

MUNICIPAL WASTE MANAGEMENT STRATEGY FOR TORBAY **2007–2025**



Strategic Environmental Assessment: **Baseline Report**

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1 SEA Topic: Air

1.1 Air Quality in Torbay

- 1.1.1 Air quality in Torbay is generally good, meeting six out of seven air quality objectives specified in the Air Quality Regulations 2000 (as reported to DEFRA in March 2004). These objectives cover the following pollutants: carbon monoxide (CO), benzene, 1-3-Butadiene, lead, nitrogen dioxide (NO₂), sulphur dioxide (SO₂) and PM10 (PM10 stands for particulate matter below 10 microns in diameter).
- 1.1.2 The air quality objective that was not met in 2003-2004 was for nitrogen dioxide and was linked to one location close to a busy road. It is anticipated, however, that the air quality objectives in Torbay will be reached by their target date of 2010 in regard to the seven key pollutants, which include nitrogen dioxide.
- 1.1.3 The air quality figures have been established through monitoring in both temporary and fixed locations. Suspected problem areas were targeted for the sampling of nitrogen dioxide and are therefore likely to represent the worst figures for this pollutant, but more work is needed. In general terms, however, much more monitoring needs to be undertaken that may identify some other areas of poor air quality.

1.2 Sources of Air Pollution in Torbay

- 1.2.1 Torbay has relatively low levels of industrial activity and therefore traffic forms the main source of air pollution in the area, in particular levels of nitrogen dioxide. This is likely to remain a key issue as traffic flows are increasing in Torbay on average by 1.4% per annum¹. This problem is exacerbated in the summer months when roads are placed under additional strain by a high number of visitors and tourists.
- 1.2.2 The increase in traffic has led to a potential deterioration in air quality in a small number of areas, particularly roads where the close proximity of properties have led to a canyon effect, and in highly congested areas.
- 1.2.3 A monitoring exercise for nitrogen dioxide was carried out in Torbay in 2003 and placed 36 tubes on roads of highest traffic flows and congestion in close proximity to residential properties. The results of the study indicated that there were a number of areas that required further investigation² (see section 1.3 below)

¹ Torbay Council (Local Transport Plan 2001-2006) 'Annual Progress Report 2004

² Torbay Council (Local Air Quality Management) 'Detailed Assessment and Progress Additional Report November 2004

1.3 Air Quality Management Areas

1.3.1 Investigation undertaken during 2003/04 indicated that Hele Road was likely to fail its air quality objective. Other areas that were also close to failing the objective were Dartmouth Road in Paignton and the Bolton Cross area of Brixham. It is anticipated that all of these will experience a reduction in nitrogen dioxide by 2010 as a result of improved vehicle technology, although this may be overtaken by traffic volume increases.

1.3.2 Table 1.1 shows the results of five monitoring locations on Hele Road which were undertaken for a 12 month period during 2003/04³. Table 1.2 shows that even with the corrections made two areas were predicted to be failing the air quality objective for 2005, though not for 2010.

Table 1.1 Monitored and Corrected NO₂ Diffusion Tube Concentrations (Detailed Assessment and Progress Report - November 2004)

Location	NO ₂ Concentration (µgm ⁻³)	Bias Corrected (µgm ⁻³)
1	42.3	38.9
2	30.5	28.1
3	34.7	31.9
4	45.4	41.7
5	45.6	42.0

Table 1.2 Predicted NO₂ Diffusion Tube Concentrations (Detailed Assessment and Progress Report - November 2004)

Location	Predicted Concentration (µgm ⁻³) 2005	Predicted Concentration (µgm ⁻³) 2010
1	37.7	26.6
2	28.2	23.2
3	31.5	25.9
4	41.0	33.7
5	40.9	33.7

1.3.3 Following the submission of a detailed report to DEFRA in November 2004⁴ Hele Village was designated as an Air Quality Management Area (AQMA). The level of nitrogen dioxide here has exceeded that set by the Air Quality Objective. Monitoring using diffusion tubes was carried out along a stretch of Hele Road at various locations in order to monitor nitrogen dioxide levels. This problem is attributed to two main factors: an increase in traffic flows; and a localised canyon effect of houses and embankments that prevent dispersal of pollutants. The eastern extent of Hele Road experiences localised elevated levels of Nitrogen dioxide.

³ Torbay Council (Local Air Quality Management) 'Detailed Assessment and Progress Additional Report November 2004

⁴ Torbay Council (Local Air Quality Management) 'Detailed Assessment and Progress Additional Report November 2004

- 1.3.4 A permanent monitoring station was installed to determine nitrogen dioxide levels at different times during the day and to give an assessment of when the peak periods of nitrogen dioxide occur. The monitoring equipment has demonstrated that fluctuations in air quality correspond to changes in traffic flow, giving a more detailed picture of the level of pollution achieved.
- 1.3.5 Detailed traffic surveys have been carried out in the area and the local road network modelled in order to establish the effectiveness of various changes that could be made. Initial consultation with local residents was conducted in February 2005 followed up by further detailed consultation in September 2006 where a range of options, based upon the traffic modelling exercise, were presented for consideration and approval. A recommendation of 12 measures has been approved by the Council to address the Hele AQMA that will be introduced over a six month period. This will include an ongoing programme of monitoring so as to record the effectiveness of the measures undertaken.
- 1.3.6 Following monitoring of air quality in Brixham Town Centre throughout 2004 /05, the Bolton Cross area of Brixham was declared an Air Quality Management Area in 2006. This area is subject to detailed studies through the Brixham Central Area Transport Strategy, which is being developed in response to regeneration proposals for the town centre, including a review of car parking, new housing development, additional industrial facilities and a revised layout of the town square.
- 1.3.7 The Dartmouth Road area of Paignton has also been identified as an area of concern regarding air quality, showing levels of pollution very close to the threshold for an Air Quality Management Area declaration, and monitoring continues in this area.

1.4 Congestion Hotspots

- 1.4.1 The Torbay Local Transport Plan⁵ identifies current vehicle congestion hotspots in Torbay (2004), and predicted vehicle congestion hotspots for 2011, based on the Torbay Traffic Model which uses the transport modelling software SATURN⁶. Current and predicted vehicle congestion hotspots are shown in Figure 1.1 and Figure 1.2, with location names given in Table 1.3.

⁵ Torbay Council 'Local Transport Plan 2006-2011' March 2006.

⁶ Further details of methodology used to assess traffic growth available from www.torbay.gov.uk/torbay_saturn_model_-_final_draft_210605.pdf

Table 1.3 Location names of congestion hotspots in Torbay (see Figure 1.1 and Figure 1.2 for maps)

1) South of Kingskerswell	14) Avenue Road/Newton Road	27) Burton Street/Rea Barn Road
2) Rathmore Road/Torbay Road	15) Gallows Gate	28) Yalberton Road/Brixham Road
3) Abbey Road/Tor Church Road	16) Torquay Road/Manor Road	29) Totnes Road/Dartmouth Road
4) Abbey Gates	17) Browns Bridge	30) Dartmouth Road/Penwill Way
5) Falkland Road/Lucius Street	18) Kerswell Gardens	31) Cockington Lane/Torbay Road
6) Riviera Way/Newton Road	19) Churscombe Cross	32) Hyde Road/Torquay Road
7) Shiphay Road/Newton Road	20) Torquay Road/Cecil Road	33) Manor Road/Babbacombe Road
8) Tweenaways Cross	21) Barton Hill/Kingskerswell Road	34) Kings Drive/Torbay Road
9) Seaway Lane/Torbay Road	22) Bolton Cross	35) Whitstone Road/Dartmouth Road
10) Five Lanes	23) Belgrave Road/Torbay Road	36) Totnes Road/Fisher Street
11) Barton Road/Cricketfield Road	24) Windy Corner	37) New Road/Monksbridge Road
12) Scott's Bridge	25) Colley End Road/Kings Ash Hill	38) Great Western Road/Dartmouth Road
13) Lawes Bridge	26) Fisher Street/Dartmouth Road	39) Long Road/Brixham Road

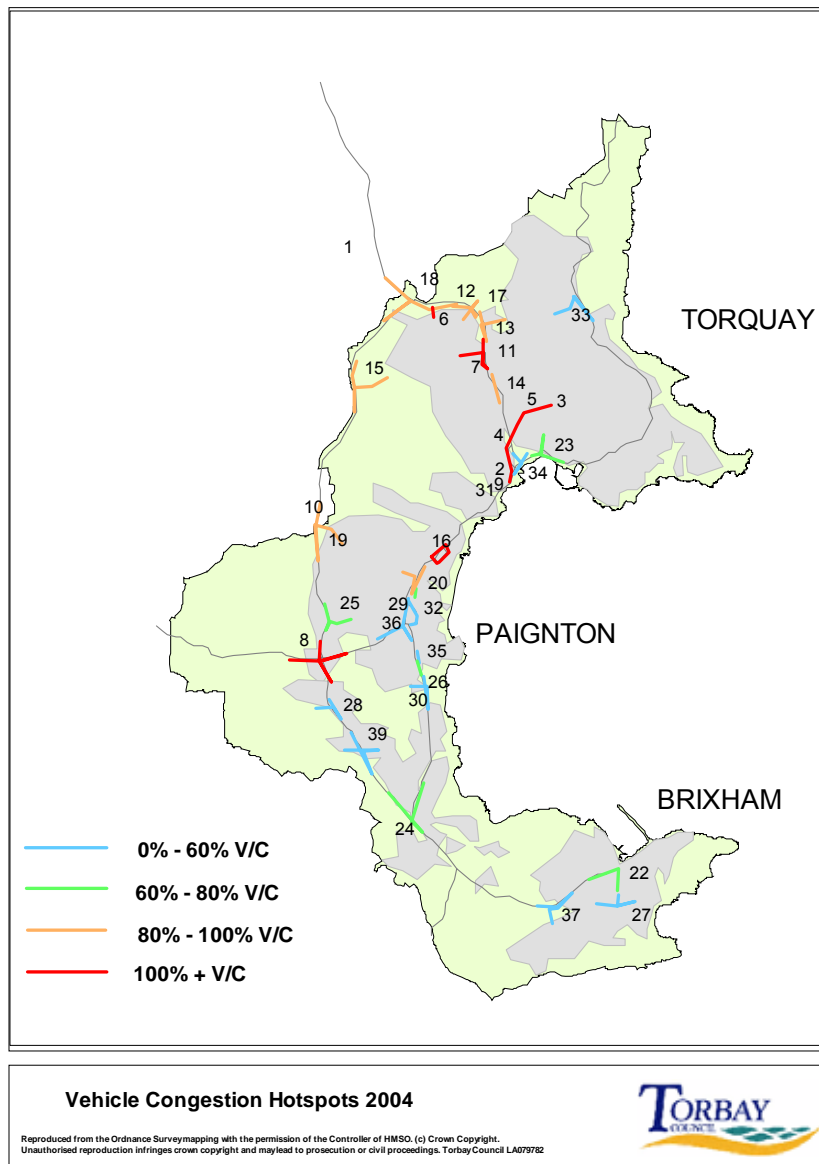


Figure 1.1 Vehicle congestion hotspots in Torbay 2004

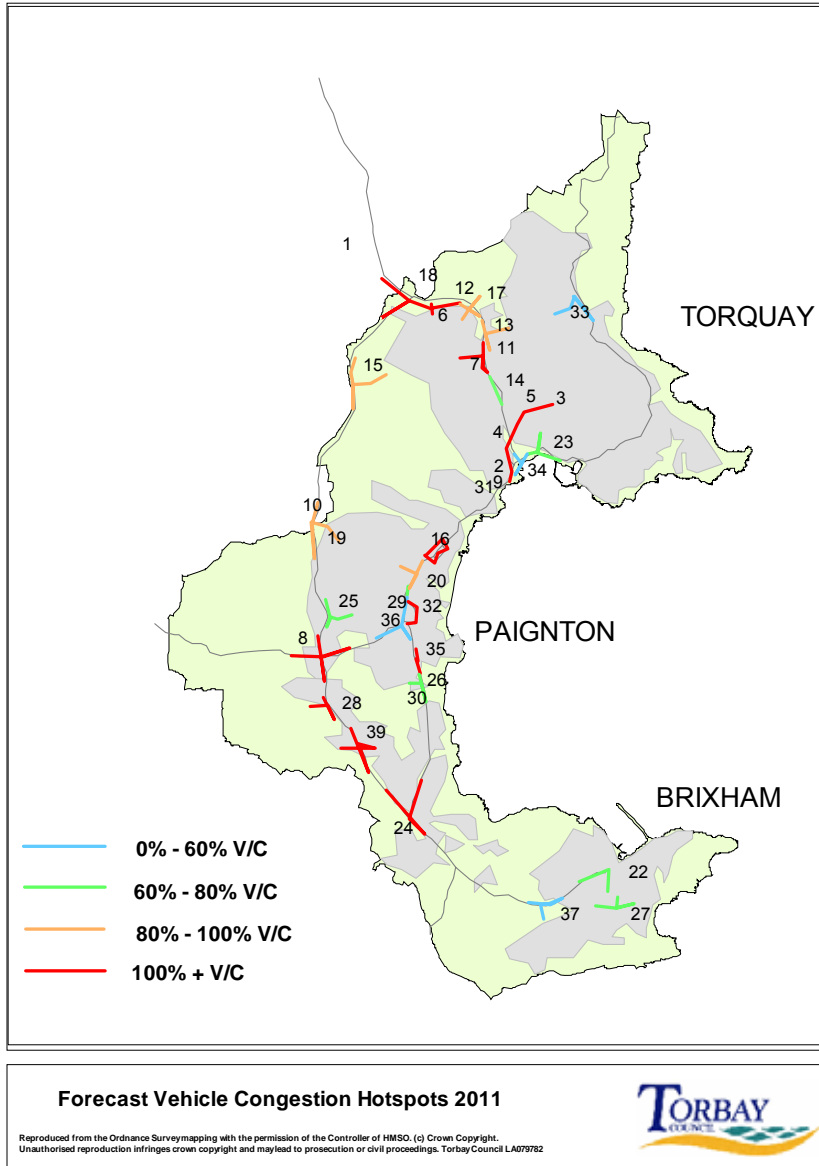


Figure 1.2 Forecast Vehicle Congestion Hotspots in Torbay for 2011

2 SEA Topic: Biodiversity, Flora and Fauna

2.1 The Regional Context

2.1.1 The South West of England is renowned for its high quality natural environment. As can be seen from Figure 2.1 a large proportion of the region is covered by environmental designations which serve to emphasise the high environmental quality of this area. In addition to those designated on the maps below the region is home to the largest concentration of built heritage in the country, a range of internationally important wildlife sites, 46 National Nature Reserves and 79 Local Nature Reserves⁷. The quality of its coastal environment is such that it comprises 60% of England's protected coastline.

