

Strategic Environmental Assessment of the Bournemouth, Poole and Dorset Local Transport Plan 3

Appendix B Baseline

December 2010

Produced for

Borough of Poole Council
Bournemouth Borough Council
Dorset County Council



Prepared by

Anne Hugh-White
Senior Sustainability Consultant
1 Waterhouse Square
138-142 Holborn,
London
EC1N 2ST

T +44 (0)207 822 2415

Document Control Sheet

Project Title Strategic Environmental Assessment of the Bournemouth, Poole and Dorset Local Transport Plan 3 (2011 – 2026)

Report Title Appendix B Baseline
Revision 2

Status Final for consultation

Control Date December 2010

Record of Issue

Issue	Status	Author	Date	Check	Date	Authorised	Date
1	Draft	Anne Hugh-White	08/01/10	Adrian Dawes	11/01/10	Adrian Dawes	12/01/10
2	Draft	Anne Hugh-White	29/03/10	Nick Winnard	29/03/10	Nick Winnard	29/03/10
3	Final	Anne Hugh-White	21/12/10	Adrian Dawes	21/12/10	Adrian Dawes	21/12/10

Distribution

Organisation	Contact	Copies
Dorset County Council	Adam Bows	1e

Contents

Document Control Sheet.....	i
Contents	ii
Table of figures	vi
1 Task A2: Collecting Baseline Information	1
2 Task A3: Identifying Environmental Issues and Problems	2
2.1 SEA Topics.....	2
2.2 Biodiversity and Flora and Fauna.....	2
2.2.1 European Conservation Sites	2
2.2.2 National Designated Sites	3
2.2.2.1 Sites of Special Scientific Interest	3
2.2.3 Local Designations	5
2.2.4 BAP Priority Habitats	5
2.2.5 Agricultural Classification	6
2.3 Landscape.....	6
2.3.1 AONB	6
2.4 UNESCO World Heritage Sites	6
2.5 Population and Human Health	7
2.5.1 Population Statistics and Structure	7
2.6 Health.....	9
2.6.1 Health Impact Assessment	9
2.6.2 Dorset Health Profile	11

2.6.3	Poole Health Profile	13
2.6.4	Bournemouth Health profile	15
2.6.5	Obesity	17
2.6.6	Ethnic Diversity	18
2.6.7	Indices of deprivation	19
2.6.8	Access to Services Dorset	22
2.6.9	Access to services in Bournemouth and Poole	24
2.6.10	Crime Statistics	25
2.6.11	Noise	26
2.7	Transport.....	28
2.7.1	South East Dorset Multi Modal Transport Study (SEDMMS)	28
2.7.2	Roads	28
2.7.3	Traffic Accidents	30
2.7.4	Travel to Work Areas	35
2.7.5	Trains	37
2.7.6	Cycling and Walking	37
2.7.7	Water Transport	37
2.7.8	Bournemouth Airport	37
2.8	Major Schemes	37
2.8.1	Poole Bridge Regeneration Initiative (Twin Sails)	37
2.8.2	The Weymouth Relief Road	37
2.8.3	2012 Olympic Games	37
2.8.4	Other Non Major Schemes	37
2.9	Water.....	37

2.9.1 Bathing Water Quality	37
2.9.2 River Quality	37
2.9.3 Flooding	37
2.9.4 Groundwater	37
2.10 Air.....	37
2.10.1 Air Quality Management	37
2.11 Material Assets.....	37
2.11.1 Waste	37
2.11.2 Housing and Homes	37
2.12 Economy	37
2.12.1 Employment	37
2.12.2 Benefit Claimants	37
2.12.3 Employment Types	37
2.12.4 Earnings	37
2.12.5 Tourism	37
2.12.6 Jurassic Coast	37
2.13 Climate	37
2.14 Climate Change Implications for Dorset.....	37
2.14.1 Climate Change & Health	37
2.14.2 Transport and Infrastructure	37
2.15 Cultural Heritage	37
2.15.1 Conservation areas and listed buildings	37
2.15.2 Scheduled ancient monuments	37
2.15.3 Historic parks and gardens	37

3 References 37

This Report is presented to the Borough of Poole in respect of the Strategic Environmental Assessment Scoping Report of the Bournemouth, Poole and Dorset Local Transport Plan 3 and may not be used or relied on by any other person or by the client in relation to any other matters not covered specifically by the scope of this Report.

Notwithstanding anything to the contrary contained in the Report, Mouchel Limited is obliged to exercise reasonable skill, care and diligence in the performance of the services required by the Borough of Poole and Mouchel Services Limited shall not be liable except to the extent that it has failed to exercise reasonable skill, care and diligence, and this report shall be read and construed accordingly.

This Report has been prepared by Mouchel Limited. No individual is personally liable in connection with the preparation of this Report. By receiving this Report and acting on it, the client or any other person accepts that no individual is personally liable whether in contract, tort, for breach of statutory duty or otherwise

Table of figures

Figure 2-1 SAC's, SPA's & RAMSAR sites.....	3
Figure 2-2 National Nature Reserves & Sites of Special Scientific Interest.....	5
Figure 2-3 AONB's.....	6
Figure 2-4 Jurassic Coast.....	7
Figure 2-5 The Main Determinants of Health.....	10
Figure 2-6 Health map for the local human habitat.....	11
Figure 2-6 Ethnic Diversity	19
Figure 2-7 Index of Multiple Deprivation Dorset	20
Figure 2-8 Indices of Multiple Deprivation Bournemouth 2007	21
Figure 2-9 Indices of Multiple Deprivation Poole 2007	22
Figure 2-10 Hospitals within Dorset.....	23
Figure 2-11 Barriers to access to services	24
Figure 2-12 Access to Hospitals Bournemouth	25
Figure 2-13 Comparison of Crime Rates	26
Figure 2-14 Noise Map Bournemouth.....	27
Figure 2-15 Noise Map Poole	27
Figure 2-16 Noise Map Dorset.....	28
Figure 2-17 A roads.....	30
Figure 2-18 Dorset's Road Casualties Compared to a 1994/98 Baseline	30
Figure 2-19 Dorset's KSI's against a 1994/98 average baseline.....	31
Figure 2-20 shows the percentage of KSI's by road user group.....	31
Figure 2-21 Geographical Distribution of Casualties within Bournemouth	33
Figure 2-22 Geographical Distribution of Casualties within Poole.....	34
Figure 2-23 Travel to Work Areas & Bus Stops.....	35
Figure 2-24 Proportion of People Travelling Less than 2 Km to Work.....	36
Figure 2-25 Proportion of People Travelling Less than 5 Km to Work.....	37
Figure 2-26 Proportion of People Travelling Less than 10 Km to Work.....	37
Figure 2-27 Proportion of People Travelling Over 10 Km to Work	37
Figure 2-28 Railway Lines and Stations in the Dorset sub region	37
Figure 2-29 Cycle to work.....	37
Figure 2-30 Cycling Trips	37
Figure 2-31 SFRA Area Covered.....	37
Figure 2-32 Flood Warnings	37
Figure 2-33 Dorset Sub Region Ground Water Protection Zones	37
Figure 2-34 AQMA Chideock.....	37
Figure 2-35 AQMA Wimbourne Rd, Bournemouth	37
Figure 2-36 AQMA Dorchester	37
Figure 2-37 Waste Arisings in Dorset Sub Region	37
Figure 2-38 Average Unemployment Dorset Sub-Region 1992 – 2009	37
Figure 2-39 GVA per Head for South West Local Authorities.....	37

Tables

Table 2-3 Bournemouth Health Profile	17
Table 2-4 South East Dorset Casualties for Each Year 2006-2008 by type.....	32
Table 2-5 South East Dorset breakdown of Casualties by Road User for the Whole 3 year Period	33
Table 2-6 Travel to work modes	37
Table 2-7 Annual Average Daily Traffic on roads accessing the Jurassic Coast - August Flows vii.....	37
Table 2-8 C02 Emission for Local Authorities in the LTP Area.....	37
Table 2-9 Indicators and Baseline Data.....	37

1 Task A2: Collecting Baseline Information

Baseline information is set out to establish the current state of the area covered by the LTP3, and to identify trends in economic, environmental and social parameters. This information is then used to assess current environmental and sustainability issues that are evident in the area. The baseline information is intended to provide a basis for predicting and monitoring the effects of implementation of the plan. It also helps to identify the environmental and sustainability issues and alternative ways of dealing with them.

Baseline data has been collected for the following local authorities areas:

- Dorset County Council
- Borough of Poole Council
- Bournemouth Borough Council
- West Dorset District Council
- East Dorset District Council
- North Dorset District Council
- Purbeck District Council
- Weymouth and Portland Borough Council
- Christchurch Borough Council

2 Task A3: Identifying Environmental Issues and Problems

Identifying the environmental issues and problems is an opportunity to define the key social, environmental and economic issues which need to be taken into account when preparing the LTP. In some cases these are constraints which must be overcome, or impacts which must be avoided; in other cases these may be opportunities (e.g. stimulating the local economy and employment markets) which should be pursued where possible, or supported indirectly by transport policies in other instances.

There is a wealth of knowledge regarding environmental and sustainability issues within the Dorset sub region as identified in the identification of plan, programmes and policies.

2.1 SEA Topics

This section includes an overview of the current situation and covers the topics specified in Annex 1 (f) of the SEA Directive, i.e.

- Climate
- Air
- Biodiversity, Flora and Fauna
- Soil
- Water
- Population & Human Health (includes transport, economics, tourism)
- Material Assets (include housing and waste)
- Cultural Heritage
- Landscape

2.2 Biodiversity and Flora and Fauna

2.2.1 *European Conservation Sites*

European Habitats Directives provide conservation of Natura 2000 sites habitats and the protection of species through the designation of Special Protected Areas (SPA's), Special Areas of Conservation (SAC's), and RAMSAR Sites (internationally important wetlands).

Within the LTP3 area there are currently 14 SAC's, 4 RAMSAR Sites and the following SPAs: (see Figure 2-1)

- Slop Bog
- Parley Common
- Pine Clump
- Turnerspudde Heath
- Stephens Castle
- Dewlands Common
- Parley Common

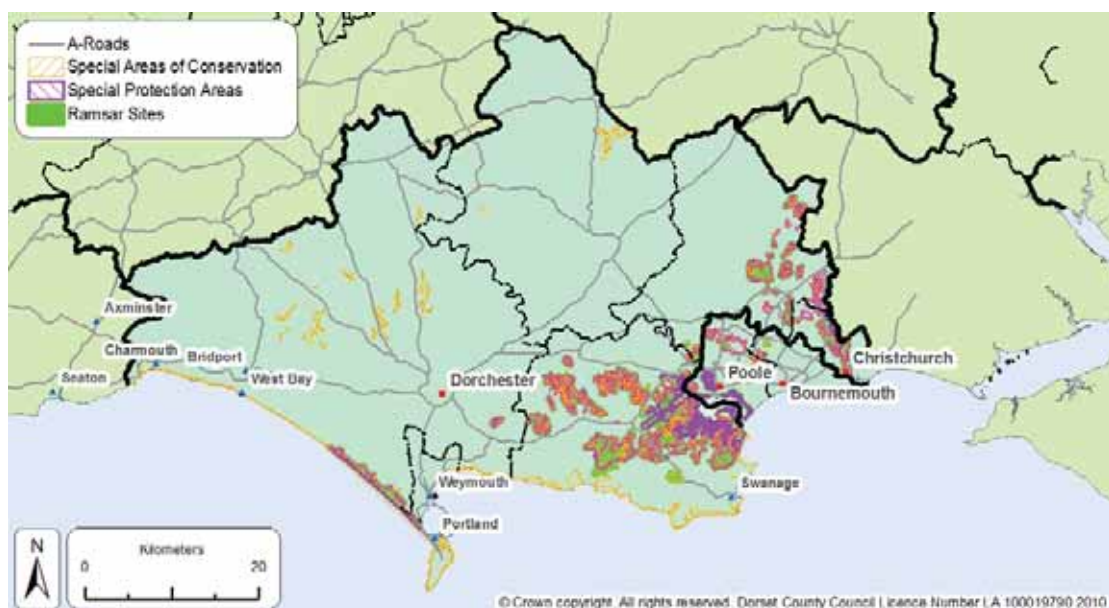


Figure 2-1 SAC's, SPA's & RAMSAR sites

2.2.2 National Designated Sites

2.2.2.1 Sites of Special Scientific Interest

Sites of Special Scientific Interest (SSSI) are sites of geomorphological and ecological importance that are of national significance. They are designated by Natural England under the Wildlife and Country side Act 1981. The Dorset sub - region has a number of international, national, and local features of biodiversity interest including 11% of the UK's rare lowland heathland. Over 96 % of the Dorset sub-regions heathlands now protected as SSSI's (see Figure 2-2). The Importance of Dorset's heathlands is recognised in European law, with many heaths being designated as Natura 2000 sites. There are a total of 141 SSSI's which cover 19,994.38 ha; this is equal to 8% of the land. The percentage of the area of land designated as SSSI within the local authority area in favourable condition is 47.11% compared to the National Government target 95%.

These heathlands experience urban pressures such as fires, trampling and disturbance as a result of being used for recreation the remaining heaths are

fragmented with many small, isolated areas. Over 30% of the heathlands are situated in and around the urban areas of South East Dorset with nearly half a million people living nearby. How the LTP3 interacts with these areas in terms of either direct land take, disturbance from human activity or increased deposits of Nitrous Oxides from vehicular traffic will be a focus for the SEA framework to ascertain as the sites have the highest possible International conservation designation.

Heathland is not a natural habitat but an ancient 'man-made' landscape, created by previous agricultural practices and continually maintained by people for over 4,000 years. Previously woodland was cleared for farming and grazing by domestic livestock, this prevented the re-growth of trees. The heathland have a unique character, notably heathers and gorse which can tolerate the nutrient poor, acidic sandy soils. This open landscape which supports a wide variety of wildlife including rare birds, reptiles, insects and plants requires continued conservation management to ensure the Internationally important heathland landscape and the rare and endangered wildlife are conserved.

As part of the SEA process, a screening assessment must be undertaken to determine whether or not there is a need to undertake an Appropriate Assessment (AA) or as it shall be referred to in this report, a Habitat Regulations Assessment (HRA). This is in accordance with Article 6(3) and (4) of the European Communities (1992) Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora ('Habitats Directive'). The EU Habitats Directive and Birds Directive are implemented in the UK through the Conservation (Natural Habitats & C) Regulations 1994 (as amended).

The screening assessment identifies whether the plan or project is likely to have a significant effect on European designated conservation sites, either alone or cumulatively. Such designated sites include Special Protection Areas (SPAs), Special Areas for Conservation (SACs) and RAMSAR sites. If it is unlikely that the plan or project will have a significant effect upon these sites, then there is no need to proceed to an HRA.

If however it is considered likely that there will be significant effects on the designated sites, an HRA must be undertaken. The HRA will then determine whether or not the plan or project (either alone or cumulatively) will lead to an adverse impact on the site's integrity. Mitigation and alternative measures may be adopted if it is determined that the plan or project is likely to significantly impact upon the site.

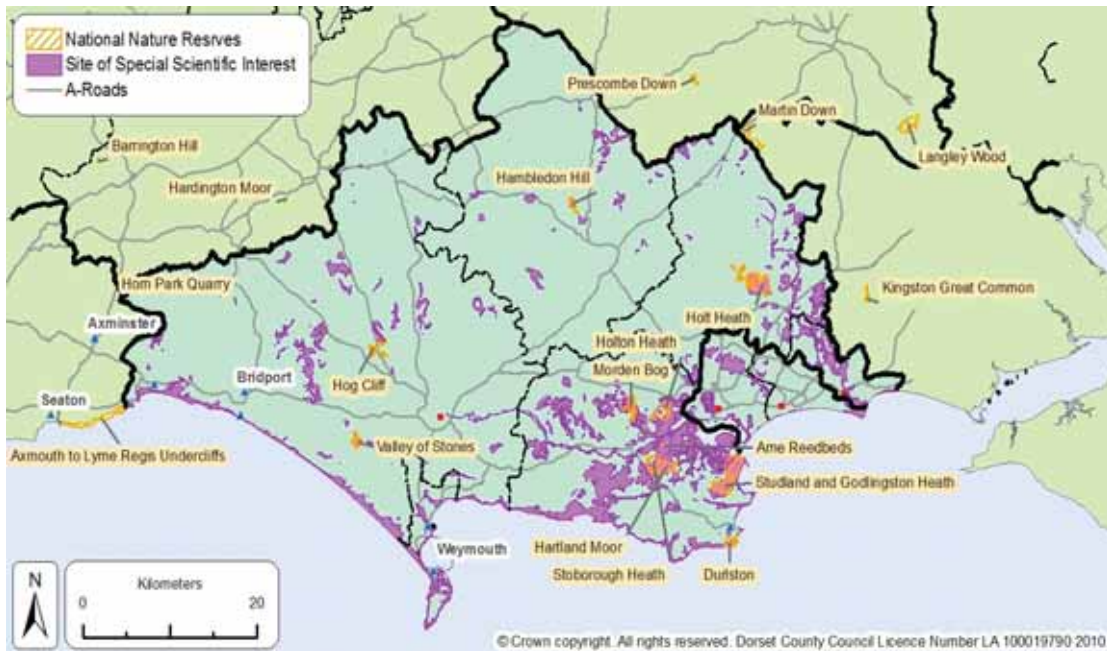


Figure 2-2 National Nature Reserves & Sites of Special Scientific Interest

2.2.3 Local Designations

Local Nature Reserves (LNR) are areas of land which are designated by Local Authorities as being important as a local natural heritage resource and/or for delivering environmental education opportunities, community enjoyment and appreciation of the countryside.

Sites of Interest for Nature Conservation (SINC) are sites of importance for nature conservation which are of local value for biodiversity.

The SEA process offers opportunities to identify negative impacts that may occur through the implementation of the LTP3; if any negative impacts are identified in Stage B of the process mitigation will be recommended.

2.2.4 BAP Priority Habitats

A Biodiversity Action Plan (BAP) is an internationally recognized program addressing threatened species and habitats and is designed to protect and restore biological systems. The United Kingdom Biodiversity Action Plan (UK BAP) covers not only terrestrial species associated with lands within the UK, but also marine species and migratory birds, which spend a limited time in the UK or its offshore waters.

The SEA process offers opportunities to identify negative impacts that may occur to habitats and species identified in the BAP through the implementation of the LTP3; if any negative impacts are identified in Stage B of the process mitigation will be recommended.

2.2.5 Agricultural Classification

Agricultural land classification in the Dorset sub-region is predominately Grade 3, there are pockets of Grade 5 these are mainly designated sites such as SSSI, RAMSAR, AONB, SPA's, and SAC's.

2.3 Landscape

2.3.1 AONB

The Dorset AONB was designated in 1959 and is the fifth largest AONB in the UK (See Figure 2-3); it covers 53% of Dorset and stretches from Lyme Regis in West Dorset to Poole Harbour in West Dorset. Due to the high numbers of tourists that visit Dorset each year it is essential that the LTP3 ensures that there will be no detrimental impacts on the AONB. The SEA process provides opportunity to ensure greater protection of the Dorset AONB by including objectives relevant to the AONB that can be used to appraise the LTP3 options/alternatives.

Cranborne Chase and West Wiltshire Downs Area of Outstanding Natural Beauty covers a total of 380 square miles and crosses the boundary of Wiltshire, Dorset, Hampshire and Somerset, the area is the sixth largest of the UK's 47 Areas of Outstanding Natural Beauty.



Figure 2-3 AONB's

2.4 UNESCO World Heritage Sites

The Dorset and East Devon Coast World Heritage Site is England's first natural World Heritage Site and is known as The Jurassic Coast. It covers 95 miles of coastline from East Devon to Dorset, with rocks recording 185 million years of the Earth's history. As detailed later (see section 2.12.6) the Jurassic coast has a significant seasonal influx of visitors that have a dramatic impact on the existing road

network and access to the Jurassic coast is limited. The LTP3 should seek a balance between improving access for visitors and protecting and respecting this unique environmental asset. This should include consideration of sustainable tourism initiatives and visitor management.



Figure 2-4 Jurassic Coast

2.5 Population and Human Health

2.5.1 Population Statistics and Structure

Population density and structure varies across the Dorset sub-region. The area consists of both rural and urban areas. Dorset's population has grown by 6.2% in the last decade; this is higher than the national average of 4.5%. The highest rate of growth has taken place in North Dorset District where population has increased by 15.7% between 1996 and 2006. The towns of Blandford, Gillingham and Shaftesbury have experienced the most growth and 40% of the population North Dorset District live in these towns. The latest population statistics show that 27.5% of Dorset's population are aged 60-65yrs and above, higher than the national average of 18.8%.

ⁱ Current estimated figures for 2009 are 710,000 and these are expected to reach 778,100 (Dorset Including Bournemouth and Poole) by 2029.

The population structure for Bournemouth is quite different to the population structure of the national average and all the other boroughs and districts within the county. The proportion of elderly has fallen in Bournemouth in line with national percentages; however there is a lower than average number of under 19 year olds. It also has a larger proportion of 20 to 24 year olds than the England and Wales figure which is probably due to those residents who have moved or remained in the area to study at Arts University College Bournemouth. Overall, the population increases in all the age groups with the exception of the 60-84 year olds where the population actually has declined since 1991. ⁱⁱ

The population of Poole has increased by 4% since the 2001 census and future forecasts for the period 2029 show an overall increase in the size of population and

also an ageing of the population, this is similar to the UK structure. Whilst the number of adults aged 20-44 is set to decline slightly, a substantial increase in the number of people aged 45 or over is forecast.

Christchurch has the highest proportion of older people of all LA's in the country, 36% aged 60+ years compared to Dorset population at 27.5% and nationally at 18.8%. Death rates are much higher than birth rates in Christchurch; reflecting the higher proportion of older people. The total population of the district is now estimated at 45,600 (2009) with a 9% population growth since 1991. The number of people aged 20-29 years has fallen by over 23%. During this same period the number of people aged 50-59 years has increased by 37%.

The total population of East Dorset is estimated at 87,700 (2009), there has been an 8% population growth since 1991. Two thirds of the population live in the suburbs that surround the Bournemouth & Poole conurbation. East Dorset has a high proportion of older people. The age structure in the district has changed significantly in recent years. Since 1991 the number of people aged 20-29 years has fallen by 29%. The number of people aged 50-59 years has increased by 49% from 8,740 in 1991 to 13,010 in 2003. 32% of the population are aged 60+, the second highest area after Christchurch. Population density in North Dorset is the second lowest in the County with just over 1 person per hectare. This is significantly lower than the national average of 3.5 people per ha. North Dorset has the largest percentage of population of people aged 0-15 years at 20%, 2% higher than the County average and equal to the national average.

The total population of Purbeck is now estimated at 45,000 (2009), this represents a 4% population growth since the 1991 Census. Purbeck also has a higher proportion of older people than the national average - over 28% are aged 60+ compared to 18.5% nationally and compared to Dorset's total population at 27.5%.

The estimated total population of West Dorset is now 98,700 and there has been a 9% population growth since 1991. 31% of the population are aged 60+ years. Over the last 10 years the number of births in West Dorset has fallen by over 19%. During this same period the number of deaths has increased by almost 6%. Since 1991 the number of 20-29 year olds has fallen by 31% from 9,379 in 1991 to 6,477 by 2003. The number of people aged 50-59 years has increased significantly during this period. In 1991 there were 9,630 people in their 50's; this increased some 46% to 13,972 by 2003.

The total estimated population of Weymouth & Portland is 66,400 (2009), this represents a 4% population growth since 1991. Weymouth & Portland Borough has the highest population density in Dorset, but still significantly lower than the Unitary Authorities of Poole (21 per ha) and Bournemouth (35 per ha). The age structure in Weymouth & Portland has the lowest proportion of older people in the County, but still significantly higher than the national average.

The population increase within Dorset County along with the age structure has implications for the LTP3, with a large ageing population in the rural areas; the LTP3 will need to consider how sustainable transport initiatives can be promoted to ensure that they are effectively used through-out the sub region, with specific focus on rural areas in order to reduce car dependency and improve accessibility to key services. The impact of the LTP3 on children and young people must also be considered.

2.6 Health

2.6.1 Health Impact Assessment

In order to strengthen the development and utilisation of HIA special consideration should be given to:

- Ensuring greater awareness and acceptance of the WHO's definition of health, the wider social, economic and environmental determinants of health, and the interrelationships between them;
- Increasing capacity in carrying out HIA as part of SEA, by training, and by disseminating and exchanging information and experience;
- Encountering issues – barriers and opportunities – in the development of health impact assessment within government policymaking. **Error! Bookmark not defined.**

Health Determinants include:

- The social and economic environment;
- The physical environment, and
- The person's individual characteristics and behaviours.

Many factors combine together to affect the health of individuals and communities. Whether people are healthy or not, is determined by their circumstances and environment. To a large extent, factors such as where we live, the state of our environment, genetics, our income and education level, and our relationships with friends and family all have considerable impacts on health, whereas the more commonly considered factors such as access and use of health care services often have less of an impact. See Figure 2-5. ⁱⁱⁱ

The Main Determinants of Health



Source: Dahlgren and Whitehead, 1993

Figure 2-5 The Main Determinants of Health

Barton and Grant (2006) have developed the Dahlgren and Whitehead model to produce the health map for the local human habitat Figure 2-6. The map continues to place people at the centre, but sets them within the global ecosystem which includes:

- natural environment
- built environment
- activities – such as working, shopping, playing and learning
- local economy – includes wealth creation and markets
- community – social capital and networks
- lifestyle.

The health map illustrates why the social determinants are of such relevance to local government. The majority of local government services impact upon or can influence the conditions in which people live and work and, to a certain extent, the life chances of individuals.^{iv}

Looking at the social determinants of health challenges the notion that health is the domain of the NHS and brings it squarely into the arena of local government.

