county. The LCA provides detailed analysis, description and classification of the landscape into generic 'types' and their sub-component 'areas' (see Figure 7.2). The study confirmed that Wiltshire is largely of strong character and good condition and around a third of Wiltshire's landscape is in moderate condition, with none in poor condition. Strategy objectives have been developed including preserving current landscape (conservation) in areas of strong character and

encouraging restoration and strengthening in areas of moderate landscape quality.

- 9.8.6 Part of Wiltshire is covered by Historic Landscape Characterisation Studies (North Wessex Downs and Cranborne Chase and West Wilts Downs AONBs) and the influence of cultural heritage on the evolution and character of the landscape should be recognised as both significant and highly valuable
- 9.8.7 Detailed Landscape Character Assessments at 1:25,000 have been undertaken by all AONBs, the Cotswold Water Park, Defence Estates for Salisbury Plain and the former district councils.

9.9 Tranquillity

- 9.9.1 The Campaign for the Protection of Rural England (CPRE) has developed a tranquillity measurement tool, which allows the likelihood of experiencing tranquillity to be mapped. Local authorities should use the tool when preparing Local Development Frameworks and making decisions about planning applications.
- 9.9.2 CPRE has also calculated tranquillity scores for English local authorities and these range from +28.6 in Northumberland to -79.5 in Slough. Wiltshire scored +3.04 and is ranked 10th out of 87 authorities.

10 Land and Soil Resources

10.1 Baseline Information

- 10.1.1 The collection of baseline information ensures that the SA process is based on a sound evidence base and provides the basis for predicting and monitoring any environmental or sustainability effects that may be identified during the SA stages. It is made clear in the SA guidance that a practical approach to the collection of baseline information is essential as there are opportunities to update the SA work in the future. The planning authority is encouraged to use existing data sources rather than to undertake original research.

10.2 Soils

- 10.2.1 There is very little data available on the quality of soils at the national or local level. Soils share an interdependent relationship with the air and water environments, which can sometimes lead to contamination of watercourses from soil through surface runoff. Conversely soils can be damaged by deposition from the air or water. It is hoped that over time this part of the evidence base will grow as research into this area continues and more data becomes available.
- 10.2.2 During the period 1990-2005, the presence of nitrates found in water samples has seen a significant increase, partly due to use of agricultural fertilisers. However, levels of phosphates show a reduction over the same period.

Best and Most Versatile Agricultural Land

- 10.2.3 Productive agricultural land which can consistently provide good crop yields is a valuable resource, which is likely to become increasingly important in the future as demand for food increases and lower quality soils fail to yield crops as the effects of climate change are experienced. The importance of high quality agricultural land has long been recognised; hence the UK has been mapped using the Agricultural Land Classification (ALC), which grades land on a scale 1-5. Grades 1-3a are termed Best and Most Versatile (BMV) agricultural land as the land which is most flexible, productive and efficient in response to inputs and which can best deliver future crops for food and non-food uses such as biomass and fibres³⁵.
- 10.2.4 Development has the potential to remove BMV land from production. Natural England requires consultation for applications involving the loss of 20ha or more BMV land. Given the low availability of brownfield land for development in Wiltshire, many of the allocations are likely to fall to Greenfield sites.

Effective Use of Land

- 10.2.5 The NPPF states that 'planning policies and decisions should make effective use of land, promote mixed use developments that create more vibrant places, and encourage multiple benefits from the use of land in urban and rural areas, recognising that some open land can perform many functions (such as for wildlife, recreation, flood risk mitigation, carbon storage, or food production)'. The NPPF does not set a national target for developing previously developed land.
- 10.2.6 Employment completions on previously developed land accounted for 72.6% of total development across Wiltshire.

³⁵ Natural England (2009) *Agricultural land Classification: Best and Most Versatile Agricultural Land*
<http://naturalengland.etraderstores.com/NaturalEnglandShop/product.aspx?ProductID=88ff926a-3177-4090-aecb-00e6c9030b29>

Table 10-1 - New and Converted Dwellings on Previously Developed Land in Wiltshire

Area	Greenfield/Brownfield	2007	2008	2009	2010	2011
East Wiltshire	Greenfield	2.4%	30.8%	9.7%	29.4%	51.6%
	Brownfield	97.6%	69.2%	90.3%	70.6%	48.4%
North Wiltshire	Greenfield	39.0%	29.8%	18.9%	10.5%	18.5%
	Brownfield	61.0%	70.2%	81.1%	89.5%	81.5%
South Wiltshire	Greenfield	42.3%	60.9%	52.2%	71.1%	80.0%
	Brownfield	57.7%	39.1%	47.8%	28.9%	20.0%
West Wiltshire	Greenfield	52.3%	35.7%	40.4%	38.9%	46.1%
	Brownfield	47.7%	64.3%	59.6%	61.1%	53.9%
Wiltshire	Greenfield	37.0%	37.1%	30.6%	39.9%	49.1%
	Brownfield	63.0%	62.9%	69.4%	60.1%	50.9%

Source: Wiltshire Council Land Use Monitoring System

10.2.7 Using land efficiently through setting appropriate housing densities for development ensures that no more land than is necessary is used for a development. This is a particular issue in Wiltshire as a relatively low.

10.2.8 Trends in Wiltshire and the three principal settlements of Salisbury, Trowbridge and Chippenham are shown in the following table:

Table 10-2 - Percentage of New Dwellings Completed at 1) less than 30 dwellings per hectare (dph), 2) between 30 and 50 dwellings per hectare (dph), 3) above 50 dwellings per hectare (dph)

Area	Completed at	2007	2008	2009	2010	2011
Wiltshire	Less than 30 dph	22.0%	22.1%	23.5%	32.8%	51.6%
	Between 30 and 50 dph	49.9%	43.9%	34.8%	34.5%	23.9%
	Above 50 dph	28.2%	33.9%	41.7%	32.7%	24.5%
	Average	-	24.7dph	29.8dph	25.7dph	23.4dph
Chippenham	Average	-	60.7dph	64.2dph	54.5dph	46.3dph
Salisbury	Average	-	90.6dph	42.9dph	39.4dph	29.9dph
Trowbridge	Average	-	42.6dph	44.0dph	39.6dph	31.0dph

Source: Wiltshire Council Land Use Monitoring System

10.3 Contaminated Land

- 10.3.1 In 2010, Wiltshire Council produced an Inspection Strategy for Contaminated Land. It states that the process of inspecting and identifying contaminated land is ongoing. Seven sites of potential concern have been identified to date and will require further investigation. Two sites have been declared as contaminated land and confirmed as 'special sites', which means that the Environment Agency (not the local authority) is responsible for taking action to address them. Further information can be obtained from: <http://www.wiltshire.gov.uk/pollutionandnoise/contaminatedland.htm>

10.4 Waste

- 10.4.1 The amount of municipal waste arising for the contract year April 2014 to March 2015 was 257,469 tonnes. The majority of commercial premises are serviced by private contractors, although the council collects some commercial waste. An accurate total picture of waste production in the county is therefore not currently available.
- 10.4.2 According to data collated by the Wiltshire Intelligence Network³⁶, the total municipal solid waste collected in Wiltshire (excluding Swindon) increased until 2004/05, declined for several years but rose slightly in Wiltshire in 2011/12 and has seen increases in 2013/14 and 2014/2015. Overall, Wiltshire performs well against other areas, recycling or composting 46.5% of it's municipal waste³⁷.