2.1.2 Habitats that are particularly important in this region include calcareous grasslands (the South West has 62% of the UK total area), lowland heath, flower rich pastures, woodland cover and intertidal areas of mudflats and saltmarsh (important for over-wintering birds).

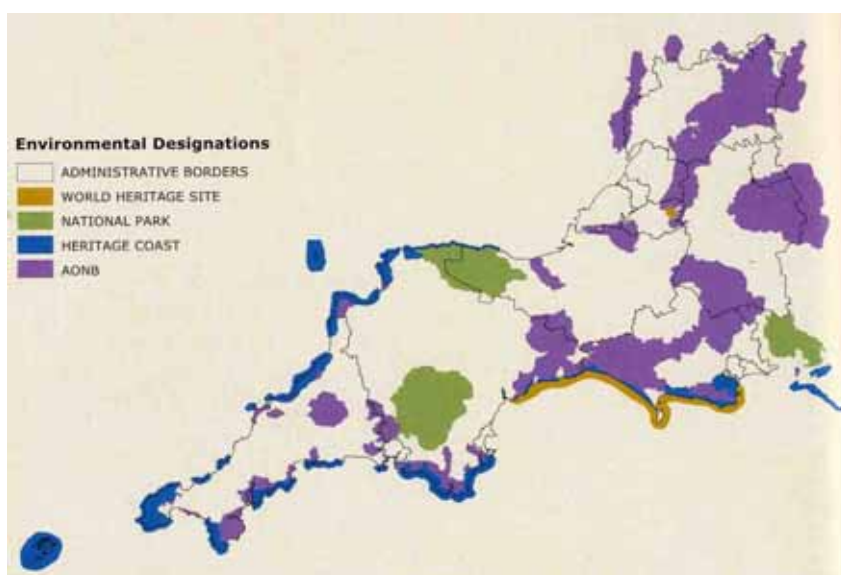


Figure 2.1 Environmental Designations of the South West⁸

2.1.3 The South West environment supports 700 species of national nature concern, 25 globally important species, and 11 species which are only found in the South West. Species of particular importance in the region include the Greater Horseshoe Bat, Sand Lizard, Pink Sea Fan, Cirl Bunting and Nightjar.

2.1.4 The Regional Strategy of the South West Environment 2004-2014 identifies some key issues which need to be addressed to maintain the environment in

⁷ SW Regional Assembly (2004) Our Environment Our Future: The Regional Strategy for the South West Environment 2004- 2014,

⁸ SW Regional Assembly (2004) Our Environment Our Future: The Regional Strategy for the South West Environment 2004- 2014,

the South West. These include concerns over the condition of Sites of Special Scientific Interest (SSSIs), loss of heathland and pressures on coastal habitats, changes to coastal geomorphology and fragmentation of habitats.

- 2.1.5 In addition to these are issues related to agricultural practices which have encouraged habitat fragmentation, decline in quality of SSSIs and a loss of farmland bird species. The latter is of particular concern as a decrease of 43% in farmland birds has been observed since 1970. This is the sharpest decline of any region. Focused projects have helped increase some populations but agri-environment schemes will hopefully help across the board.

2.2 The Local Context

- 2.2.1 Torbay is part of the South Devon Natural Area⁹ (as defined by English Nature) where the varied geology produces a diversity of coastal and inland habitats. This has led to recognition by English Nature that the area is one of the seven most important in England and Wales for rare plant species. The main habitats found in Torbay are outlined below, however it should be recognised that these should not be considered in isolation but as inter-dependent with each other. Links between these habitats provided by, for example streams and hedges, are essential in maintaining their long term survival.

- 2.2.2 **Calcareous grasslands:** Torbay has the most extensive stands of calcareous grasslands in Devon as a result of an outcrop of Devonian limestone stretching from Sharkham Point to north of Watcombe. This supports a large number of localised and nationally important species, for example White Rock Rose, Honewort and Small Hare's Ear. The most extensive areas are found at Walls Hill and Berry Head, both of which are protected by SSSI designations. Species which characterise calcareous grasslands can tolerate very low nutrient levels. They are particularly vulnerable to boost of nutrients (for example, by dog fouling) which has, in addition to trampling, caused degradation in areas such as Walls Hill. These rare species are also vulnerable to damage from scrub invasion often associated with retreat of agricultural activity to more profitable land. This has been further exacerbated by trampling and erosion. There are a number of nature conservation objectives for these habitats defined by English Nature's Natural Area Study of South Devon. These are outlined below:

⁹ English Nature (1998) 'South Devon Natural Area'

Nature Conservation objectives for species-rich grasslands

- 1) Maintain and enhance resources of species-rich grasslands plants and invertebrate communities through appropriate management and development control.
- 2) Encourage the extensification of grassland farming, both through targeted agri-environment schemes and more generally, with the aim of increasing the extent of species- rich neutral grassland within the Natural Area. Aim to link and extend existing sites where this does not conflict with other nature conservation objectives.
- 3) Foster greater understanding among farmers and other land managers of the value of species-rich grasslands, ensure that important road verges are managed appropriately.
- 4) Increase the opportunities of the public appreciation of this habitat.
- 5) Increase the quality and amount of this habitat.

2.2.3 Seacliff and cliff tops: Torbay's varied geology, sheltered aspect and mild climate results in a number of coastal plant and animal communities with Mediterranean affinities¹⁰. Cliff tops in the South Devon Area are under pressure from farming practices and lack of management which has led to an invasion of scrub and this is an issue in Torbay. Of equal concern are recreational pressures and loss of habitat to development. Maintenance of these cliff tops is essential as they are considered to be one of the most natural of England's habitats. The sea cliffs at Berry Head are home to one of the highest concentration of breeding sea birds in the South Devon Natural Area. This includes the Fulmars, Kittiwakes, Shags and the biggest colony of Guillemot on the Channel coast.

Nature Conservation objectives for sea cliff and top habitats:

- 1) Maintain through appropriate management, the existing extent of maritime grassland, heathland and other communities of interest.
- 2) Encourage the restoration of degraded or neglected sites to their former glory.
- 3) Seek to recreate lost maritime grassland and heathland habitat adjacent to existing areas.
- 4) Encourage an increase in Cirl Bunting numbers through appropriate management.
- 5) Ensure that coastal planning decisions allow for the maintenance of natural coastal processes and promote the use of 'soft' engineering techniques. This objective will be facilitated by the production of Shoreline Management Plan.
- 6) Promote application, interest and sustainable public enjoyment of the habitats, geology and landform features of the coastal areas.

English Nature (1998) South Devon Natural Areas

2.2.4 Heathland: There remains only one patch of heathland in Torbay at Berry Head which has a significant role as a rare habitat (limestone heath) of very high nature conservation value. The Wildlife Survey of 1991 states that this area is contracting in size due to gorse invasion. Management plans scheduled in the past have concentrated on scrub clearance and the recreation of open heathland. The area is currently classified as in Unfavourable Condition.

¹⁰ English Nature (1998) 'South Devon Natural Area'

2.2.5 **Farmland and hedgerows:** These areas play an important role in provision of wildlife in Torbay with agricultural land accounting for a third of Torbay's area¹¹. The intensification of agriculture is the key issue affecting these habitats. They are linked via ancient hedgerows and green lanes which offer potential for movement for flora and fauna, refuge and opportunities for recolonisation. A number of these of particular importance have been designated in the Torbay Local Plan (see figure 2.2).

2.2.6 National trends have indicated a loss of hedgebanks as a result of intensification of farming. This loss has not been so great in the South Devon Natural Area however there remain concerns over management of existing field boundaries as it is still felt to be problematic for nature conservation. This is largely linked to a lack of management of traditional field hedgerows which substantially reduces their ecological value. Traditional hedgerows support a number of species including Cirl Bunting and Dormouse (both protected species). Of concern is a decline in Barn Owls due to a loss of suitable hunting habitat (intensification of agriculture) and loss of breeding sites (old barns and farm buildings).

Nature Conservation objectives for farmland and hedgebanks:

- 1) Increase the availability of weedy winter stubbles for Cirl Bunting and other farmland birds.
- 2) Encourage the management of arable margins to benefit rare plants and declining farmland birds.
- 3) Encourage appropriate management of existing semi-natural grasslands and extensification of improved grasslands to benefit farmland biodiversity
- 4) Maintain overall numbers of hedgerows and hedgerow trees at least at current levels and halt the further loss of species rich hedges through neglect or removal.
- 5) Achieve favourable management of all species- rich hedges through publicity and the provision of advice.
- 6) Ensure the hedgebanks of the Natural Area remain a valuable habitat of the Dormouse and Brown Hairstreak.
- 7) Foster the public understanding and enjoyment of farmland wildlife.
- 8) Increase the quality and amount of information on farmland wildlife.

English Nature (1998) South Devon Natural Areas

2.2.7 The nature conservation value of these areas is being reduced by the increased use of autumn sown cereals causing a loss of cereal stubble. Neglect of hedgerows is also an issue. This is particularly significant for the Cirl Bunting population which faced a significant national decline in 1970 and further declines in 1989 where all but four pairs were found in South Devon¹². Torbay now has 10-12% of the UK population of Cirl Bunting with all the remaining population in the South Devon Area. Land management to encourage these birds includes providing low intensity mixed farmland with winter stubble and insect rich pastures with thick bushy hedges and scrub. Correct Management through Countryside Stewardship Schemes in the county indicated an increase

¹¹ English Nature (1998) 'South Devon Natural Area'

¹² 'Species Action Plan: Cirl Bunting'[WWW] www.ukbap.org.uk/ukplans (accessed 17/02/05)

of 85% in the Cirl Bunting population on stewardship land compared to 2% on non-stewardship land¹³.

2.2.8 **Woodland:** The Wildlife Trust's 1991 survey¹⁴ indicates that approximately 18% of undeveloped land in Torbay is woodland, of which 40 Ha out of the 532 Ha is ancient and therefore of the highest ecological value. These are found in Clennon Valley, Occombe Woods, Lupton Park and the Grove. Torbay's Ash/Maple woodlands growing on limestone soils are exceptional in Devon and their degraded condition is of considerable concern¹⁵. Threats to these woodlands relate mainly to invasion by alien species, encroachment from neighbouring development and intensive recreational use. Active management is required to resolve these problems.

2.2.9 Other woodlands in Torbay that are not classified as ancient semi-natural are often under equal pressure and their dependent species may be of equal value to the older established woodlands. Fragmentation of and encroachment into these woodlands is likely to damage Torbay's biodiversity.

Nature Conservation objectives for ancient woodland:

- 1) Maintain and enhance areas of ancient woodland in the Natural Area through ensuring appropriate management
- 2) Restore native tree cover to areas of ancient woodland planted with conifers
- 3) Encourage the integration of small woods into the local economy through sustainable timber production
- 4) Encourage the expansion and linking together of woodlands through the planting of new areas, where this does not damage existing habitat of nature conservation importance
- 5) Retain veteran trees and ensure the long term continuity of this habitat
- 6) Maintain important lichen and bryophyte communities through encouraging appropriate management
- 7) Maintain and, where possible, improve air quality across the Natural Area for the benefit of lichens and lower plants. This will largely be achieved as the result of National Strategies
- 8) Encourage the public appreciation and enjoyment of ancient woodlands
- 9) Increase the quality and extent of information on ancient woodlands in the Natural Area.

English Nature (1998) South Devon Natural Areas

2.2.10 **Urban Habitats:** Although much of Torbay is urbanised this does not mean these areas have little biodiversity value. Allotments, pockets of woodland, domestic gardens, ponds and dwellings all have ecological value each providing a variety of different habitats. Garden ponds, for instance, are known to provide one of the largest remaining reservoirs for amphibians in the UK¹⁶. A key issue in Torbay regarding urban habitats is the value of insect/invertebrate rich gardens which help many mammal and bird species. The intensive use of

¹³ 'South West Biodiversity Action Plan – Cirl Bunting Conservation Project' [WWW]

www.swbiodiversity.org.uk

¹⁴ Torbay Wildlife Survey, Devon Wildlife Trust (1991)

¹⁵ Dominic Acland, Director, Torbay Coast and Countryside Trust, Personal communication. March 2005

¹⁶ Dominic Acland, Director, Torbay Coast and Countryside Trust, Personal communication. March 2005

pesticides has reduced the value of gardens and the number of species feeding on invertebrates. Other problems include intensive recreational pressures, fragmentation, over-intensive management of public open spaces and highway verges, and the development of open space. New houses could consider their value to local wildlife by providing nesting opportunities for bats, Swift, Starling and the House Sparrow¹⁷. This is easy to do when houses are being built but expensive and difficult later. English Nature objectives for urban areas are set out below :

Nature Conservation objectives for urban areas:

- 1) Ensure no further loss of semi-natural habitats in urban areas and that new developments allow for areas of green space of value to wildlife.
- 2) Enhance the quality of existing urban wildlife habitats.
- 3) Encourage the creation of new wildlife habitats, including wildlife corridors, within urban areas.
- 4) Ensuring that buildings either remain of value or are designed to be of value to wildlife, particularly bats.
- 5) Ensure that native plants of compatible genetic stock are used where appropriate in landscaping and restoration projects.
- 6) To improve the opportunities for the general public and communities to experience, enjoy and appreciate the natural worlds within the urban areas, after all, most people spend most of their time in towns and cities.
- 7) Increase the quality and extent of information on urban wildlife and natural features.