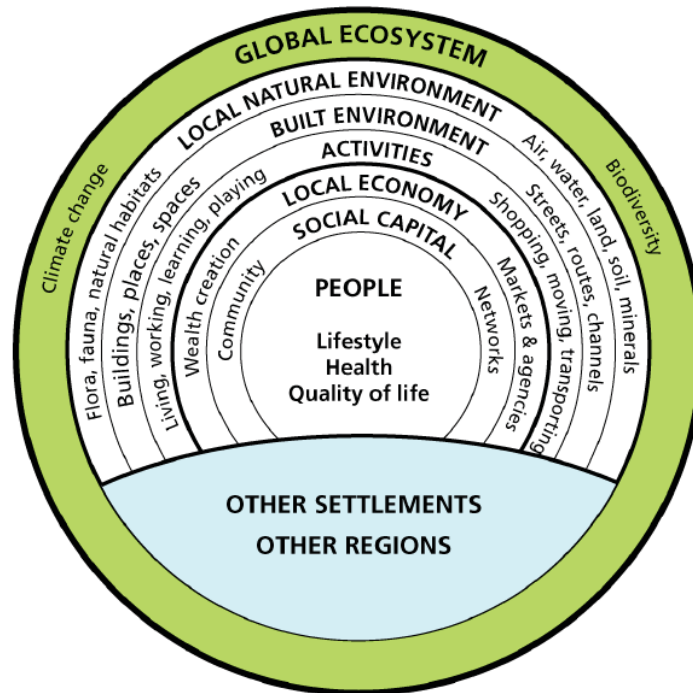


Figure 2-6 Health map for the local human habitat

Transport affects the health of the whole population both directly and through pollution of the environment. Transport emissions are also one of the major contributors to climate change. Health effects include injuries from road traffic accidents, respiratory problems due to air pollution, overweight/obesity associated with reduced physical activity from dependency on the car, and noise annoyances. Vulnerable groups include children and the elderly, as well as cyclist and pedestrians.

2.6.2 Dorset Health Profile

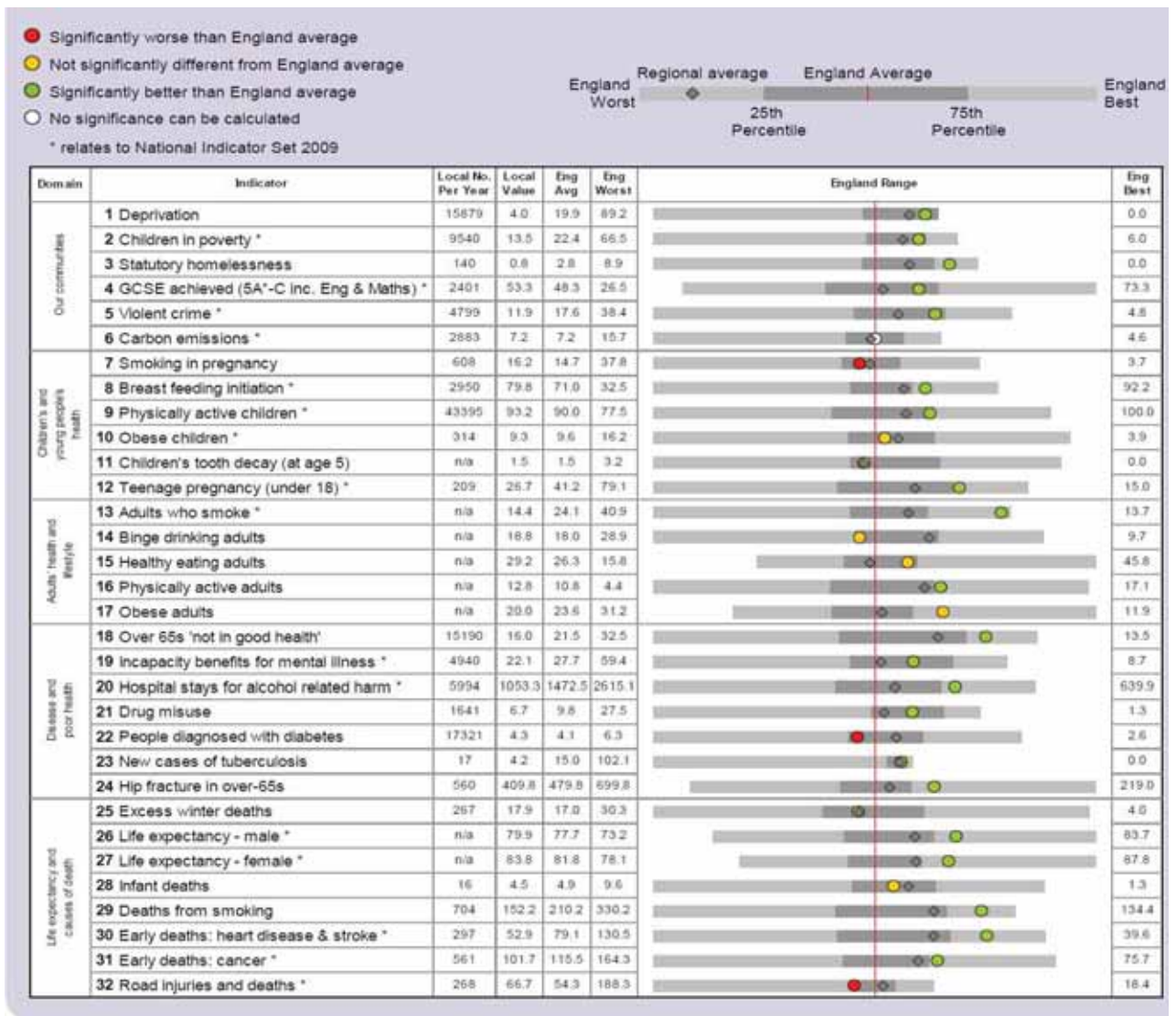
The Association of Public Health Observatories (APHO) and Department of Health have produced a 2009 Health Profile for Dorset, which identifies some key health related facts:

- The health of people in Dorset is generally better than the England average and deprivation levels are low across the County.
- Both men and women in each district of Dorset have a higher life expectancy than the England average with the exception of Weymouth and Portland where the life expectancy for women is similar to the England average.

- Over the last ten years early death rates from heart disease and stroke as well as early death rates from cancer have been declining and death rates from all causes combined are lower in Dorset than in England as a whole.
- Dorset has a higher proportion of people diagnosed with diabetes than in England as a whole.
- Rates of death and injury on the roads of Dorset are higher than the England average. 268 people are killed or injured on the roads each year.
- The Dorset Local Area Agreement priorities for the next three years are Healthy Weight, employment and mental health, supporting independence for older people, teenage pregnancy and road traffic accidents.

Table 2-1 ^v shows how people's health in Dorset compares to the rest of England. The local result for each indicator is shown as a circle, against the range of results for England which is shown as a bar. A green circle may still indicate an important public health problem.

Table 2-1 Dorset's Health Profile



Notes (numbers in bold refer to the above indicators)

1 % of people in this area living in 20% most deprived areas of England 2007 2 % of children living in families receiving means-tested benefits 2007 3 Crude rate per 1,000 households 2007/08 4 % at Key Stage 4 2007/08 5 Recorded violence against the person crimes crude rate per 1,000 population 2007/08 6 Total end user CO2 emissions per capita (tonnes CO2 per resident) 2006 7 % of mothers smoking in pregnancy where status is known 2007/08 8 % of mothers initiating breast feeding where status is known 2007/08 9 % 5-16 year olds who spent at least 2 hours per week on high quality PE and school sport 2007/08 10 % of school children in reception year 2007/08 11 Average number of teeth per child age 5 which were actively decayed, filled or had been extracted 2005/06 12 Under-18 conception rate per 1,000 females (crude rate) 2005-2007 13 % Direct estimate from Health Survey for England 2003-2005 14 % Direct estimate from Health Survey for England 2003-2005 15 % Direct estimate from Health Survey for England 2003-2005 16 % aged 16+ 2007/08 17 % Direct estimate from Health Survey for England 2003-2005 18 % who self-assessed general health as 'not good' (directly age and sex standardised) 2001 19 Crude rate per 1,000 working age population 2007 20 Directly age and sex standardised rate per 100,000 population 2007/08 21 Crude rate per 1,000 population aged 15-64 2006/07 22 % of people on GP registers with a recorded diagnosis of diabetes 2007/08 23 Crude rate per 100,000 population 2004-2006 24 Directly age-standardised rate for emergency admission 2006/07 25 Ratio of excess winter deaths (observed winter deaths minus expected deaths based on non-winter deaths) to average non-winter deaths 1.08.04-31.07.07 26 At birth, 2005-2007 27 At birth, 2005-2007 28 Rate per 1,000 live births 2005-2007 29 Per 100,000 population age 35+, directly age standardised rate 2005-2007 30 Directly age standardised rate per 100,000 population under 75 2005-2007 31 Directly age standardised rate per 100,000 population under 75 2005-2007 32 Rate per 100,000 population 2005-2007

2.6.3 Poole Health Profile

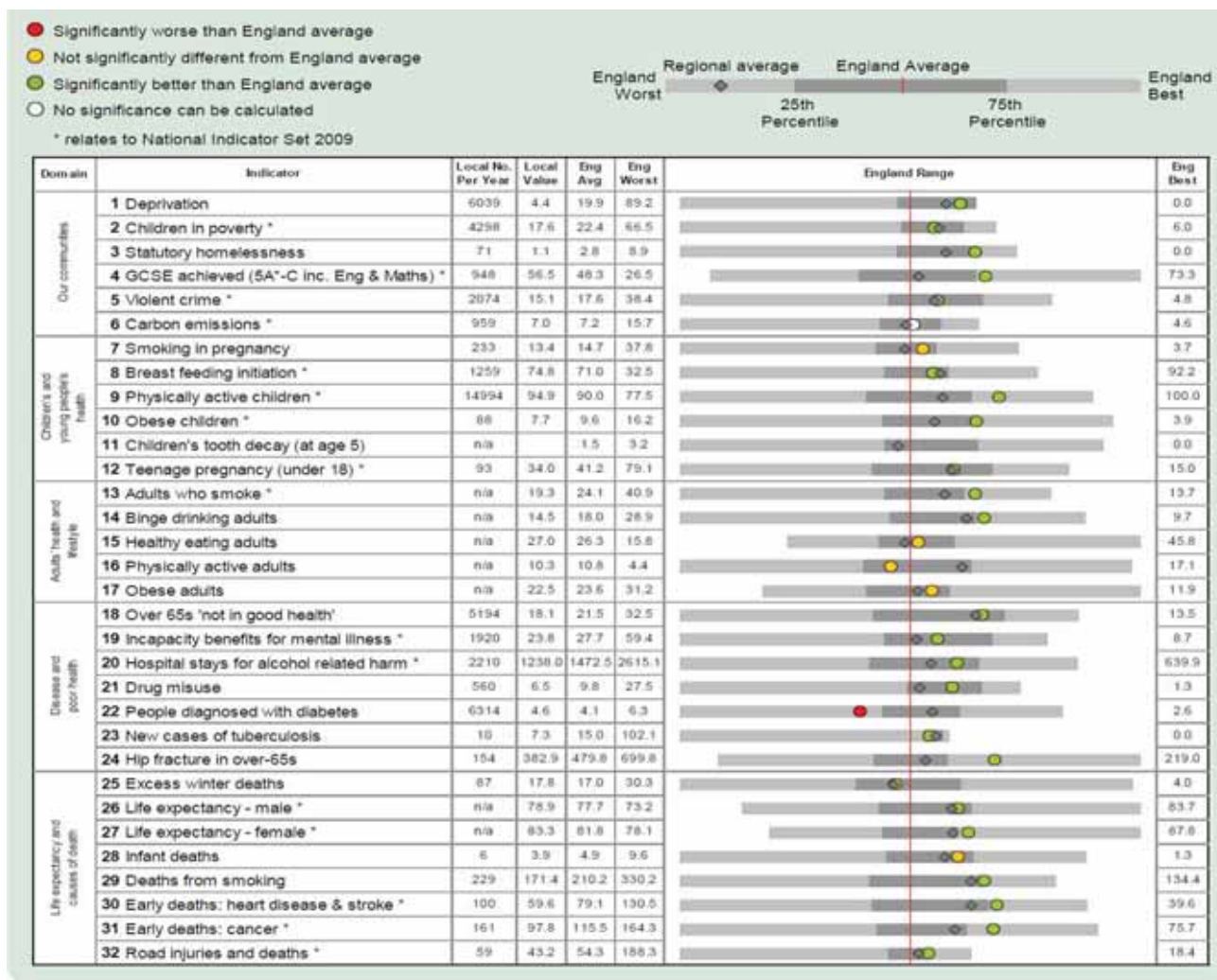
The APHO and Department of Health 2009 Health Profile for Poole identifies some key health related facts:

- The health of people living in Poole appears generally better than the England average.

- The number of people diagnosed with diabetes appears higher than the England average while statutory homelessness and drug misuse appear lower.
- Within Poole, there are inequalities by location and gender. For example, men from the least deprived areas can expect to live ten years longer than those living in the most deprived areas.
- Mortality from all causes combined has dropped over the last ten years, as have early death rates from cancer and heart disease and stroke, both of which are lower than the England average.
- Rates of hospital stays for alcohol related harm appear over 2,200 hospital stays for alcohol related harm each lower than the England average.
- The estimated number of adults who smoke is lower than the England average. However, around one in five adults in Poole smoke.
- Obesity levels in children and adults are similar to the England average.

Table 2-2 v shows how people's health in Poole compares to the rest of England. The local result for each indicator is shown as a circle, against the range of results for England which is shown as a bar. A green circle may still indicate an important public health problem.

Table 2-2 Poole Health Profile



Notes (numbers in bold refer to the above indicators)

1 % of people in this area living in 20% most deprived areas of England 2007/08 **2** % of children living in families receiving means-tested benefits 2007/08 **3** Crude rate per 1,000 households 2007/08 **4** % at Key Stage 4 2007/08 **5** Recorded violence against the person crimes crude rate per 1,000 population 2007/08 **6** Total end user CO2 emissions per capita (tonnes CO2 per resident) 2006/07 **7** % of mothers smoking in pregnancy where status is known 2007/08 **8** % of mothers initiating breast feeding where status is known 2007/08 **9** % 5-16 year olds who spent at least 2 hours per week on high quality PE and school sport 2007/08 **10** % of school children in reception year 2007/08 **11** Average number of teeth per child age 5 which were actively decayed, filled or had been extracted 2005/06 **12** Under-18 conception rate per 1,000 females (crude rate) 2005-2007 **13** %. Modelled estimate from Health Survey for England 2003-2005 **14** %. Modelled estimate from Health Survey for England 2003-2005 **15** %. Modelled estimate from Health Survey for England 2003-2005 **16** % aged 16+ 2007/08 **17** %. Modelled estimate from Health Survey for England 2003-2005 **18** % who self-assessed general health as 'not good' (directly age and sex standardised) 2001 **19** Crude rate per 1,000 working age population 2007 **20** Directly age and sex standardised rate per 100,000 population 2007/08 **21** Crude rate per 1,000 population aged 15-64 2006/07 **22** % of people on GP registers with a recorded diagnosis of diabetes 2007/08 **23** Crude rate per 100,000 population 2004-2006 **24** Directly age-standardised rate for emergency admission 2006/07 **25** Ratio of excess winter deaths (observed winter deaths minus expected deaths based on non-winter deaths) to average non-winter deaths 1.08.04-31.07.07 **26** At birth, 2005-2007 **27** At birth, 2005-2007 **28** Rate per 1,000 live births 2005-2007 **29** Per 100,000 population age 35+, directly age standardised rate 2005-2007 **30** Directly age standardised rate per 100,000 population under 75 2005-2007 **31** Directly age standardised rate per 100,000 population under 75 2005-2007 **32** Rate per 100,000 population 2005-2007

2.6.4 Bournemouth Health profile

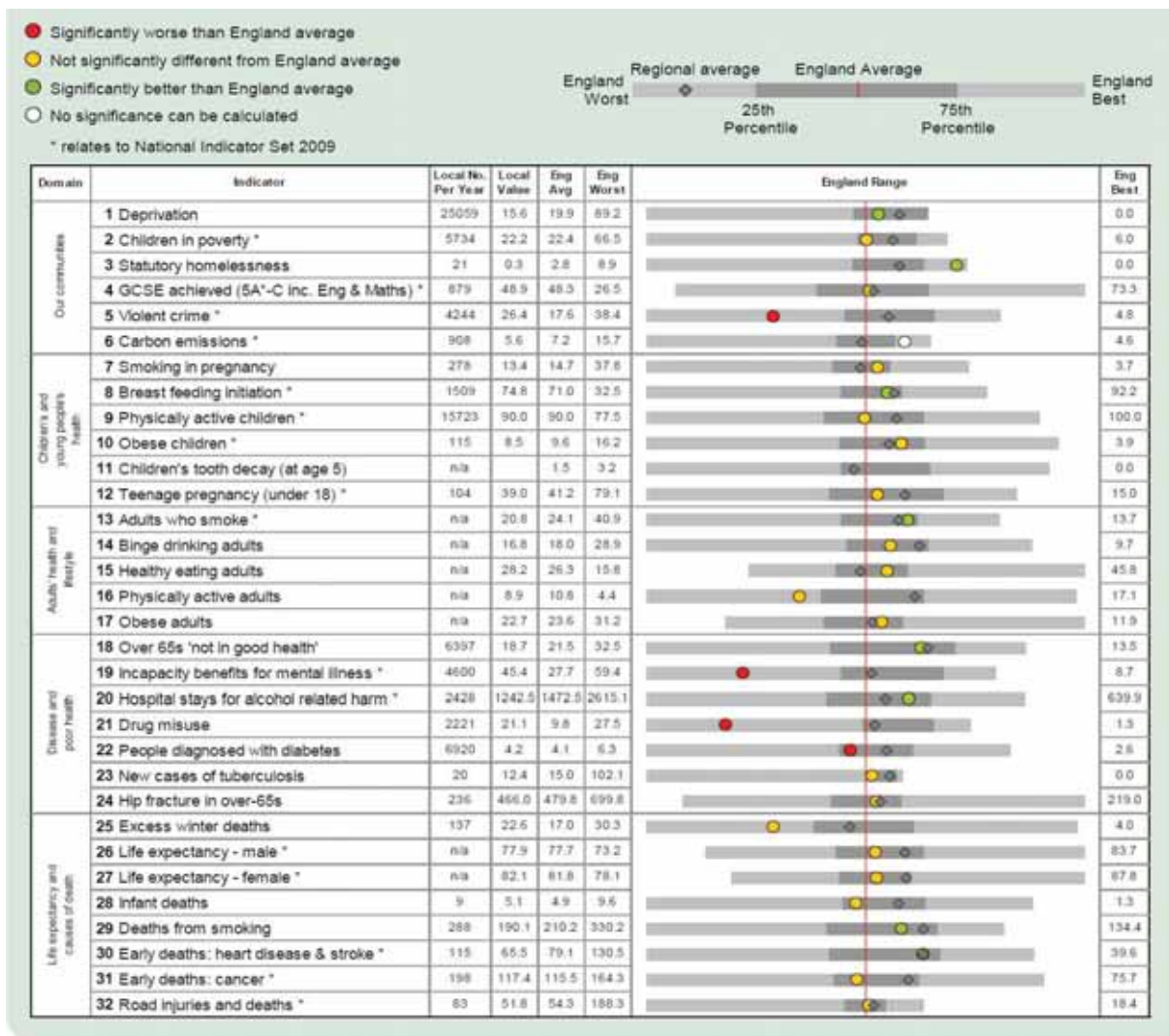
The APHO and Department of Health 2009 Health Profile for Bournemouth identifies some key health related facts:

- The health of people in Bournemouth is generally similar to the England average.
- Rates of drug misuse, violent crime and people diagnosed with diabetes all appear higher than the England average while homelessness, hospital stays for alcohol related harm and deaths from smoking are lower than England as a whole.

- Within Bournemouth there are inequalities by location and gender. Women living in the least deprived areas can expect to live six years longer and men over eight years longer than those living in the most deprived areas of Bournemouth.
- Early death rates from heart disease and stroke in Bournemouth remain lower than the England average.
- The health of children in Bournemouth is similar to that of England as a whole, however, over 5,700 children live in low income households.
- Rates of death from smoking in Bournemouth are better than the England average. However, smoking kills 288 people on average each year in Bournemouth.
- Drug misuse appears higher than the England average with over 2,000 people misusing drugs in Bournemouth.
- More adults claim incapacity benefit due to mental illness in Bournemouth compared with the England average.

Table 2-3 v below shows how people's health in Bournemouth compares to the rest of England. The local result for each indicator is shown as a circle, against the range of results for England which is shown as a bar. A green circle may still indicate an important public health problem

Table 2-3 Bournemouth Health Profile



Notes (numbers in bold refer to the above indicators)

1 % of people in this area living in 20% most deprived areas of England 2007 2 % of children living in families receiving means-tested benefits 2007 3 Crude rate per 1,000 households 2007/08 4 % at Key Stage 4 2007/08 5 Recorded violence against the person crimes crude rate per 1,000 population 2007/08 6 Total end user CO2 emissions per capita (tonnes CO2 per resident) 2006 7 % of mothers smoking in pregnancy where status is known 2007/08 8 % of mothers initiating breast feeding where status is known 2007/08 9 % 5-16 year olds who spent at least 2 hours per week on high quality PE and school sport 2007/08 10 % of school children in reception year 2007/08 11 Average number of teeth per child age 5 which were actively decayed, filled or had been extracted 2005/06 12 Under-18 conception rate per 1,000 females (crude rate) 2005-2007 13 %. Modelled estimate from Health Survey for England 2003-2005 14 %. Modelled estimate from Health Survey for England 2003-2005 15 %. Modelled estimate from Health Survey for England 2003-2005 16 % aged 16+ 2007/08 17 %. Modelled estimate from Health Survey for England 2003-2005 18 % who self-assessed general health as 'not good' (directly age and sex standardised) 2001 19 Crude rate per 1,000 working age population 2007 20 Directly age and sex standardised rate per 100,000 population 2007/08 21 Crude rate per 1,000 population aged 15-64 2006/07 22 % of people on GP registers with a recorded diagnosis of diabetes 2007/08 23 Crude rate per 100,000 population 2004-2006 24 Directly age-standardised rate for emergency admission 2006/07 25 Ratio of excess winter deaths (observed winter deaths minus expected deaths based on non-winter deaths) to average non-winter deaths 1.08.04-.31.07.07 26 At birth, 2005-2007 27 At birth, 2005-2007 28 Rate per 1,000 live births 2005-2007 29 Per 100,000 population age 35+, directly age standardised rate 2005-2007 30 Directly age standardised rate per 100,000 population under 75 2005-2007 31 Directly age standardised rate per 100,000 population under 75 2005-2007 32 Rate per 100,000 population 2005-2007

2.6.5 Obesity

Obesity levels in the UK are increasing due to lifestyle choices; people are less active and do not eat as healthily as they used to, meaning that rates of obesity in adults and children are higher than ever before. Transport is a significant factor in physical activity as increasing dependence on the motor vehicle has resulted in lower levels of physical activity through travel. Being overweight or obese can have a severe impact on an individual's physical health – both are associated with an increased risk of type 2 diabetes, cancer, and heart and liver disease, among other

illnesses.^{vi} There is a significant opportunity to increase levels of physical activity through the promotion of walking and cycling in the LTP.

Bournemouth and Poole have similar rates of both overweight and obesity levels compared to the national average for both 4-6yrs at 24% and 10-11yrs at 28.1%, national average for 4-6yrs is 22.8% and 10-11 yrs is 27%. These results were higher for age group 4-6yrs than previous years and slightly exceeded national trends.

The percentage of pupils found to be either overweight or obese in Dorset was similar to the national average in the 4-6 year age group at 22.6% and lower than the national average in the 10-11 year age group at 27%.

In addition, the survey found that the prevalence of obesity was much higher amongst 10-11 year olds than amongst 4-5 year olds. These differences between age groups are consistent with the findings of the two previous NCMP surveys and are in line with national trends in the 4-5 age groups.

Throughout the Districts the proportion of overweight pupils was highest in Weymouth and Portland and lowest in North Dorset. The proportion of obese pupils was highest in Christchurch and lowest in North Dorset. In the 10-11 age group the proportion of overweight pupils was highest in Weymouth and Portland and lowest in East Dorset.

The LTP3 presents opportunities to promote physical activity by providing and improving sustainable transport and active travel initiatives such as walking and cycling. It is important that the LTP contributes positively to, and supports, objectives to reduce levels of obesity and improvements in overall physical fitness, particularly in target areas.