Figure 10-1 - Municipal Solid Waste (MSW)

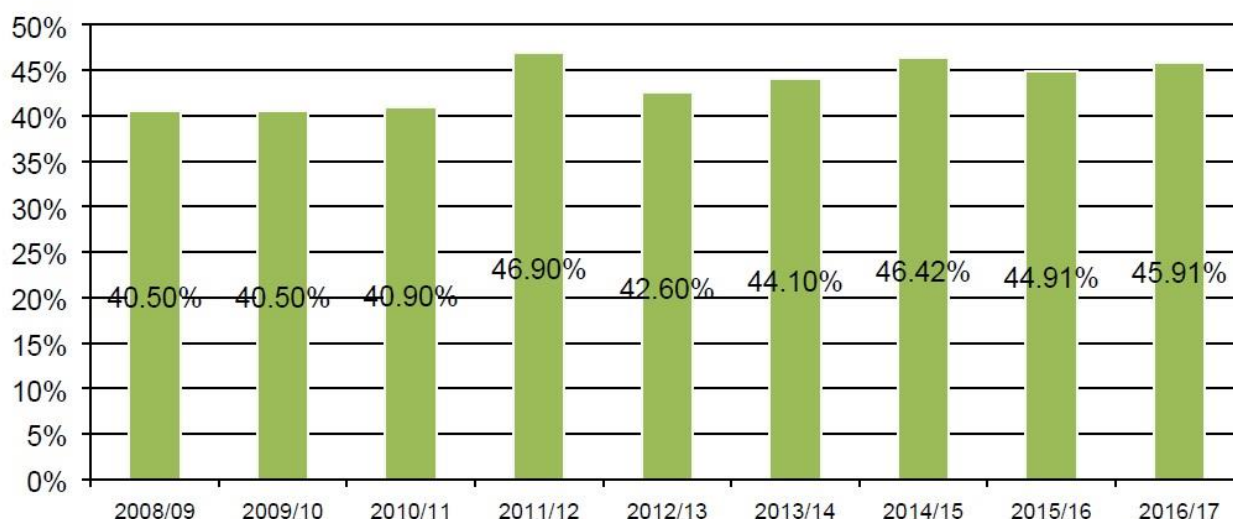


- 10.4.3 Of the municipal waste collected, 113,893 tonnes was diverted from landfill through reuse and recycling, resulting in a diversion rate of 44.24% for 2014/15. This figure has decreased by 1.68% from the 45.92% reported in 2013/14.
- 10.4.4 In addition to the 113,893 tonnes shown above, a further 107,834 tonnes was diverted from landfill to recovery through Energy from Waste (EfW). This material consists of 10,488 tonnes of wood processed for bio-fuel; and two separate contracts which supplied black bag household waste to the Northacre RRC, and the Lakeside EfW facility. The inclusion of this tonnage increases the landfill diversion rate to 221,727 tonnes (86.12%) for 2014/5. The total amount of municipal waste collected for 2014/15 has increased by 3,575 tonnes (1.43%) compared to 2013/14.

³⁶ <http://www.intelligence-network.org.uk/environment/waste-and-pollution/>

³⁷ <http://wiltshirejsa.org.uk/wp-content/uploads/2016/10/Environment-Datapackv2.pdf>

Figure 10-2 - Dry Recycling and Composting as Percentage of Household Waste



NI 192: Dry Recycling and Composting as Percentage of Household Waste (2016/17: at Aug 2016)

- 10.4.5 The amount of dry recycling and composting as a percentage of household waste has remained fairly consistent over the last five years at approximately 45%. This has increased from approximately 40% in the previous three years.

Wiltshire and Swindon Waste Core Strategy 2006-2026

- 10.4.6 The Wiltshire and Swindon Waste Core Strategy 2006-2026 contains much of the current information that is available regarding waste in Wiltshire and Swindon and should be referred to for further detail. It can be viewed or downloaded at: <http://www.wiltshire.gov.uk/mineralsandwastepolicy.htm>
- 10.4.7 The development of the evidence base that underpins the Minerals and Waste Development Framework revealed a number of key issues that the Waste Core Strategy must address. The key 'drivers of change' relating to the future of waste management in Wiltshire and Swindon are outlined below.

Key Issue 1: Substantial Population Growth in Wiltshire and Swindon and the Need for Additional Waste Management Capacity

- 10.4.8 The projected population growth will lead to pressure on resources and a need to plan for additional waste management capacity.

Key Issue 2: Identifying Future Site Locations, Rationalising the Framework of Waste Management Sites and the Environmental Importance of Wiltshire and Swindon

- 10.4.9 The decisions made in terms of locating future waste management facilities must have regard to the significant number of environmental designations in Wiltshire. Due to the rich and diverse environment of Wiltshire and Swindon suitable site locations are likely to be limited and hence difficult decisions will have to be taken in terms of where sites will be located. This is particularly true of south Wiltshire where there are limited waste management facilities.

Key Issue 3: The Approach to Waste Management in Wiltshire and Swindon

- 10.4.10 The approach to waste management in Wiltshire and Swindon is another issue that must be resolved. Reducing the amount of waste produced in Wiltshire and Swindon and driving waste up the management hierarchy are important issues. The approach consumers and producers take to address these challenging tasks are also key considerations.
- 10.4.11 The Waste Site Allocations Development Plan Document (DPD) builds upon policies in the Wiltshire and Swindon Waste Core Strategy and identifies broad locations for future waste management facilities. It links to the Aggregate Minerals Site Allocations DPD with regard to providing sites for aggregate recycling facilities. Refer to the draft waste sites allocations DPD for further information on specific sites throughout Wiltshire.

10.4.12 Policy WCS3 of the Wiltshire and Swindon Waste Core Strategy identifies a need to deliver the following capacities through the Waste Site Allocations DPD.

Table 10-3 - Capacity Allocated within the Waste Core Strategy Policy WCS3 to be Delivered in the Waste Site Allocations DPD

Waste Stream	Capacity to be Delivered as at 2006 (tpa)
Municipal	<ul style="list-style-type: none"> 54,000 tonnes per annum (tpa) of treatment capacity for municipal waste management for Wiltshire and Swindon Three HRCs, a MRF and a composting facility for the management of Wiltshire's municipal waste Suitable municipal waste management facilities in Swindon to achieve the target of 50% recycling by 2010
Industrial and Commercial	<ul style="list-style-type: none"> 915,870 cubic metres of void space capacity for the management of industrial and commercial waste 250,000 tpa of treatment capacity for industrial and commercial waste management for Wiltshire and Swindon 150,000 tpa of recycling capacity for industrial and commercial waste management for Wiltshire and Swindon.
Inert	<ul style="list-style-type: none"> 950,000 cubic metres of void space capacity for the management of inert waste 90,000 tpa of transfer capacity for the management of inert waste in Wiltshire and Swindon.

10.4.13 However, the requirements set out in Policy WCS3 were established using a base date of 2006. Since then a number of waste management facilities have been permitted increasing the existing capacity for the plan area. The following table illustrates the changes to the capacity gap as identified through annual monitoring of planning applications.

Table 10- 4 - Additional Permitted Waste Management Capacity in Wiltshire and Swindon 2006 - 2010

Waste Stream	Type of Facility	Capacity (tpa)
Municipal	Waste Treatment	<ul style="list-style-type: none"> 60,000 tpa (in Wiltshire of which only 38,000 tpa of biodegradable waste diverted from landfill)
	Outdoor Composting	45,050 tpa
	Recycling	28,000 tpa
Industrial and commercial	Waste Treatment	127,000 tpa
	Recycling	91,538 tpa
	Landfill	552,666 cubic metres
Inert	Recycling / Transfer	96,730 tpa
	Landfill	988,000 cubic metres

10.4.14 The following table shows the revised capacity gap figures that the councils need to provide for.

Table 10-5

Waste Stream	Capacity to be Delivered (tpa)
Municipal	<ul style="list-style-type: none"> • -6,000 tpa of treatment capacity for municipal waste management for Swindon • A HRC and a MRF for the management of Wiltshire's municipal waste • Suitable municipal waste management facilities in Swindon to continue achieving the target of 50% recycling and to meet the objectives of the Swindon Municipal Waste Strategy.
Industrial and Commercial	<ul style="list-style-type: none"> • 363,204 cubic metres of void space capacity for the management of industrial and commercial waste • 123,000 tpa of treatment capacity for industrial and commercial waste management for Wiltshire and Swindon • 58,462 tpa of recycling capacity for industrial and commercial waste management for Wiltshire and Swindon.
Inert	<ul style="list-style-type: none"> • 0 cubic metres of void space capacity for the management of inert waste • 0 tpa of transfer capacity for the management of inert waste in Wiltshire and Swindon.