English Nature (1998) South Devon Natural Areas

2.2.11 The Torbay Local Biodiversity Action Plan: The Local Biodiversity Action Plan (LBAP) for Torbay¹⁸ identifies objectives and actions for the conservation of priority habitats and species within Torbay. The document is being developed by the Torbay Biodiversity Steering Group in consultation with a wide range of local organisations and experts. Priority habitats identified in the LBAP are lowland calcareous grassland, urban, farmland, broadleaved woodland, parkland and veteran trees, maritime cliff and slope, wetlands, marine (see more details below) and earth heritage. The LBAP also contains species action plans for the following priority species: Cirl Bunting, Small Blue butterfly, Horseshoe bats, White Rock-rose, Seabirds, Seahorses, and Dolphins, Porpoises and Basking Sharks.

2.3 The Marine Environment

2.3.1 The marine environment provides habitats for a range of species including; soft muddy sands, limestone sublittoral communities, a high density of marine caves, the largest area of eelgrass in the Great West Bay, intertidal zones, under boulder sites and rocky ledges and boulders. The Torbay Marine

¹⁷ Kevin Rylands, Cirl Bunting Project Officer, RSPB South West Regional Office, Personal Communication, March 2005

¹⁸ The Nature of Torbay 2006-2016. A Local Biodiversity & Geodiversity Action Plan. Torbay Coast and Countryside Trust (2007)

Biodiversity Action Plan¹⁹ and the emerging Torbay LBAP²⁰ identify priority marine habitats and species as outlined below. Location of some key marine habitats are shown in Figure 2.2

- 2.3.2 **Littoral Rock and Sediment:** This zone, between tide marks is immersed during high tides and exposed during low tides. It is recognised as a Devon Priority Habitat and provides habitats for Honeycombe worm reefs and edible mussel beds. It is currently threatened by intense recreational pressures (e.g. rock pooling). Potential threats include development pressures, for example coastal defences existing into the littoral zone.
- 2.3.3 **Inshore Sublittoral Rock and Sediment:** These are national priority habitats, Devon Priority Habitats and are linked to the Commercial Marine Fish Species Action Plan. The species it supports includes Cuckoo Wrasse, Pollack, Bass, Leopard-Spotted Goby, Devonshire Cup Coral, Common Lobster and Common Spider Crab. Threats include: physical disturbance by the fishing industry, pipe and cable laying and sea defence construction; organic pollution (e.g. sewage); coastal protection works; discharge of contaminants and nutrient enrichment.
- 2.3.4 **Seagrass beds:** These habitats develop in intertidal and shallow subtidal areas of sand and mud and are National and Regional Priority Habitats. In Torbay the most extensive areas are found at Torre Abbey Sands and Elberry Cove. They provide habitats for seahorses and breeding grounds for cuttlefish and other fish species as well as important feeding areas for wintering sea birds. The main threats to these environments include disease, physical disturbance (trampling and dredging), increased turbidity, nutrient enrichment and marine pollutants.
- 2.3.5 **Marine Caves:** Torbay's marine caves provide habitat for a diverse range of fauna. Berry Head contains an extensive limestone cave system and several other caves in Torbay have also been noted for the presence of rare species. There is a lack of awareness and knowledge of marine caves and this habitat may also be threatened by pollution and disturbance.
- 2.3.6 **Dolphins, Porpoises and Basking Sharks:** The Bottlenose Dolphin is listed in Annex II and IV of the EC Habitats Directive. The harbour porpoise under Appendix II of CITES, Appendix II of the Bern Convention and Annexes II and IV of the EC Habitats Directive and protected under schedule 5 of the Wildlife and Countryside Act. The Basking Shark is also protected under the Countryside and Wildlife Act 1981 with its global status assessed as vulnerable in the 1996 IUCN (International Union for the Conservation of Nature) Red list. Harbour porpoises, Basking Sharks and seals regularly visit the bay as does a pod of 50 Bottlenose Dolphins. Dolphins are threatened by by-catches, physical damage caused by boat activity and contaminants.
- 2.3.7 **Seabirds:** Torbay is a nationally important area for winter roosting bird species such as the Red-throated Diver, Black-throated Diver, Great Northern Diver,

¹⁹ Torbay Marine Biodiversity Action Plan, Torbay Coast and Countryside Trust (2004)

²⁰ The Nature of Torbay 2006-2012 A Local Biodiversity & Geodiversity Action Plan, DRAFT, Torbay Coast and Countryside Trust (2006)

Great Crested Grebe, Red-necked Grebe, Slavonian Grebe, Black-necked Grebe and Common Scoter. It is also an important breeding site for the Common Guillemot colony at Berry Head which requires minimal disturbance during the breeding season and is recognised through its designation as an Area of Special Protection. All of these species are listed under the UK Birds of Conservation Concern schedule as red (globally threatened) or amber (unfavourable conservation status in Europe) (see figure 2.5). The main threats to these species include physical disturbance, anglers, gill nets, marine pollution and increased turbidity.

- 2.3.8 **Seahorses:** Torbay has populations of the Spiny Seahorse and the Short Snouted Seahorse, both of which are assessed as vulnerable in the IUCN Red List. Current concerns and threats relating to these species include a lack of awareness and information, and the threat of habitat loss e.g. seagrass habitats.

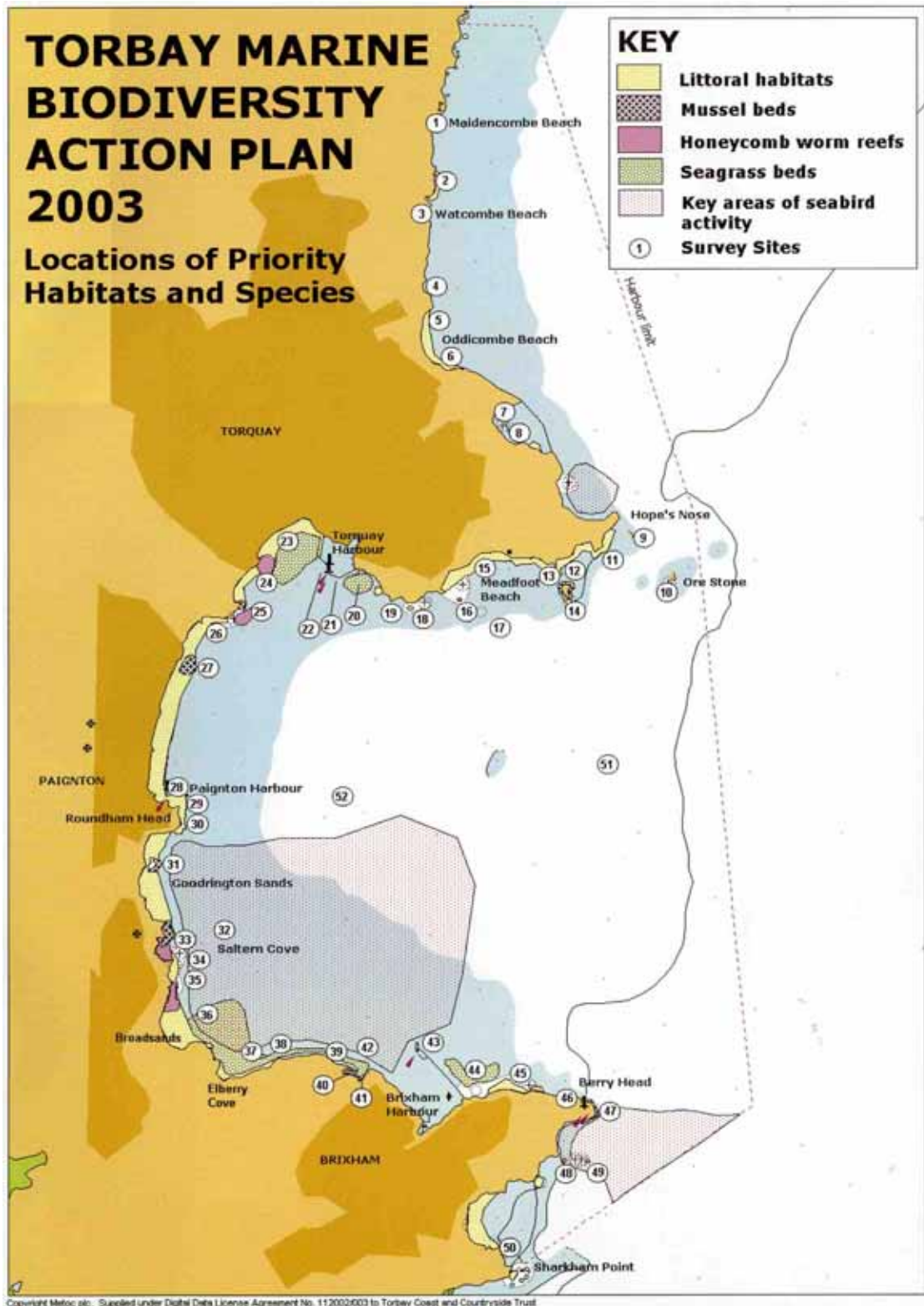


Figure 2.2 Key marine habitats of Torbay as identified in the Torbay Marine Biodiversity Action Plan. Location numbers relate to specific habitats and their associated species and are detailed further in the Torbay Marine Biodiversity Action Plan (2004)

2.4 Designated Areas in Torbay

2.4.1 Torbay contains a number of designations allocated at different levels from local to national and international. These are shown in Figure 2.3.