2.6.6 *Ethnic Diversity*

Dorset is less ethnically diverse than England. In 2001 3.2% of Dorset's population classed themselves as not being "White British" (i.e. from a black and minority ethnic (BME) group), lower than the proportion for England (13.0%). Figures for the Districts ranged from 2.8% in East Dorset to 3.4% in North Dorset. Ethnic diversity is greater within Bournemouth and is now estimated to be 10.5% of the total population (see Figure 2-7), however this is significantly lower than England as a whole.^{xi}

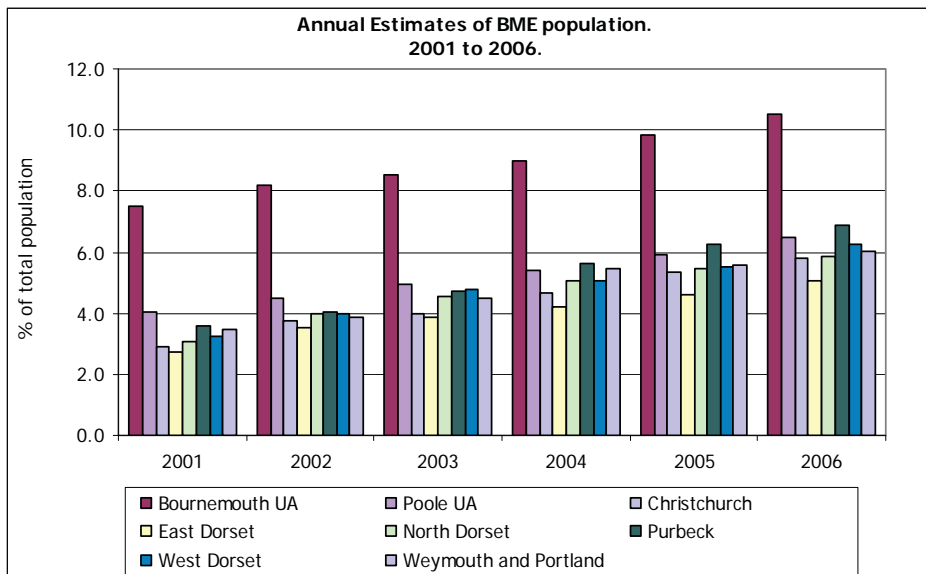


Figure 2-7 Ethnic Diversity

Development must be non-discriminatory; an Equality Impact Assessment (EqIA) will be undertaken for the LTP3 to ensure that the plan does not have disproportionate impacts on different groups of society based on ethnicity, gender, sexual orientation, age, disability and religion. Any negative impacts identified from the EqIA process will be integrated into the SEA and will include suggested mitigation and monitoring.

2.6.7 Indices of deprivation

There are ten areas in Dorset that are within the top 20% most deprived nationally for multiple deprivation, eight are within the urban areas of Weymouth and Portland and two in Christchurch. In East Dorset the majority of areas fall into the least deprived nationally on the Indices of Multiple Deprivation (IMD). Of the fifty nine areas in Dorset that fall into this category thirty five (61%) are in East Dorset. ^{viii}

There are 107 LSOAs in the Bournemouth Unitary Authority area. According to the IMD, 17 of these 107 areas are among the most deprived 20% nationally, 2 fewer than in 2004. They are home to about 25,000 people. 8 of Bournemouth’s 18 wards contain at least one of these areas.

Two Bournemouth Local Super Output Areas LSOAs are within the most deprived 5% nationally. (Figure 2-10) These are both in Boscombe West ward. One of them is among the most deprived 1% of LSOAs in England. ^{vii}

There are 91 LSOAs in the Poole Unitary Authority area (Figure 2-10). According to the IMD, 4 of these 91 areas are among the most deprived 20% nationally, one more than in 2004. They are home to about 6,000 people. Two are within Alderney ward, with one each in Poole Town and Hamworthy West. The most deprived LSOA is among the most deprived 11% in England. It is part of Poole Town ward.

The indices of deprivation are based on income; employment; health and disability; education, skills and training; barriers to housing and services; living environment

and crime. Deprivation therefore is a result of environmental factors, socio-economic factors and health factors. The SEA process provides an opportunity to guide the LTP3 towards policies preventing the transportation-related elements of deprivation levels rising, but more importantly to contribute to reducing deprivation levels, this is also clearly linked to access to services which are a significant area of deprivation within Dorset (see section 2.6.8).

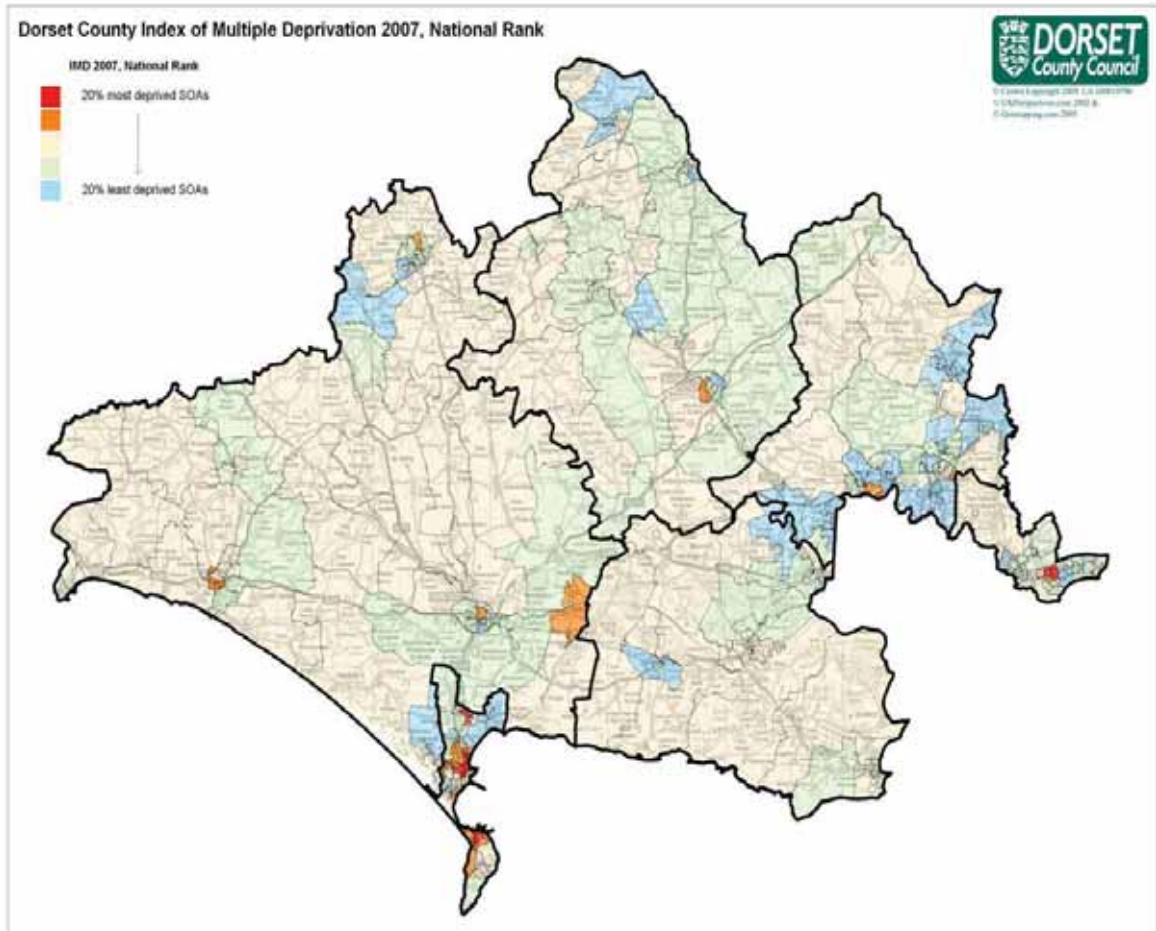


Figure 2-8 Index of Multiple Deprivation Dorset

Indices of Deprivation 2007
Index of Multiple Deprivation in Bournemouth

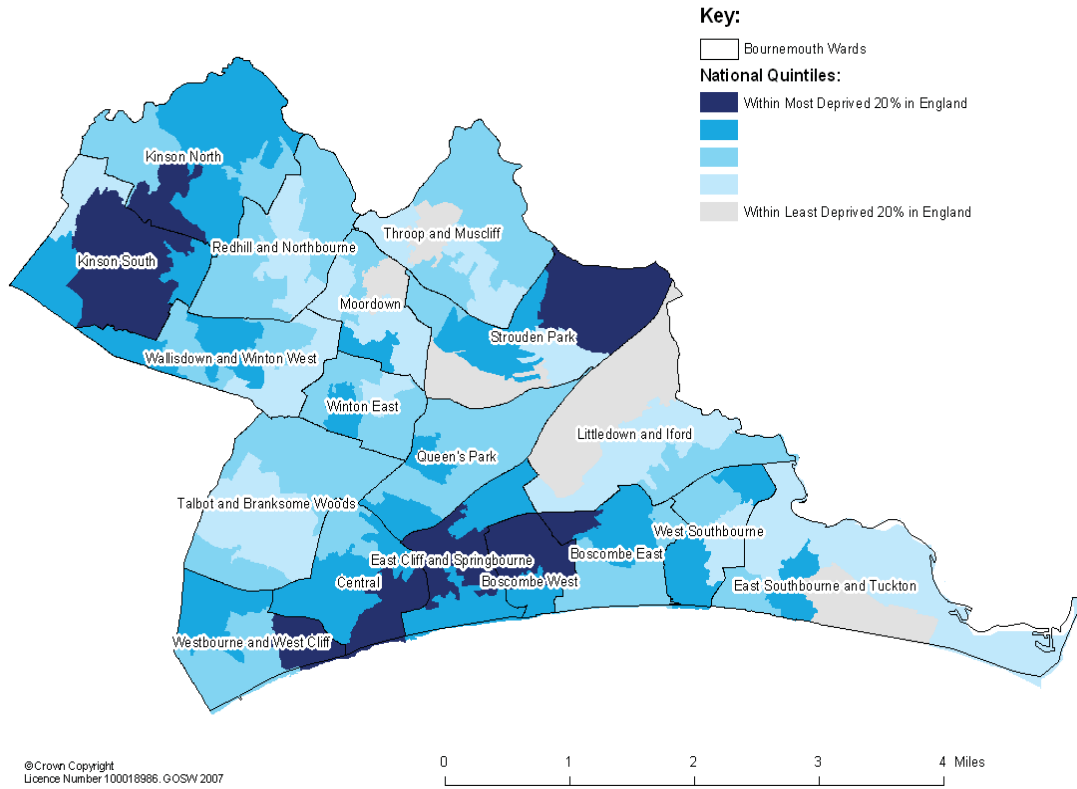


Figure 2-9 Indices of Multiple Deprivation Bournemouth 2007

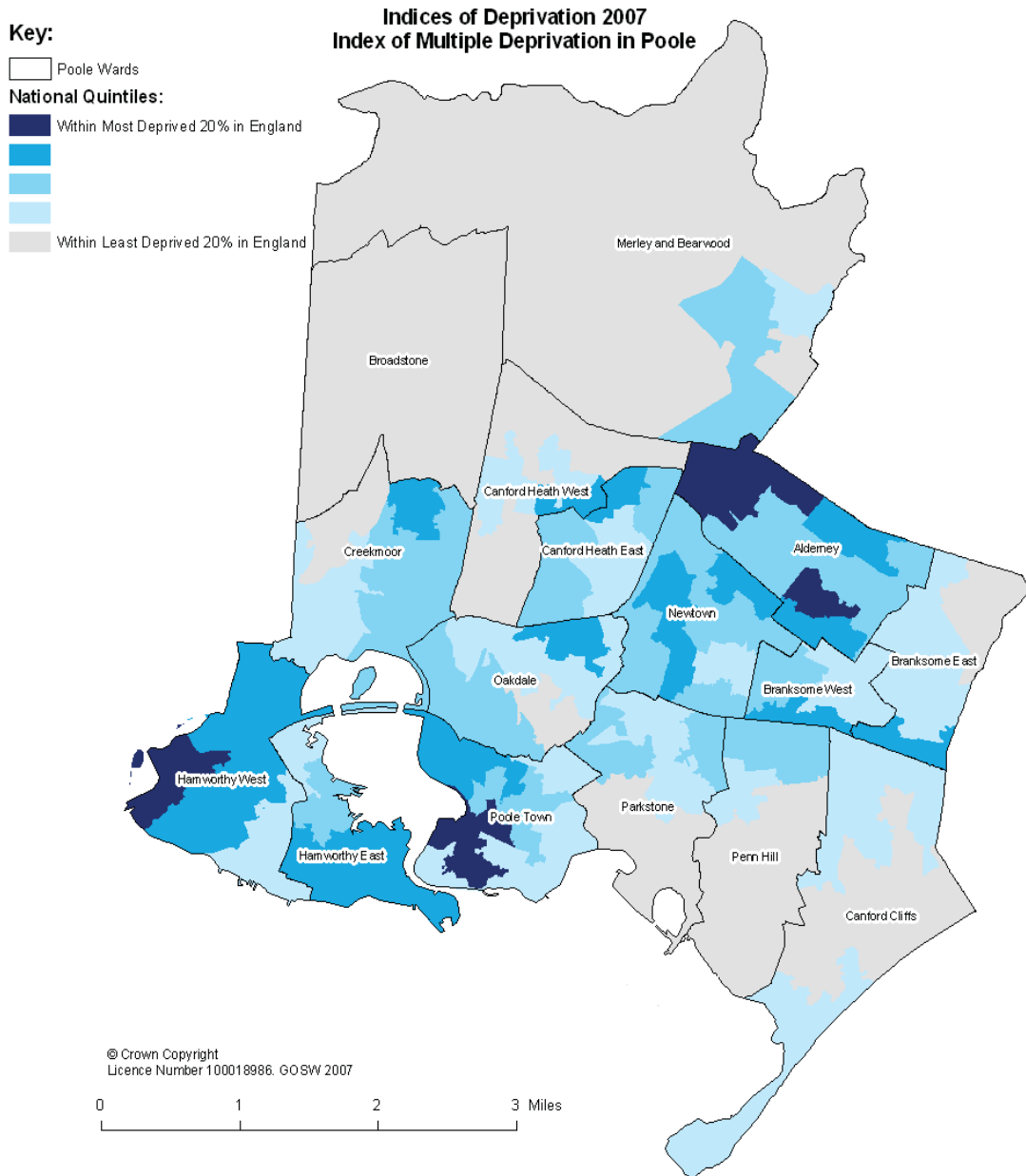


Figure 2-10 Indices of Multiple Deprivation Poole 2007

2.6.8 Access to Services Dorset

There are large rural areas within Dorset resulting in access to services being a significant area of deprivation. Dorset has many hospitals within its boundary; however some areas of North and West Dorset are a considerable distance from them (see Figure 2-11). Seventy four areas are within the top 20% most deprived nationally for this indicator. West Dorset has twenty seven areas in the top 20% most deprived and North Dorset has nineteen. The most deprived area in the County is Halstock in West Dorset which is the 49th most deprived area nationally out of 32,482, followed by Frome Valley in West Dorset and Lydden Vale in North Dorset. Nine areas fall into the top 1% most deprived nationally.



Figure 2-11 Hospitals within Dorset

Figure 2-12 shows how lack of access measured by road distance affects people in Dorset to four key services, including lack of access to:

- supermarket or convenience store
- GP surgeries
- primary schools
- post offices.

This shows that access to services and affordable housing is a significant challenge in Dorset, and is a priority for the health service and local authority partners, as reflected in the Local Area Agreements for each authority.

Four groups are at particular risk of geographical isolation and transport difficulty in Dorset these include younger people, older people, those with impaired mobility and households in rural areas living on low incomes.

There are estimated to be:

- 10,000 16-24 year olds living in areas of severe access deprivation identified by IMD 2004
- 23,000 older people (65+ years old)
- 18,000 people with a limiting long term illness
- 4,420 households without a car,

- 5,500 families claiming benefits and nearly 10,000 individual benefit claimants living in areas of severe access deprivation ^{viii}

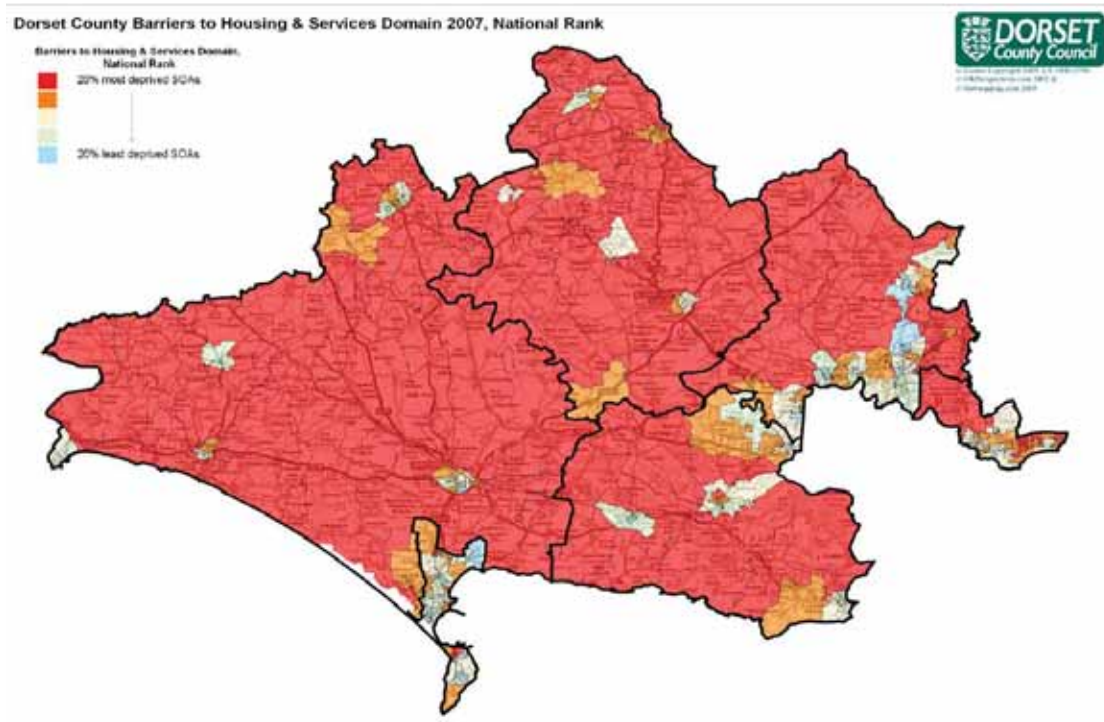


Figure 2-12 Barriers to access to services

2.6.9 Access to services in Bournemouth and Poole

Within Bournemouth and Poole, despite the urban and relatively dense nature of the area, there still exist some accessibility issues, and particularly for certain demographic groups. These are caused by both lack of access to cars, particularly for low income households and areas of deprivation, and lack of access to suitable public transport alternatives. The availability of services is also an important factor. There has been some contraction of bus services, particularly at the peripheries of the urban areas, and these communities have suffered from reduced accessibility as a result.

Social exclusion is not generally an issue in Bournemouth and Poole but one area that is particularly affected by poor accessibility owing to poor transport links is the Boscombe area in Bournemouth. The LTP has a role in helping to reduce social exclusion and promote equality through ensuring equal access to key services.

Access to hospitals was identified in the LTP2 as a priority. Accessibility targets for 2008/09 in Bournemouth and Poole were exceeded with 80.5% of the total population within 30 minutes of a hospital by public transport, and 87.5% without access to a car within 30 minutes of a hospital by public transport. Introduction of the Route 1 town centre bus service in Poole contributed to an improvement in 2007/08, linking the hospital with the Quay, and Poole Quarter developments with the bus/rail

stations. Figure 2-13^{ix} shows accessibility by public transport to hospitals for the South East Dorset area, using the Accession accessibility mapping tool.

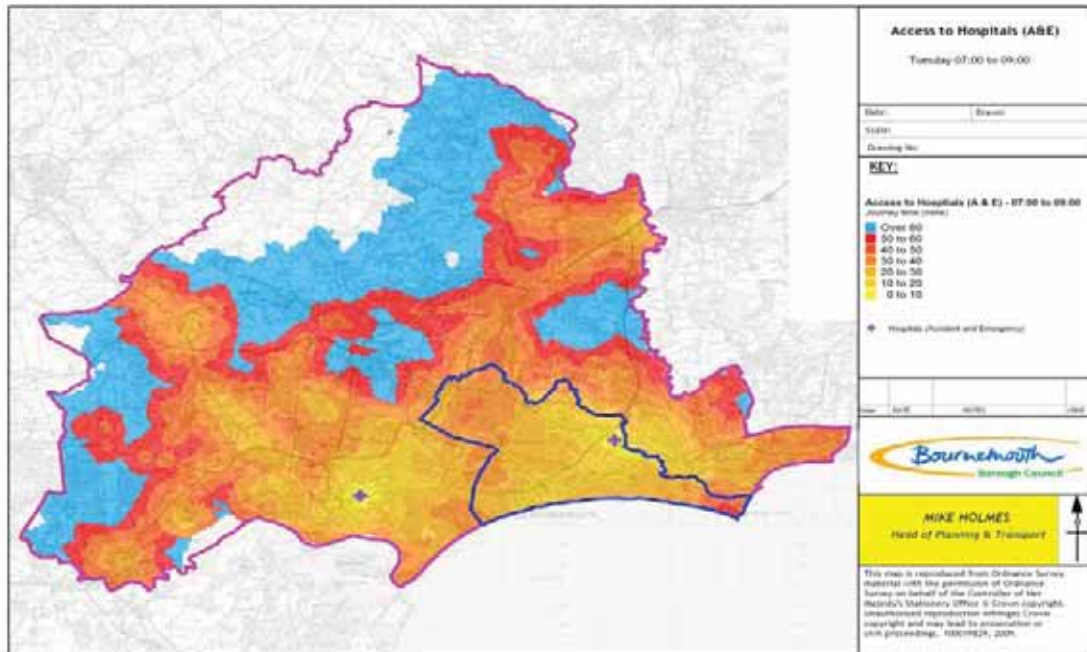


Figure 2-13 Access to Hospitals Bournemouth

Other key issues within the Bournemouth and Poole area include poor north-south accessibility in Bournemouth and access to Bournemouth International Airport, particularly by public transport. There is only one bus service to the airport from Bournemouth and the potential expansion of employment land around the airport means improvements in sustainable access should be considered.

Affordability of transport is also an issue in terms of accessibility for children and young people (who often may not have access to a car). The ageing population in the LTP area also needs to be considered in terms of accessibility and the provision of suitable accessible transport which serves the needs of older people.

2.6.10 Crime Statistics

Crime in the Dorset area remains low compared to many parts of the country, and significantly lower than national average figures. In 2007/08, the rate of total recorded crime (per 1,000 head of population) in Dorset was over one-third lower than the figure for England and Wales and well below the rate for the South West Region overall. Across the local authority areas within Dorset there are significant variations in crime levels, however East Dorset, with approximately 40 crimes per 1,000 populations in 2007/08, has one of the lowest rates of crime of any local authority area in England and Wales. Conversely, the rate of crime in Weymouth and Portland, a more heavily urbanised area with a busy commercial core and buoyant night-time economy, is slightly higher than the national average figure. However, even though crime rate is considerably lower than many areas within the UK, residents in many areas have a serious concern about crime.

However, in contrast, Bournemouth’s overall crime rate was 2nd highest in 2008/09 out of the 16 South West counties and unitary authorities. Poole was 6th highest. Bournemouth saw an increase across all key offences for the period 2007/08 to 2008/09. The figure below compares the crime rate of Dorset, Bournemouth and Poole with the rest of the South West and England. Figure 2-14 ^{viii}

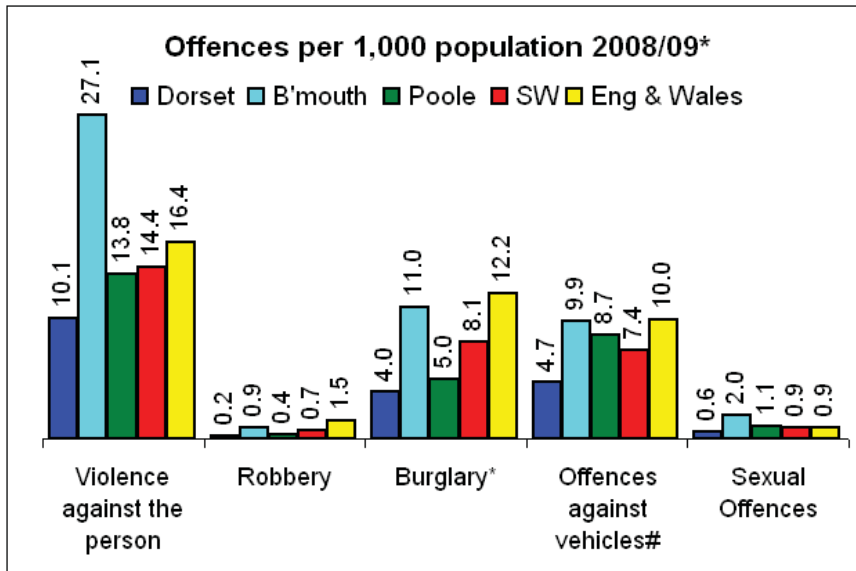


Figure 2-14 Comparison of Crime Rates

2.6.11 Noise

In accordance with the Environmental Noise (England) Regulations 2006, strategic noise maps for England have been produced on behalf of the Secretary of State estimating noise levels from the following sources:

- Major Roads - roads with more than 6 million vehicle passages annually;
- Major Railways - railways with more than 60,000 train passages annually;
- Major Airports - airports with more than 50,000 aircraft movements annually (except for training on light aircraft): and
- First Round Agglomerations - urban areas (with populations greater than 250,000 and a certain population density), taking into account the above sources and additionally other roads, railways, aircraft movements and industrial premises. ^x

Within the Dorset sub region, noise is mapped for the area surrounding Bournemouth airport and the results show that 32,400 people are impacted by noise levels of 55-59Db, 13,200 people 60-64dB and 2300 people 65.-69dB during the day time. Night time results show that 17,500 people are impacted by 55-59Db, 3700 people 60-64Db and 100 people 65-69dB.