11 Population and Housing Baseline

11.1 Baseline Information

- 11.1.1 The collection of baseline information ensures that the sustainability appraisal process is based on a sound evidence base and provides the basis for predicting and monitoring any environmental or sustainability effects that may be identified during the sustainability appraisal stages. It is made clear in the sustainability appraisal guidance that a practical approach to the collection of baseline information is essential as there are opportunities to update the sustainability appraisal work in the future. The planning authority is encouraged to use existing data sources rather than to undertake original research.

11.2 Population

- 11.2.1 Although the south west region covers the largest territory of any of the regions in England at 23,837 square kilometres, it is home to a relatively modest population of approximately 5 million. The estimated population for Wiltshire (excluding Swindon) in March 2011 was 470,981, which actually represents a relatively low population density compared with the national average, the region and surrounding areas. Over the period Census 2001 to Census 2011, Wiltshire's population growth was 8.8%, higher than England's at 7.9% and higher still than the South West's growth at 7.3%. Wiltshire's growth rate was the fourth largest in the region and, with only Swindon, Bristol and Bournemouth in the region having higher growth rates, the highest of any of the rural authorities in the South West.

Table 11-1 - Population Density, 2011, Period: Mar11

Variable	Measure	Wiltshire	South West	England
All Usual Residents (Persons) ¹	Count	470,981 ²	5,288,935	53,012,456
Area (Hectares) (Areas) ¹	ha	325,534 ²	2,383,736	13,027,843
Density (Number of Persons per Hectare) (Persons) ¹	Rate	1.4 ²	2.2	4.1

Last Updated: 30 January 2013 Source: Office for National Statistics

- 11.2.2 The Census 2011 estimates show that compared to averages in the South West and England, Wiltshire has a higher percentage (18.0%) of its total population under the age of 15 years. It also shows that, compared to England, Wiltshire has a relatively high percentage of its total population at retirement age and above (21.5%), although slightly less than the South West average (23.1%). The combination of these two facts means that Wiltshire has a relatively low percentage of its population at working age (60.4%). As a result of this Wiltshire has a dependency ratio of 65.44, higher than the South West at 65.15 and England at 58.89.
- 11.2.3 As the ratio increases there is an increased pressure on the economically active part of the population to maintain the welfare of the economically dependent. This is, to a large extent, a national issue in terms of education, health service and pension provision. Parliament, however, note that for our 'older' populations: "the greater part of care and support is provided by carers such as spouses, partners, family members, friends and neighbours". Informal care and support is, therefore, especially important in Wiltshire. Wiltshire's population is set to increase by 48,800 persons between Census 2011 and 2026, an increase of just over 10.4%. However, it is the composition of such growth that is going to pose what is likely to be the greatest challenge to Wiltshire over the forthcoming decades.

11.3 The Ageing Population

- 11.3.1 Wiltshire's population is projected to increase to 511,100 persons in 2026. The under 16 years of age population is projected to increase from 83,000 to 84,400 persons, whilst the working age population, aged 16 to 64 for males and 16 to 59 for females, is projected to increase slightly from 274,900 persons

to 277,200 persons.

- 11.3.2 With only a 3,700 person increase in the sub-retirement age population, Wiltshire's projected 12% total population increase over the next two decades will be almost entirely (94.4%) accounted for by our retirement age population. This poses Wiltshire with an extremely significant 'ageing population' challenge.
- 11.3.3 The fastest population increase has been, and will continue to be, in the number of people aged 85 years and over. There are currently more than twice as many females than males in this population group. The number of males aged 85 years and over is projected to increase by 137.8% during the period 2009 to 2026, compared to an increase of only 69.1% for females of the same age group over the same period. In total, the number of Wiltshire's residents aged over 85 years is projected to increase from 11,800 persons in 2009 to 22,500 persons in 2026.
- 11.3.4 The cost of adult social care is known to rise significantly for this population group. Wiltshire's Working-Age Population (WAP) is projected to decrease from 58.9% to 55.4% of total population and Wiltshire's Retirement-Age Population (RAP) is projected to increase by almost half again from 21.6% to 29.3% of total population from 2009 to 2026. This will result in enormous pressure on public sector resources to care for Wiltshire's older population in the future.

Table 11-2 - Age Structure, 2011 (KS102EW), Period: Mar11

Variable	Measure	Wiltshire	South West	England
All Usual Residents (Persons) ¹	Count	470,981 ²	5,288,935	53,012,456
Age 0 to 4 (Persons) ¹	%	6.0 ²	5.6	6.3
Age 5 to 7 (Persons) ¹	%	3.5 ²	3.1	3.4
Age 8 to 9 (Persons) ¹	%	2.3 ²	2.0	2.2
Age 10 to 14 (Persons) ¹	%	6.2 ²	5.6	5.8
Age 15 (Persons) ¹	%	1.3 ²	1.2	1.2
Age 16 to 17 (Persons) ¹	%	2.6 ²	2.4	2.5
Age 18 to 19 (Persons) ¹	%	2.3 ²	2.6	2.6
Age 20 to 24 (Persons) ¹	%	5.2 ²	6.3	6.8
Age 25 to 29 (Persons) ¹	%	5.4 ²	5.8	6.9
Age 30 to 44 (Persons) ¹	%	19.4 ²	18.8	20.6
Age 45 to 59 (Persons) ¹	%	20.9 ²	20.1	19.4
Age 60 to 64 (Persons) ¹	%	6.6 ²	6.8	6.0
Age 65 to 74 (Persons) ¹	%	9.6 ²	10.1	8.6
Age 75 to 84 (Persons) ¹	%	6.0 ²	6.6	5.5
Age 85 to 89 (Persons) ¹	%	1.6 ²	1.9	1.5
Age 90 and Over (Persons) ¹	%	0.9 ²	1.0	0.8
Mean Age (Persons) ¹	y	40.8 ²	41.6	39.3
Median Age (Persons) ¹	y	42 ²	42	39

Last Updated: 30 January 2013 Source: Office for National Statistics

11.4 The Military Population

- 11.4.1 Wiltshire is notable for the scale of its military presence, which is one of the largest in any county in the UK. The Salisbury Plain Training Area (SPTA) covers 150 square miles.
- 11.4.2 Military personnel make up some 3% of the total population of Wiltshire. Including personnel and dependants an estimated 30,000 people are thought to be living in Wiltshire related to the military. The distribution of the personnel is inconsistent across Wiltshire with a number of wards seeing a military population over 20%. This is most pronounced around Salisbury Plain, where the Headquarters 43 (Wessex) Brigade is based due to the extensive training area. The wards of Tidworth, Bulford, Durrington, Upavon and Warminster East all include significant military populations peaking at 75% in Tidworth.
- 11.4.3 The nature of military deployment in Wiltshire is undergoing substantial changes.
- 11.4.4 Major new developments are being planned and built at a number of locations across the county. Nevertheless, in general the changes can be described as a rationalisation of facilities and in some cases personnel. The development of the Salisbury Plain Super Garrison is likely to see a significant increase in military personnel and their dependants in this part of Wiltshire alongside increasing the stability in military life. However, the effects of the closure and potential re-use of RAF Lyneham and a number of other facilities and installations is as yet unknown.
- 11.4.5 The Defence Infrastructure Organisation (DIO) produced a Salisbury Plain Masterplan, which was recognised by the Wiltshire Council Strategic Planning Committee on 30 July 2014 as a critical background document to be taken into account in the next phase of focused planning applications. The Salisbury Plain Masterplan sets out proposed developments to accommodate the 4,300 extra personnel and their families relocating to the Salisbury Plain area.