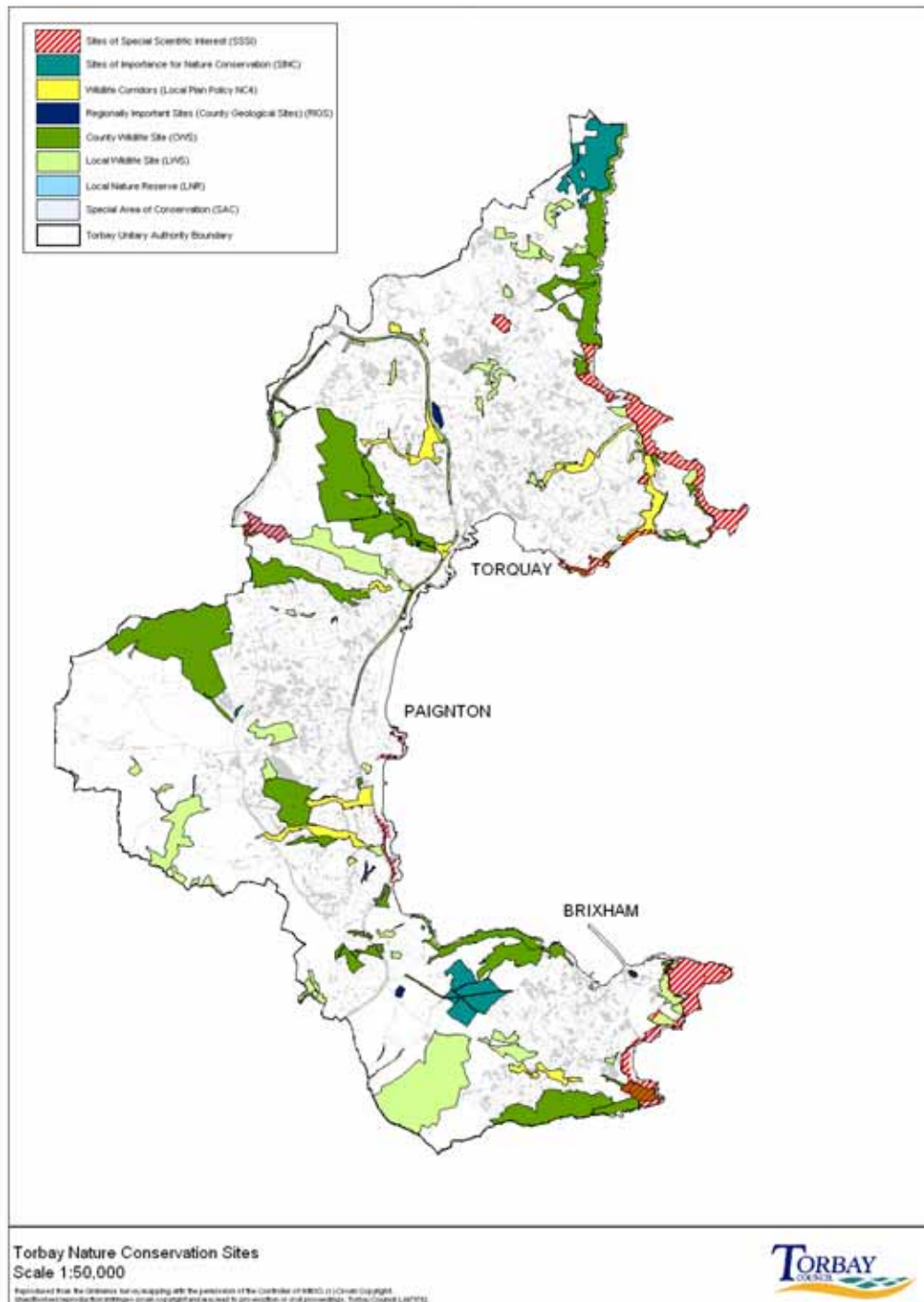


Figure 2.3 Map of designated areas within Torbay

- 2.4.2 Locally allocated sites include 50 Local Wildlife Sites (LWS) and 31 County Wildlife Sites (CWS) (see Figure 2.3 above). These non-statutory sites are important in retaining green open space which has a high nature conservation value and provides opportunities for the public to have access to and learn about wildlife. A 1998 review²¹ carried out survey work to identify the condition of those sites thought to be of concern, of which the majority required minor management (largely scrub clearance). This could be linked to a lack of awareness by landowners of the importance of such sites and the management required.
- 2.4.3 Of more concern was the recognition that two County and two Local Wildlife Sites were reduced in size over the period 1991-1998 and their continued inclusion as LWS or CWS has been brought into question. The sites were only identified as of wildlife importance after the Torbay Local Plan had designated them for housing. Three of the wildlife sites reduced in size as a result of pressure for housing development. Recognition of the importance of maintaining the number of breeding pairs of Cirl Bunting has increased over recent years. As the population has recovered the criteria for designating a site CWS has been amended from four breeding pairs up to six. This has resulted in the deletion of a further four County Wildlife Sites in Torbay as a result of an RSPB survey undertaken in 2002/2003.
- 2.4.4 Torbay also has four Local Nature Reserves (LNRs) at Occombe Valley Woods, Occombe Farm, Scadson Woods and Saltern Cove. Each is designated by Torbay Council and provides opportunities for people to learn about and enjoy these areas of local wildlife and their geological features. The Torbay Community Plan Action Plan²² aims to achieve the national target of one hectare of LNR per 1000 of the population by 2006.
- 2.4.5 Land to the east and west of Brixham is part of the South Devon Area of Outstanding Natural Beauty that stretches around the coast through Dartmouth, Ivybridge to Wembury, south of Plymouth. The area is recognised for its 'rugged cliffs, sandy coves, peaceful countryside, pretty villages, rolling hills, colourful hedgebanks and secretive estuaries'²³. The management plan associated with this area therefore aims to maintain this landscape and biodiversity whilst providing sustainable economic and social opportunities through careful management of farming, recreation, access, planning and developments.
- 2.4.6 Torbay has a number of Important Geological sites²⁴. There are six existing official RIGS (Regionally Important Geological Sites) with more pending approval. In Torbay the official RIGS are Quarry Woods Quarry in Cockington and Chapel Hill in Torre. In Paignton there are Goodrington Quarry and Road Cutting in Goodrington and Barcombe Mews Quarry in Shorton. In Brixham the

²¹ Torbay Wildlife Sites Review, Devon Wildlife Trust (November 1998)

²² Torbay community Plan Action Plan 2004 – 2007, Torbay Council (2004)

²³ South Devon AONB Partnership (2004) 'South Devon Area of Outstanding Natural Beauty: Management Plan 2004-2009'

²⁴ Kevin Page, Devon Regionally Important Geological Sites (RIGS) Group, Geologically Important Sites, Personal Communication, April 2005

RIGS sites are Breakwater Quarry in Brixham and Brokenbury Quarry in Churston Ferrers.

- 2.4.7 Torbay has 12 SSSIs (Sites of Special Scientific Interest) (see Figure 2.3) the condition of which is monitored by Natural England. The condition of SSSIs in the South West Region, Devon and Torbay is shown in Table 2.1. It is apparent from these figures that in comparison with Devon and the South West, Torbay's SSSIs are in relatively good condition with a higher proportion of area in favourable condition. Those areas in Torbay experiencing unfavourable conditions are generally noted to be in need of scrub clearance and increased grazing requirements. There is evidence of an improvement with much of over half of these areas in unfavourable recovering condition.

Table 2.1 Condition of SSSIs in the South West, Devon and Torbay²⁵

Area	%Area meeting Public Service Agreement target ²⁶	%Area favourable	%Area unfavourable recovering	%Area unfavourable no change	%Area unfavourable declining	%Area destroyed/ part destroyed
South West	79.20	51.43	27.77	14.55	6.15	0.10
Devon	78.47	40.88	37.59	14.72	6.80	0.02
Torbay	91.89	83.19	8.69	6.30	0.00	1.82

- 2.4.8 The cSAC (Candidate Special Area of Conservation)/ SAC (Special Area of Conservation) (see Figure 2.3 above) which stretches from Berry Head to Sharkham Point is designated under the European Habitats Directive for a number of reasons including the presence of Annex I Habitats (European dry heaths and Semi-natural dry grasslands and scrubland facies) and the largest UK population of Annex II species the Greater Horseshoe Bat. Within Torbay the colony of Greater Horseshoe Bats at Berry Head is the key issue of concern, particularly the amount of appropriate feeding habitat available to the colony and the specific temperature conditions in the main nursery roost. Because both of these are sub-optimal the colony is one of the least productive in England. Management effort is directed mainly at improving the amount of feeding habitat by providing traditional cattle-grazed pasture and hedgerows in the close vicinity. The redevelopment of the former Dolphin Holiday Camp is an example of how appropriate land management can support the colony at Berry Head. Detailed research has been carried out to map the colony's feeding areas, which lie within a 25km radius of Berry Head¹⁷.

- 2.4.9 Berry Head itself is a particularly sensitive area with a number of designations including Site of Special Scientific Interest, Area of Special Protection (to protect seabird colonies from disturbance by sea craft during breeding season) a Candidate Special Area of Conservation, a National Nature Reserve (for

²⁵ Condition of SSSI data from Natural England website <http://www.english-nature.org.uk/special/sssi/reportIndex.cfm> (Accessed 05.01.07)

²⁶ PSA (Public Service Agreement) target is to achieve 95% of SSSIs in favourable or unfavourable recovering condition by 2010.

importance in wildlife habitat and geological formations) and an Area of Outstanding Natural Beauty. The key biodiversity assets of Berry Head are outlined below²⁷ :

- Nursery colony and hibernaculum of Greater Horseshoe Bats (GHB) and their associated forage areas
- The largest colony of Guillemots on the Channel coast
- Calcareous grassland flora, with 9 nationally scarce species present
- Area of Outstanding Natural Beauty
- Submarine Caves

2.4.10 Torbay Coast and Countryside Trust took over the site in 2001 when it became a National Nature Reserve and gained lottery funding to carry out an in-depth study of the site. Its findings included:

- Conservation grazing needs to be extended over approximately 80% of the site (cattle and goats currently graze approx. 10%)
- The proliferation of signs, the current location of the car park and scrub invasion damage the landscape and need to be removed or relocated
- A new interpretation scheme is needed to improve people's understanding of the heritage, including a relocated Visitor Centre
- The Napoleonic structures need to be protected from damage by people and invasive plants

2.4.11 Based upon this work a comprehensive management plan for the site is currently being developed and this will set out a long term vision to protect these important assets.

2.4.12 In addition to land-based designations Torbay has a diverse marine life and has been designated as one of the 28 sensitive marine areas by English Nature. Its designations include:

- The underwater Local Nature Reserve and SSSI of Saltern Cove, designated as such for its marine geological features.
- Candidate Special Area of Conservation at Berry Head to Sharkham Point
- 6 coastal SSSIs
- Several coastal County Wildlife Sites

2.5 Protected Bird Species in Torbay

2.5.1 Torbay has many endangered bird species. The most endangered birds found in Torbay are those listed in Annex 1 of the EC Birds Directive, as shown in Table 2.2.

2.5.2 The wintering Divers, Grebes and Sea Ducks require safe undisturbed winter feeding areas between November 1st and April 1st from Goodrington South end of South Sands to Seven Quarries. This produces a conflict of interest with windsurfers, jet skiers and kite surfers. Fishing restrictions in this area would

²⁷ Coast and Countryside Trust [WWW] http://www.countryside-trust.org.uk/documents/Berry_Head_details_2005.doc (accessed 18/02/05)

also enhance the fish nursery and cut out the threat of birds being trapped in gill nets.

Species	Wintering	Breeding	Migration
Red-throated Diver	<input type="checkbox"/>		<input type="checkbox"/>
Black-throated Diver	<input type="checkbox"/>		<input type="checkbox"/>
Great Northern Diver	<input type="checkbox"/>		<input type="checkbox"/>
Slavonian Grebe	<input type="checkbox"/>		<input type="checkbox"/>
Balearic Shearwater			<input type="checkbox"/>
Storm Petrel			<input type="checkbox"/>
Little egret	<input type="checkbox"/>		<input type="checkbox"/>
Merlin	<input type="checkbox"/>		<input type="checkbox"/>
Peregrine	<input type="checkbox"/>	<input type="checkbox"/>	
Bar-tailed Godwit			<input type="checkbox"/>
Mediterranean Gull	<input type="checkbox"/>		<input type="checkbox"/>
Sandwich tern			<input type="checkbox"/>
Common tern			<input type="checkbox"/>
Arctic Tern			<input type="checkbox"/>
Little Tern			<input type="checkbox"/>
Black Tern			<input type="checkbox"/>
Kingfisher	<input type="checkbox"/>		
Woodlark	<input type="checkbox"/>		
Dartford Warbler	<input type="checkbox"/>		

Table 2.2 Annex 1 EC Birds Directive²⁸ Species found in Torbay

2.5.3 There are many more endangered bird species found in Torbay that are not on the Annex 1 list above. These include species that are listed as UK Birds of Conservation Concern (BOCC). Species listed on the BOCC Red List are shown in Table 2.3.

2.5.4 Species on the BOCC Amber list include Barn Owl, Cormorant, Dunnock, Fulmar, Goldcrest, Green woodpecker, Grey Wagtail, Guillemot, Herring Gull, House Martin, Kestrel, Kittiwake, Lesser black backed Gull, Meadow Pipit, Mistle thrush, Mute Swan, Peregrine, Shag, Stock Dove, Stonechat, Swallow, Willow Warbler.

²⁸ EC Birds Directive (79/409/EEC) 1979

Table 2.3 Torbay species on the UK Birds of Conservation Concern (BOCC) Red List

Species Name	Where found in Torbay	Management Requirements
Bullfinch	Throughout Torbay	
House Sparrow	Urban Areas and farmland	
Linnet	Coastal and farmland	Stubble fields in winter, conservation headlands for breeding
Skylark	Farmland	Stubble fields in winter, conservation headlands for breeding
Song Thrush	Throughout Torbay	Gardens with no pesticides or predator control (cats)
Spotted Flycatcher	No longer breeds – passage many areas	
Starling	Throughout Torbay	
Yellow Hammer	Farmland on outskirts of Torbay	Stubble fields in winter, conservation headlands for breeding
Cirl Bunting	Farmland	Low intensity mixed farmland, Stubble fields in winter

2.6 Summary

2.6.1 This section demonstrates the quantity and diversity of protected species found in Torbay and the extent of protected habitats. These protected areas are one of Torbay's great natural assets but they also provide a constraint in terms of land available for future development. Many protected species are at risk from human activity, especially changes to farming practices and the influence of the tourist industry.

3 SEA Topic: Climatic Factors

3.1 The Regional Context

3.1.1 'The last century was probably the warmest of the entire millennium' according to the South West Climate Change Impact Study (2003). Recent warming of our climate noted over the last 50 years has been attributed to increases in heat-trapping gases such as carbon dioxide and methane. There has been a global recognition of the need to reduce emissions for greenhouse gases in the future through the signing of the Kyoto Protocol.

3.1.2 If climate change continues in the South West at the current rate, by 2050 it has been estimated that the region will experience²⁹.

- Warming of 1-2.5 degree c
- 5-15% wetter winters and 15-30% drier summers
- Significant reduction in snowfall
- Increase in solar radiation levels in summer and autumn as cloud cover decreases
- Decrease in summer soil moisture
- Increased frequency and intensity of winter storms
- A rise in sea level of up to 19cm (relative to 1961 – 1990) by 2020, increasing to 80cm by 2080³⁰

3.2 The Local Context

3.2.1 There are a number of opportunities and challenges that present themselves in association with climate change. Those most relevant to the Torbay area are outlined below.

3.2.2 Torbay's coastal location makes it vulnerable to increases in stormy weather, coastal erosion and flooding associated with climate change. Current sea level rise is approximately 2.5mm per annum for Torbay. Of the 36km of shoreline within Torbay, 9km are defended against erosion, with the remaining 27km frontage consisting of natural undefended cliff. Erosion levels outside of the defended area averages 0.2m per year³¹.

3.2.3 The rise in sea level may cause a squeezing of biodiversity between sea and farmland or urban development as well as a possible migration of certain species such as the Honeycombe Worm northwards. Other species will thrive on warmer temperatures and longer breeding seasons.