Figure 2-15 Noise Map Bournemouth

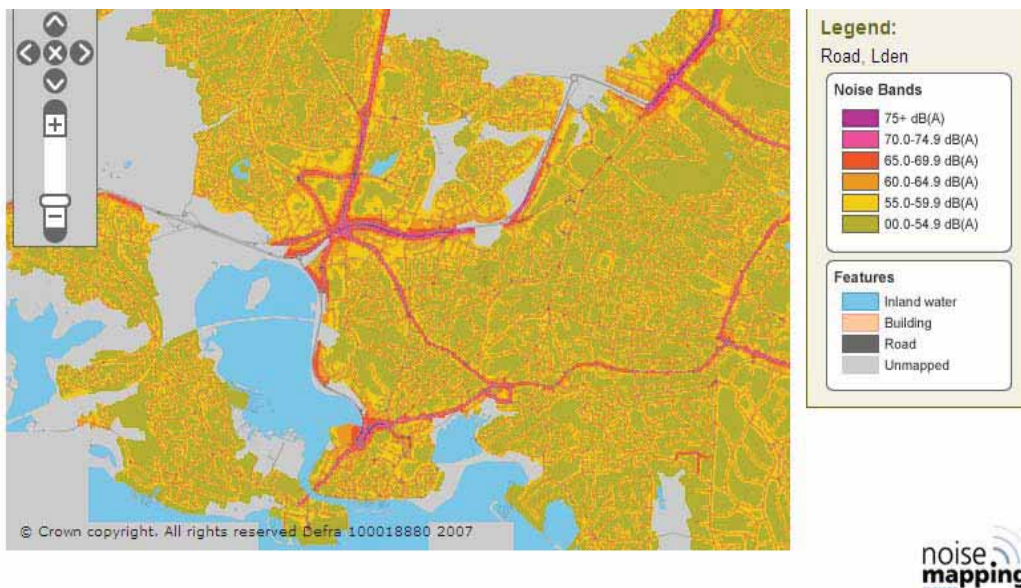


Figure 2-16 Noise Map Poole

It is likely that residents are impacted by noise from the major roads as these pass by several small towns and villages (see Figure 2-17 x). The impact of transport proposals in the LTP on noise must be considered. By introducing sustainable transport initiatives and reducing car dependency it may be possible to reduce overall traffic levels, and hence traffic noise, on all major roads throughout the sub region. There may also be opportunities to build in noise mitigation measures to certain transport schemes.



Figure 2-17 Noise Map Dorset

2.7 Transport

2.7.1 South East Dorset Multi Modal Transport Study (SEDMMS)

The purpose of this study is to develop the long term transport strategy for the South East Dorset area. This will include identifying potential major road/ transport infrastructure improvements that would be required to facilitate the future growth agenda emanating out of the Regional Spatial Strategy (RSS). An up-to-date, multi-modal transport model is required to undertake the technical work necessary to assess the impacts of major transport projects which could include schemes such as the A31 to Poole link, Airport and Port access improvements and improvements on Bus Showcase Corridors and “Smarter Choices” measures aimed at reducing car use and making more efficient use of the existing transport network. SEDMMS will meet the Dft requirements for bids for Government funding of transport schemes. The results from this study are not available at the time of writing this Scoping Report, however the study results will be used to inform the SEA through the appraisal of alternative options against NATA objectives, one of which is the environment.

2.7.2 Roads

Although the Dorset sub region does not have any motorways within its boundaries there are two trunk road corridors running east-west through it. In the north, the A303 London to Exeter and Cornwall road briefly enters the County, though for most of its route it is north of the borders within Somerset and Wiltshire. Further south, the A31,

a continuation of the M27 motorway from Hampshire, serves as a northern bypass for the South East Dorset conurbation, merging into the A35 to continue west through the County, serving Dorchester and Bridport via bypasses.

There are also several primary routes/roads that run through the sub region. (See Figure 2-18) These are:

- A338, Bournemouth spur road, and through route to Salisbury.
- A35, from its split from the A31 trunk road, east through Poole, Bournemouth and Christchurch.
- A350, Poole spur road, and through route to the A303 through Poole, via Blandford Forum and Shaftesbury.
- A354, from Weymouth and Portland to Salisbury, via Dorchester and Blandford Forum.
- A37, from Dorchester to Yeovil and Bristol.
- A31 South East Dorset conurbation, merging into the A35

These roads within the Dorset sub region carry heavy flows of traffic, including substantial numbers of daily commuters, and heavy additional flows in holiday periods. The location of the roads which run through or beside some of the main towns and villages, results in environmental problems, severance and congestion.

There are 3 Local Air Quality Management Areas (LAQMA) within the LTP area; one at Dorchester, one at Chideock and one in Winton, Bournemouth (See section 2.10 for further details).

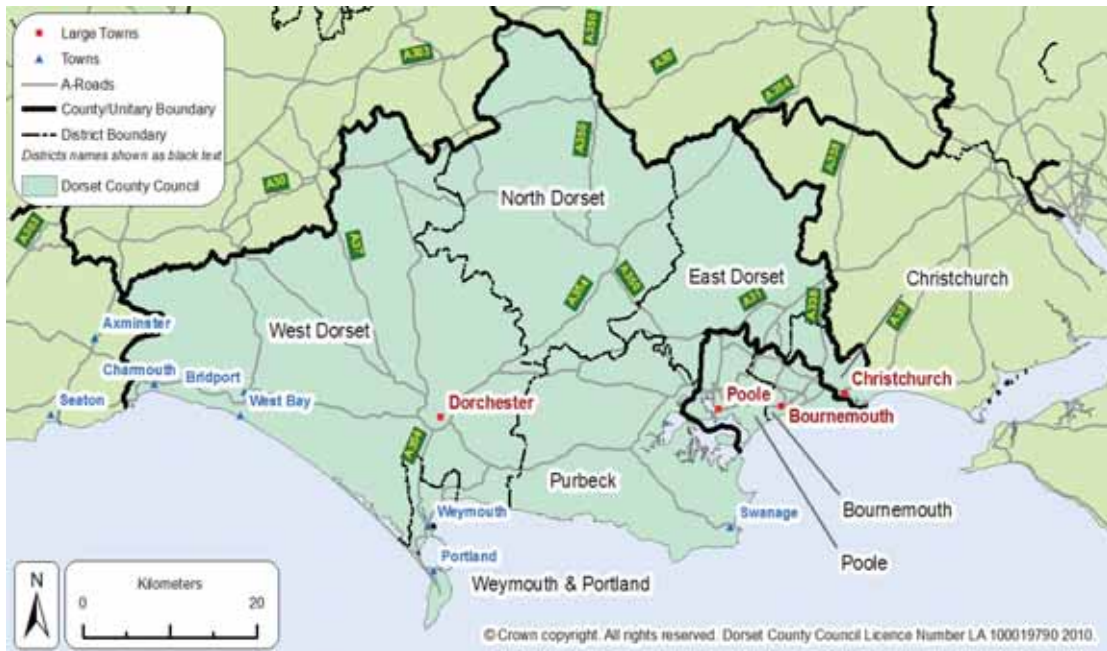


Figure 2-18 A roads

2.7.3 Traffic Accidents

Dorset’s overall performance is good in terms of a reduction in the total number of road casualties. There has been a consistent fall in the number of all injury collisions and casualties over the past 10 years. However, in 2008, there were still 442 road casualties per 100,000 people in Dorset, the highest rate in the South West (SW) counties and unitary authorities (SW 368, England 397). Figure 2-19 shows all road casualties in Dorset compared to a 1994/98 average baseline. ^{xi}

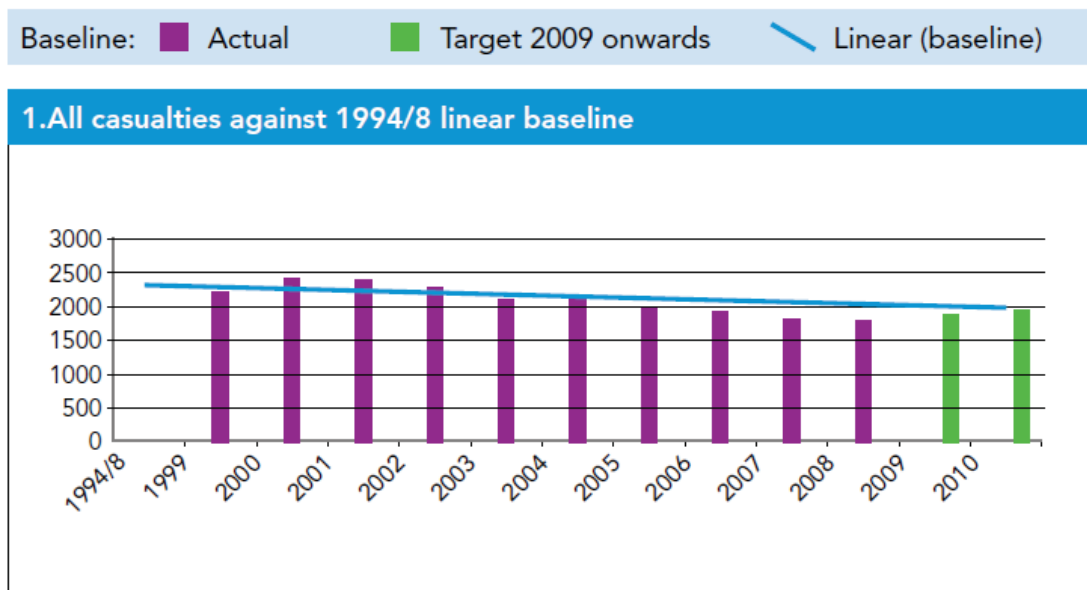


Figure 2-19 Dorset’s Road Casualties Compared to a 1994/98 Baseline

Since 2006 there has been an increase in KSI (killed or seriously injured) casualties. The county is currently 10% below the 1994-98 KSI base figures, which is behind

target and places Dorset in the lower quartile of performance across Great Britain (GB). Figure 2-20 shows all KSI's against a 1994/98 average baseline.

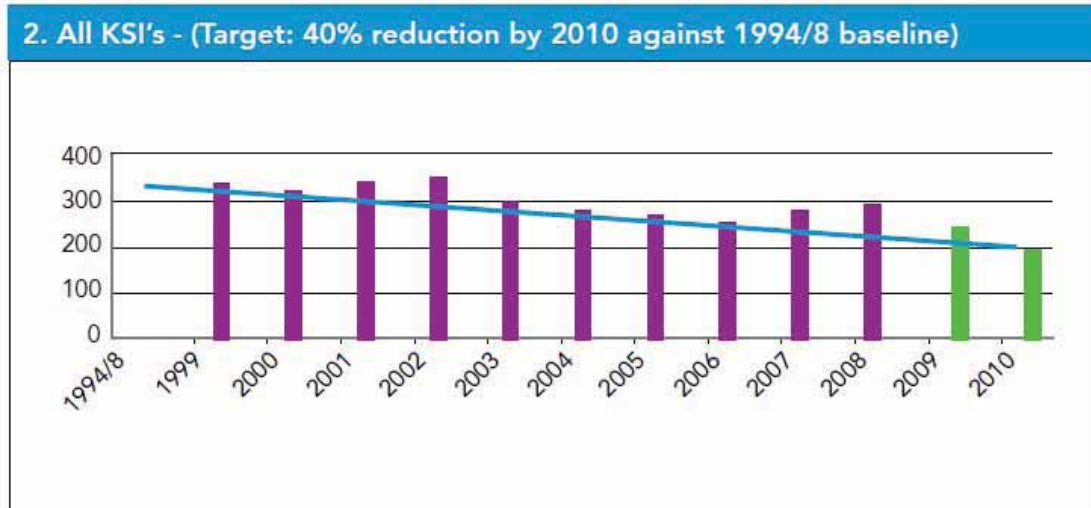


Figure 2-20 Dorset's KSI's against a 1994/98 average baseline

In particular motorcyclist KSI casualties, despite only accounting for approximately 1% of traffic, make up 25% of all KSI casualties and are now over 53% above the 1994-98 base levels, and have been steadily rising. (Figure 2-21 ^{xi}) Child KSI casualties have experienced a continued downward trend and are only marginally behind target, and well below the base level.

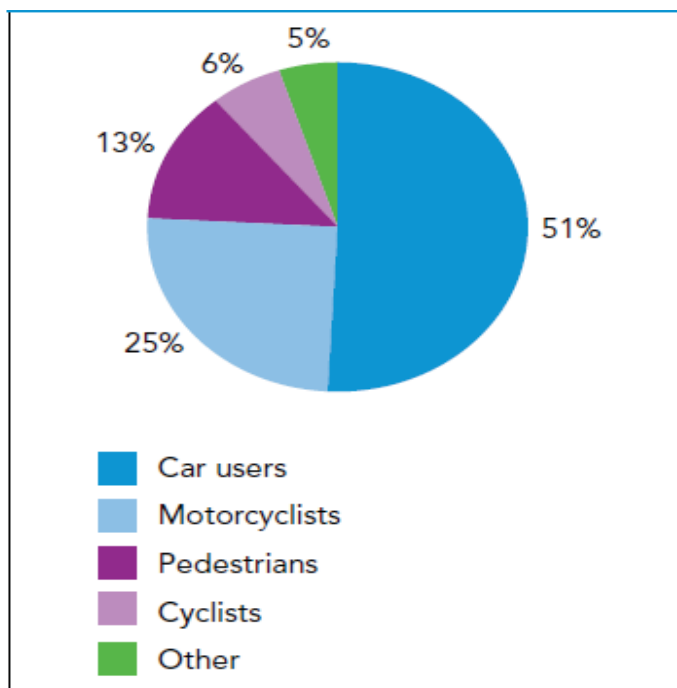


Figure 2-21 shows the percentage of KSI's by road user group

Local accident trends are identified through accident analysis. More generally, there is some evidence for a link between road casualties and deprived areas and children/ young people. Road safety on rural roads is also a key issue with 62% of all road fatalities in 2007 occurring on rural roads, which carry only 42% of traffic.

In Bournemouth and Poole overall the three year rolling average for Killed and Seriously Injured (KSI) indicates a decline from 2004 to 2006, and despite an increase from 2006/07, it remains just within the target trajectory. 73% of the KSI casualties are vulnerable road users. There has also been an increase in alcohol related pedestrian KSI in the town centres during the evening.

Table 2-4 shows all casualties for each year between 2006-2008 by type, and Table 2-5 provides a breakdown by road user for the whole 3 year period. The data relates to the South East Dorset area, which includes Bournemouth and Poole. Figure 2-22 and Figure 2-23 show the geographical distribution of these casualties within Bournemouth and Poole respectively. ^{ix}

Table 2-4 South East Dorset Casualties for Each Year 2006-2008 by type

Year	2006	2007	2008	Total
Fatal	16	15	15	46
Serious	182	231	213	626
KSI	198	246	228	672
Slight	1332	1288	1228	3848
Total	1530	1534	1456	4520
Severity Index	0.13	0.16	0.16	0.15

Table 2-5 South East Dorset breakdown of Casualties by Road User for the Whole 3 year Period

Casualties	Fatal	Serious	KSI	%KSI	Slight	Total	% All Casualties	Severity Index
Car	23	213	236	32%	3279	3515	60%	0.07
Pedal Cycle	4	109	113	15%	535	648	11%	0.17
PTW	9	188	197	27%	591	788	13%	0.25
Pedestrians	10	141	151	21%	437	588	10%	0.26
Other	2	32	34	5%	317	351	6%	0.10
Total	48	683	731	100%	5159	5890	100%	0.14

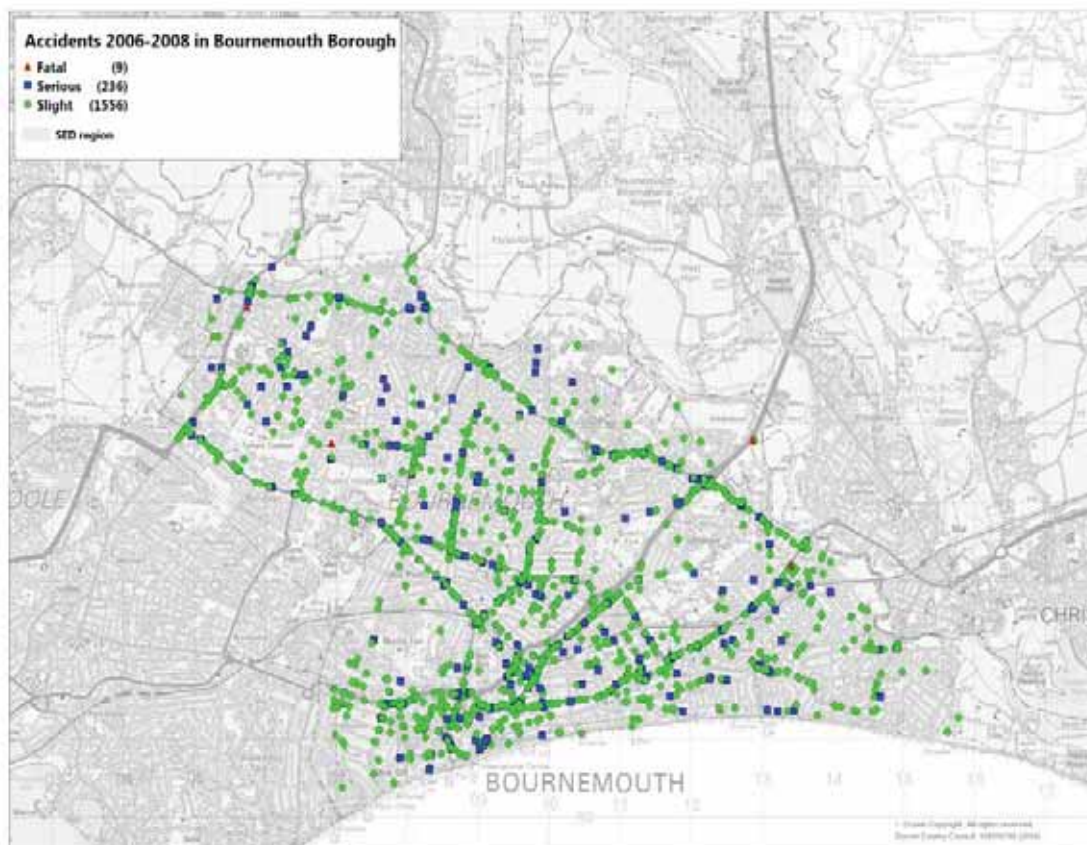


Figure 2-22 Geographical Distribution of Casualties within Bournemouth

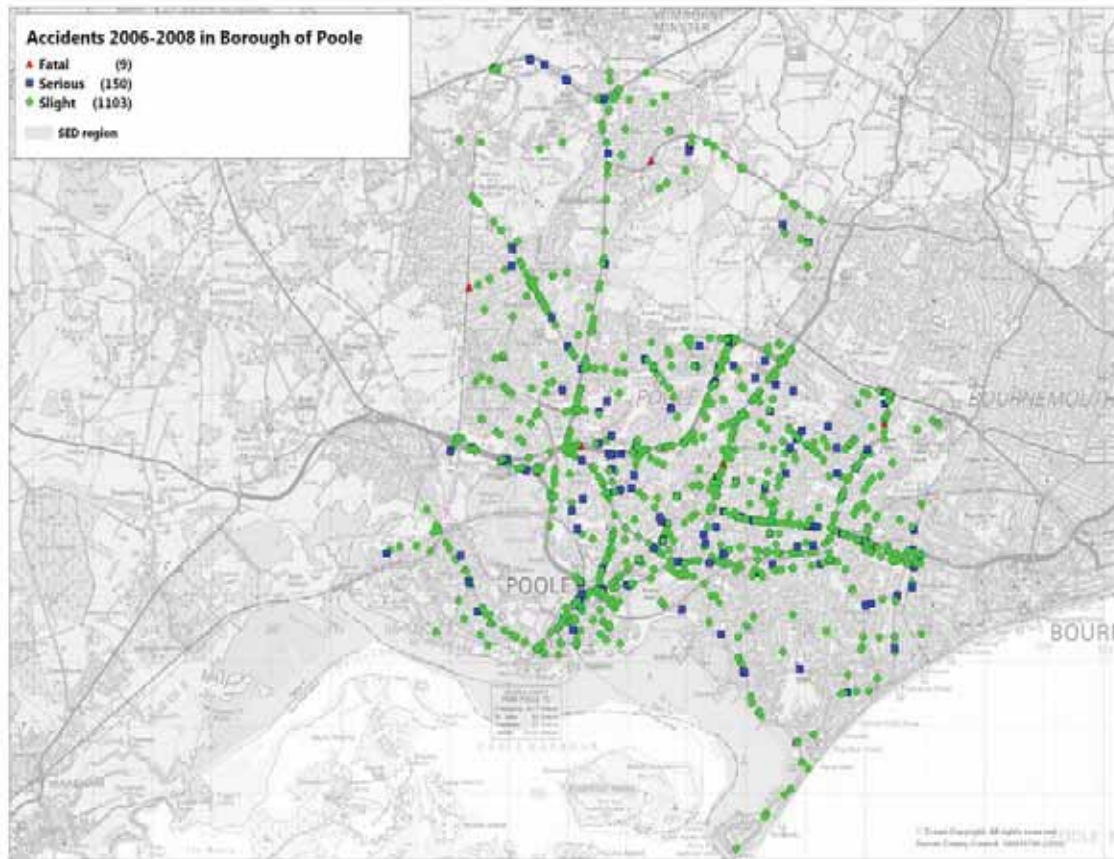


Figure 2-23 Geographical Distribution of Casualties within Poole

In 2008 Bournemouth and Poole had 420 and 403 casualties per 100,000 population respectively. This equates to the 4th and 5th highest proportions among South West county and unitary authorities (South West average = 368, England average = 397). Poole accounted for approximately 25% of all KSI's in the South East Dorset area, compared to 35% for Bournemouth.

A significant proportion of accidents occur along the principal transport corridors, or Prime Transport Corridors of the South East Dorset area. This is mainly due to the fact that the six corridors are made up of the busiest vehicular routes, as well as including a significant proportion of the local shopping centres in the South East Dorset area. This also suggests that there would be some safety benefit from proposals for further development of the Prime Transport Corridors.

Road safety is directly related to human health in the LTP area. The LTP has a direct impact on road safety and will include strategies for road safety. All proposed elements of the LTP strategy should work towards improving road safety and reducing casualties, particularly for vulnerable groups and deprived areas. Improving road safety overall can have related benefits in terms of increasing levels of walking and cycling due to a safer environment.

Recent traffic accidents data for the whole Dorset sub region is currently being compiled. The complete data will not be available until the end of April 2010. Once

available this data will be used to inform the SEA Report and the development of the LTP approach to road safety.

Recent traffic accidents data for Dorset is currently being compiled. Recent results indicate Dorset is not on track to meet targets set for 2010 -11, however the complete data will not be available until the end of April 2010. Once available this data will be used to inform the SEA Report and the development of the alternatives.

2.7.4 *Travel to Work Areas*

Travel to Work Areas are defined by the Office for National Statistics using census data for commuting between wards, based on the different locations of individuals' home and work addresses. A Travel to Work Area is a collection of wards for which "of the resident economically active population, at least 75% actually work in the area, and also, that of everyone working in the area, at least 75% actually live in the area". Figure 2-24 shows where most people are likely to commute to work and the number of bus stops along the routes.

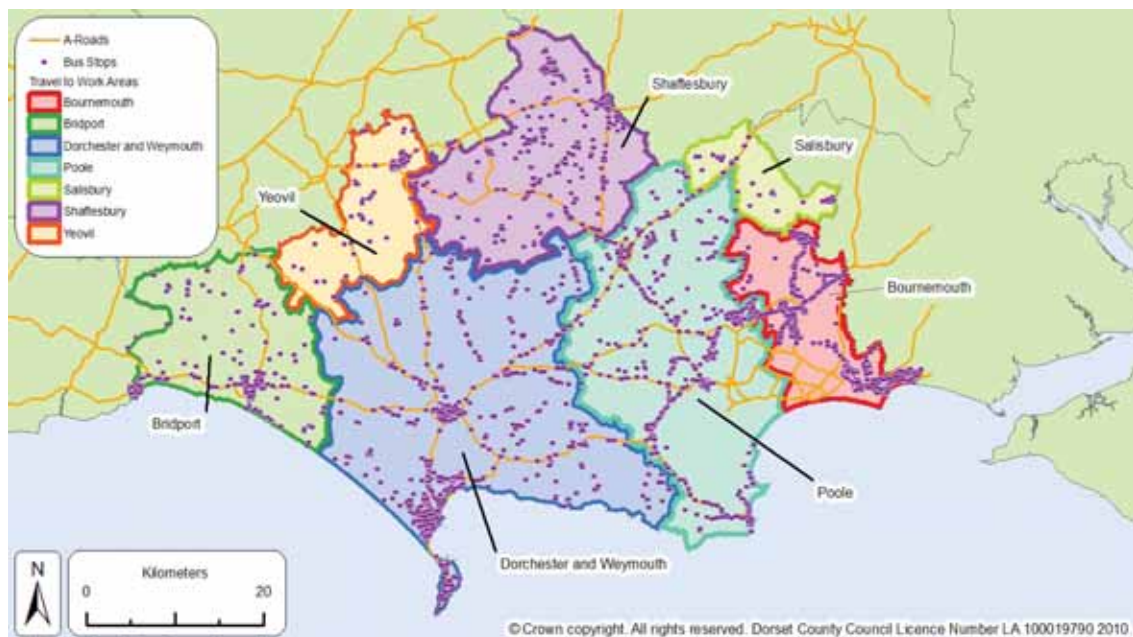


Figure 2-24 *Travel to Work Areas & Bus Stops*

The Travel to Work Map identifies the towns within Dorset that offer more employment opportunities and the catchment area that people are most likely to commute from. Dorchester and Weymouth within West Dorset have the largest catchment area for employees attracting people from Purbeck and North Dorset. The map also highlights the lack of bus stops within this catchment.

Poole and Bournemouth have a large catchment area (equivalent to the defined South East Dorset conurbation area). The public transport network is more comprehensive and defined in this area, particularly along principal routes. However, some of the more peripheral parts of the conurbation do not have direct services and there is a trend for increasing contraction of the bus network in these peripheral areas as operators focus on the main routes. This has implications for

accessing employment opportunities (and other services) from these areas, particularly for those without access to a car or reliant on public transport for other reasons.