11.5 Housing

- 11.5.1 In Wiltshire the local housing market is unbalanced. There are too few homes available which people in local communities can afford. Often these shortages are more keenly felt in smaller rural communities which mean people cannot live where they work or where they grew up. A shortage of homes at the right price and in the right place has an impact upon Wiltshire in several ways - it can affect the social health and well being of households who are forced to live in homes which are too small, in poor condition and do not offer long term security and has an effect on the economy and sustainability of communities.
- 11.5.2 Having access to affordable, quality homes is important for social and economic wellbeing and the health of children and families. It can also play an important role in promoting economic growth; low rates of house building lead to a restriction of labour mobility which can, as a result, constrain productivity. Wiltshire needs to respond to increasing demand and the need to supply a responsive housing stock.

11.6 Efficient Use of Land

- 11.6.1 Setting appropriate housing densities for development ensures that land is used efficiently and that greenfield land take is kept to a minimum. This is a particular issue in Wiltshire as the county is rural in nature and there is a relatively low amount of previously developed land available for development.
- 11.6.2 It is also essential that the density of development is appropriate to context and place. Design and density are closely interrelated and it is essential that design solutions are encouraged which will achieve higher density levels wherever possible. It should also be ensured that the density of development is not at the expense of high quality living environments or private amenity space.
- 11.6.3 Evidence on density in Wiltshire can be found in the monitoring of new development.

11.7 Mixed and Balanced Communities

- 11.7.1 The 2011 SHMA estimated the housing in Wiltshire to be 3,862 new households per annum. The implication of this level of housing need is to support a 40% target for affordable housing.
- 11.7.2 The SHMA found that the locations where affordable supply is lowest in relation to need are, not surprisingly the rural areas: North and Central rural and South rural, where supply is below 20% of the annual need. Salisbury Plain, a mixed urban and rural area has an equally low supply. Among towns, the lowest supply is found in Trowbridge (21%). The County average is that 38% of the need is met by annual supply.

- 11.7.3 Wiltshire has highly rural population: about two thirds of all households live in rural areas, compared with a fifth as the national average. Rural areas show the strongest polarity of incomes being home to both relatively low income households and high income ones typically involving long distance commuters. This is combined with a larger older population. Rural households register much greater difficulty in accessing services, a common pattern throughout the country.
- 11.7.4 With regards to affordable housing the conclusion is that in current market conditions, there is a requirement for around 1,360 new affordable dwellings in Wiltshire each year.
- 11.7.5 By 2026 the composition of Wiltshire's older age groups will have changed dramatically. There will be a higher proportion of the older age groups, including the over 85s, and double the number of older disabled people. It is therefore important that new homes are suitable to meet the needs of households in the future including an ageing population. Overall it is estimated that 41,465 households in Wiltshire have one or more members in an identified support needs group – this represents 21.5% of all households. It should be noted that a household found to have a support need will not necessarily need to move to alternative accommodation.
- 11.7.6 Innovative housing schemes which assist older and vulnerable people to live securely and independently in sustainable locations with good access to local services will need to be encouraged and supported. The layout, form and orientation of development should consider adaptability to change as an integral part of the design at the outset. Development proposals should demonstrate how accessibility and adaptability are addressed. The provision of sufficient new accommodation for vulnerable and older people, including nursing accommodation, residential homes and extra care facilities should also be encouraged and supported. Such accommodation should be provided in sustainable locations, where there is an identified need, within settlements (normally in the principal settlements and market towns) where there is good access to services and facilities.

11.8 Affordable Housing

- 11.8.1 Access to the owner occupied market is heavily restricted by rising house prices with increases exceeding local income inflation. The relationship between local incomes and the realistic supply of the cheapest stock available exacerbates the affordability problem within Wiltshire.
- 11.8.2 In Wiltshire there has been a gradual deterioration in affordability, determined by the ratio of lower quartile house price to lower quartile income. According to government figures, the 2010 affordability index for Wiltshire was 8.57 - higher than the Southwest and England average. This is illustrated in the table below - if a multiplier of 3.5 is assumed in order to secure a mortgage, then based on the average income a resident would be able to afford £86,954.

Table 11-3 - Affordability Index for England, South-West and Wiltshire

	2002	2003	2004	2005	2006	2007	2008	2009	2010
England	4.72	5.23	6.28	6.82	7.15	7.25	6.97	6.28	6.69
South West	6.37	7.11	8.18	8.58	8.51	8.94	8.75	7.63	8.17
Wiltshire	7.19	8.03	8.84	8.50	8.76	9.16	8.58	8.09	8.57

Source: HM Land Registry House Prices 2010 / ONS Annual Survey of Hours & Earnings 2010

- 11.8.3 Income is a key driver of demand and is a core factor in the assessment of the scale of housing need and in determining affordability in local housing markets. The average house price for all properties during July 2010 was £223,043. Since 2003 the average price of all properties has risen by 33%. Entry level stock, terraced properties have increased by 30% and flats / maisonettes have increased by 32% between 2003 and 2010.
- 11.8.4 However, the impact of the recession on house prices was significant. As confidence was lost in the banking and financial sectors as a result of bad debt, house prices plummeted from the end of 2007 through to their lowest point in the spring of 2009. House prices in Wiltshire then began to recover, rising slowly through 2010 and 2011, before again dropping slightly in 2012. Average (median) house prices in Wiltshire were only 2% higher in 2012 than they had been in 2007.
- 11.8.5 The overall recovery of house prices since the low point in 2009 has exacerbated the affordability issues faced by first time buyers in Wiltshire, although indications of improved lending by the banks and the

availability of low-cost home ownership products offer encouragement to those seeking to buy their first home. Numbers of sales were also approximately 5% higher in 2012 than in 2010, suggesting a slightly larger available market.

11.8.6 The median house price in 2012 in Wiltshire, for all types of property, was £200,000.

Table 11-4

Property type	July 2003	July 2010	% Change
Detached	£259,102	£307,556	+19
Semi-detached	£150,845	£193,966	+29
Terraced	£125,896	£163,525	+30
Flat	£99,509	£131,097	+32
All properties	£167,905	£223,043	+33

11.8.7 There is considerable variation in house prices within Wiltshire. In 2012, the highest median property price was in Marlborough community area (£307,500) and the lowest was in Westbury community area (£158,500): a difference of £149,000.

11.8.8 House prices in the Wiltshire region of the country tend to be higher than the national average. The attractiveness of the area as a whole keeps the housing market competitive and property prices up, despite the recent difficulties in the market. When looking at Wiltshire's immediate neighbours, Wiltshire's house prices are average (median) within this area. This reflects the attractive housing stock and environment and the county's accessibility to major centres of employment, which keeps the housing marketing competitive for those that live and work in the county and those that commute to Bristol, Swindon and along the M4 to London

11.9 Homelessness

11.9.1 The total number of homeless acceptances for Wiltshire is far higher than for any of our neighbouring local authorities. However, in terms of a rate Wiltshire had 2.2 homelessness acceptances per 1,000 households which is on par with Swindon, South Gloucestershire and Mendip; lower than South Somerset, but higher than Bath and North East Somerset or Cotswold.