²⁹ South West Climate Change Impacts Partnership (2003) ' South West Region Climate Change Impacts Scoping Study - Warming to the idea: Meeting the challenge of climate change in the South West'

³⁰ UK Climate Impact Programme (November 2005), Updates to Regional Net Sea – Level Change Estimates for the UK

³¹ Posford Duvivier (1998) Lyme Bay and South Devon Shoreline Management Plan

- 3.2.4 Change in fish stock numbers and composition as a result of increasing sea temperatures is potentially significant for the economy of the South West which comprises 42% of England's fishing operations. On a local level this has greatest implications for Brixham which is centred around the fishing industry.
- 3.2.5 A combination of increased urbanisation and storminess creates peaks of rain water runoff which have the potential to increase or cause new localised flooding threatening buildings, transport and communications. Torbay already has a history of fast flash floods in summer months³² linked to the high number of hard surfaces, steep topography and reduced lag time. It is likely that these flash floods will become more frequent and will extend to winter months due to increased frequency of winter depressions. There is a marked need to avoid development in areas of risk and encourage use of sustainable urban drainage systems (SUDS) to provide flood storage and reduced lag time. Further detail on areas susceptible to flooding is outlined in part 10 of this appendix.
- 3.2.6 Reduced water availability as summers become hotter and drier will require increased efforts for water conservation such as the installation of low water consumption fittings, rainwater harvesting and grey water recycling.
- 3.2.7 There are particular concerns over the accessibility of the rail link into Torbay which passes around the coast via Teignmouth and Dawlish from Exeter. The track is vulnerable to storm damage due to the proximity to the coastline which results in disruption to the line several times a year. This is likely to come under increasing pressure as global warming continues to increase storminess. This link carries high numbers of passengers providing vital transport for school children, those that work in Torbay and tourists visiting the area, helping to reduce dependency on the private car.
- 3.2.8 A need to design new buildings to maximise solar gain during winter months whilst providing cooling for predicted increased summer temperatures. This will apply to both business premises and residential buildings. Increased temperatures will also bring increased requirements for outdoor shading for buildings and public open spaces.
- 3.2.9 Hotter and drier summers bring threats of subsidence and disruption to buildings and services. They also have the potential to cause disruption of vital transport infrastructure such as roads and railway lines, which are designed for certain temperatures which, if exceeded, will cause buckling of railway lines and melting of tarmac.
- 3.2.10 Changing balance of energy demand will cause less demand for energy in the winter months but increased demand for power in summer months to supply cooling systems.

³² Torbay Council (2004) 'Review of flooding within Torbay'

- 3.2.11 Lifestyles may change with warm weather encouraging increasing numbers of people to walk and cycle, and increased demand for access to public open spaces, rivers and coasts³³.
- 3.2.12 Climate change could have positive effects including the potential for a night time economy and an extension of the tourist season potentially encouraging more people to favour domestic holidays over travel abroad. This could act to strengthen the tourism role of Torbay and its associated industries.
- 3.2.13 There may also be opportunities in agriculture to extend the growing season with warmer climates providing opportunities for new crop varieties such as grapes, maize and sunflowers.

3.3 Reducing Carbon Emissions through Sustainable Transport

- 3.3.1 Over a quarter of households in Torbay do not have a car or van. The average number of cars per household is lower than the national and regional average (see Table 3.1). The private car, however, still remains a popular mode of transport in Torbay. In 2003/2004 63% of trips to work in Torbay were by car³⁴. The 'Hands Up Survey' 2005 showed that 43% of school children are driven to school³⁵.

Table 3.1 Average number of cars per household

Area	Average No. of Cars per Household
England and Wales	1.11
South West	1.23
Torbay	1.05

- 3.3.2 Cars are a major contributing factor to carbon emissions. The reduction of this source in Torbay can be achieved through the use of alternative, greener forms of fuel (biofuels and electric) or by reducing car use altogether. The take up of green fuels has not been high locally so the emphasis has been placed largely on reducing peoples need to travel by car. This can be achieved through a series of different measures including encouraging use of public transport, walking and cycling as alternatives to using the private car.
- 3.3.3 Travel Plans are an important factor in promoting sustainable forms of transport throughout Torbay. These act to encourage schools and businesses to provide on-site facilities, promote walking, cycling, public transport use and car sharing schemes to decrease single passenger car use. Approximately 39% of

³³ Regional Assembly [WWW] <http://www.oursouthwest.com/climate/ccipleaflet.pdf> (accessed 16/03/05)

³⁴ Strategic Transport Team, Torbay Council

³⁵ Strategic Transport Team (2005) 'Hands Up Survey 2005' Torbay Council

students in Torbay are covered by school travel plans, with 2003-2004 introducing 5 new travel plans. An increasing number of schools are becoming involved in school travel plans including the new South Devon College. Occupation of this out-of-town site is subject to implementation of an appropriate travel plan to incorporate enhanced bus services, such as the 12A, cycle facilities and restrictions on parking.

Bus Services

3.3.4 Bus patronage has risen from 6,412,000 bus passenger journeys in 2002/03 to 6,498,000 in 2004/05. The target from the Torbay Local Transport Plan 2006 - 2011 is to achieve 8,035,000 passenger journeys by 2010/11.

3.3.5 The increase in bus patronage is likely to be linked to the following factors:

- Increased provision of public transport information through improvement in Travel Line Call Centre. This has led to an increase in number of calls to the Centre from 15,975 in 2001/2 to 36,310 in 2003/4.
- Improved bus infrastructure through an increase of 20 new bus stops, and improvements to 35 stops.

3.3.6 Further improvements are recognised as necessary in order to increase bus use. These include:

- Implementation of further bus priority schemes
- Introduction of multi-modal interchange for ease of use
- Further improvements are required to improve accessibility and quality of information
- A need to address public concern over personal security. Survey work indicates that this is discouraging bus use.

3.3.7 Customer satisfaction with bus services has improved since 2000 when 38% of bus users were satisfied with the service to 58% in 2003. It is anticipated that bus services will continue to be improved through the implementation of the Torbay Bus Strategy³⁶, designed to increase co-operation between the council and bus operators to achieve higher bus patronage.

Rail

3.3.8 Torbay is part of the mainline National Rail Network with services running via Newton Abbot. Torbay has three railway stations at Torre, Torquay and Paignton. This line has a vital role in sustainable transport for Paignton and Torquay bringing employees, school children and holidaymakers into the area. The service is regular running on an hourly basis for the majority of the day and half hourly at peak times. It is especially busy in the summer months when it takes additional holiday makers. Reliability of the train services has improved

³⁶ Torbay Council , Revised Torbay Bus Strategy 2005

over the three years from 91.1% in 2001/2002 to 98%³⁷ in 2003/4 with Wessex Trains meeting their service reliability targets.

- 3.3.9 Each of the stations have historic value (Grade II) but are in need of serious renovation. Torquay station in particular has been recognised as a potential location for a local transport interchange as part of a re-arrangement of layout at the station, and introduction of small business units. A step towards this interchange has been made through the provision of cycle parking facilities at Torquay station with further plans to introduce the same at Torre and Paignton within the financial year 2005-6. It is hoped that this will facilitate easier linked trips.

Cycling

- 3.3.10 The levels of cycling in Torbay are increasing and new indicators being developed to measure this over time at key locations. An English Regions Cycling Development Team Local Authority Audit³⁸ found that Torbay needed to improve its level of importance attached to cycling and the progress made towards its promotion and investment for infrastructure. Despite this, cycling in the Bay is increasing and Torbay Council was awarded 'Most Improved South West Authority' by the English Regions Cycling Development Team in 2004. However it is recognised that further work is required to increase funding for cycle infrastructure, further develop sections of the National Cycle Network, and promote cycling through for example schools and bike weeks. This will help to address the relatively low proportion (1.7%) of the working population who cycle to work (as of the 2001 census).

- 3.3.11 There are a number of physical barriers to cycle use in Torbay, the majority of which are common to many authorities. Such factors include the lack of cycle infrastructure (e.g. racks and dedicated cycle lanes), poor lighting, adverse weather and Torbay's naturally hilly topography. In addition to this there are a number of social barriers, including fears of safety, security of cycle racks and perceived danger of associated traffic. The majority of these physical and psychological barriers are common to a large number of authorities and reflect general problems with cycling as a whole. They are documented here as general points that will need to be addressed through the plan making process in order to increase cyclist numbers. The environment in Torbay is relatively safe for cyclists with the number of fatal and serious accidents in Torbay involving cyclists very low with only one recorded accident in 1998 and one in 2001.

Walking

- 3.3.12 Although many walk for pleasure there is a recognised need to increase the number of people walking as an alternative to the private car for short journeys. For example, parents driving children to school and those using the car for short journeys to work are significant generators of carbon emissions and congestion.

³⁷ Torbay Council (2004) Torbay Local Transport Plan: Annual Progress Report 2004

³⁸ English Regions Cycling Development Team Local Authority Audit (2003)

Such issues are being addressed through school travel plans and travel to work plans which encourage alternative means of transport, such as walking. At the time of the 2001 census, approximately 16% of Torbay's working population (53,547) walked to work.

3.3.13 Efforts to encourage people to walk have been aided by improvements in pedestrian footways. Those in good condition have increased from 70% in 2000/2001 to 76% in 2003/2004.

3.4 Renewable Energy

3.4.1 The South West region has huge potential for renewable energy sources and has been in the forefront of wind power schemes, housing the first ever commercial wind farm in Cornwall in 1991³⁹. In addition to this there are a number of smaller schemes for more unusual sources of renewable energy such as hydro sites, renewable energy plants for biomass, waste - to energy, ground sourced heat pumps, solar electric and solar water heating systems.

3.4.2 However at present grid connected renewable sources only supply 122MW of the South West's current generating power⁴⁰. This will need to be substantially increased in order to meet target RE1 of the draft Regional Spatial Strategy which aims for 509-611MWe of electricity generation to be derived from onshore renewable energy by 2010 and for 20% of the region's electricity capacity to be derived from renewable sources by 2020. This will have to be balanced against the need to retain the landscape, biodiversity, cultural and historic assets of the South West.

3.4.3 There are a number of barriers to improving the generation of renewable energy recognised by the Regional Renewable Energy Strategy for the South West of England⁴¹. These are outlined below:

- Some lesser-developed technologies are expensive to install e.g. biomass, combined heat and power (CHP), solar photo voltaic (PV) and wave power.
- Electrical network upgrade required to handle power from different sources.
- Small power generating projects can find connection to the local distribution system to be time consuming and costly. For example for those wishing to sell power from their own PV system, a new and costly upgrade to the electricity meter is required to allow electricity to be exported.
- Biomass fuel distribution is limited by a lack of heating networks and poor marketing.
- Electrical storage technologies need to be cheaper and more accessible in order that small scale and intermittent renewable energy suppliers can be more viable.

³⁹ Regen SW (2003) Regional Renewable Energy Strategy of the South West of England 2003-2010,

⁴⁰ Regen SW (2006) Renewable Energy Survey highlights poor performance from South West local authorities. Website accessed 19.01.07 (<http://www.regensw.co.uk/press/news-read.asp?id=50>)

⁴¹ Regen SW (2003) Regional Renewable Energy Strategy of the South West of England 2003-2010,

- 3.4.4 A lack of policy backing can result in applications for renewable energy schemes being too easily rejected. The Devon Structure Plan 2001- 2016 highlights a target of 151 MW of electricity to be produced through land based renewable sources by 2010. Its policy CO12 actively encourages provision of renewable energy development. The majority of the proposed wind energy schemes are located in North Devon. However plans have been put forward for small-scale schemes at Bradworthy (now in operation) and at Goveton, South Hams. There are no sites designated for wind based energy production along the South Devon coastline.
- 3.4.5 It should be recognised that in Torbay itself there are limited opportunities for development of wind energy due to the high proportion of urban areas and the high quality (of largely designated) landscapes which make up a significant proportion of the non-urbanised area. There remain opportunities for alternative technologies other than wind power. However these technologies, as recognised above, need further development over time in order to make them an economically viable and practical option. One such option is the recognised potential for wave and tide energy. Technology is being developed for such options through, for example a trial wave hub off North Cornwall to collect data on the potential of such means. Although this option is in early stages of development they should not be discounted from future use in areas such as Torbay, where wind farms may be impractical given the urban nature and landscape value of the area.
- 3.4.6 The most realistic option for Torbay to contribute to renewable energy in the immediate future is through adaptations to energy supply infrastructure to make renewable energy sources more accessible.

4 SEA Topic: Economic Factors

4.1 Introduction

4.1.1 In spite of its traditional prosperous image Torbay has some serious economic problems⁴². The economy of Torbay is largely dependent upon the Tourism Industry, sectors of which, such as long stay resort tourism, are in decline. This has led to a largely seasonal, low wage economy. Torbay has one of the lowest levels of income and economic output measured in Gross Value Added (GVA) per head both nationally and regionally. Unemployment although low in line with the general economy of the UK is still above the national average, especially male unemployment⁴³, and parts of Torbay show signs of severe deprivation⁴⁴.

4.1.2 In 2005 gross average annual pay per employee in Torbay was £17,110, only 81.8% of the South West and 71.5% of the England and Wales gross average income (refer to Table 4.1). The issue of low income levels has also been highlighted in a Viewpoint Survey in 2004 in which 67.7% of respondents felt that wage levels and local cost of living had got worse over the preceding 3 years⁴⁵.

Table 4.1 Gross Annual Pay (£) for all Employee Jobs, UK 2005⁴⁶

Note: The table shows adult rates of income for those in the same job for more than a year. This means that those people providing temporary and short term work were not included.

Authority/Area	Mean Gross Annual Earnings
West Devon	13,004
Torridge	13,152
Torbay UA	17,110
South Hams	17,123
Mid Devon	17,235
Teignbridge	17,792
East Devon	17,995
Devon	18,164
North Devon	18,624
Exeter	20,656
Plymouth UA	20,927
South West	20,919
England and Wales	23,916

4.1.3 In 2003 the Torbay Development Agency was created to promote economic diversification and regeneration. The agency embodied the tourism, marketing and economic regeneration activities previously provided by the former

⁴² Torbay Council Torbay Employment Land Monitor 2004

⁴³ Ibid.

⁴⁴ Torbay Council (2004) Adopted Torbay Local Plan 1995-2011

⁴⁵ Torbay Council Research Team (2004) Viewpoint 9 Survey: Satisfaction with Council Services'

⁴⁶ Office for National Statistics

Strategic Services Directorate. Regeneration priorities include job creation; start up of businesses and training⁴⁷ as well as a capital programme to regenerate the built environment and management of all maritime activities.