The Travel to Work map does not show the bus stops within Bournemouth and Poole themselves but does show the bus stops in the surrounding areas, so it is still possible to identify the areas lacking in bus stops. North Dorset, East Dorset and parts of West Dorset are poorly served by public transport. Due to the location of bus stops in East Dorset only 41% of residents are able to walk to a bus stop which is served hourly or more frequently, in North Dorset the amount is 66%.

There are no railways in East Dorset (Figure 2-29) and bus services are sporadic, with many suburban and rural areas having no service at all. The Districts have a low population density, however due to the lack of transport alternatives there is consequently a high level of car ownership in the UK and a high percentage of people use their cars to travel to work, even though very few people commute distances over 20km.

The Census 2001 travel to work data (Figure 2-25, Figure 2-26, Figure 2-27 and Figure 2-28) shows the proportion of people travelling to work for different categories of distance.

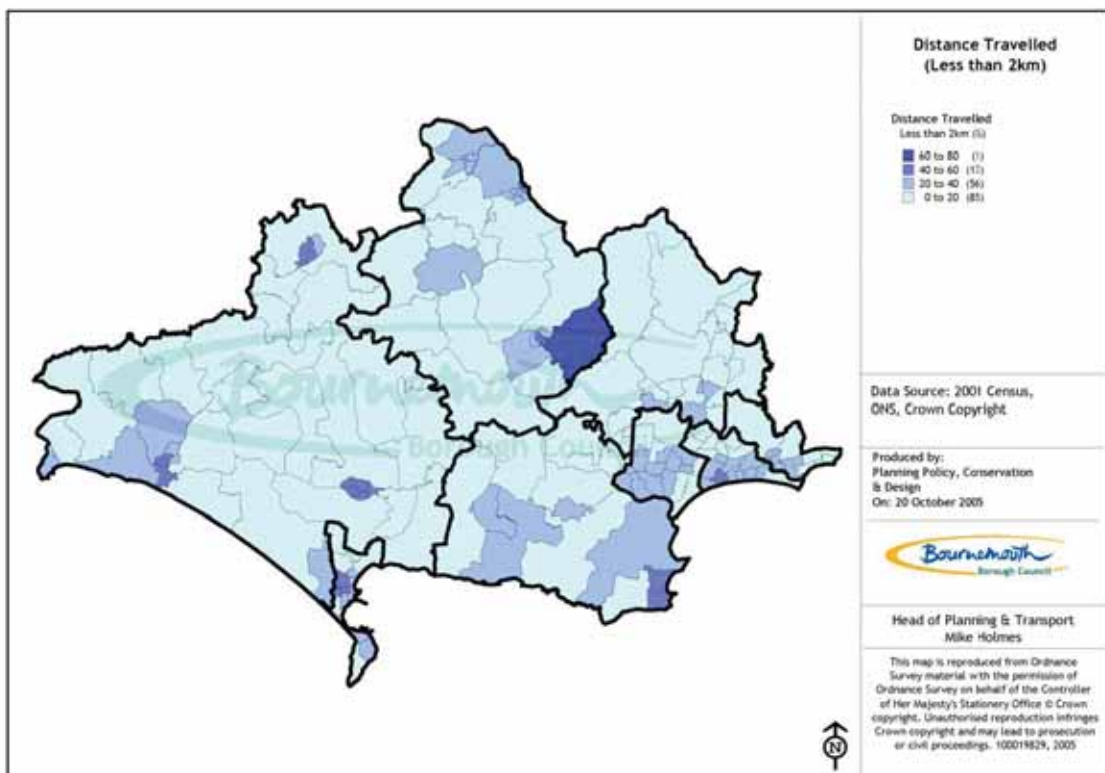


Figure 2-25 Proportion of People Travelling Less than 2 Km to Work

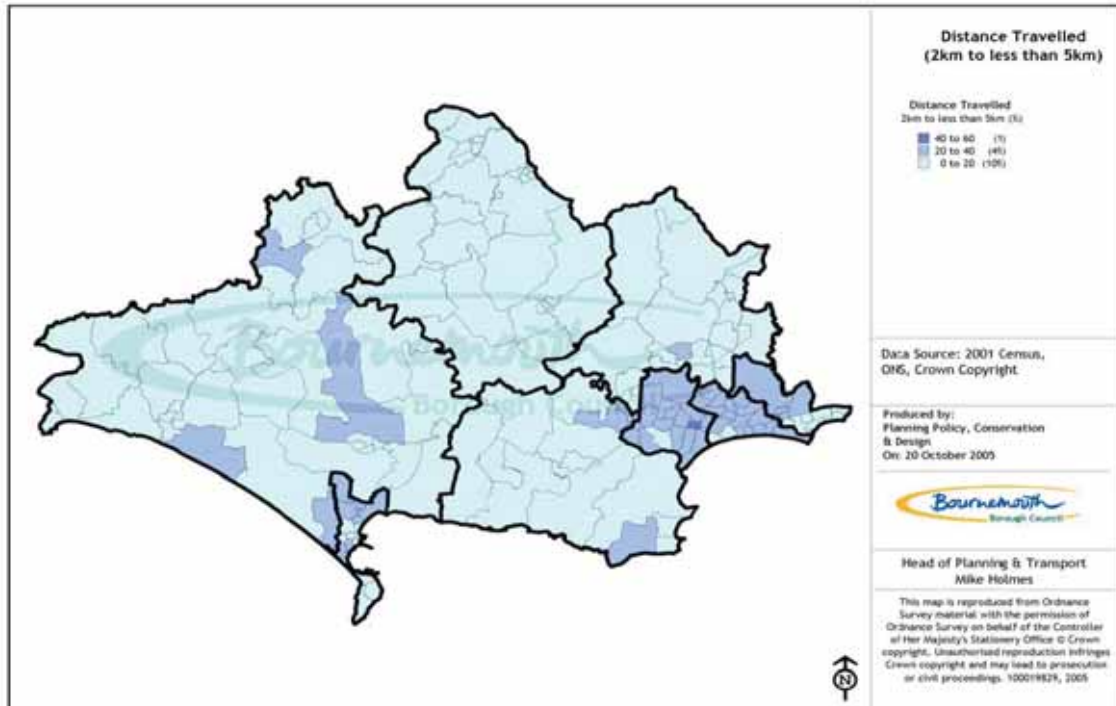


Figure 2-26 Proportion of People Travelling Less than 5 Km to Work

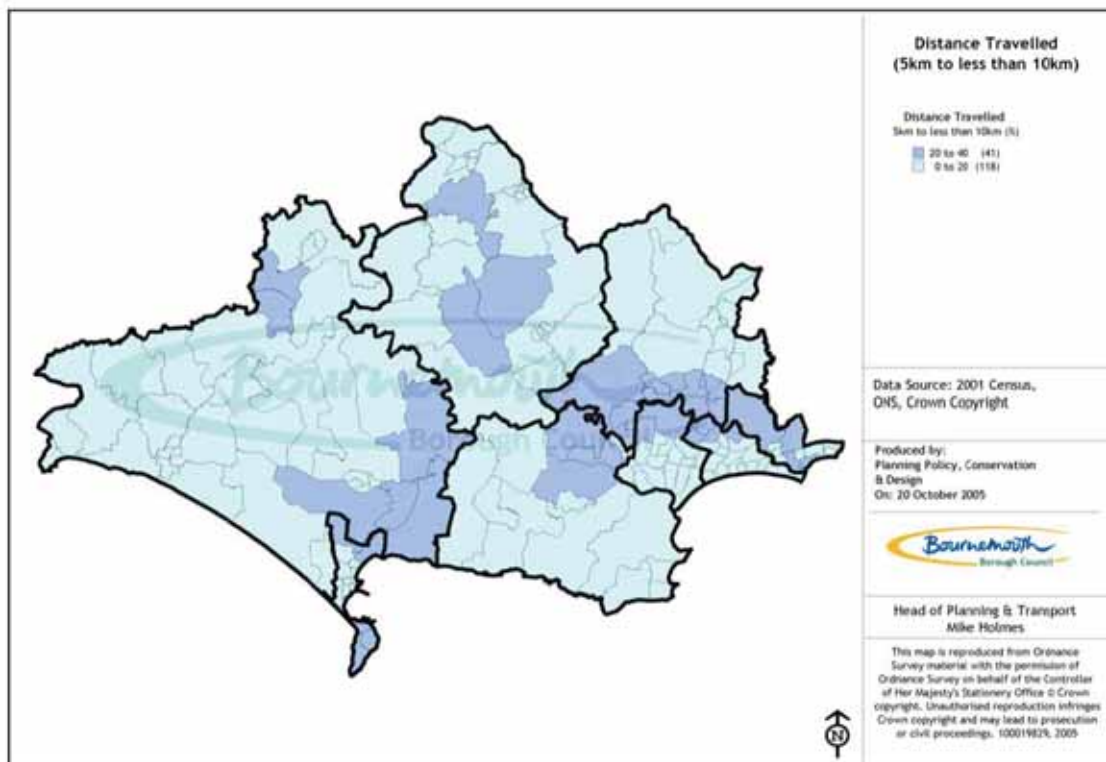


Figure 2-27 Proportion of People Travelling Less than 10 Km to Work

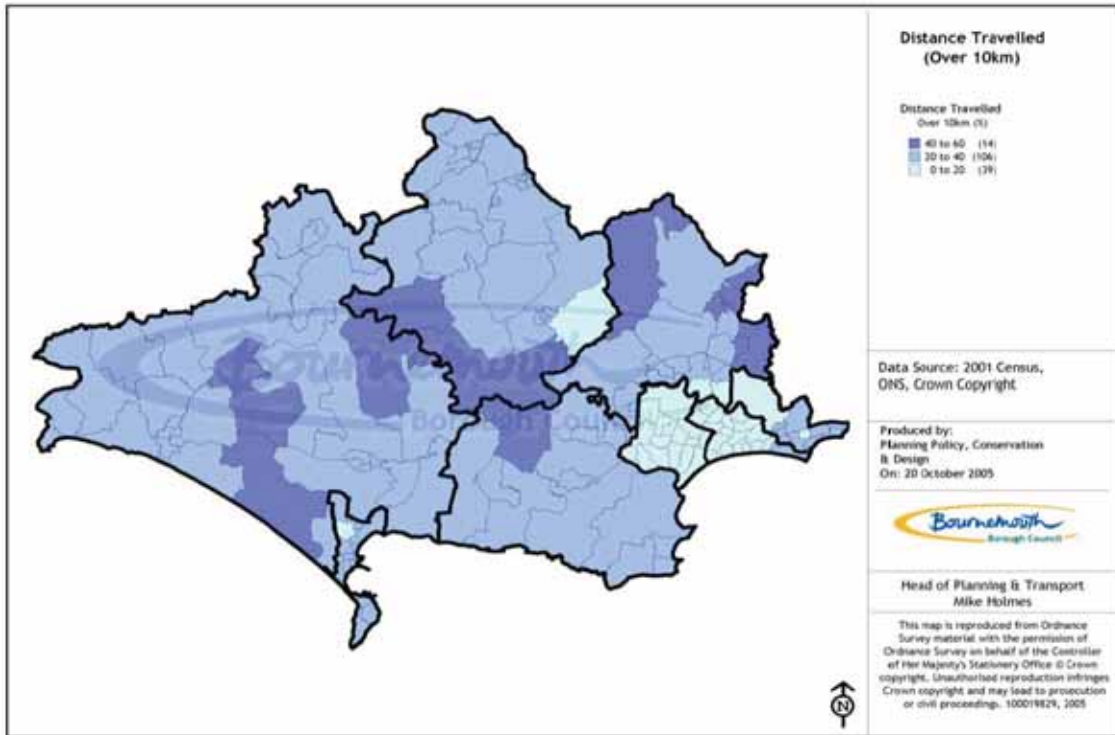


Figure 2-28 Proportion of People Travelling Over 10 Km to Work

This demonstrates the variation in distances travelled to work across the LTP area. There is a higher proportion of shorter distance trips to work (less than 5km) in Bournemouth and Poole (over 50% of trips). Within the rest of Dorset the proportion of shorter distance trips is lower, although a number of the market towns do demonstrate higher proportions, and particularly for trips of less than 2km, indicating a higher level of walking. A high proportion of short trips to work indicates self containment. The South East Dorset area has the highest self containment index, with Weymouth having the highest in the rest of Dorset. The proportion of trips to work over 10km is less than 20% for the vast majority of Bournemouth and Poole, compared to 30-40% for large areas of the rest of Dorset. This indicates a higher level of car use to access employment.

Car ownership rose by 26% between 1991 and 2001 and traffic growth has risen by between 40% – 67% in all areas within Dorset in the last 16yrs.

2.7.5 Trains

Dorset has four main train routes serving the County (see Figure 2-29). The routes are as follows:

London - Weymouth South West Trains - London Waterloo - Southampton - Christchurch - Pokesdown - Bournemouth - Branksome - Parkstone - Poole - Hamworthy - Holton Heath - Wareham - Wool - Moreton - Dorchester - Upwey - Weymouth Monday - Saturday 2 trains per hour, Sundays hourly service.

London - Exeter South West Trains - London Waterloo - Salisbury - Gillingham - Templecombe - Sherborne - Yeovil Junction - Crewkerne - Axminster - Exeter 1 hourly service (London-Yeovil section) Daily

Bristol - Weymouth First Great Western - Bristol - Bath - Yeovil Pen Mill - Thornford - Yetminster - Chetnole - Maiden Newton - Dorchester West - Upwey - Weymouth 8-9 journeys Mon - Sat / 4-6 journey Sun (reduced in Winter) viii

Birmingham – Bournemouth Cross Country – Birmingham - Birmingham International – Coventry – Leamington Spa – Banbury – Oxford – Reading – Basingstoke – Winchester – Southampton Airport Parkway – Southampton Central – Brockenhurst - Bournemouth

There are good train routes through from Christchurch to Bournemouth, Poole and Weymouth, and from Weymouth through to Dorchester to North West Dorset and across the top of Dorset from Salisbury to Yeovil (although this line has few stations). The middle of the County has no train lines at all and this combined with a weak bus route creates problems of accessibility for those without access to a car.

Connections to the north are considered to be an issue, and particularly to Bristol and the midlands with infrequent and indirect services. For example, the train journey from the South East Dorset area to Bristol requires a train to Southampton and then a change to another train to Bristol.

There are opportunities for the LTP to seek to improve access to stations and also to support improvements in train services and infrastructure. Travelling by train is a sustainable alternative to the car but it is also important to consider sustainable access to the station at the beginning of the trip.

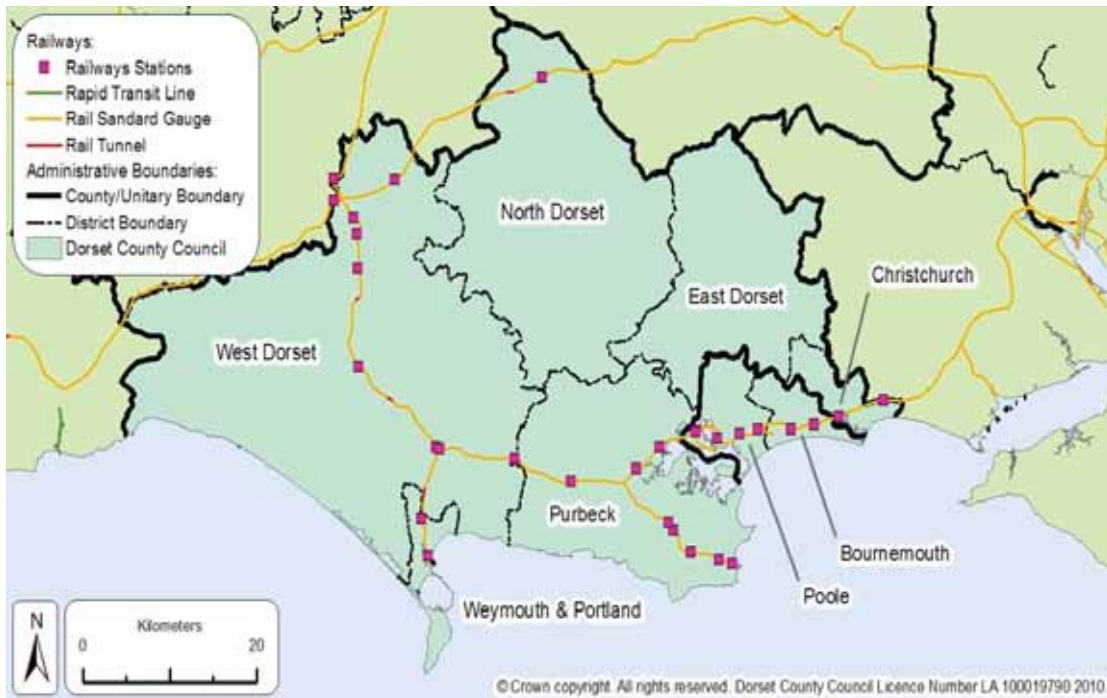


Figure 2-29 Railway Lines and Stations in the Dorset sub region

2.7.6 *Cycling and Walking*

Figure 2-30 shows the proportion of people travelling to work by cycle in the Census 2001 for the authorities in the LTP area, compared to other regions, authorities and towns.

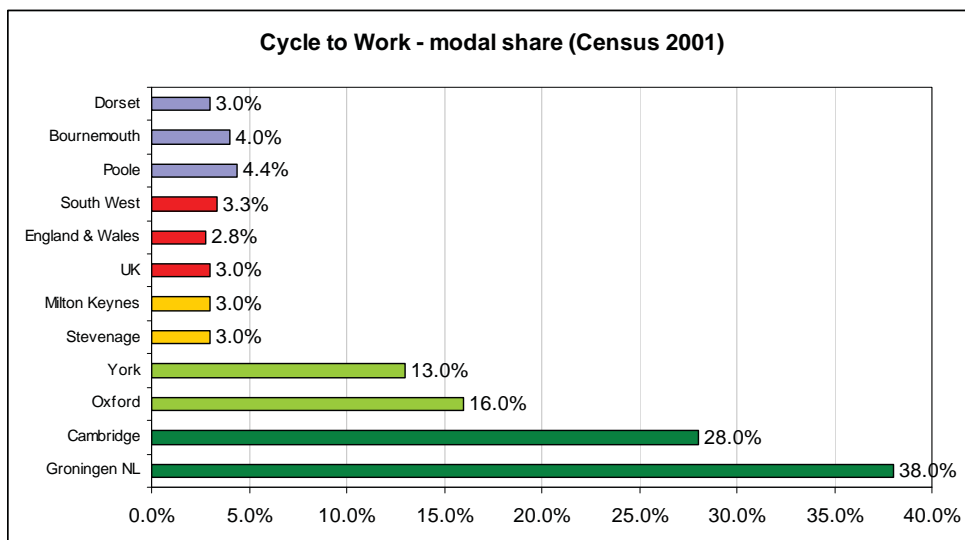


Figure 2-30 Cycle to work

The mode share for cycling is higher than the national and regional averages in the South East Dorset area. The rest of Dorset is similar to the national average. However, there is significant potential to increase levels of cycling, compared to some of the leading towns for cycling.

Table 2-6 illustrates mode shares for travel to work for the market towns throughout Dorset, including cycling and walking.

Table 2-6 Travel to work modes

Market Towns	Train & Underground	Bus & Taxi	Car Driver	Car Passenger	Motorcycle	Bicycle	On foot	Other	Total nos.
Beaminster	1.7	2.9	80.0	8.9	1.4	0.7	3.7	0.7	867
Blandford Forum	0.6	6.0	76.1	6.1	1.7	2.8	6.0	0.6	2,460
Bridport	1.4	3.9	72.9	8.4	1.6	3.1	7.6	1.0	1,484
Chickerell	1.2	7.1	72.9	7.6	3.1	3.5	4.0	0.5	1,715
Dorchester	3.0	3.1	79.7	5.5	2.5	2.7	2.4	1.1	2,465
Gillingham	4.4	2.2	78.5	7.0	1.2	1.8	4.3	0.5	1,225
Lyme Regis	0.6	4.5	75.7	8.9	1.9	0.0	5.7	2.6	470
Portland	1.0	18.2	65.4	8.6	2.4	1.3	2.1	1.0	3,108
Salisbury	6.6	1.7	80.5	4.9	1.6	1.0	3.0	0.8	12,756
Shaftesbury	0.9	1.4	60.3	5.7	1.1	4.0	25.6	1.0	2,384
Sherborne	3.6	1.8	78.3	6.6	1.8	1.9	4.9	1.0	1,576
Sturminster Newton	0.8	2.1	83.7	7.2	0.4	0.8	3.7	1.2	724
Swanage	3.2	3.2	75.8	7.8	2.1	0.9	5.9	1.1	1,398
Weymouth	1.7	5.4	74.5	7.9	2.6	3.1	3.9	0.9	10,225
Weymouth inc Granby	1.6	5.7	74.3	7.9	2.6	3.1	3.9	0.9	11,940
Yeovil	0.2	3.8	53.1	8.4	1.5	8.1	24.5	0.4	13,993
Averages	2.3	4.6	70.8	7.2	2.0	3.5	8.8	0.8	

Source: 2001 Census, ONS, Crown Copyright

The recorded growth in cycling in recent years across the LTP area is illustrated in Figure 2-31. This indicates stronger growth in the South East Dorset area, greater than the target set. Growth has been greater in Poole. Growth in Dorset has been less and is currently just below the projected target.

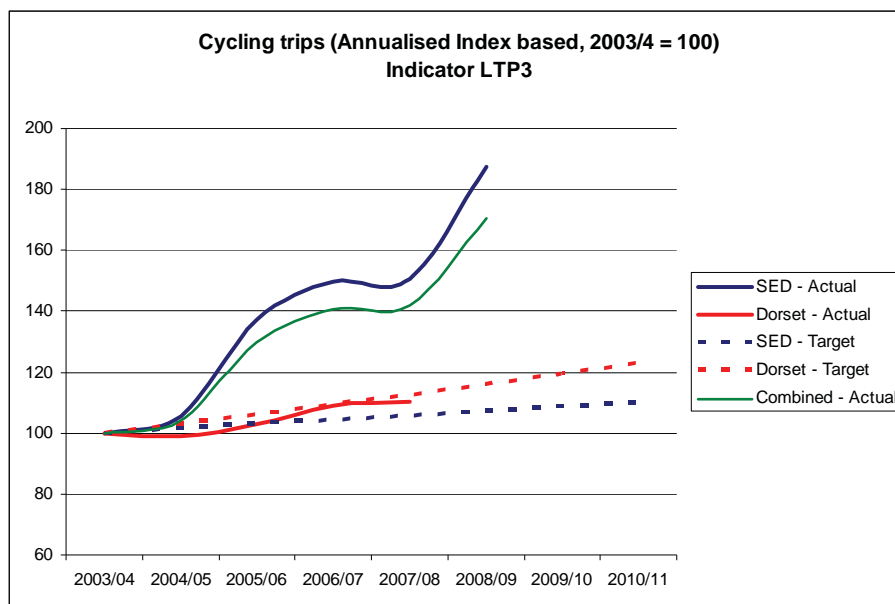


Figure 2-31 Cycling Trips

A number of local cycling studies and surveys have been carried out in recent years, including the Bournemouth Cycling and Walking Study carried out in 2008. This study identified key deterrents to cycling as being the fear of being involved in an

accident and the lack of adequate cycle route. The findings of these studies will be used to inform the development of the LTP3.

There is currently no cycle map that covers the whole of the Dorset sub region; there are various tourist related cycling routes available for each District and Borough. Although these are very informative they are more focused towards recreational cycling and not for daily commuting. Poole and Bournemouth Borough Councils have cycling maps available for the town centres and the surrounding areas; these include cycle ways, and cycle paths. There are over 500 stands for cycle parking in the Borough of Poole as well as 44 free Bykebins in the town centre. Encouraging functional cycling, such as cycling to work could substantially increase levels of cycling and promote a shift from the private car. The greatest potential for this is in the South East Dorset area where there are high population densities and many short trips to work.

Due to the landscape AONB, the sub region is an attractive location for recreational cycling and many tourists who visit the area could be encouraged to arrive by train with their bikes or hire them when they arrive. The lack of train connectivity throughout Dorset may limit many cyclists to arriving in more urban areas and exclude central Dorset to the more adventurous cyclist only. This could be overcome if bus transportation was improved to the more remote areas and if cycling hire was available on arrival. This may be out of the remit of the LTP3; however improved accessibility could lead to a greater need for cycle hire.

Cycling and walking are a key form of active travel and have a significant role to play in increasing physical activity amongst the population in the LTP area. They can contribute to improved health and reduce the risk of obesity, heart disease and cancer. It is important that the LTP strategy considers opportunities to contribute to improved health.

2.7.7 *Water Transport*

Whilst water transport currently accounts for a very low proportion of trips, the LTP may explore opportunities to increase its use as a sustainable mode of travel and an alternative to car use, given the coastal location of the LTP area.

The Dorset and East Devon Waterborne Transport Study was completed in September 2009. This scoping study underlines the need to explore transportation opportunities and seeks to identify how, where and when waterborne passenger transportation could replace car journeys and improve accessibility for coastal communities. At its core, this study provides a high level review of the potential for waterborne passenger transport in terms of the market for it, and supply side issues related to providing it.^{xii}

The focus is the “Jurassic Coast” - defined as Studland to Exmouth (excluding the Exe Estuary). However, this sits firmly in the context of the wider coastal region from

Torbay to Christchurch Bay (the “Study Coast”), and it was determined at an early stage to widen the scope to consider the influence of this where sensible.