11.9.2 In Wiltshire from 2007-2008 to 2009-2010 the three main causes of homelessness were and still are:

- being asked to leave by parents
- termination of assured shorthold tenancies
- relationship breakdown.

11.9.3 These are consistent with the national and South West homeless figures.

11.10 Rural Housing

11.10.1 Wiltshire Council is working with parish councils to identify the housing needs of local people.

11.10.2 Households in parishes are being asked to take part in a survey that will give up-to-date information about local housing circumstances and aspirations. This information will be used to help the council develop its housing and planning policies to best meet these needs, including whether there is a local need for affordable housing in parishes and, if so, of what size and type.

12 Transport

12.1 Baseline Information

- 12.1.1 The collection of baseline information ensures that the sustainability appraisal process is based on a sound evidence base and provides the basis for predicting and monitoring any environmental or sustainability effects that may be identified during the sustainability appraisal stages. It is made clear in the sustainability appraisal guidance that a practical approach to the collection of baseline information is essential as there are opportunities to update the sustainability appraisal work in the future. The planning authority is encouraged to use existing data sources rather than to undertake original research.

12.2 Background Information

- 12.2.1 The large area covered by the county, and its geographic position in relation to nearby major economic centres, results in a wide range of transport related problems and issues which need addressing and resolving. Due to its rural nature, the area has a vast network of country lanes and other rural routes, many of which have evolved from historic tracks or droving routes. Consequently, many of these routes are unsuitable for coping with modern day traffic, particularly HGVs. Wiltshire Council has the opportunity to limit the impact of traffic in rural areas, through such measures as the introduction of speed limits in rural communities and working with freight operators.
- 12.2.2 Land use planning has a key role in delivering the Government's integrated transport strategy. By shaping the pattern of development and influencing the location, scale, density, design and mix of land uses, planning can help to reduce the need to travel, reduce the length of journeys and make it safer and easier for people to access jobs, shopping, leisure facilities and services by public transport, walking, and cycling. Consistent application of these planning policies will help to reduce some of the need for car journeys by reducing the physical separation of key land uses and enabling people to make sustainable transport choices.
- 12.2.3 However, distortion of costs caused by decisions in other policy areas, such as health and education, must be taken into account. For example, as health facilities have become more centralised to achieve economies of scale, access has become increasingly car-oriented. Likewise, policies giving parents a choice of school have complicated travel patterns and increased car travel. The result has been to shift the cost of access away from the institution onto the individual. So while infrastructure provision may appear cheaper on paper, by externalising the transport costs it is often those in society who are least able to pay who are picking up the bill.
- 12.2.4 New development proposed as part of the Core Strategy will be predominantly centred on the principle towns of Chippenham, Trowbridge and Salisbury where a greater degree of self containment can be achieved. However, some growth will also occur in the other market towns and smaller towns and villages. The continuation of high house prices and the increasing trend towards single person households may also contribute to greater commuting distances and more dispersed transport needs.

12.3 Wiltshire's Transport Network

- 12.3.1 Wiltshire Council is responsible for maintaining 4,381 km of road in the county. Previous under investment provided to the former County Council for road maintenance, as well as increased wear and tear on the highway network through increased traffic volumes, has led to sections of the network being below national standards for structural condition and skid resistance. Road maintenance also often leads to acute local congestion and increased journey time unreliability; which can have a major detrimental effect on the local economy.
- 12.3.2 Some of the main highway routes in the county are unsuited to the volume and weight of traffic carried and this has given rise to some local congestion, relatively low inter-urban journey speeds and journey time reliability issues. This has resulted in some societal impacts such as community severance and environmental impacts in terms of increases in vehicle emissions and air pollution. In both urban communities and rural areas, such conditions can devalue the quality of life and act as a major inhibitor to walking and cycling through increased and perceived dangers, and to public

transport by increasing journey times on services.

12.4 Air Quality

- 12.4.1 Local authorities have a duty under the Environment Act 1995 to review and assess local air quality within their areas against a set of health-based objectives for a number of specific air pollutants. Where exceedences of these objectives are identified, authorities are then required to declare an Air Quality Management Area (AQMA) and to prepare an Air Quality Action Plan (AQAP) setting out measures they intend to introduce in order to reduce concentrations of air pollutants.
- 12.4.2 While air quality across Wiltshire is generally good, AQMAs have been declared in a number of locations as a result of air pollution caused by traffic. The latest Air Quality Action Planning Progress Report integrates the reporting duties for the former district councils into a single document and shows progress on implementing the respective AQAPs; the council is currently working towards the integration of these currently separate AQAPs into a single document. Regular and ongoing dialogue on air quality issues is achieved through the Wiltshire Local Air Quality Management Officers Working Group.
- 12.4.3 A Wiltshire Air Quality Strategy for the period 2011 to 2015 has been produced. For more information please see the 'Air Quality' section of the baseline information.

12.5 Car Ownership

- 12.5.1 Car ownership has a direct impact on the ability of individuals to access key goods, services and employment. Car ownership is expected to continue to increase in the UK as incomes rise, cars become more affordable, more women learn to drive and households become smaller. There is a saturation point in car ownership, but we have not yet reached this in the UK.
- 12.5.2 The car is the main form of transport for most people: some 40% of households in Wiltshire have access to two or more cars compared with the average in England of 29.5%, and 60.5% of all journeys to work are by car compared to the South West average of 58.7% (Census, 2001).
- 12.5.3 Car usage in Wiltshire is expected to rise by nearly a third at 28% by 2025. However there is a significant minority of households who don't own a car and not everyone living in a car owning household is able to rely on having access to a car for all of their travel needs.

Table 12-1 - Car or Van Availability, 2011, Period: Mar11

Variable	Measure	Wiltshire	South West	England
All Households (Households) ¹	Count	194,194 ²	2,264,641	22,063,368
No Cars or Vans in Household (Households) ¹	Count	28,660 ²	428,093	5,691,251
No Cars or Vans in Household (Households) ¹	%	14.8 ²	18.9	25.8
1 Car or Van in Household (Households) ¹	Count	80,315 ²	985,432	9,301,776
1 Car or Van in Household (Households) ¹	%	41.4 ²	43.5	42.2
2 Cars or Vans in Household (Households) ¹	Count	63,879 ²	641,473	5,441,593
2 Cars or Vans in Household (Households) ¹	%	32.9 ²	28.3	24.7
3 Cars or Vans in Household (Households) ¹	Count	15,513 ²	151,711	1,203,865
3 Cars or Vans in Household (Households) ¹	%	8.0 ²	6.7	5.5
4 or More Cars or Vans in Household (Households) ¹	Count	5,827 ²	57,932	424,883
4 or More Cars or Vans in Household (Households) ¹	%	3.0 ²	2.6	1.9
All Cars or Vans in the Area (Vehicles) ¹	Count	280,840 ²	2,984,354	25,696,833

Source: Office for National Statistics Last Updated: 30 January 2013

- 12.5.4 Car ownership is high in Wiltshire reflecting the rural nature of the county. The proportion of households with access to 2 or more cars or vans is significantly higher than at both regional and national levels. The percentage of households with no access to either a car or a van is lower than in the rest of the region and country.
- 12.5.5 In a rural area such as Wiltshire, encouraging modal shift or reducing travel demand can be difficult. However, in the larger settlements, particularly Chippenham, Salisbury and Trowbridge, there is more scope to do so. Some smaller towns such as Westbury, Bradford on Avon and Warminster also have a higher degree of connectivity.