- 4.1.4 More positively, the Torbay Employment Land Monitor suggests a high level of economic activity with 4.4 hectares of employment land under construction. In addition there were planning permissions for up to 2,177 sq. metres of employment floor space in existing employment areas. This is a significant increase after years of relatively low construction on employment land.
- 4.1.5 VAT registration data from the Office of National Statistics (2003) indicates that Torbay has a higher than average rate of business start ups resulting in a net increase in businesses of 60 per year (390 registration and 330 deregistrations). This indicates a good level of entrepreneurship and economic health for the business population. Reducing the rate of business closures is an important way of increasing economic activity in Torbay⁴⁸.

4.2 Economic Output

- 4.2.1 In the three year period between 1995 and 1998 Gross Domestic Product (GDP) rose in line with the national average increase in percentage terms (18.3 % compared to UK 18.1%) but overall GDP was well below national and regional figures in terms of money per head⁴⁹. Recent information from ONS measured in GVA (GDP + tax - subsidies) is outlined in Table 4.2. This table shows how Torbay was still well below national and regional economic output by 2001.

Table 4.2 Economic Output in GVA per Head⁵⁰

	GVA £ per head				GVA £ per head (UK = 100)			
	1998	1999	2000	2001	1998	1999	2000	2001
Torbay	9,996	10,253	10,597	10,949	78	77	76	76
Cornwall (Isles of Scilly)	7,543	7,718	7,971	8,212	59	58	57	57
Plymouth	11,416	11,892	12,475	13,174	89	89	90	91
Bristol	17,917	18,432	18,949	19,450	139	138	136	135
Devon CC	10,002	10,258	10,537	10,897	78	77	76	76
South West	11,686	12,053	12,443	12,873	91	90	89	89
United Kingdom	12,858	13,369	13,917	14,418	100	100	100	100

- 4.2.2 Overall output in 2003 grew by 7.6%, compared with a national growth of 5.4%. This above average growth has helped reduce Torbay's income gap with the

⁴⁷ Torbay Council Torbay Employment Land Monitor 2004

⁴⁸ Torbay Council (September 2005) 'South West Regional Spatial Strategy', Torbay Council first detailed proposals (Technical Information and Related Research)

⁴⁹ Torbay Council (2004) Adopted Torbay Local Plan 1995-2011

⁵⁰ Office for National Statistics, Regional Trends 38

national average to 68.1%. These trends may indicate an upturn in Torbay's economy. Partly the reason for this is a growth in manufacturing in 2003.⁵¹

- 4.2.3 Table 4.3 below illustrates how the share of economic output in each sector has varied over time. The biggest changes have been in the manufacturing sector, which has experienced mixed fortunes. The biggest increase has been in the Real Estate/Business sector and the biggest overall decrease was in the Social Services sector during this ten year time period.

Table 4.3 Changes of Composition of Output in Torbay 1993-2003 (%)⁵²

Measured by Output	1993	1998	2003
Distribution	18.5	19.0	20.0
Real Estate/Business Activities	16.6	17.8	20.0
Hotels and Catering	14.7	13.1	13.1
Construction	6.1	7.6	8.0
Manufacturing	8.6	12.3	7.9
Health	6.0	6.6	7.7
Other Services	4.9	4.5	4.9
Social Services	6.3	4.8	4.8
Education	5.5	4.4	4.6
Public Admin/Defence/Social Security	4.3	3.3	2.9
Transport and Communication	2.9	3.1	2.7
Financial Services	2.9	2.1	2.0
Electricity/Gas/Water	1.2	0.4	0.7
Fishing	0.8	0.6	0.6
Mining and Quarrying	0.1	0.1	0.1
Agriculture/Forestry	0.3	0.1	0.1
Sanitary Services	0.4	0.1	0.1
Gross Added Value at Basic Prices	100.0	100.0	100

- 4.2.4 According to the English Indices of Deprivation 2004 (Revised), 7% of the Torbay population (just over 9,000 persons, nearly 4,000 households) live in an area within the top 10% most deprived in England on the Rank of Income Deprivation. These include parts of Torquay and Paignton Town Centres, Queen Elizabeth Drive in Paignton and Hele and Barton in Torquay. 16% of the Torbay population live in an area within the top 20% most deprived areas on the Rank of Income Deprivation. Torbay ranked 95th out of 354 local authorities in England for income deprivation, just outside the top 25%⁵³. The Indices of Deprivation are based on various indicators, including numbers of people receiving state benefits. The Indices may understate the degree of deprivation that exists in small pockets of Torbay as they reflect absolute numbers rather than averages.

⁵¹ O.Nankivell (2005) 'The Torbay Economy 1993-2003 : Repairing the Damage' (Torbay Council web site)

⁵² O.Nankivell (2005) 'The Torbay Economy 1993-2003 : Repairing the Damage' (Torbay Council web site)

⁵³ The English Indices of Deprivation (Revised) ODPM, Key findings for Torbay, 2004

4.2.5 Torbay has 7 Super Output Areas (SOAs) which are ranked in the top 10% most employment deprived in England. They include 5,300 households in areas such as Tormohun, Ellacombe and Wellswood in Torquay and Roundham with Hyde in Paignton. These indices take into account unemployment, disability allowance, incapacity benefit and the New Deal scheme¹⁰.

4.3 Employment Structure

4.3.1 Table 4.4 is based on the UK Standard Industrial Classification of Economic Activities. From this data 'Wholesale and Retail trade and Repairs' would seem to be the largest employment sector, followed by 'Manufacturing'. Due to this categorisation, the dominance of the tourist industry is not immediately apparent. Data from the Torbay Local Plan 1995-2011 based on the 1997 Survey by the ONS, groups together Hotels, Restaurants and Distribution which then accounted for 32.56% of employment, and made this the largest sector⁵⁴.

Table 4.4 Sex and Industry by Employment Status and Hours Worked⁵⁵ (Table Population: All people aged 16 to 74 in employment the week before the Census)

<i>Economic Sector</i>	Total	Gender		Male		Female	
		Male	Female	Full Time	Part Time	Full Time	Part Time
Agriculture, Hunting and Forestry	488	379	109	82.6%	17.4%	47.7%	52.3%
Fishing	193	175	18	88.6%	11.4%	33.3%	66.7%
Mining and Quarrying	73	67	6	95.5%	4.5%	100%	0%
Manufacturing	7,860	5,723	2,137	95.4%	4.6%	76.4%	23.6%
Electricity, Gas and Water Supply	302	261	41	96.6%	3.4%	85.4%	14.6%
Construction	4,224	3,938	286	94.6%	5.4%	57.3%	42.7%
Wholesale and Retail Trade, Repairs	9,902	5,049	4,853	83.0%	17.0%	41.3%	58.7%
Hotels and Restaurants	5,504	2,546	2,958	78.3%	21.7%	50.0%	50.0%
Transport, Storage and communications	2,969	2,175	794	90.2%	9.8%	65.6%	34.4%
Financial Intermediation	1,118	454	664	95.4%	4.6%	66.0%	34.0%
Real Estate, Renting and Business	4,573	2,471	2,102	84.0%	16.0%	54.4%	45.6%
Public Admin and Defence, Social Security	2,447	1,363	1,084	92.00%	8.00%	68.2%	31.8%
Education	3,369	916	2,453	75.7%	24.3%	44.3%	55.7%
Health and Social Work	7,508	1,507	6,001	81.9%	18.1%	51.1%	48.9%
Other	2,975	1,420	1,555	75.4%	24.6%	51.4%	48.6%
Torbay totals	53,505	28,444	25,061	87.4%	12.6%	52.6%	47.4%

⁵⁴ Torbay Council (2004) Adopted Torbay Local Plan 1995-2011

⁵⁵ Office for national Statistics, 2001 Census Data

4.3.2 The dominance of each employment sector can be more easily reviewed in graph form in Figure 4.1. The values of each employment sector are expressed as percentages of the total working population aged 16 to 74.

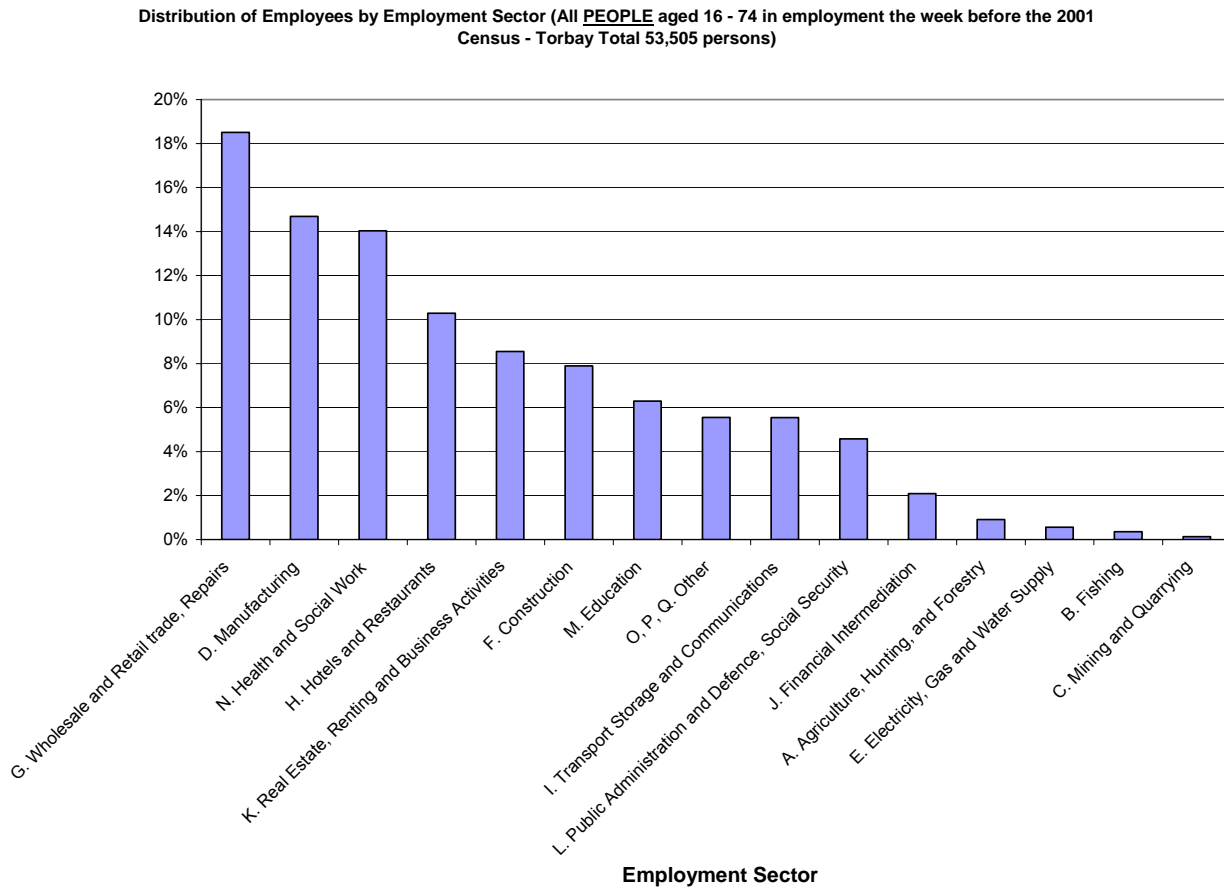


Figure 4.1 Distribution of employee by employment sector (All people aged 16-74 in employment the week before the 2001 Census. Torbay total 53,505 persons)⁵⁶

4.3.3 Figure 4.2 demonstrates the proportions of each socio-economic group within Torbay. The largest sectors, apart from those that were unclassifiable, were: lower managerial / professional occupations and semi-routine occupations. Small employers/ own account workers (this group mainly contains the self-employed) and routine occupations are also significantly large groups. The retired and those looking after a home, training schemes, sick or disabled are classified according to their former occupations. The relatively small proportion of higher professional occupations would accord with the trend for the South West as a whole to be a net exporter of graduates.

⁵⁶ Office for national Statistics, 2001 Census Data

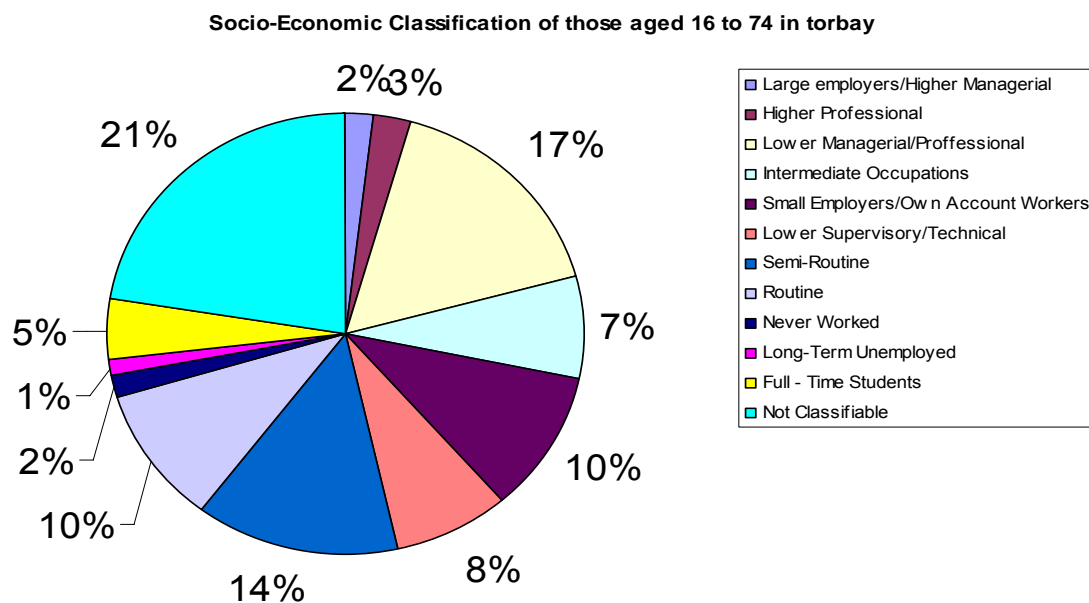


Figure 4.2 Socio-economic classification of those aged 16-74 in Torbay⁵⁷

4.3.4 Cambridge Econometrics’ data, used by the Regional Assembly, set out employment and gross value added (GVA) data for the Exeter city region and Torbay. These can be used to estimate growth of employment and GVA in Torbay, and are set out in Table 4.5 below. They project a respectable growth rate in Torbay, although this is much lower than Exeter’s. It must be emphasised that the figures are extrapolations only and may be unduly pessimistic about Torbay’s economic potential, since they reflect the massive reduction of Torbay’s opto-electronics sector that coincided with the baseline for these figures. As set out above, Nankivell (2005) suggests that there has been a more recent resurgence in the economy. In addition’ it is not clear what area the figures relate to, and they do not follow the Local Authority boundary.