The Study concluded that there are a number of barriers associated with implementing wider use of waterborne transport, however there is potential for penetration of water passenger transport in the medium and longer term. If water transport accommodated 10% of existing overall flows (i.e. replacing about 4,000 car journeys per day), this would be equivalent to perhaps 10 to 15 years growth in road use.’ xiv

The findings of the study will be used as evidence for developing the part of the LTP strategy that focuses on visitor management and sustainable tourism. Whilst there may be opportunities to promote waterborne transport as a sustainable mode of travel the impacts of increasing these services on the environment must also be considered.

2.7.8 *Bournemouth Airport*

Bournemouth Airport is located in Christchurch Borough, about 10 minutes drive from the town centre. It is one of the fastest growing regional airports in the country with passenger numbers exceeding one million in 2006. (Manchester Airport Group) In 2004, it handled 11,300 tons of freight and mail, an increase of 10% from the previous year. Total aircraft movements were 81,000 in 2004 (Dorset Data Book 2007). In 2008, Bournemouth Airport handled approximately 1.1 million passengers. This meant that it was England’s 14th busiest airport, and the South West’s 2nd busiest. The number of passengers saw a 0.3% decrease on the figures for 2007 (SW: +4%, England: 2.1% decrease). Scheduled and charter flights are available primarily to European destinations and operators include: Airtours, Jet2, Palmair, Ryanair, Thomson, Thomsonfly and Unijet. Bournemouth Airport is predicted to expand in terms of the numbers of flights and passengers served. Additionally, land adjacent to the Airport is identified as a strategic employment site, to meet the needs of the wider conurbation. Road Access to the site currently experiences congestion and whilst there is a bus service between Bournemouth and the airport for passenger flights, the industrial estate is almost wholly reliant upon private transport. The expansion of the airport and surrounding employment land therefore has widespread transport implications and the LTP3 must consider how it can support this with the minimal impact to the environment.

2.8 **Major Schemes**

Major Schemes include all schemes over £5 million. They must be included in the Regional Funding Allocation and must gain approval through the DfT’s Major Scheme Business Case process.

The RFA2 Transport Programme currently includes the following schemes within the LTP area:

Current short term commitments (2009/10 – 2013/14):

- A354 Weymouth Relief Road
- Poole Bridge Regeneration Initiative, PBRI, Core Scheme

Under consideration:

- Weymouth Olympic Transport Package
- A338 Bournemouth Spur Road – major maintenance

Longer term suggested priority list:

- PBRI Town Network and Poole Bridge approaches
- The SE Dorset Bus Showcase Corridors
- Bournemouth Airport Access and Parley to Cooper Dean

2.8.1 *Poole Bridge Regeneration Initiative (Twin Sails)*

The Twin Sails: Poole Bridge Initiative (PBRI) Core scheme - the proposed Twin Sails lifting bridge completed all its statutory procedures in 2006, and detailed design was completed in October 2007. It is being promoted by the Borough of Poole as a second harbour bridge crossing across the Backwater Channel between Poole Town Centre and Hamworthy, Dorset. The current bridge has provided a vital road link across an important waterway between Poole and Hamworthy and the expanded Port of Poole. However the existing bridge can no longer cope with the demands placed on it. The new bridge is intended to be a catalyst for regeneration of an area of the Borough's most deprived ward, bringing the residents of Hamworthy within easy reach of the Town Centre. The intention is that the bridge and its associated waterside developments will bring people back to work, live and play in this part of Poole, and will enable the provision of some much-needed affordable housing.

2.8.2 *The Weymouth Relief Road*

The Weymouth Relief Road is a single carriageway road linking the A354 Manor Roundabout to the A354 at the top of the Ridgeway Hill. The scheme also includes improvements to Littlemoor Road, between Preston and Littlemoor, the provision of a park and ride facility, new footpaths, cycleways and bridleways and the removal of the existing A354 from the hairpin bend to the top of the Ridgeway Hill. The road will improve access to Weymouth and Portland and improve the reliability of journey times on the A354 between Weymouth and Dorchester.

2.8.3 *2012 Olympic Games*

Weymouth and Portland will be holding events in the 2012 Olympic Games; this will bring considerable numbers of both competitors and spectators to the area. During games time, the Weymouth Transport Package will be complemented by a series of

temporary measures put in place for the duration of the sailing events in Weymouth Bay and Portland Harbour.

It will be important to maximise the number of people using public transport when travelling to future major sporting and cultural events. For those travelling by road to the Games viewing areas in Weymouth, there are opportunities to provide special park-and-ride schemes that will allow spectators to park their car and finish their journey by bus or train.

The Olympic Delivery Authority is currently working with Dorset County Council and Weymouth and Portland Borough Council, together with other stakeholders, on developing a transport package which will include short term measures that will keep vehicle and pedestrian movement flowing in the town. Plans may include:

- Out of town park and ride sites with shuttle buses taking visitors to the designated spectator viewing areas
- Increased train services to Weymouth from Bristol and London Waterloo
- Increased local bus services, including between Dorchester and Weymouth
- Restricted vehicle access to Portland and Weymouth town centre
- Designated delivery times for shops and other businesses

2.8.4 *Other Non Major Schemes*

Outside of the major schemes there are also some well progressed schemes which are considered to be relevant, including:

- Dorchester Transport & Environment Plan, which seeks to restrain growth in private car use in the town centre to tackle a variety of cross-cutting objectives including tackling air quality in the AQMA (see section 7.11.1). Completion is anticipated in Autumn 2013.
- Weymouth Connect2 Scheme - design, construction and installation of a new walking and cycling bridge crossing of Newstead Road in Weymouth. This will provide a continuous link in the Rodwell Trail, a traffic free walking and cycling route that links much of Weymouth. Part funded by Sustrans. Completion anticipated 2013.
- Throop mill Connect2 Scheme - design, construction and installation of a new walking and cycling crossing of the River Stour at Throop Mill, near Pigshoot Lane, linking Bournemouth with the major employment site at the airport. Part funded by Sustrans. Completion anticipated 2013.

2.9 Water

2.9.1 *Bathing Water Quality*

The Environment Agency (EA) is responsible for monitoring bathing water quality across England and Wales. Within the Dorset sub region the coastline stretches from Lyme Regis (West Dorset) to Christchurch. The EA's bathing water grading system "excellent" means the bathing water meets the strict guideline standards and "good" means the bathing water meets the mandatory standards. In 2009 the bathing water quality remained excellent with the exception of Church Beach Lyme Regis (West Dorset) and Kimmeridge Bay (Purbeck) where throughout 2009 the quality fluctuated from good to excellent. The fluctuating results are due to bacteria, which are likely to have come from sewage works or farming activities.

The high standard of bathing water quality contributes to high levels of tourism in many areas within Dorset. The LTP3 needs to ensure that sustainable transport opportunities are accessible to prevent high levels of congestion at tourism hotspots.

2.9.2 *River Quality*

River quality in the Dorset sub region has overall good biological and chemical quality compared to regional river quality. Most areas have above 95% good quality with the exception of Christchurch and West Dorset where good biological quality is lower at 86.8% and 83%. North Dorset has lower than National good chemical quality at 64%. Transport has the potential to impact upon the water quality and drainage of an area through direct and indirect impacts; road pollutants entering watercourses lead to the changes in local hydrology, this can occur through surface water runoff. The LTP3 needs to consider how transport may impact on the river quality.

2.9.3 *Flooding*

A Strategic Flood Risk Assessment has been carried out to include the following Local Authorities in the LTP area: Bournemouth BC, Christchurch BC, East Dorset DC and North Dorset DC (see Figure 2-32) ^{xiii}

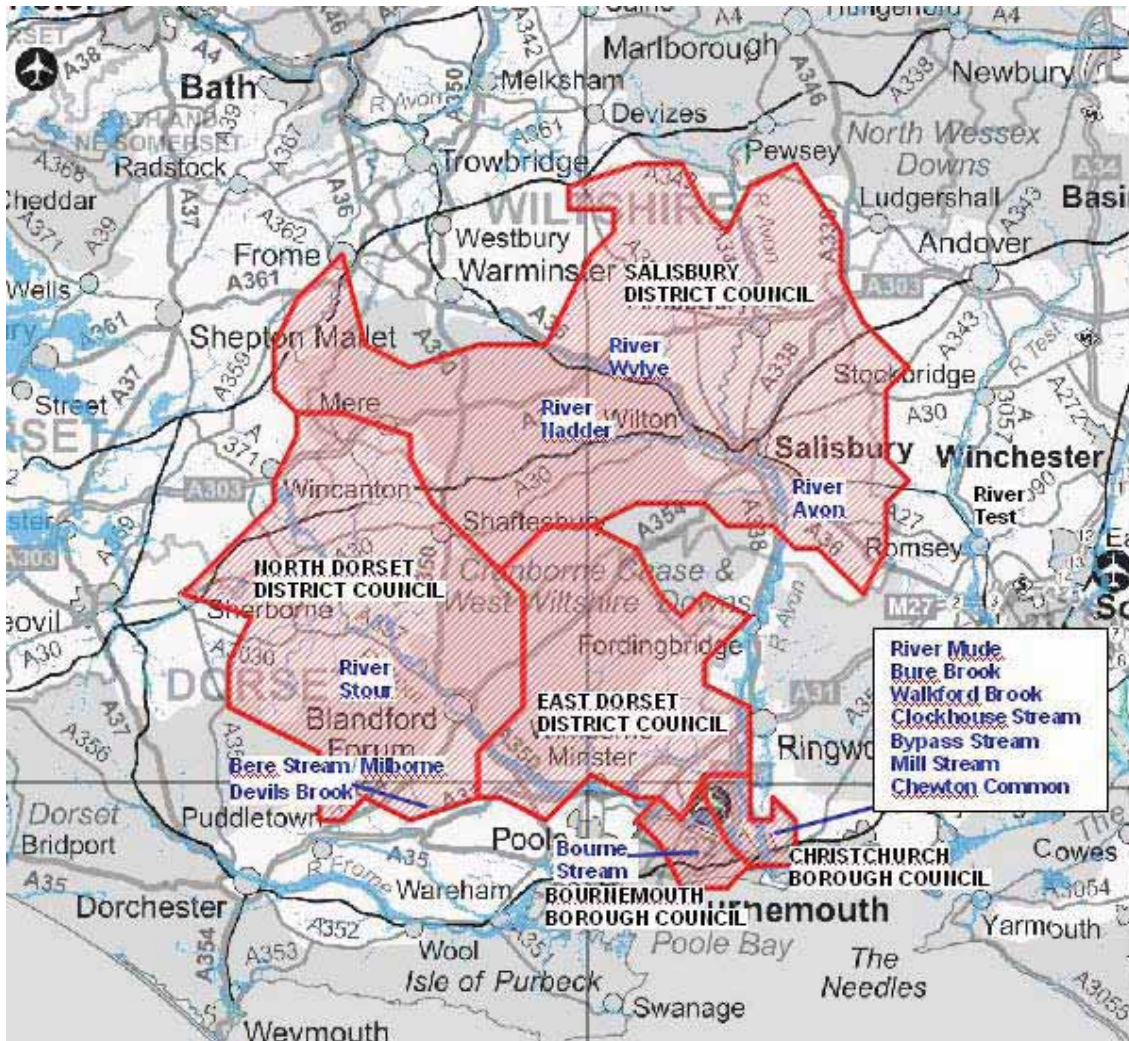


Figure 2-32 SFRA Area Covered

The SFRA assesses all forms of flood risk and has been prepared to provide information and advice in relation to land allocations and development control.

The purpose of the SFRA is to:

- Inform SA/SEA so that flood risk is taken into account when considering options in the preparation of strategic land use policies
- Propose appropriate policy recommendations for the management of flood risk within Local Development Documents
- Determine the acceptability of flood risk in relation to emergency planning capability
- Identify the level of detail required for future site-specific Flood Risk Assessments (FRAs) that support planning applications

Government's Planning Policy Statement PPS25 recommends that Local Planning Authorities conduct SFRA to contribute to sustainable development within their plans. The joint SFRA covers the catchments of the Avon and Stour rivers, plus a number of smaller streams and other watercourses, and considers flooding from all sources defined by PPS25.

The risk of flooding within the study area arises from river, surface water, groundwater, sewer and coastal flooding. There are 3 major rivers running through the LTP area; the River Frome, the River Stour and the River Avon. The map below (Figure 2-33) shows the areas most at risk of flooding within the area, several major roads are likely to be impacted, and these include:

- A338 through Christchurch,
- A350 through Blandford,
- A352 through Wareham,
- A35 near Dorchester,
- A31 near Corfe Mullen (River Stour) and
- A37 near Stratton (River Frome)



Figure 2-33 Flood Warnings

The SEA will use the information provided within the SRFA when appraising the options/alternatives within the LTP3 to ensure that impact of flood risk is mitigated against.

A SFRA has not been undertaken for West Dorset or Weymouth and Portland, both are at risk of coastal flooding. Charmouth (West Dorset) and Portland have only one access road, the LTP3 needs to address access to and from these towns in the case of severe storms.

A Poole and Christchurch Bays Shoreline Management Plan - Hurst Spit to Durlston head ^{xiv} has been developed on behalf of Bournemouth Borough Council, the purpose of The Shoreline Management Plan (SMP2) is to provide a large-scale assessment of the risks associated with coastal evolution and presents a policy framework to address these risks. The plan provides both a broad scale assessment of these risks but also quite specific advice to operating authorities in their management of defences. The LTP3 will need to address any issues raised by the SMP2.

2.9.4 Groundwater

The Environment Agency has defined Groundwater Source Protection Zones (GSPZ) for 2000 groundwater sources such as wells, boreholes and springs used for public drinking water supply. These zones show the risk of contamination from any activities that might cause pollution in the area. The shape and size of a zone depends on the condition of the ground, how the ground water is removed and other environmental factors.

The Environment Agency divides groundwater source catchments into four zones, as follow:

Zone 1 (Inner protection zone) – Any pollution that can travel to the borehole within 50 days from any point within the zone is classified as being inside Zone 1. This applies at and below the water table. This zone also has a minimum 50 meter protection radius around the borehole. These criteria are designed to protect against the transmission of toxic chemicals and water-borne disease.

Zone 2 (Outer protection zone) – The outer zone covers pollution that takes up to 400 days to travel to the borehole, or 25% of the total catchment area – whichever area is the biggest. This travel time is the minimum amount of time that we think pollutants need to be diluted, reduced in strength or delayed by the time they reach the borehole.

Zone 3 (Total catchment) – The total catchment is the total area needed to support removal of water from the borehole, and to support any discharge from the borehole.

Zone of special interest – Sometimes a fourth zone is defined. This is usually where local conditions mean that industrial sites and other polluters could affect the groundwater source even though they are outside the normal catchment area.

The following map Figure 2-34 highlights the GPZ, inner zones, outer zones, total catchment and special interest zones within the Dorset sub region.^{xv}

Key

- Inner zone

- Outer zone

- Total catchment

- Special interest

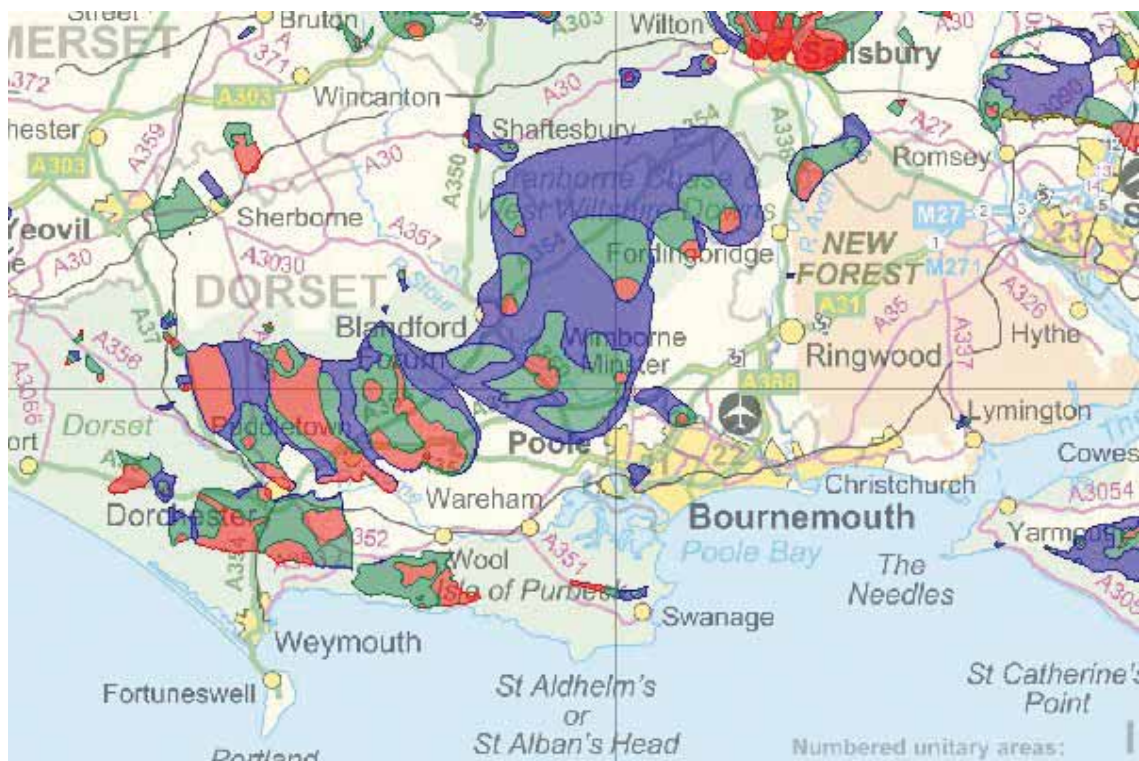


Figure 2-34 Dorset Sub Region Ground Water Protection Zones

2.10 Air

2.10.1 Air Quality Management

Local authorities have statutory duties for local air quality management (LAQM) under the Environment Act 1995. They are required to carry out regular reviews and assessments of air quality in their area against standards and objectives prescribed in regulations for the purpose of local air quality management. If there are areas where these objectives are not being achieved, authorities must designate air quality management areas (AQMA), this involves preparing and implementing remedial action plans to tackle the problem.

There are currently 3 Local Air Quality Management Areas (LAQMA) within the LTP area; one at Dorchester, one at Chideock and one in Winton, Bournemouth.

West Dorset District Council (WDDC) has undertaken a further assessment of air quality in Chideock as part of its duty under the Environmental Act 1995. This report follows on from the detailed assessment for nitrogen dioxide completed in 2006 that led to the designation of the air quality management area in Chideock in May 2007 (see map Figure 2-35). The high level of HGV traffic passing through Chideock combined with the local topography is responsible for the high levels of nitrogen oxide. The LTP3 will need to consider how the plan can address these issues.

High East Street in Dorchester was declared an Air Quality Management Area (AQMA) in 2009 (Figure 2-37). The district council has been monitoring the air quality in the district and found that the air pollution levels in the area are too high due to nitrogen dioxide from traffic. The designation means that pollution levels will be monitored in more detail and an action plan to improve air quality in the area will be drawn up.

The most recent assessment of air quality in Bournemouth was submitted to DEFRA in December 2005. This report looked at areas where there was concern that the nitrogen dioxide objective would not be met. The report highlighted three separate areas of concern, these being Wimborne Road, Winton, Castle Lane West and the Junction of Columbia Road/Kinson Road. Modelling of pollutant levels was carried out and it was found that only one area was likely to exceed the AQ Objective, this being Wimborne Road. See below Figure 2-36.^{xvi}

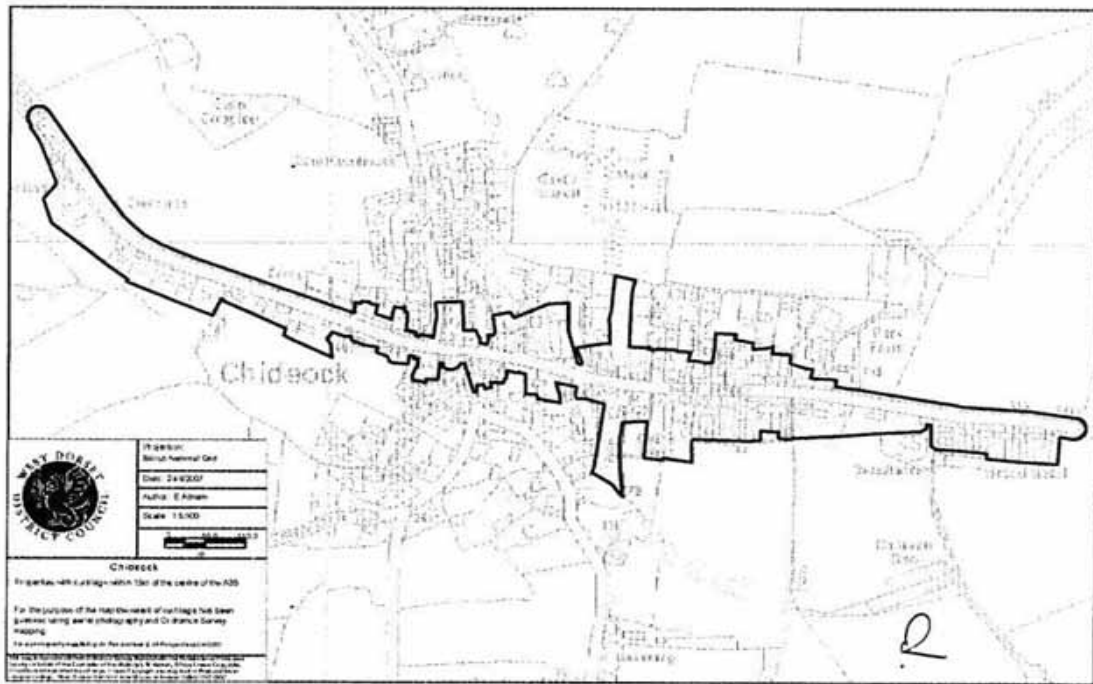


Figure 2-35 AQMA Chideock

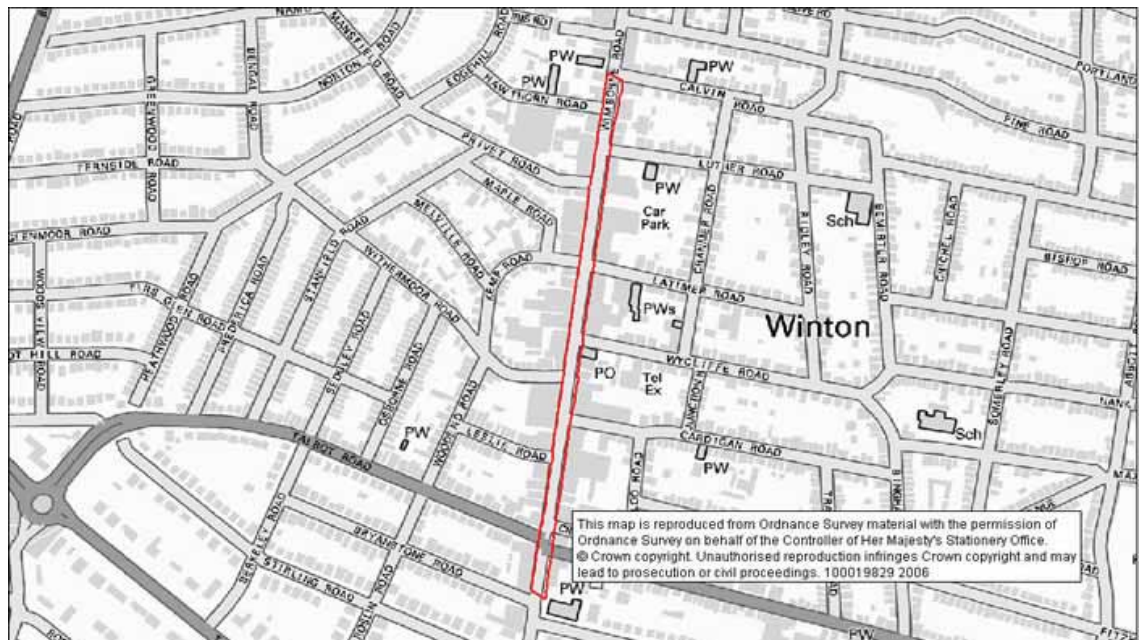


Figure 2-36 AQMA Wimbourne Rd, Bournemouth

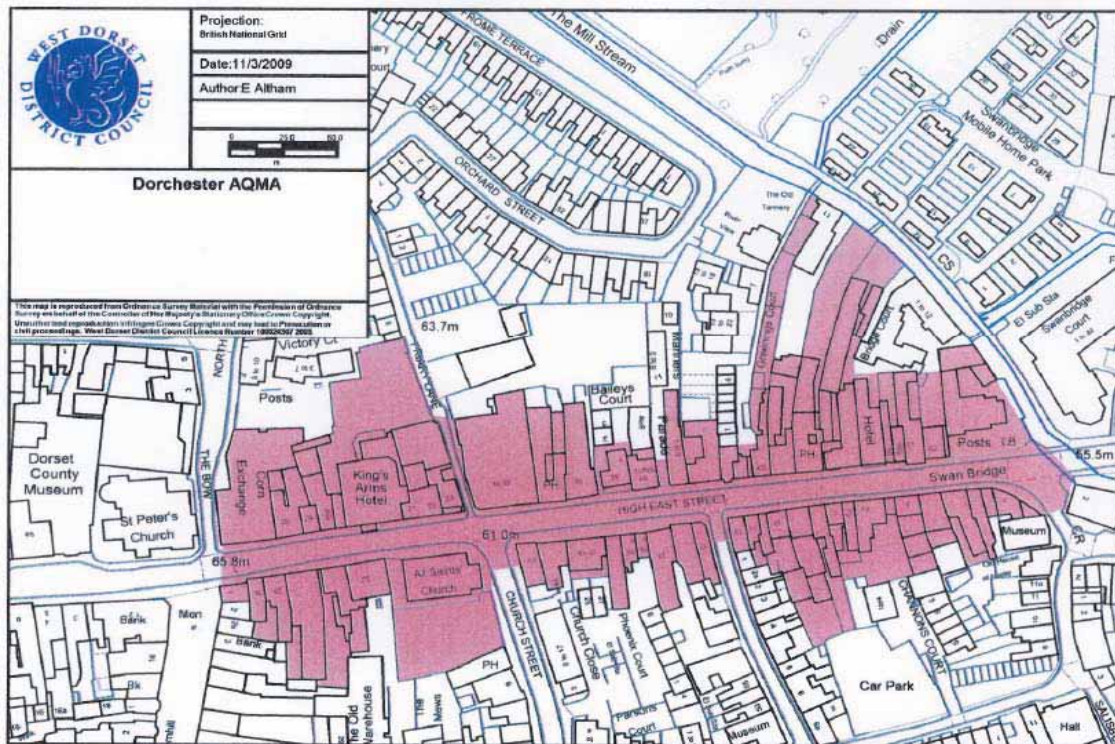


Figure 2-37 AQMA Dorchester

The LTP3 needs to address the pollution related transport issues identified within the Dorset sub region and consideration needs to be given to providing alternative routes for HGV's. Improvements to alternative sustainable modes of transport and other measures should also be considered within the South East Dorset area in particular to reduce road traffic congestion during peak periods. Furthermore, the LTP may consider the promotion of newer, less polluting vehicle technologies.