12.6 Public Transport

- 12.6.1 Public transport in Wiltshire accounts for 6% of journeys to work, which is a greater proportion than the average for the south west. However, this is half the national average suggesting scope for public transport to carry a greater proportion of trips in the county.
- 12.6.2 Increasing car ownership levels have given rise to greater flexibility for many social, leisure and employment activities as well as many facilities now being located on the edge of urban areas. Public transport is mostly unable to meet these changes, both in terms of service frequency and geographic coverage, thus leaving those without access to a car disadvantaged. For many trips there is no public transport alternative, or, the cost and perceived inconvenience leads car owners to choose to bear the marginal extra motoring costs.

Bus Travel

- 12.6.3 Bus services in Wiltshire are provided for by many different companies, with no single company being dominant across the county. The majority of services are provided on a commercial basis with the remainder being tendered revenue supported services. The tendered services are usually found in the rural areas and/or outside normal daytime hours, mainly being early morning, evening or Sunday services.
- 12.6.4 There has been significant growth in bus use in Wiltshire, which increased from 8.7 million passenger trips per annum in 2003/4 to 12.3 million passenger trips per annum in 2008/9 before falling back to 10.4 million in 2009/10 mainly as a result of the recession. These increases are largely as a result of the introduction of free travel for older people, but development of the Park & Ride services in Salisbury, and partnership schemes with the main operators to improve ridership on their commercial services, such as Kickstart improvements to the Chippenham- Swindon route, the Salisbury Area and Active8 Quality Partnerships, have also contributed to this growth.
- 12.6.5 The proportion of the rural population with access to an hourly or better weekday bus service has fallen from 64% to 54% between 2003/04 and 2007/08 and the proportion with at least a daily weekday daytime service has remained around 90% during the same period (see table below).
- 12.6.7 The proportion of bus routes operated by low floor vehicles has increased from 11% in 2005/06 to 21% in 2007. However, both figures appear low due to the relatively large number of small rural and school services, which are less likely to be a priority for low floor conversion. The proportion of Key Bus Route services that were low floor operated in 2007 was 64% compared to 41% in 2005.
- 12.6.8 Currently around a third of services are subsidised by Wiltshire Council, which is a significant demand on the annual revenue budget. Additionally tender prices have risen considerably over recent years due in part to the lack of qualified bus drivers and rising fuel prices. Future increases in tender prices pose a real threat to maintaining the existing coverage of bus services in the county.
- 12.6.9 The most recent progress report (2008) shows that while bus punctuality remains on track the impact of slowly rising traffic levels on the road network as a whole is beginning to have an effect on bus service reliability, and several routes have required additional running time to be inserted in the timetable. On at least one route this has led to significantly increased costs as an extra vehicle was required to maintain the existing regular frequency.

Community Transport

- 12.6.10 Community and voluntary transport schemes play an important role in supplementing conventional services where socially necessary needs cannot be provided in cost effective manner. The council provided £330,000 of funding for community transport in 2010/11.
- 12.6.11 There are currently 24 community minibuses in the county, carrying 250,000 single passenger trips a year. The majority are small scale and locally based, providing a service predominantly for

older and less able residents, including those who travel in a wheelchair, who cannot, or who find it difficult, to use ordinary public transport.

- 12.6.12 There is an extensive network of over 40 'Link' good neighbour schemes in Wiltshire, providing, as part of the 'good neighbour' remit, social car coverage to 98% of rural households.

Passenger Rail

- 12.6.13 Rail travel is increasingly popular in Wiltshire. Monitoring of rail patronage in Wiltshire has indicated a sustained growth in the number of rail passenger journeys over recent years. The LTP 2008 progress report indicates that rail passenger trips have increased by 17% since 2003, despite a slight decrease in 2007, as shown in the following table. This was due to timetable changes following the award of the new Great Western Franchise.

Transport Interchanges

- 12.6.14 Transport interchanges across Wiltshire are generally of a low standard with considerable investment required to create quality facilities. Recent improvements include enhancements to the main bus interchange in Trowbridge town centre for pedestrians, cyclists and public transport users, and improvements to Chippenham station forecourt which now provides better integration of bus and rail services.

12.7 Parking

- 12.7.1 The car parking strategy in Wiltshire was subject to a review in 2010 and as a strategy it seeks to find a balance between supporting economic growth and being an effective demand management tool to encourage the use of sustainable transport alternatives. The majority of parking within Wiltshire's market towns and villages is off-street, publicly operated car parks and/or on-street parking. Typically, the parking stock is supplemented by large car parks operated by supermarkets and other smaller privately operated car parks.

12.8 Freight Management

- 12.8.1 Road freight distribution by the use of Heavy Goods Vehicles (HGV), smaller lorries and vans are by far the most widely used form of distributing freight in the county. Approximately 85% of freight in Wiltshire is distributed via this means, which is in line with national distribution patterns.
- 12.8.2 Due to the rural nature of the county, freight movements have a noticeable impact upon the road network, as the roads which are used to access businesses and homes are, in instances, neither designed or always suitable for freight movements.
- 12.8.3 The need to provide an efficient distribution system can have an adverse impact on the local environment. This has resulted in increased vehicle emissions from road based freight traffic, increased noise, vibration, pollution, and deteriorating air quality. It also results in freight vehicles using inappropriate roads in sensitive rural areas or along residential roads. Work through the Freight Quality Partnership and the Freight Assessment Priority Mechanism seek to ensure that not only is best practice followed by the freight industry but that congestion and safety is reduced through better a managed road network for HGVs and other delivery vehicles.
- 12.8.4 A study by the former Wiltshire County Council, found that 86% of freight trains in Wiltshire travel through the county and there are no rail freight movements with both end trips in Wiltshire. Freight movements in the county consist predominantly of the Somerset quarry traffic routed via Westbury to London or Wootton Bassett. There is also movement of oil tanks through the county from Hampshire and freight movements from Avonmouth/Portishead and South Wales on the Great Western mainline, as well as freight from Didcot in the other direction towards Cardiff.
- 12.8.5 Rail freight can provide distinct benefits to business, society and local authorities over road based transport. Road based congestion and associated road maintenance could be reduced if significant transfer to rail could be achieved. However, rails biggest advantage is the environmental benefits that can be achieved. Using rail freight produces 3.4 times less CO₂ per tonne-km than road transport, which means that switching to rail freight gives a 70% reduction in CO₂ emissions compared to the equivalent road journey.
- 12.8.6 There is currently no known movement of freight on the canal system in Wiltshire. The canals are primarily used for leisure and recreational purposes.

12.9 Walking and Cycling

- 12.9.1 Walking is not as extensively studied as motor vehicle traffic, and useful information on the extent and purpose of walking journeys is limited. From the 2001 census, about 16% of journeys to work by residents of urban areas in Wiltshire were made on foot. Overall, the proportion of journeys to school made on foot is close to the regional average, and has been recently increasing slowly.
- 12.9.2 Within the UK there are great variations with the highest rates of cycling to work seen in Cambridgeshire (10% in 2001) and Oxfordshire (8%). Wiltshire has slightly higher than average levels with 4% of people cycling to work in 2001 compared to 3% across England. However, the number of cycling trips in Wiltshire has remained fairly stable since 2001 which is similar to national trends.
- 12.9.3 Research shows that cycling is more popular in higher income households. Wiltshire's relative affluence and high levels of cycle ownership offer a good opportunity to increase levels of cycling. The council will continue through the LTP process and developer contributions, to seek opportunities for the development of the defined pedestrian and cycle networks for each of the main towns, as well as the programme of pedestrian and town centre accessibility improvements.