Table 4.5 Cambridge Econometrics’ Estimates of Employment and Gross Value Added in the Torbay area: Summary of Data⁵⁸

Year	Employment (000s)	Gross value added (£ millions)
2001	65.5	1555.3
2004	61.5	1473.1
2006	62.8	1566.1
2011	64.6	1727.6
2016	66.3	2039.0
2021	67.4	2342.8
2026	68.7	2719.6
Increase 06-26	+5.9	1294.5

⁵⁷ Office for national Statistics, 2001 Census Data

⁵⁸ Cambridge Econometrics Model, provided by South West Regional Assembly 2004

4.3.5 Tables 4.6 and 4.7 show projected growth by sector in Torbay to 2026. The predictions show that although health and retailing make significant contributions to new jobs, electronics contributes over twice as much to GVA (and 2-3 times on a per capita basis) than service industry jobs. This demonstrates the need for economic diversification beyond traditional tourism related jobs.

Table 4.6 Top Ten Growth Sectors by Jobs Created⁵⁹

Rank	Sector	Jobs	Rank by GVA
1	Health/Social Services	1,912	2
2	Retail	1134	3
3	Computing services	716	7
4	Education	694	8
5	Other Business Services	669	10
6	Professional Services	535	13
7	Distribution	476	6
8	Misc. Services	462	12
9	Hotels and Catering	346	9
10	Electronics	248	1
Total Jobs		5961	

Table 4.7 Top Ten Growth Sectors by Gross Value Added 2006-2026⁶⁰

Rank (by GVA)		Growth in GVA (£ million)	GVA per capita (£ Million)	Rank by Jobs created
1	Electronics	301	1.2137	10
2	Health/Social Services	145	0.0758	1
3	Retailing	81	0.0714	2
4	Communications	78	Not possible to calculate	45
5	Construction	69	0.377	11
6	Distribution	63	0.132	7
7	Computing Services	57	0.0796	3
8	Education	56	0.08069	4
9	Hotels and Catering	55	0.1589	9
10	Business Services	43	0.0642	5

4.4 Tourism

4.4.1 Marketed as the English Riviera, Torbay is the premier tourist resort in the UK, with attractions including: Quay West water park; Kents Cavern; Paignton Zoo;

⁵⁹ Source: Cambridge Econometrics Model, South West Regional Assembly 2004

⁶⁰ Source: Cambridge Econometrics Model, South West Regional Assembly 2004

a steam railway; picturesque harbours; a model village; 18 beaches; waterfront gardens and country parks.

- 4.4.2 Tourism has been the mainstay of the Torbay economy since the mid nineteenth century. Tourism in Torbay reached its peak in the mid 1970s, showed a sharp downturn in the 1980s and showed a slow and steady decline from the 1990s onward. The main reasons for the steady decline are: changes in public attitude towards traditional seaside holidays; unpredictable British weather; overseas competition from package holidays; and a transition towards long haul and exotic holidays. That was until 2003 when there was a sharp increase in visitors to Torbay which became full to capacity, mostly with last minute bookings. This was due in part to the high temperatures experienced during that summer, and the managed reduction of bed space capacity to maintain the quality of Torbay's accommodation. It was hoped that this would mark a return to Torbay's tourism peak but 2004 saw the industry slow again due to bad weather and a slowing economy⁶¹.
- 4.4.3 At present tourism in Torbay accounts for around 1.45 million staying visitors and 3.8 million day visitors, generating a direct and indirect spend of £442 million per annum and representing one third of the area's wealth and one third of the areas employment ⁶².
- 4.4.4 Since the mid 1980s there has been a change in emphasis on the types of holiday that are becoming more popular. The shift is from the traditional 'bucket and spade' holiday towards short break, weekend and second holidays. A popular sector is breaks linked to coach tours, which attract older age groups to the larger hotels. There is growth in educational and business tourism and activity holidays. Special interest tourism is becoming more popular for example history and ecological tourism, and another growth area is that of Language Schools⁶³.
- 4.4.5 The 2003 Torbay Visitor Survey⁶⁴ portrayed the typical visitor profile as in the middle to older age groups, less affluent, in adult only groups, staying in serviced accommodation for approximately 7.5 nights. They travel down mostly by car, caravan and motorcycle, but 16 % are on a coach tour. Top activities include shopping, walking on the coast path, spending time on the beach, and visiting other attractions such as Dartmoor, Cockington and Plymouth.
- 4.4.6 The Local Plan 1995-2011⁶⁵ contains policies for tourism which include the regeneration and development of tourist attractions, the modernisation and upgrading of accommodation, the protection of principal holiday accommodation areas (PHAAs), the diversification of the Torbay economy and of the tourism sector itself and supporting the regeneration of harbour side facilities.

⁶¹ Torbay Council (2004), Torbay Principal Holiday Accommodation Areas (PHAA) Monitor, 2004

⁶² Torbay Development Agency (2005) Tourism Strategy for Torbay 2005-2015

⁶³ Torbay Council (2004), Torbay Principal Holiday Accommodation Areas (PHAA) Monitor, 2004

⁶⁴ South West Tourism Research Department (December 2003) 'Torbay Visitor Survey 2003'

⁶⁵ Torbay Council (2004) Adopted Torbay Local Plan 1995-2011

4.4.7 The Torbay Local Plan 1995-2011, and Torbay Tourism Strategy⁶⁶ seek to increase the quality and value added of tourism and improve the stock of tourism infrastructure and accommodation. In particular there has been significant regeneration at Torquay Harbourside and waterfront, including the creation of the “Living Coasts” marine aviary. The Torbay Tourism Strategy contains a number of actions which aim to develop tourism infrastructure and products, establish regular monitoring and research within the tourism sector, promote activity which attracts both existing and new markets of tourists, and improve quality and service delivery.

4.5 Manufacturing

4.5.1 Between 1991 and 1997 manufacturing was of increasing importance to the economy of Torbay. During this time there was a 60% growth in manufacturing, mostly in full-time employment and its contribution to GDP in Torbay (13.1%) was comparable to that of Tourism (13.5%)⁶⁷.

4.5.2 As manufacturing per employee generates approximately the same wealth as tourism does for three employees, the closure of Nortel in Paignton since 2000 with the loss of over 5000 jobs was a severe blow to the manufacturing sector in Torbay, which had been expanding. Consequently it has been estimated that manufacturing accounted for only 8% of Torbay’s GDP output in 2002, comparable to 1992 levels⁶⁸. The slump in manufacturing led to per capita income falling to 34% below the national average. However there have been signs of recovery since the pull out of Nortel. Manufacturing output grew by 7.6% in 2003, the same as for the general economy which has enabled the sector to maintain its share of 7.9 % of economic output (refer to Table 4.3).

4.5.3 Employment in the manufacturing industry is still low compared to other centres of similar size and there is currently a shortage of readily available sites for light industry⁶⁹.

4.6 Office Employment

4.6.1 Economic Output from office employment (refer to Table 4.3 under Financial Services) is also low compared with centres of comparable size. There is a lack of purpose built office accommodation and the area suffers from a poor skills base and communications. Improvements in telecommunications, however, and the attractive environment of Torbay may help to stimulate office growth⁷⁰.

4.6.2 According to Owen Nankivell between 2002 and 2003 there was a growth in the private sector, particularly in business services. Other growth sectors included

⁶⁶ Torbay Development Agency (2005) Tourism Strategy for Torbay 2005-2015

⁶⁷ Ibid.

⁶⁸ O. Nankivell (2004), ‘The Torbay Economy 1992-2002 – Back to Square One’

⁶⁹ Torbay Council (2004) Adopted Torbay Local Plan 1995-2011

⁷⁰ Torbay Council (2004) Adopted Torbay Local Plan 1995-2011

general administration, education and health⁷¹. An indication of this growth is the former Nortel House, now known as Vantage Point, and the adjoining land have now received planning permission for use as South Devon College's Campus⁷².

4.7 Agriculture and Fishing

4.7.1 Overall fishing accounted for only 0.6% of economic output in 2003⁷³ but it is Brixham's main industry. Brixham is a major fishing port with the country's second highest landings in value (£14.6 million in 2002/3). In recent years decommissioning has taken place and although the size of the fleet fluctuates from year to year, between 1992 and 2002 the fleet declined from 139 vessels to 101. Changes following the review of EU Common Fishing Policy could lead to a further decline. Approximately 100 additional people are directly dependent on the fishing industry⁷⁴.

4.8 Unemployment

4.8.1 Throughout the early 1990s unemployment was over 10% of the workforce⁷⁵, and although it has not reached these high levels recently, this is due mainly to the low National unemployment rate rather than an improvement in Torbay's position in comparison to other areas. Unemployment has shown a downward trend over recent years at a national, regional and local level (see Table 4.8).

Table 4.8 Unemployment Trends in Torbay compared to National and Regional data⁷⁶

	% of workforce unemployed			
	Torbay UA	Devon	South West	UK
Aug 01	4.5	2.1	2.1	3.2
Jan 02	5.6	2.4	2.3	3.3
Aug 02	3.9	2.0	2.0	3.2
Jan 03	3.7	1.8	1.8	2.5
Aug 03	2.6	1.5	1.6	2.6
Jan 04	3.0	1.7	1.7	2.6
Aug 04	2.1	1.2	1.3	2.3
Jan 05	2.7	1.4	1.5	2.4
Aug 05	2.3	1.3	1.5	2.6

4.8.2 Torbay's unemployment rate, at 2.4% in March 2005, was in line with the National average⁷⁷. There is, however, a significant seasonal fluctuation in the

⁷¹ O.Nankivell (2005) 'The Torbay Economy 1993-2003 : Repairing the Damage' (Torbay Council web site)

⁷² Torbay Council Torbay (2004) Employment Land Monitor 2004

⁷³ O.Nankivell (2005) 'The Torbay Economy 1993-2003 : Repairing the Damage' (Torbay Council web site)

⁷⁴ Torbay Council (2004) Adopted Torbay Local Plan 1995-2011

⁷⁵ Torbay Council (2004) Adopted Torbay Local Plan 1995-2011

⁷⁶ Sources: Torbay Council (2005) Employment Land Monitor 2004; Office for National statistics 'Labour Market Statistics' Nomis (2005) (University of Durham)

unemployment rate in Torbay, related to the heavy reliance of the economy on tourism (See Figure 4.3).

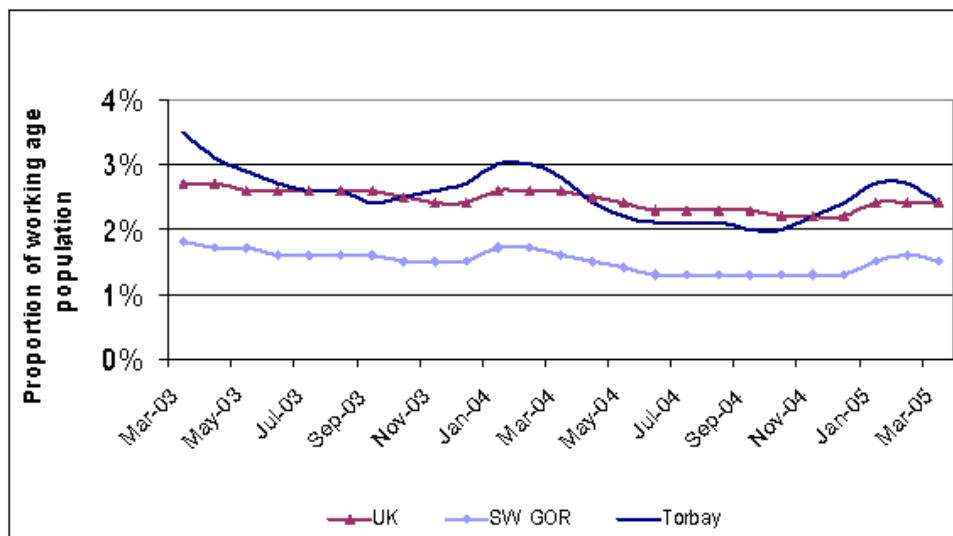


Figure 4.3 Seasonal fluctuations in percentage of working age population claiming Job Seekers Allowance in Torbay.⁷⁸

4.8.3 Female unemployment tends to be lower than male unemployment (See Table 4.9). This could be due to the relatively higher numbers of women working part time (refer to Table 4.4). High levels of part time employment are also a symptom of underemployment in Torbay as there is a shortage of full time jobs⁷⁹.