2.11 Material Assets

2.11.1 Waste

Figure 2-38 below shows the amount of municipal waste arising in Bournemouth, Poole and Dorset. This data is based on 2008/2009 data and does not include commercial, demolition and Industrial wastes. Waste needs to be transported in the area, either to recycling facilities or to landfill, regular collections are required and the transport infrastructure needs to exist to ensure that an efficient service is provided.

2008/09 Municipal Waste Arisings								
Waste Management Options	Recycled	Composted	Reused	Landfill	Incineration with EfW ⁽³⁾	Incineration without EfW	Other	TOTALS
Dorset County Council	51,583	45,510	11,788	112,520	0	0	0	221,402
Bournemouth Borough Council	28,627	9,133	296	50,571	52	0	527	89,206
Borough of Poole	18,282	12,718	266	58,113	30	0	0	89,409

Figure 2-38 Waste Arisings in Dorset Sub Region

2.11.2 *Housing and Homes*

The issues of affordable housing will be addressed by the Local Planning Authorities, Local Development Framework Core Strategies and Site Allocations Development Plan Documents (DPD). Within these DPD's new housing locations will be identified as will new employment sites, it is essential that the LTP3 is integrated with the LDFs to ensure that development is located in locations accessible by sustainable modes of travel.

The LTP3 must ensure access to services is a high priority for new housing development within Dorset, the SEA process provides an opportunity to ensure that these issues are fully addressed at the strategy options/alternatives appraisal stage.

2.12 **Economy**

From April 2010, all unitary authorities and county councils have a statutory duty to carry out an assessment of the economic conditions of their area through a Local Economic Assessment (LEA). This will provide local authorities and other stakeholders with a robust analysis of the local economy which will inform their economic policies and interventions.

As partners in a Multi Area Agreement, Bournemouth, Dorset and Poole councils are working together to produce a Local Economic Assessment for the Dorset sub-region. This will allow a shared understanding of local economic challenges and economic geography and ensure the alignment of other statutory processes such as Local Development Frameworks and community strategies as well as the economic interventions of a range of stakeholders.

The development of the LEA will inform both the SEA and the LTP.

2.12.1 *Employment*

The population structure of the Dorset sub region (including Bournemouth and Poole) (section 2.5) shows that it has a higher than the national average of persons of retirement age (particularly in Dorset), therefore the percentage of persons of working age in Dorset is only 57% of the total population. The economic activity rate of those of working age is 80.3 % which is higher than the national average of 78.5%.

2.12.2 *Benefit Claimants*

The annual average rate of claimant unemployment for the Dorset sub region was 2.7% in 2009, which was lower than the national average of 4%. Figure 2-39 ^{xi} shows the trends in annual average unemployment rates between 1992 and 2009.

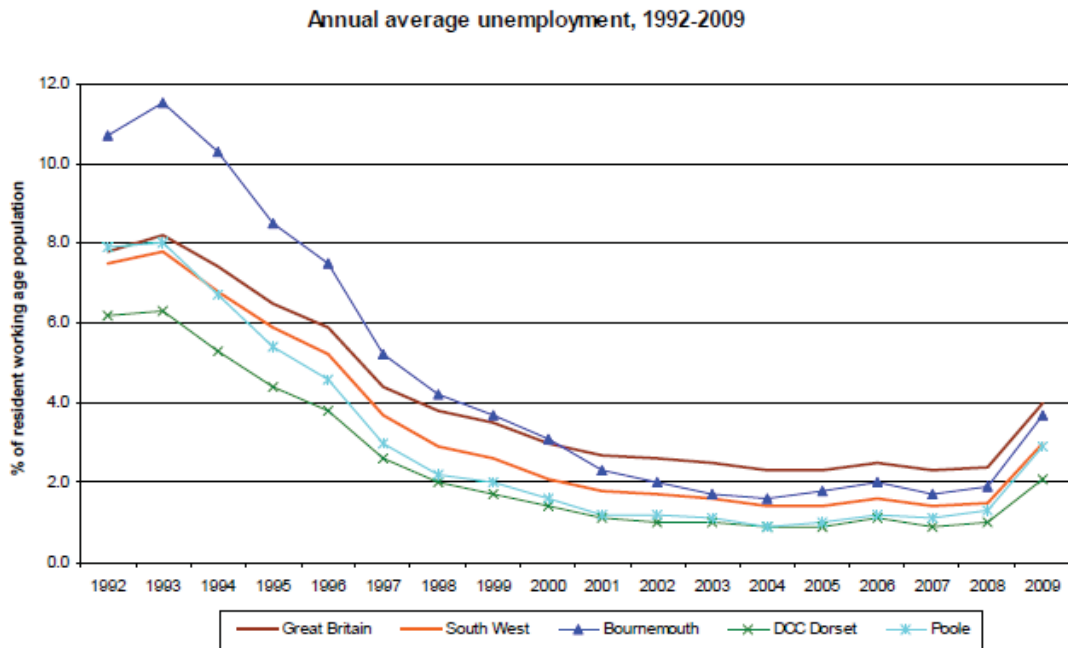


Figure 2-39 Average Unemployment Dorset Sub-Region 1992 – 2009

The highest unemployment claimants in the sub region were in Bournemouth at 3.7% of the working age population in 2009. This figure is converging with the average national rate, having been below it for a number of years.

Poole remains marginally below the rate for the south west region and the average rate for Dorset remains below that of both Poole and the south west region. Within Dorset, Weymouth and Portland had the highest annual average rate of claimant unemployment.

Although the Dorset sub region has a higher than average percentage of people of working age that are employed, statistics show that the numbers of households receiving benefit has risen sharply since 2008 with 3,040 more households.

This equates to an increase of 10.4%. The number and percentage of households claiming benefit is now the highest it has been since recording in Dorset first began. The benefit population in Dorset now stands at 55,138 (13.58%). The percentage of older people receiving benefit however has remained virtually unchanged with a rise of just 0.01% in the last 2 yrs.

The majority of the increase has come from working age households, a rise of almost 2,500 households. This could well be a consequence of contraction in the economy over the past year. There has also been a rise (2.45%) in the number of under 20s living in households dependent on benefits. The characteristic of households claiming benefit has therefore altered somewhat since last year with pensioners as a whole accounting for 4% less than in 2008 and working age households 4% more.

When comparing the benefit claimants, lack of access to services and the Indices of multiple deprivation for super output areas statistics in the LTP area, Bournemouth, Weymouth and Portland score higher and therefore worse than all other Boroughs' and Districts. The LTP3 needs to consider how transport initiatives can help to address these issues, such as ensuring that access to employment and education opportunities is improved and affordable.

2.12.3 Employment Types

Employment in the Dorset sub region is largely based in the service sector, which accounts for 27% of employment. Weymouth and Portland and Bournemouth have the greatest dependence on this sector. 6% of employment for Dorset sub region is leisure and tourism based which is higher than the national average of 4%.

12% of employment contributes to the manufacturing industry of which the highest percentages are for Christchurch, North Dorset, Purbeck and East Dorset. Bournemouth has the highest rate of knowledge based employment in the County at 27%, higher than the national average of 24%.

Agricultural employment in Dorset sub region is 2%, which is higher than the national average of 0.7%. West Dorset has the highest agricultural workforce at 43.2%, followed by North Dorset at 27.6% and Purbeck at 12%, this has shown a slight decrease since 2007.

2.12.4 Earnings

In Dorset, residence based earnings (earnings of people who live in the area but don't work in the area) are higher than work based earnings (people who live and work in the area). This is due to people living in Dorset and commuting for work outside the area. Figure 2-40 shows GVA per head for authorities in the south west region compared to the national average.

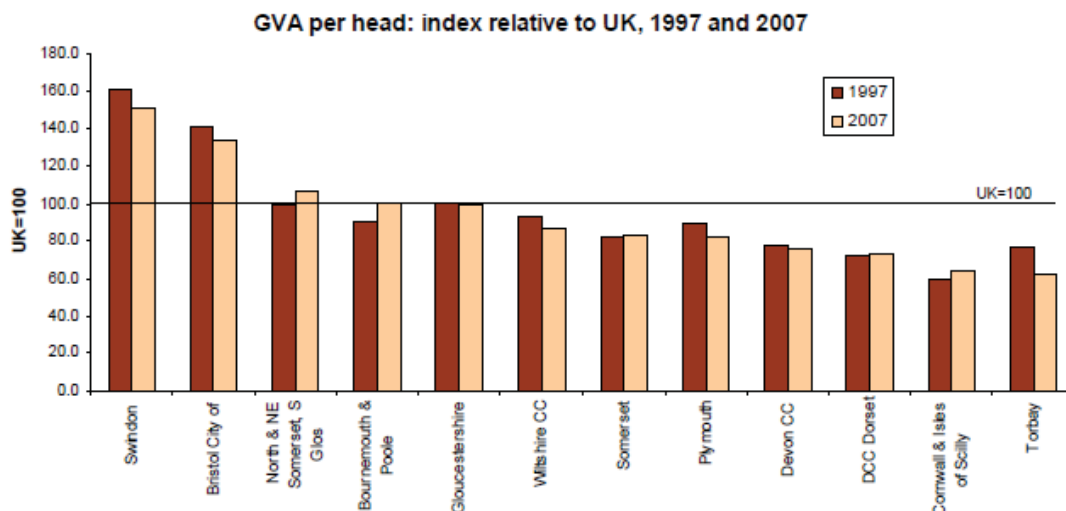


Figure 2-40 GVA per Head for South West Local Authorities

Within Dorset the GVA per resident is below the national average and reflects population structure and the commuting patterns. Bournemouth and Poole GVA per

resident is higher than the South West average and approximately equal to the national average.

The MAA aims to develop a more prosperous economy and the LTP should seek to support this through helping to make employment accessible to all.

2.12.5 *Tourism*

An estimated 45,509 people are directly and indirectly employed in tourism in Dorset.^{xvii} This includes employees in restaurants, snack bars, cafes, public houses, bars, licensed clubs, hotel trade, other short stay accommodation, libraries, museums, art galleries, sport / recreational services, travel agencies and tour operators. This also directly links with education needs.

The Dorset sub region receives 16.3 million night visitors per yr and 13.7 Million day visitors per yr. Bournemouth receives the most visitors at 4.6m per yr and tourism spend is estimated at £1,420.1m / yr.^{xviii}

- key domestic markets are London and the Southeast, the East and West Midlands.
- principal overseas markets are Australia and New Zealand, America and Canada, Switzerland, Germany, France and the Netherlands.
- Most day visitors come from within Dorset itself, Hampshire, Wiltshire, Somerset, Bristol and Avon.
- Visitors stay an average of 7 nights
- 78% of visitors used their car to travel to Dorset during the main season.
- There is a greater proportion of visitors in the 35-54 age group and noticeably fewer visitors aged between 16 and 24.
- Family groups with children account for 29% of visitors. Adult couples (i.e. two adults, no children) account for 51% of visitors
- Visitors to Dorset tend to mainly be "Professional" and "Craft and Related" occupational groupings, or are retired.^{viii}

The LTP has direct links with tourism through the need to ensure visitors can travel to, from and within the area in order to support the economy. It can also influence the travel choice of these visitors to manage seasonal peaks in traffic congestion and encourage sustainable tourism initiatives.

2.12.6 *Jurassic Coast*

The Jurassic Coast is a major leisure and tourist destination (Figure 2-4). Spending related to this supports about 48,000 jobs across the areas identified, and this has a

significant economic impact. Based on 2007 data, 5 million trips are made by staying visitors, generating 21 million bed nights. In terms of spend, the total value was estimated at £1.8 billion in 2007, of which some £450 million (25%) was spent on “travel” and “attractions / entertainment”.

An Economic, Social and Cultural Impact Study of the Jurassic Coast, 2008, concluded “that 5 million leisure visits were made to the Jurassic Coast to include Purbeck, West Dorset, Weymouth and East Devon, (about 50% of the total for the four areas neighbouring the Jurassic Coast.) The combined spending on travel and attractions / entertainment for the Jurassic Coast can thus be estimated at over £100 million.”^{xix}

Whilst the visitors themselves bring economic benefits, their reliance on road-based access (mainly by car), has a significant impact on landscape, communities, air quality, and damage to the historic environment in villages. This huge seasonal influx of visitors has a significant impact on the existing road network. The table below shows the average daily traffic on roads accessing the Jurassic Coast.

Table 2-7 Annual Average Daily Traffic on roads accessing the Jurassic Coast - August Flows *viii*

SITE No.	ROAD No.	LOCATION	AADF (Annual Average Daily Traffic)							Percentage Growth Since				
			1983	1990	94-98 Average	2000	2003	2006	2007	2003 4 Years	2000 7 Years	1996 11 Years	1990 17 Years	1983 24 Years
<i>Sites in italics indicate sites not monitored every year, but on a three year cycle.</i>														
<i>Unobserved flows estimated from similar or adjacent counts.</i>														
GROUP 23 - SUMMARY OF FLOWS ON ROADS ACCESSING JURASSIC COAST - AUGUST FLOWS														
17	A3052	WEST OF LYME REGIS	1,600	3,100	3,380	3,600	3,490	3,400	3,300	-3%	-8%	1%	10%	113%
18	A3052	EAST OF LYME REGIS	3,400	3,700	4,460	4,600	4,890	4,900	4,800	0%	4%	10%	32%	44%
308	B3157	EAST OF BRIDPORT	2,800	5,800	5,860	6,200	7,000	7,300	7,100	4%	15%	25%	26%	161%
310	B3157	CHICKERELL	2,900	5,100	4,960	5,000	5,900	6,100	6,500	3%	30%	23%	20%	110%
353	B3351	REMPSTONE	1,000	1,600	1,660	2,100	2,200	2,500	2,500	14%	19%	34%	56%	150%
359	A351	EAST OF CORFE CASTLE	4,500	6,400	7,260	7,400	7,500	8,000	8,100	7%	9%	10%	25%	78%
846	B3070	WEST LULWORTH	n/a	n/a	n/a	1,200	2,000	1,800	1,900	-10%	58%	N/A	N/A	N/A
1933		STUDLAND FERRY ROAD	n/a	n/a	n/a	n/a	2,500	2,900	3,200	16%	N/A	N/A	N/A	N/A
OVERALL FLOWS/GROWTH AT SELECTED SITES since 1983			11,200	18,900	19,940	20,700	22,600	23,900	24,200	6%	17%	21%	28%	116%
OVERALL FLOWS/GROWTH AT ALL SITES since 2003							35,480	36,900	37,400	4%	N/A	N/A	N/A	N/A

2.13 Climate

Carbon dioxide (CO₂) is the main greenhouse gas, accounting for about 85% of the total UK greenhouse gas emissions in 2007, the latest year for which final results are available. In 2008, UK net emissions of CO₂ were provisionally estimated to be 531.8 million tonnes. This was 2% lower than the 2007 figure of 542.6 million tonnes - resulting from fuel switching from coal to natural gas for electricity generation, combined with lower fossil fuel consumption by industry and in road transport (Defra, 2009).

Some of the potential impacts of climate change may be:

- hotter and drier summers
- longer growing season for plants
- wetter winters

- more extreme weather events like prolonged drought, intense storms and flooding.

4,640 kt of end user CO₂ emissions were released in the Dorset sub region in 2007, a 3% (42 kt) decrease on the 4,803 kt released in 2005.

Emissions by sector:

- 38% came from domestic sources
- 35% came from industrial and commercial sources
- **27% came from road transport**
- 1% (28 kt) came from land use, land use change and forestry^{xx}

Table 2-8 below shows emissions for each authority in the LTP area between 2005 and 2007.^{xxi}

Table 2-8 CO₂ Emission for Local Authorities in the LTP Area

Authority	Year	Industry and Commercial	Domestic	Road Transport	Total	Population ('000s, mid-year estimate)	Per Capita Emissions (t)
Bournemouth	2005	315	409	192	916	161.0	5.7
	2006	322	405	188	915	161.2	5.7
	2007	308	388	189	885	163.2	5.4
Poole	2005	427	348	197	971	136.7	7.1
	2006	428	349	191	968	136.9	7.1
	2007	427	332	191	950	138.1	6.9
Christchurch	2005	100	117	89	306	44.9	6.8
	2006	100	116	88	304	45.0	6.8
	2007	97	110	90	297	45.4	6.5
East Dorset	2005	178	240	196	613	85.1	7.2
	2006	161	243	192	596	85.0	7.0
	2007	154	230	196	580	85.8	6.8
North Dorset	2005	140	176	127	442	65.8	6.7
	2006	142	180	126	447	66.7	6.7
	2007	134	170	126	430	67.6	6.4
Purbeck	2005	182	125	131	438	44.7	9.8
	2006	180	125	128	433	45.2	9.6
	2007	178	118	124	420	45.8	9.2
West Dorset	2005	250	273	280	803	95.7	8.4
	2006	248	277	277	802	96.2	8.3
	2007	241	263	277	781	97.1	8.0
Weymouth and Portland	2005	89	149	75	313	64.8	4.8
	2006	89	149	73	312	64.9	4.8
	2007	84	140	74	299	65.1	4.6

In 2007, total CO₂ emissions were highest in Poole, which accounted for 20% (950 kt) of the sub region total, and the lowest emissions were in Christchurch with 6% (297 kt).

Most local authorities showed little change in their total emissions between 2005 and 2007:

A total of 6.55 tonnes of CO₂ were released per capita in the Dorset sub-region in 2007, 1% higher than the 6.87 tonnes for 2005. However, this was still 18% (1.45 tonnes) lower than the South West average.

With 9.2 tonnes, per capita emissions were highest in Purbeck - 40% higher than the Dorset average and 15% higher than the South West average. The lowest per capita emissions were found in Weymouth and Portland with 4.6 tonnes - 31% lower than the sub region average and 43% lower than the South West average.

All local authorities showed little change in their per capita emissions between 2005 and 2007.

The change in CO₂ emissions can be due to many reasons such as change in population density and change in population structure.

Road transport is responsible for 27% of the total of all CO₂ emissions in the Dorset sub region, therefore the LTP3 strategy will need to aim to ensure that opportunities are taken to reduce the CO₂ emissions from transport use. All elements of the strategy will need to be carefully considered in terms of their likely impact on CO₂ emissions. Tackling climate change through reducing carbon emissions is one of the DaSTS goals (national transport goals) and therefore the LTP will need to demonstrate how it will contribute to achieving this goal. The SEA process provides an opportunity not only to prevent CO₂ emissions levels rising but more importantly, to contribute to reducing CO₂ emissions.

2.14 Climate Change Implications for Dorset

Climate change will have unavoidable direct effects on the sub region's wildlife as conditions could alter significantly and have a direct affect on their range, preferred habitats and behaviour. Habitats which are dependent on the Dorset coasts and wetlands are particularly at risk, with the prospects of sea level rise and longer summer droughts. Extreme weather of all types affects all habitats, for example increased storminess could damage coastal and marine habitats as well as the more obvious trees and woodlands. The projected changes suggest that many species will need to disperse to survive and many of these will find dispersal difficult unless action is taken at multiple scales to address habitat fragmentation. Dorset has a number of protected habitats and species (see section 2.2)

Two well-known species that are predicted to be affected detrimentally by climate change in the Dorset sub region are the Song Thrush and the Stag Beetle. For the Song Thrush, the projected hotter, drier summers will reduce the numbers of slugs

and snails that it feeds on and reduce survival rates. Significant loss of suitable climatic conditions is expected in Dorset and this now ubiquitous species may become scarce in the future. ^{xxii}

The sub region has a 'hot spot' for Stag Beetles in the south east of the area, particularly in and around Bournemouth, with few records found elsewhere. Adult beetles, although able to fly, do not disperse long distances. If a southern European climate develops in Dorset, as projected by some forecasts, then the Stag Beetle's presence in the County may be lost. ^{xxiii}

2.14.1 *Climate Change & Health*

While the UK national assessment acknowledged the uncertainties surrounding predictions of likely effects of climate change, it identified a number of potential health impacts by the 2050s, these include:

Extremes of temperature, most at risk groups are the elderly. Dorset sub region has a higher than average number of inhabitants over the age of 60yrs and this is expected to increase;

Flooding – it is predicted that there will be an increased frequency of severe coastal and river floods, both of which can have severe impacts on health. Analysis of more recent river flooding in the UK shows that mental health problems are the most important health impact among flood victims due to experience of personal and economic loss and stress^{xxiii} and; UV exposure and Vector-borne diseases.

Climate change and its impact on health may put additional strain on the UK health care system, it is also widely acknowledged that the health impacts of climate change can be minimised by building climate change considerations into the UK's health and social care infrastructure. Targeting improvements in health and social services at the most at risk groups – for example by improving social services for elderly people homes – may also help to reduce the potential health impacts of climate change. Such initiatives could form part of a more holistic risk management approach to climate change issues. It is important that the LTP3 considers how access to these services may be improved.

2.14.2 *Transport and Infrastructure*

All built structures such as bridges, promenades, pylons, roads and railway lines will become more vulnerable to higher winds, flooding, storm events and soil moisture changes. Some roads near the coast and near rivers will also be susceptible to increased risk of flooding. Roads in general may be impacted upon by changes in temperature and damage to rural roads and overloading of sewers may also become more commonplace.

Some coastal villages and towns are easily cut off during storm conditions because most have only one access route in and out of the settlement e.g. Swanage, Ringstead, Charmouth and Portland.

Other potential impacts of climate change on transport include:

- higher winter temperatures could mean less icy roads in winter with the concomitant reduction in ice related road accidents and the need for gritting or salting,
- the Highways Agency and Highways Authorities have considered the issue of increased frequency of intense rainfall events and the need to develop the capability of the carriageway to cope with excess water,
- the rail network within the sub region is limited and not considered to be particularly at particular risk, other than perhaps from an increased risk from land slips,
- air transport (based at Bournemouth Airport) is unlikely to be affected directly.

xxiv

The Met Office is currently undertaking a study to identify the impacts and vulnerabilities of Dorset's Highways Network to climate change. In this project, climate risks, priorities and plans for the assessment phase will be identified; key current and future vulnerabilities will be defined. These risks will then be assessed in more detail during future investigations. The Stage 1 report (identification of baseline & future climate risks) will be due by the end of April 2010 and these will be considered when producing the SEA Environmental Report and developing the LTP strategy options.

2.15 Cultural Heritage

Dorset has a beautiful and varied countryside and coastline, and numerous attractive small towns and villages. These have developed slowly over the centuries and are relatively unaffected by the events which have caused radical changes in other parts of the country. The pressures for change inherent in modern day life, lack of care and attention, and the natural processes of decay will, if unchecked, result in the gradual erosion and eventual destruction of the unique character of many of Dorset's towns and villages. Many people see these features as especially important to their quality of life and choose to live or visit the area because of them. Local public opinion surveys and community planning processes consistently confirm the importance of quality of life to local people.

There are 219 Conservation areas, 1,043 Scheduled Ancient Monuments and 36 Historic Parks and Gardens across the LTP area.

2.15.1 Conservation areas and listed buildings

Listed buildings are classified into three grades:

- Grade I buildings of exceptional interest, usually judged to be of national importance;

- Grade II*(known as two star) - particularly important buildings of exceptional interest and of outstanding importance;
- Grade II - other buildings of special interest, which warrant every effort to preserve them.

There are more than 13,000 listed buildings in Dorset and over 160 conservation areas of varying size and character. Dorchester, Bridport, Sherbourne, Lyme Regis, Wareham, Poole, Blandford Forum and Shaftsbury have the highest number of listed buildings within the Dorset sub region.

Bournemouth has 237 Listed Buildings and 21 conservation areas, Christchurch has almost 300 Listed Buildings (from which 6 are Grade I with the remainder being Grades II and II*) and the Borough of Poole has 21 conservation areas and over 200 Listed Buildings.

Borough of Poole also has two Listed Structures: Canford Main Bridge and Canford Flood Arches, both Grade II Listed Structures. The bridges are located to the south of Wimborne Minster at the boundary of the Borough of Poole and Dorset County Council highway areas.

Traffic can have a detrimental impact on conservation areas and listed buildings. Traffic can cause noise and visual intrusion, damaging the character of the conservation area. Exhaust gases, such as nitrous oxides, combine with water droplets in the atmosphere to produce acid rain which may damage the facade of the buildings within the area. Vibrations from heavy vehicles and high traffic flows can damage the integrity of the buildings. While the main factors affecting conservation areas may not be related to transport, the LTP has a role to play in reducing the growth in traffic and the associated impacts. The design of individual transport schemes also has the potential to have significant cumulative impacts on conservation areas.