13 Water and Flood Risk

13.1 Baseline Information

13.1.1 The collection of baseline information ensures that the SA process is based on a sound evidence base and provides the basis for predicting and monitoring any environmental or sustainability effects that may be identified during the SA stages. It is made clear in the SA guidance that a practical approach to the collection of baseline information is essential as there are opportunities to update the SA work in the future. The planning authority is encouraged to use existing data sources rather than to undertake original research.

13.1.2 Key points from the JSA for Wiltshire 2012/13:

Due to below-average rainfall, in March 2012 groundwater levels were the lowest for 90 years and all rivers were below normal levels, with some at exceptionally low levels. This situation was improved with above-average rainfall from April to June 2012.

- Wessex Water is developing its water supply grid to meet future demand, including a new supply pipe to transfer water from Dorset to Salisbury.
- The ecological status of rivers has been assessed by the Environment Agency and Wiltshire's rivers can be compared as shown in Figure 13-1 below. Wiltshire has two sections of river (14km in total) which have been classed as 'fail' on chemical status.
- A programme of actions is underway to improve water quality under the European Water Framework Directive. The Environment Agency in South West England has set a target of 43% of surface water bodies to be in good ecological status (or better) by 2015.
- The main challenge relating to water quality in Wiltshire is high levels of phosphate, which comes from sources including agricultural fertilisers and household detergents. This can lead to excessive algal growth and poor numbers of macro invertebrates and fish.

Figure 13-1 Ecological Status of River Water Bodies in Wiltshire and related River Basin Districts (RBDs) as a Percentage of Total River Length

	Wiltshire	Severn RBD	South West RBD	Thames RBD
High	0%	0%	0%	0%
Good	23.3%	21.4%	24.8%	10.2%
Moderate	55.6%	55.4%	63.6%	54.8%
Poor	18.9%	21.3%	10.4%	30.2%
Bad	2.2%	1.9%	1.1%	4.9%

Source: 2009 baseline figures from the Environment Agency. Wiltshire's rivers fall partly within the RBDs shown.

13.1.3 With a growing population in Wiltshire and drier summers predicted as a result of climate change, pressures on the authority's water resources will increase and need to be carefully managed.

13.2 Water Supply

13.2.1 The majority of Wiltshire's rivers are over abstracted, with over 70% under threat if abstraction licenses already granted were used to their full extent. The rivers within the Bristol Avon

catchment are the exception to this, but even within this catchment there is no more water available for further licensing.

- 13.2.2 66% of Wiltshire's groundwater sources have been assessed as 'poor' in terms of quantity status, with the remaining 34% assessed as 'good'.

13.3 Water Management and Climate Change

- 13.3.1 Managing the supply demand balance, in the face of the uncertainty of climate change, whilst maintaining environmental standards, will be a major challenge in water resources management in the future. Climate change presents one of the most significant issues for water resources planning. It will affect the supply demand balance by changing the yield of surface and groundwater resources, altering average and peak demands, and changing the expected yield of new resource development.
- 13.3.2 River flows are likely to be lower in summer, but there is currently much uncertainty in quantifying this long-term impact. This is a new area of work and water companies will need to keep their climate change assessments under review.
- 13.3.3 Historic groundwater flooding incidents have been minimal in Wiltshire, although groundwater within the underlying geology plays an important role in the watercourses flow regimes. Flooding from overland flow, generated from rainfall running off from surrounding land, together with flooding from sewers, due to limited capacity issues, has also been experienced. The risks of flooding from these sources are forecast to increase with the predicted effects of climate change. All potential development locations need to be checked to ensure the capacity exists within the drainage networks to reduce the risk of flooding from these sources.
- 13.3.4 Climate change is forecasted to result in more frequent flooding and increase the magnitude of flood events. Therefore the effects of climate change on floodplains should be a material consideration in strategic land use planning

13.4 Recreation and Tourism

- 13.4.1 Wiltshire's rivers and canals provide opportunities for a wide range of recreational and tourism related activities, and are also vital components of Wiltshire's rich environment that support a wealth of animal and plant species. Activities such as boating, fishing, walking and cycling are popular among local people and visitors to the county.
- 13.4.2 The Kennet and Avon Canal contributes to a range of sustainability factors and is noted for its industrial, cultural, landscape and ecological value. It also has a role as a catalyst for regeneration and investment. Some of the canal's outstanding structures include the Caen Hill Lock Flight, Avoncliff and Dundas aquaducts, Claverton Pumping Station and Crofton Beam Engines.
- 13.4.3 Restoration is underway on the Wilts and Berks canal and Cotswold canals. Wiltshire Council is a key member of the respective canal partnerships. When the restoration of the Wilts and Berks Canal and Cotswold canals is complete, an impressive 'Wessex ring' will be formed, comprising the Kennet and Avon, Wilts and Berks and Cotswold canals.

13.5 Flood Risk

- 13.5.1 Wiltshire Council has prepared a county-wide Strategic Flood Risk Assessment (SFRA) and this is being used as a tool to inform strategic and local planning decisions when allocating land for development or determining applications; the SFRA is also consulted when assessing significant effects through sustainability appraisal process.
- 13.5.2 The SFRA makes a series of policy recommendations to ensure a consistent approach to flood risk throughout the Wiltshire Council administrative area. Those relating to area specific strategies are as follows:
- In Chippenham, where deep and fast flood water flows can occur, opportunities to direct water away from areas of high social impact should be identified;
 - In rural areas upstream of Malmesbury, Melksham and Chippenham opportunities should be sought to increase flood storage areas capacity, including an additional storage allowance for increases in flow accounting for climate change;

- Opportunities should be sought for strategic flood storage areas in close proximity to future development areas to be maintained by developer contribution for the lifetime of the development;
- In Bradford on Avon, where fluvial and surface water flooding can occur, opportunities to direct water away from areas of high social impact should be identified;
- In Warminster, opportunities should be sought to open culverted watercourses, where possible, to return them to a natural system. When opening up culverted watercourses consideration should be given to ensure flood risk is not exacerbated downstream;
- In the application of SuDS techniques it is recommended that priority is given to the use of surface water drainage techniques due to the generally permeable soils throughout Salisbury. Prior to implementing these techniques, each site should confirm that the use of infiltration drainage will not increase the risks of groundwater flooding.

13.5.3 The SFRA recommends further work as follows:

- Level 2 work is currently being undertaken for two specific sites within Salisbury, commissioned by SDC prior to the commencement of the unitary authority. The Environment Agency has also identified that the 'west of Swindon growth area' may require Level 2 work to consider other sources of flooding;
- The Level 2 requirements for the rest of the Wiltshire Council administrative area will not be understood until the LPA has undertaken the Sequential Test within each of the district administrative boundaries;
- However, to mitigate against the anticipated effects of climate change further information through additional hydraulic modelling may be required to inform potential flood alleviation options within existing urban areas of Chippenham, Salisbury and Malmesbury; and
- Issues with surface water have been identified in Warminster, Bradford on Avon and Britford. Depending on development aspirations, these locations may benefit from a surface water management plan to reduce flooding from this source in the future. In addition, areas identified for regeneration provide opportunities for holistic consideration of surface water management through such plans.

13.5.4 The Strategic Housing Land Availability Assessment (SHLAA) for Wiltshire demonstrates that there is sufficient land available in Flood Zone 1, the zone of least risk, to meet the Core Strategy proposed housing requirement of 37,000 new homes for the area.

Wiltshire Council Level 1 SFRA Update - July 2013

13.5.5 In 2010 Wiltshire Council commissioned a Countywide (covering the Wiltshire Council and Swindon Borough Council administrative areas) Minerals and Waste Level 1 SFRA Update document to include new data and reflect changes to policy and flood risk guidance. Following the changes in Planning Policy with the introduction of the National Planning Policy Framework (NPPF) in 2012, the introduction of new legislation (Flood Risk Regulations 2009, Flood and Water Management Act 2010) and additional responsibilities of Wiltshire Council as 'Lead Local Flood Authority' (LLFA), Wiltshire Council commissioned the Level 1 SFRA 2013 update to highlight these changes.

13.5.6 The update report collected new datasets were collected for review. The only main changes identified were major changes in flood extent within the Swindon, Trowbridge and Salisbury area.

Wiltshire Surface Water Management Plan (SWMP), November 2011

13.5.7 Chippenham, Trowbridge and Salisbury are the locations identified as the focus of the SWMP. Key outcomes/recommendations are highlighted below:

Chippenham

13.5.8 Historically, the majority of reported flooding issues within Chippenham have been linked with

fluvial flooding from the River Avon. Surface water flooding combined with sewer exceedance has occurred within the High Street causing localised flooding of surrounding commercial properties. Key observations are as follows:

- A potential overland flow path has been identified within the Eastern Avenue area. This area is served by an existing public surface water sewer network but is likely to have localised flooding where sewer capacity is exceeded;
- Historically, the high street has experience flooding associated with surface water sewer exceedance. Pluvial modelling illustrates that this area will remain susceptible to surface water flooding and is likely to be exacerbated by high water levels within the River Avon;
- Potential development in the Hill Corner Road area may offer opportunities to reduce the surface water flood risk associated with a culverted watercourse to the south of the area; and
- Potential developments in the Pewsham Way and Hardens Farm area are located in greenfield areas. These are not served by the public sewer system and flow paths associated with ordinary watercourses (ditches, mainly) are likely to convey water to the River Avon. Surface water management should be considered during the masterplanning phases to direct development away from potential flow routes and to provide green open space.

Trowbridge

13.5.9 Historically, the majority of reported flooding issues within Trowbridge have been linked with fluvial flooding from the River Biss. Surface water flooding incidents have been limited, with no significant issues identified. Key observations are as follows:

- A potential overland flow path has been identified within the Timbrell Street area. This area is served by an existing public surface water sewer network but is likely to have localised flooding where sewer capacity is exceeded.
- Potential surface water and sewer exceedance issues were identified by the pluvial modelling in the Green Lane Area and Bramley Lane Area.
- Potential flood risk issues associated with the Drynham Brook ordinary watercourse were identified by the pluvial modelling.
- Potential development in the east of Trowbridge in the Green Lane area is not considered to be constrained by surface water flooding issues.
- Potential development in the south east of Trowbridge is in predominantly greenfield areas. These are not served by the public sewer system and flow paths associated with ordinary watercourses (ditches mainly) are likely to convey water to the River Biss. Surface water management should be considered during the masterplanning phases to direct development away from potential flow routes and provide green open space.

Salisbury

13.5.10 Historically, the majority of reported flooding issues within Salisbury and the surrounding area have been linked with fluvial flooding from the River Avon (Hampshire), River Nadder and River Bourne. However, due to the nature of the underlying bedrock, base flows within these rivers are inherently linked with groundwater levels. During wet periods, surface water infiltration into the underlying aquifer causes groundwater levels to rise causing increases in base flow within river channels. These cause longer duration flood events that are a combination of groundwater and fluvial flows. Key observations are as follows:

- Potential overland flow paths have been identified within the Bermaton and Laverstock areas. These areas are served by an existing public surface water sewer network but are likely to have localised flooding where sewer capacity is exceeded and depressions within the flow path exist;
- Potential surface water and exceedance of ordinary watercourses were identified by the pluvial modelling in the Britford Area;
- Flooding issues are identified in the city centre area, historical flood incidents have

been noted in this location (in particular the cathedral area) and are likely to be from a combination of sources including fluvial, surface water sewer exceedance, surface water ponding and groundwater levels;

- Potential flood risk issues associated with overland flows, ordinary watercourses and the interaction with the underlying groundwater levels and River Nadder in the Netherhampton area; and
- Potential flood risk issues associated with overland flows/ordinary watercourses in the Old Sarum area.

13.6 Water Supply and Demand

- 13.6.1 Using comparisons between supply and demand forecasts, Wessex Water has identified that there is the potential for deficits in water supply to occur in Wiltshire as a result of decreases in abstractions to protect sensitive watercourses such as the Hampshire Avon, as a result of climate change and as a result of population growth. Development of an integrated water supply grid is now in the initial stages of development and is expected to provide part of a long-term solution to the challenge of climate change, alongside leakage reduction and water efficiency.

13.7 Water Infrastructure

- 13.7.1 The impacts of climate change are likely to significantly affect waste water treatment infrastructure as well. Wessex Water expects to see more frequent damage to pipe work as soils dry out and shrink. The sewerage network is likely to come under greater pressure from more intense rainfall, which could lead to sewer flooding and spills from combined sewer overflows. More prolonged periods of dry weather could mean that treated effluent from sewage treatment works returned to rivers constitutes a higher proportion of the flow in these rivers and streams, whilst hotter weather could lead to an increase in complaints from residents concerning odour from sewage works.

13.8 Water Quality and Phosphate Levels

- 13.8.1 The River Avon SAC and ground water sources are particularly vulnerable to the effects of diffuse and point source pollution. The Draft Core Strategy identifies the need for the use of sustainable drainage (SUDS) and water conservation measures in relation to the River Avon SAC.
- 13.8.2 A specific issue considered in the initial HRA of the Core Strategy was the potential for likely significant effects upon the River Avon SAC through elevated phosphate levels from additional sewage discharges in the catchment. However, following the completion of significant upgrades to the sewage treatment infrastructure last year, the Environment Agency has concluded that sewage discharges projected by the Core Strategy will be compliant with the Habitats Regulations provided that a Nutrient Management Plan is put in place to bring down phosphate levels.
- 13.8.3 The Environment Agency and Natural England are currently working on the Nutrient Management Plan. The plan will identify works that are required to reduce river phosphate levels and the funding required for these. At that stage it will be appropriate for Wiltshire Council to consider whether it is appropriate for development to contribute to the implementation of the plan. If the Nutrient Management Plan identifies a need for developer contributions to deliver the necessary phosphate reductions, the Core Strategy (or other DPD/SPD) will need to consider this.

13.9 Nitrogen Enrichment

- 13.9.1 Nitrogen enrichment of surface waters and groundwater is already regarded as a problem in a number of areas. Wiltshire's chalk streams are internationally important for biodiversity, but currently suffer from a number of interacting factors that are having negative impacts.

13.10 Groundwater Protection

13.10.1 We need to manage and protect our groundwater resources from pollution if we are to continue to have sustainable supplies in the future. We also need to protect aquatic environments and ecosystems that depend on groundwater. Groundwater supplies about one third of mains drinking water in England as well as supporting numerous private supplies, but pollution and demands for water puts the resource under pressure. Groundwater also has many benefits, including to:

- Society - by providing water that needs little treatment before it can be drunk;
- The Economy - groundwater reserves are worth an estimated £8 billion; and
- The Environment - all rivers are partly fed by groundwater. Some rivers and wetlands are completely dependent on it.

13.10.2 There are two key risks to groundwater, these are:

- Pollution - groundwater is vulnerable to contamination and is difficult to clean. Nitrate, pesticides, solvents and other chemicals can get into groundwater from both surface water and soils; and
- Demand - over use of groundwater depletes the public water supply, so we might not be able to rely on it in the future. Many rivers and wildlife also depend heavily on groundwater and may be harmed, or lost, if groundwater levels become too low. 35% of groundwater bodies are classified as at 'poor quantitative status' under the EU Water Framework Directive because of abstraction pressures.