2.15.2 *Scheduled ancient monuments*

Over 1,000 scheduled ancient monuments are dispersed across the Dorset sub-region, the vast majority of which are located in the Dorset area, outside Bournemouth and Poole. They are located more generally in the central parts of the LTP area, with some more profound concentrations existing to the south west of Dorchester and the coastal area between Weymouth and Swanage.

Transport has the potential to contribute to detrimental impacts on monuments. Exhaust gases from traffic such as nitrous oxides contribute to acid rain, damaging stonework, and new transport infrastructure schemes can directly harm monuments. The impact of the LTP strategy on any ancient monuments must be considered.

2.15.3 *Historic parks and gardens*

Generally, parks over 30 years old are considered to be "historic" although this does not necessarily make them of special historic interest. They are a valuable resource

which contribute positively to the landscape and can be enjoyed by the public. Their preservation is of importance to maintain the quality of the landscape and the quality of life of those who enjoy them. Since the 1980's the "Register of Parks and Gardens of special historic interest in England" has been maintained by English Heritage.

There are 37 registered parks and gardens across the Dorset sub region, including:

- Abbotsbury Gardens
- Sherborne Castle
- Dorchester Borough Gardens
- Poole Park
- Kingston Lacy
- Crichel House
- Anderson Manor
- Milton Abbey
- Compton Acres

The potential impacts of the LTP on parks and gardens may be either directly through individual schemes and their associated impacts of increasing traffic, resultant air pollutants and carbon emissions, or indirectly through influencing access to this resource.

Table 2-9 Indicators and Baseline Data

Indicator	National-	Regional South West	Dorset Sub region	Dorset (excluding Poole & B'm)	Poole	Bournemouth	Christchurch	East Dorset	North Dorset	Purbeck	West Dorset	Weymouth & Portland	Trend	Target	Data Sources
Environmental															
Number of Local Air Quality Management Areas (LAQMA)	N/A	N/A	3	N/A	0	1	0	0	0	0	2	0	Increasing	0	Bournemouth BC & West Dorset DC
Carbon dioxide emissions by sector and per capita emissions.	N/A	25,990kt	38% (1,878 kt)	N/A	332kt	388kt	110kt	230kt	170kt	118kt	263kt	140kt	No change in total emissions between 2005-2006, with the exception of East Dorset which almost halved and Christchurch which almost doubled. 4,640 kt of end user CO ₂ emissions were released in the Dorset sub region in 2007, a 3% (42 kt) decrease on the 4,803 kt released in 2005	Kyoto commitment to reduce emissions of six different greenhouse gases by an average of 12.5% compared with 1990 levels over the years 2008 to 2012	South West Observatory 2009 & Department of energy and climate change
a) domestic sources	N/A	33,381kt	35% (1,710 kt)	N/A	356kt	427kt	97kt	154kt	134kt	178kt	242kt	84kt			
b) industrial and commercial sources	N/A	23,583kt	27% (1,167 kt)	N/A	191kt	189kt	110kt	196kt	126kt	124kt	277kt	74kt			
c) transport	N/A	1,784kt	1% (28 kt)	N/A	0	0	12kt	6kt	6kt	9kt	40kt	2kt			
d) land use, land use change and forestry	N/A	1,784kt	1% (28 kt)	N/A	0	0	12kt	6kt	6kt	9kt	40kt	2kt			
Production of crude oil from Wych Farm (2006)	59,885,000 tonnes		865,000 tonnes	N/A	N/A	N/A	N/A	N/A	N/A	865,000 tonnes	N/A	N/A	Decreased from 4,475,000 tonnes in 1997	No Target	Dorset CC Data book 2008
Percentage of Non – Energy Minerals in Dorset Millions of Tonnes (2006)	N/A	N/A	1,811%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Decreasing	No Target	Dorset CC
a) Sand & Gravel															
b) Crushed rock			0.181%												
c) Ball clay			0.217%												

Indicator	National-	Regional South West	Dorset Sub region	Dorset (excluding Poole & B'm)	Poole	Bournemouth	Christchurch	East Dorset	North Dorset	Purbeck	West Dorset	Weymouth & Portland	Trend	Target	Data Sources
The percentage of river length assessed as (a) good biological quality;	72%	92	N/A	N/A	N/A	No Specific data River Quality Overall Good	86.8%	97%	94%	100%	83%	100%	Quality Improving	100%	Defra 2008 & South West Observatory 2009
(b) good chemical quality.	79%	89%	N/A	N/A	N/A	No Specific data River Quality Overall Good	100%	78%	64%	95%	98%	78%			
Bathing Water Quality	N/A	N/A	N/A	N/A	Excellent	Excellent	Excellent	N/A	N/A	Excellent/ Good	Excellent/ Good	Excellent	Remained the same with the exception of Lyme Regis (West Dorset) & Kimmeridge Bay (Purbeck)	Excellent	Environment Agency 2009
Total area of sites of special scientific interest (SSSI) land	N/A	N/A	19,994.38 ha	18,729.02 ha	1,021.34 ha	244 ha	1,142.56 ha	2,445.48 ha	838.67 ha	9,924.79 ha	3,574.14 ha	803.36 ha	N/A	N/A	Dorset CC Data book 2008
% area of land designated as SSSI within the local authority area in favourable condition; 2008	N/A	N/A	47.11%	47.64%	32.32%	68.44%	33.25%	14.76%	52.19%	49.88%	32.47%	47.20%	Improving	95%	Dorset CC Data book 2008
Change in areas designated for their intrinsic environmental value, including sites of international, national, regional, sub-regional or local significance: Loss	N/A	N/A	N/A	N/A	0	1.8ha	0	0	10.53ha	4.02ha	0	No Data	No Trend	No net loss of designated areas	The Dorset Environmental Records Centre (DERC) and Boroughs, Districts Annual Monitoring Report
Addition					Happy Bottom SNCI +0.07ha, Sandbanks SNCI +1.12ha	0	0	0	6.46 Todber Copse (3.15 hectares) and Jobs Hill (3.02 hectares)	17ha	11.56ha	No Data	No Trend	N/A	

Indicator	National-	Regional South West	Dorset Sub region	Dorset (excluding Poole & B'm)	Poole	Bournemouth	Christchurch	East Dorset	North Dorset	Purbeck	West Dorset	Weymouth & Portland	Trend	Target	Data Sources
Area of land designated as a Local Nature Reserve (LNC)	N/A	N/A	701.88 ha	245 .09 ha	157.55 ha	299.24 ha	72.43 ha	82.12 ha	5.72 ha	0.75 ha	67.46 ha	16 .61 ha	N/A	N/A	Dorset CC Data book 2008
Area of land designated as Special Area of Conservation (SAC)	N/A	N/A	12,773.01 ha	12,088 ha	615.22 ha	69.79 ha	432.47 ha	1,661.63 ha	325.55 ha	6,522.08 ha	2,501.77 ha	644.5 ha	Designated land increasing	N/A	Dorset CC Data book 2008
Area of land designated as Special Protected Area (SPA)	N/A	N/A	11,635.72 ha	10,624.84 ha	951.85 ha	59.03 ha	763.66 ha	1,709.52 ha	0	7,348.86 ha	675.64 ha	127.16 ha	Designated land increasing	N/A	Dorset CC Data book 2008
Area of land designated as RAMSAR	N/A	N/A	10,320.09 ha	9766.82 ha	529.69 ha	33.58 ha	636.70 ha	1,267.68 ha	0	7,059.64 ha	675.64 ha	127.16 ha	Designated land increasing	N/A	Dorset CC Data book 2008
Area of land designated as Site of Nature Conservation Interest (SNCI)	N/A	N/A	12,123.53 ha	11,732.54 ha	212.18 ha	178.65 ha	129.04 ha	1,805.85 ha	2,853.53 ha	1,920.92 ha	4,906.45 ha	115.89 ha	N/A	N/A	Dorset CC Data book 2008
% area of land designated as SNCI within the local authority area in favourable condition;	N/A	N/A	43.66%	43.38%	81.47%	17.26%	19.15%	37.56%	37.21%	26.02%	67.46%	16.61%	No trend	95%	Dorset CC Data book 2008
% of landscape areas designated Areas of Outstanding Natural Beauty	15%	27%	53%	55%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No Trend	N/A	Dorset CC Data book 2008
Environmentally Sensitive Areas	N/A	N/A	88miles (excluding Poole Harbour)	N/A	89 miles (Poole Harbour)	N/A	N/A	N/A	N/A	32 miles (Purbeck Heritage Coast)	25 miles (West Dorset Heritage Coast)	N/A	N/A	N/A	Dorset CC Data book 2008
Length of coastline and coastline designations	N/A	N/A	88miles (excluding Poole Harbour)	N/A	89 miles (Poole Harbour)	N/A	N/A	N/A	N/A	32 miles (Purbeck Heritage Coast)	25 miles (West Dorset Heritage Coast)	N/A	N/A	N/A	Dorset CC Data book 2008
Length of World Heritage Coast sections	N/A	N/A	71 miles (Dorset coast section)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Dorset CC Data book 2008

Indicator	National-	Regional South West	Dorset Sub region	Dorset (excluding Poole & B'm)	Poole	Bournemouth	Christchurch	East Dorset	North Dorset	Purbeck	West Dorset	Weymouth & Portland	Trend	Target	Data Sources
Grade 1 and 2* Listed Buildings at risk	N/A	N/A	N/A	N/A	No Data	No Data	0	3 h	No Data	No Data	6	N/A	No Trend	Removal of buildings of risk register	English Heritage Buildings at Risk Register 2008
Permitted loss of Grade 1 and 2 land (ha) Agricultural Land	N/A	N/A	N/A	N/A	No Data	No Data	0	0.23 ha	No Data	No Data	No Data	N/A	No Trend	No Loss	
Number of planning permissions granted contrary to Environment Agency advice on flooding and water quality grounds	N/A	N/A	N/A	N/A	No Data	0	0	0	0	0	0	0	No Trend	No development if refused by the EA	Environmental Agency 2008
Estimated traffic flows for all vehicle types (million vehicle km)	436,325	49,217	5454	3,814	823	817	No Data	No Data	No Data	No Data	No Data	No Data	Increasing	Reduce Traffic flows	Department for Transport
Percentage of new holiday accommodation and attractions within 800m of a public transport route	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	N/A	N/A	N/A
Economic															
% of persons unemployed for 12 months or more of working age	13%	9%	No Data	5%	5%	9%	No Data	No Data	No Data	No Data	No Data	No Data	Decreased over the last 10yrs	None Identified	Dorset CC Data book 2008
% of population with 5 or equivalent Grades A*- C in Math/English	46.7%	51.6%	No Data	49.8%	54.5%	48.2%	No Data	No Data	No Data	No Data	No Data	No Data	Varies across the County	None Identified	Dorset CC Data book 2008
The proportion of working-age population qualified to a) NVQ3 or above	45.3%	47.3%		47.6%	46.3%	48.3%	No Data	No Data	No Data	No Data	No Data	No Data	Increasing	100%	Dorset CC Data book 2008
Economic activity rate all working age 2008 a)total	74.2%	78.3%	78%	81%	80.2%	79%	71.6%	No Data	No Data	No Data	No Data	77.2%	Slight Decrease since 2006	100%	Dorset CC Data book 2008 Annual & LA's Monitoring Report 2008/09
b)In Knowledge		21%	21%	17%	21%	27%	26%	No Data	No Data	No Data	No Data	No Data	Slight	None Identified	

Indicator	National-	Regional South West	Dorset Sub region	Dorset (excluding Poole & B'm)	Poole	Bournemouth	Christchurch	East Dorset	North Dorset	Purbeck	West Dorset	Weymouth & Portland	Trend	Target	Data Sources
driven sector	24%												Decrease since 2006		
c) In leisure /tourism direct	4%	5%	6%	6%	8.2%	8%	4%	No Data	No Data	No Data	No Data	No Data	Slight Decrease since 2006	None Identified	
d) In distribution, hotels & restaurants	24%	26%	27%	6%	24.2%	4%	26%	No Data	No Data	No Data	No Data	No Data	Slight Decrease since 2006	None Identified	
e) Employment in agriculture and horticulture	0.7%	1.1%		2.0%	N/	N/	0.4%	1.7%	3.2%	2.6%	2.9%	0.1%	Decreasing	N/A	
Amount of tourism revenue from the Jurassic Coast (including Purbeck, West Dorset, Weymouth and East Devon) 2005	N/A	N/A	£100 million	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Economic, Social and Cultural Impact Study of the Jurassic Coast, 2008
Amount of night visitors per yr (Million)	N/A	N/A	16.3m	9.8m	2m	4.6m	0.8m	1.2n	0.8m	1.8m	3.1m	2.1m	No Trend	N/A	Dorset CC
Amount of day visitors per yr (Million)	N/A	N/A	13.7m	8.4m	2.2m	3.1m	0.8m	1.5m	1.0m	1.5m	2.6m	1m	No Trend	N/A	Dorset CC
Tourism spend % of local economy	N/A	N/A	10%	11%	6%	12%	9%	7%	7%	15%	12%	18%	No Trend	N/A	Dorset CC
Social															
Estimated Population statistics 2009	N/A	N/A	710,00	N/A	135,500	162,200	45,600	87,700	68,600	45,500	98,700	66,400	Increasing	No Target	Dorset CC Data book 2008
Estimated Population statistics 2029	N/A	N/A	778,100	N/A	140,500	170,900	50,000	97,200	81,800	48,900	114,400	74,400			
Life Expectancy Male 2004-2006 (yrs)	77.2	79	No Data	No Data	78.2	77.9	80.03	81.4	79.4	79.5	79.5	77.9	Increasing	No Target	Dorset CC Data book 2008
Life Expectancy Female 2004-2006 (yrs)	81.5	83.1	No Data	No Data	82.9	81.9	84.4	84.7	83.9	83.8	83.1	82.2	Increasing	No Target	Dorset CC Data book 2008
Indices of multiple	N/A	N/A	N/A	N/A	216	108	220	325	274	241	210	127	Varies across	None Identified	Dorset CC Data

Indicator	National-	Regional South West	Dorset Sub region	Dorset (excluding Poole & B'm)	Poole	Bournemouth	Christchurch	East Dorset	North Dorset	Purbeck	West Dorset	Weymouth & Portland	Trend	Target	Data Sources
deprivation super output areas in the county 2007 rank of 354 areas (1 being most deprived)													the County		book 2008
The percentage of residents surveyed who said they feel 'fairly safe' or 'very safe' outside a) during the day	N/A	N/A	N/A	N/A	88%	94%	94%	96%	95%	96%	97%	92%	Varies across the County	100%	Dorset Place Survey 2008 LA Annual Monitoring Report
b) after dark					37%	58%	61%	67%	70%	73%	77%	56%		100%	
Total crime per 1,000 populations 2007/2008	England & Wales 100.2	86.4	78.6	60.0	46	67	60.5	42.6	41.4	57.3	56.9	107.8	Increasing since 1995	Reduce crime	Dorset CC Data book 2008/ Public health report 2008 B'm & Poole
a) Total road accidents – KS1	397	368	N/A	442	403	420	9	29	23	27	16	6	Higher than the South West average	40% reduction in the number of people killed or seriously injured (KSI)	Dorset CC Department for Transport Southwest Observatory 2008
b) Total road accidents – Children	2,779	185	N/A	No Data	48	358	No Data	No Data	No Data	No Data	No Data	No Data	Higher than the South West average	50% reduction in the number of children killed or seriously injured	
c) Total road accidents – slight injury	No Data	No Data	N/A	8308	No Data	3503	52	89	78	53	114	60	Decreasing in line with Government target	10% reduction in the slight casualty rate	
d) % of total pedestrian road accident casualties	No Data	No Data	N/A	7.06%	No Data	14%	No Data	No Data	No Data	No Data	No Data	No Data	Decreasing in line with Government target	No Target	Dorset CC Department for Transport Southwest Observatory

Indicator	National-	Regional South West	Dorset Sub region	Dorset (excluding Poole & B'm)	Poole	Bournemouth	Christchurch	East Dorset	North Dorset	Purbeck	West Dorset	Weymouth & Portland	Trend	Target	Data Sources
e) % of total cyclist road accident casualties	No Data	No Data	N/A	4.60%	No Data	15%	No Data	No Data	No Data	No Data	No Data	No Data	Decreasing in line with Government target	No Target	Dorset CC Department for Transport Southwest Observatory
% of residents who think that the following aspects of their area most in need improving:	N/A	N/A	N/A	46%	42%	34%	46%	51%	49%	49%	43%	42%	Increased concern – top 3 priorities among Districts & Boroughs	No Target	Dorset , B'M & Poole Place Survey's 2008 B'M
a) activities for teenagers;															
b) levels of traffic congestion			N/A	41%	52%	47%	58%	42%	28%	38%	34%	53%	Increased concern – top 3 priorities among Districts & Boroughs	No Target	Dorset , B'M & Poole Place Survey's 2008 B'M
c) road and pavement repairs			N/A	38%	36%	37%	39%	36%	34%	49%	42%	40%	Increased concern – top 3 priorities among Districts & Boroughs	No Target	Dorset , B'M & Poole Place Survey's 2008 B'M
d) public transport			N/A	37%	30%	20%	33%	51%	34%	35%	42%	40%	Remained the same	No Target	Dorset , B'M & Poole Place Survey's 2008 B'M
e) Levels of crime			N/A	18%	22%	30%	No data for individual districts	No data for individual districts	No data for individual districts	No data for individual districts	No data for individual districts	No data for individual districts	Remained the same	No Target	Dorset , B'M & Poole Place Survey's 2008 B'M
f) sport and leisure facilities;			N/A	16%	14%	12%	No Data	No Data	No Data	No Data	No Data	No Data	Consistently not considered as high priority	No Target	Dorset , B'M & Poole Place Survey's 2008 B'M
g) level of pollution			N/A	6%	9%	8%	No Data	No Data	No Data	No Data	No Data	No Data	Consistently not considered as high priority	No Target	Dorset , B'M & Poole Place Survey's 2008 B'M

Indicator	National-	Regional South West	Dorset Sub region	Dorset (excluding Poole & B'm)	Poole	Bournemouth	Christchurch	East Dorset	North Dorset	Purbeck	West Dorset	Weymouth & Portland	Trend	Target	Data Sources
h) access to nature			N/A	2%	4%	3%	No Data	No Data	No Data	No Data	No Data	No Data	Consistently not considered as high priority	No Target	Dorset , B'M & Poole Place Survey's 2008 B'M
i) parks and open spaces.			N/A	8%	8%	8%	No Data	No Data	No Data	No Data	No Data	No Data	Consistently not considered as high priority	No Target	Dorset , B'M & Poole Place Survey's 2008 B'M
J) cultural facilities (for example, cinemas, museums)			N/A	7%	8%	8%	No Data	No Data	No Data	No Data	No Data	No Data	Consistently not considered as high priority	No Target	Dorset , B'M & Poole Place Survey's 2008 B'M
Area of open space permitted to be converted to other uses	N/A	N/A	N/A	N/A	No Data	No Data	No Data	0	No Data	No Data	No Data	No Data	No Trend	None Identified	East Dorset Annual Monitoring Report
Major additional open space land provided in association with other development	N/A	N/A	N/A	N/A	No Data	No Data	No Data	0	No Data	No Data	No Data	No Data	No Trend	No Target	N/A
Age standardised mortality rates for a) all cancers 2006 (yrs)	27.6	N/A	N/A	29.3	26.8	25.9	No Data	No Data	No Data	No Data	No Data	No Data	No Trend	No Target	Dorset CC Data book 2008
b) circulatory diseases 2006 (yrs)	34.7	N/A	N/A	36.3	34.5	34.8									
c) respiratory diseases 2006 (yrs)	13.7	N/A	N/A	12.3	13.7	12									
% of overweight/obese children a) age 4-5yrs	22.8%	N/A	N/A	22.6%	24% (Statistics are for both Poole & B'm combined)	24% (Statistics are for both Poole & B'm combined)	27%	20%	19.5%	24%	24%	25%	Poole & B'm increased Dorset Districts levels remaining stable		Dorset County Council 2009 & Joint Strategic Needs Assessment / Public health report 2008
b) age 10- 11 yrs	28.9%	N/A	N/A	27%	28.1% (Statistics are for both Poole & B'm combined)	28.1% (Statistics are for both Poole & B'm combined)	27%	26.5%	26%	29%	30%	30%	Stable		
The percentage of the resident population who travel to work: a) by private motor	N/A	77 %	61.2%	N/A	62.8%	58.2%	64.5%	70.3%	No Data	61%	58%	55.4%	No Trend		Census 2001

Indicator	National-	Regional South West	Dorset Sub region	Dorset (excluding Poole & B'm)	Poole	Bournemouth	Christchurch	East Dorset	North Dorset	Purbeck	West Dorset	Weymouth & Portland	Trend	Target	Data Sources
vehicle															
b) by public transport	N/A	6%	4.0%	N/A	6.3%	8.9%	5.6%	2.1%	No Data	3.5%	3%	9.1%	No Trend		
c) On foot or cycle.	N/A	15%	No Data	N/A	Cycle: 4.4% Walk : 8.8%	Cycle : 4% Walk 11%	12.6%	No Data	No Data	14.8%	17%	16.1%	No Trend		
The % of the resident population travelling 20 km < 30Km work	5.4%	N/A	N/A	N/A	1.1%	No Data	2.3%	2%	No Data	5.2%	No Data	1.76%	No Trend		Census 2001
Total km of new cycle routes during monitoring period	N/A	N/A	N/A	N/A	1.64km	No Data	No Data	No Data	No Data	No Data	No Data	No Data	None	None	
% of households within walking distance of hourly daytime bus service	N/A	N/A	N/A	N/A	99.8%	No Data	92%	66%	41%	81%	80%	100%	Increasing	100%	Census 2001
% of new residential development within 30 minutes public transport time of a: GP					100%	No Data	No Data	96.71%	95.7%	99.33%	99.37%	No Data	Increasing	100%	Individual LA Annual Monitoring Report 2008/09
Hospital	N/A	N/A	N/A	N/A	89.6%	No Data	No Data	89.47%	82.5%	62.66%	93.74%	No Data	Increasing	100%	
Primary School					100%	No Data	No Data	97.37%	97.6%	99.33%	99.81%	No Data	Increasing	100%	
Secondary School					100%	No Data	No Data	78.95%	79.2%	60.66%	84.81%	No Data	Increasing	100%	
Employment Centre					No Data	No Data	No Data	92.76%	92.4%	96.66%	65.53%	No Data	Increasing	100%	
% of population with 5 or equivalent Grades A*- C in math/English	46.7%	51.6%	N/A	49.8%	54.5%	64.1%	No Data	No Data	No Data	No Data	No Data	No Data	None Identified	None Identified	Dorset CC Data book 2008
The proportion of working-age population qualified to a) NVQ3 or above	45.3%	47.3%	N/A	47.6%	46.3%	48.3%	No Data	No Data	No Data	No Data	No Data	No Data	None Identified	None Identified	Dorset CC Data book 2008
% of people satisfied with local sports provision (all adults)	69.5%	68.5%	N/A	72.5%	50%	57.5%	78.3%	77%	65.4%	72%	72.5%	70%	None Identified	None Identified	Dorset CC Data book 2008
% of respondents who claim to undertake 30 minutes of moderate physical activity at least 3 days per	21%	22.5%	N/A	21.5%	20%	20.01%	20.3%	22.3%	24%	20.6%	20.4%	21.3%	None Identified	None Identified	Dorset CC Data book 2008

Indicator	National-	Regional South West	Dorset Sub region	Dorset (excluding Poole & B'm)	Poole	Bournemouth	Christchurch	East Dorset	North Dorset	Purbeck	West Dorset	Weymouth & Portland	Trend	Target	Data Sources
week															
Total annual average daily traffic on roads accessing the Jurassic Coast august flow 2007	N/A	N/A	37,400	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Increased from 35,480 since 2003	N/A	Dorset County Council 2007

3 References

ⁱ The Dorset Data Book 2008, Dorset County Council

ⁱⁱ <http://www.bournemouth.gov.uk>

ⁱⁱⁱ Whitehead 1993

^{iv} Improvement and Development Agency

^v Association of Public Health Observatories & Department of Health, 2009

^{vi} HEALTHY WEIGHT, HEALTHY LIVES: national child measurement programme Guidance for Primary care trusts 2009/10

^{vii} Audit Commission deprived Index of Multiple Deprivation (IDACI) 2007

^{viii} Dorset County Council 2007

^{ix} Bournemouth Borough Council

^x Defra 2009

^{xi} Dorset County Council 2009

^{xii} Dorset and East Devon Waterborne Transport Study Sept 2009

^{xiii} Bournemouth, Christchurch, East Dorset, North Dorset and Salisbury SFRA Strategic Flood Risk Assessment - Level 1 Executive Halcrow Group Limited 2008

^{xiv} A Poole & Christchurch Bays Shoreline Management Plan - Hurst Spit to Durlston head, Bournemouth Borough Council, November 2009, Consultation draft

^{xv} Environment Agency 2010

^{xvi} <http://www.airquality.co.uk/>

^{xvii} Dorset Tourism Data project using the Cambridge Economic Impact Model 2006 Geoff Broom Associates

^{xviii} South West Tourism Board 2005

^{xix} Economic, Social and Cultural Impact Study of the Jurassic Coast, 2008 - Dorset and East Devon World Heritage Site Steering

^{xx} South West Observatory 2009



^{xxi} Department of Energy and Climate Change 2009

^{xxii} Dorset Wildlife Trust 2009

^{xxiii} Tapsell S et al Vulnerability to flooding: health and social dimensions, Phil Trans R Soc Lond, 360, 1511-25, 2002

^{xxiv} South West Region Climate Impacts Partnership 'Warming to the Idea' January 2003,

www.dorsetwildlifetrust.org.uk