Table 4.9 Recent Unemployment in Torbay by Gender⁸⁰

	Workforce %	Male %	Female%
Aug 01	3.9	5.9	1.9
Jan 02	5.6	8.6	2.7
Aug 02	3.9	6.3	1.7
Jan 03	3.7	5.4	1.8
Aug 03	2.6	3.7	1.4
Jan 04	3.0	4.3	1.6
Aug 04	2.1	3.0	1.1
Jan 05	2.7	3.9	1.4
April 05	2.3	3.3	1.2

4.8.4 According to the English Indices of Deprivation 2004 (Revised) 8% (nearly 10,500 people) live in an area within the 10% most deprived in England on the

⁷⁷Office for National statistics ‘Labour Market Statistics’ Nomis (2005) (University of Durham)

⁷⁸Office for National statistics ‘Labour Market Statistics’ Nomis (2005) (University of Durham)

⁷⁹Torbay Council (2004) Adopted Torbay Local Plan 1995-2011

⁸⁰Office for National statistics ‘Labour Market Statistics’ Nomis (2005) (University of Durham)

Rank of employment Deprivation. This equates to over 5,300 households. 27.8% of the Torbay population live in an area in the top 20% most employment deprived. These include much of Torquay Town Centre, Paignton Town Centre, Chestnut Estate in Brixham and Preston Town Centre. Torbay ranked 94th out of 354 Local Authorities on the Rank of Employment Deprivation⁸¹.

- 4.8.5 In order to alleviate this situation The Council has undertaken several successful initiatives since the early 1980s. The Cockington Centre has been developed to promote rural skills, Brixham Fish Quay has been redeveloped and there have been marina developments at Torquay and Brixham. Industrial estates have also been developed at Broomhill Way and Chatto Road in Torquay and at Yalberton, Kemmings Close and Long Road in Paignton⁸². The first phase of a regeneration programme at Torquay Harbour side and Waterfront has been completed and major regeneration schemes are proposed in Brixham.
- 4.8.6 The Torbay Council Economic Regeneration Strategy has four main strands. Firstly to strengthen, improve and expand the manufacturing base and business sector. Secondly to ensure that the area remains one of the UK s premier tourist resorts and conference destinations. Thirdly to enhance the town centre to improve Torbay's role as a Sub Regional Shopping Centre. Lastly to facilitate the regeneration of the most deprived areas through community led local economic initiatives⁸³.

⁸¹ The English Indices of Deprivation (Revised) ODPM, Key findings for Torbay, 2004

⁸² Torbay Council (2004) Adopted Torbay Local Plan 1995-2011

⁸³ Torbay Council (2004) Adopted Torbay Local Plan 1995-2011

5 SEA Topic: Landscape and Heritage

5.1 Landscape: The Regional Context

- 5.1.1 The South West has a varied range of landscapes. The Countryside Agency has identified 30 Character Areas in the region. The most distinctive to the region include Moorlands and granite landscapes (Dartmoor and Exmoor), chalk and limestone landscapes (Mendips & Wiltshire), lowland heaths of Dorset, Somerset Levels and Moors, woodlands and orchards. A large proportion of the landscapes in this region comprises of a complex of farmed landscapes punctuated by field boundaries of hedge banks, mixed hedgerows and stone walls acting as a reminder of the historic patterns of farming⁸⁴.
- 5.1.2 Due to its peninsula location the region also has a number of water-based landscapes recognised by the Countryside Agency as coastal landscapes, open sea, estuaries and river systems and inland water.
- 5.1.3 37% of the South West region is protected by Landscape designations, including the 2 National Parks of Dartmoor and Exmoor, and all or part of 14 Areas of Outstanding Natural Beauty⁸⁵

5.2 Landscape: The Local Context

- 5.2.1 Torbay itself has a unique relationship between landscapes comprising largely of seascapes, urban and rural nature. It is the combination of these elements which make Torbay an attractive tourist resort. The bay is bounded at either end by Hopes Nose and Berry Head which comprise of hard limestone headlands. The bay itself is created by erosion of the underlying softer sandstones which have created long sandy stretches of beaches on what is now known as the English Riviera. The Torbay coastline forms part of the South West Coast Path, one of 15 National Trails in England and Wales that provide long distance walking routes through fine areas of landscape.
- 5.2.2 At present Torbay is classified at a County level as falling within the Character Area 'Tourist Riviera'. This stretches from Dawlish Warren to Berry Head, incorporating all of Torbay. The main characteristics are identified below⁸⁶.

Characteristics of 'Tourist Riviera'

- Extensive coastal development of resorts and associated tourist infrastructure
- Elegant seafront parks, promenades, palms, Pines, white 'Riviera' buildings
- Small scale, dissected hilly landscape in hinterland
- Tidal Teign Estuary, largely undeveloped
- Coastal cliffs, ranging from red sandstone to limestone headlands
- Steep urban areas overlooking the bay, estuary and harbours.

⁸⁴ Our Environment Our Future 2004 - 2014, South West Regional Assembly (July 2004)

⁸⁵ The Countryside Agency (2005) The State of the Countryside in the South West 2004.

⁸⁶ Devon County Council (2002) 'The Devon Landscape'

- 5.2.3 The exception to the rule in terms of white Riviera style buildings is Brixham which has a less formal feel associated with its roots in the fishing industry. The urban environment climbs steeply inland to provide views of the harbour and bay whilst creating a dramatic backdrop when viewed from the sea.
- 5.2.4 The area surrounding Torbay is characterised by a mix of small farms, orchards, a number of caravan sites, industrial estates and seasonal tourist markets. It is noted that this is perhaps the most vulnerable area in this character zone. It is suggested that the conservation and strengthening of existing features such as hedgerow networks could aid in maintaining the integrity of this area.
- 5.2.5 Agriculture plays an important role in the landscapes in the periphery of Torbay's built up area accounting for more than half of the undeveloped land of Torbay. Due to the scarcity of high quality agricultural land in this area care should be taken to ensure that such areas are identified and protected when considering development proposals (See also Section 8: Soil).
- 5.2.6 Further work on Character Areas of Torbay is in preparation to identify a number of smaller units as sub-units of the 'Tourist Riviera' as identified above. This work will be done in collaboration with other districts in the County to ensure consistency with approaches across authority boundaries.
- 5.2.7 In addition to the Character Areas identified by the Countryside Agency much of Torbay's landscape is protected by various designations including two County designations; the Areas of Great Landscape Value (AGLV) designation and the Coastal Preservation Areas. The former consists of high land or parts of valley systems with a distinctive local character and the latter designed to safeguard unspoilt stretches of coastline (see Figure 5.1).
- 5.2.8 Additional green wedges are created by the Countryside Zones which provide an important function preventing the merging of urban areas and settlements. The land surrounding Brixham is designated by the Countryside Agency as the South Devon AONB (see Figure 5.1) and partially by a Countryside Protection Area. There is a strong requirement to protect these areas from increased traffic, lighting, noise and pollution.
- 5.2.9 It is recognised that there are a certain number of pressures on the AONB, in particular, pressure for development in Plymouth and Torbay which have resulted in a number of developments and allocations coming forward on or near the AONB boundary. There is increasing pressure to convert barns to residential use, in particular where the farming community are working on sites of marginal economic feasibility and therefore need to diversify. There is also a recognised need to address light pollution.
- 5.2.10 The natural environment is therefore changing with a gradual decline of formerly common wildlife species due to changes in the farmed landscapes of the AONB. Although there have been benefits from take up of agri-environment

schemes, there remain concerns that the schemes such as the Countryside Stewardship have been under-resourced.

- 5.2.11 Landscape value is not just restricted to the countryside. In addition Torbay has 46 Urban Landscape Protection Areas (ULPAs) designated on a local level set in or bordering the urban area. They can be vantage points, amenity open spaces or landmarks (see Figure 5.1). There is also a recognised need to protect urban green spaces including public parks and amenity areas which are valuable for their contribution to the quality of the built environment.
- 5.2.12 This high concentration of designated landscapes has been recognised by Devon County Council as a constraint upon development when allocating housing targets.
- 5.2.13 Trees provide an important means by which to bind together elements of the landscape. The stock of trees in Torbay is declining as few new are saplings planted. The Torbay Community Plan Action Plan proposes recruiting 20 tree wardens to act as community representatives to raise awareness of trees in the environment. There are two areas of ancient woodland identified by English Nature in Rams Hill Copse and Clennon Hill in Paignton. Additional data is required to assess the condition of the tree stock in Torbay.
- 5.2.14 The Torbay coast line is part of the South West Coast Path (one of 15 National Trails in England and Wales).

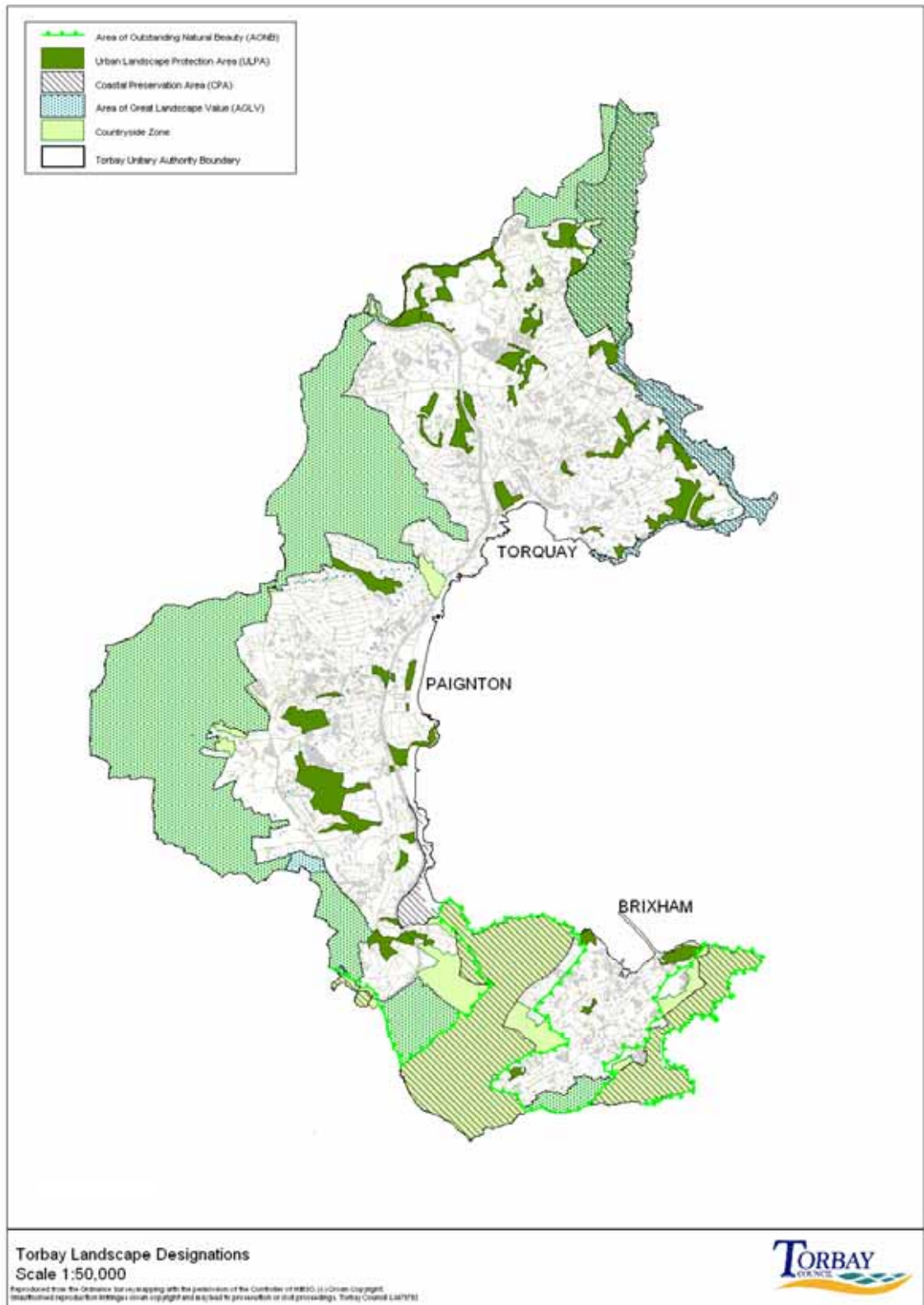


Figure 5.1 Landscape designations in Torbay

5.3 Heritage: The Regional Context

- 5.3.1 The historic environment provides us with links to our past through a number of forms including building styles, settlement form and built archaeology as well as human-influenced landscape. Heritage also plays an important role in the tourist industry encouraging a significant number of visitors to the South West. It is important to underline that the historic environment encompasses designated assets and undesignated features of local historic interest, as well as the potential for as yet unrecorded archaeological interest.
- 5.3.2 The South West has a very high concentration of protected sites. The region's area is 18% of the total land area of England but has 36% of the country's Scheduled Ancient Monuments (6,903), 24% of the listed buildings (88,865) and 17% of all conservation areas (1,509)⁸⁷. Over the last ten years £334 million has been given by Heritage Lottery fund to 935 projects in the South West by Heritage Lottery Fund. Whilst this has aided a lot of beneficial work, there is still a recognised lack of Local Authority resources to deal with the number of buildings at risk. Success in securing funds in Torbay has remained relatively low compared to the South West as a whole with £860,000 from Heritage Lottery fund for 15 projects. Torre Abbey has secured its bid and the Palace Theatre is currently under consideration.
- 5.3.3 Other assets of importance in the South West as identified by the Regional Assembly include Historic Landscapes (field systems and settlement patterns), 3 (out of 16) nationally designated World Heritage Sites, a number of historic settlements (including Bristol, Bath, Exeter and Plymouth), 296 Historic Parks and Gardens, important trees and woodlands, 43 historic battlefields, 20 marine archaeological resources, a number of historic harbours, remnant industrial landscapes and military landscapes.

5.4 Heritage: The Local Context

- 5.4.1 Within Torbay itself the local distinctiveness of this historic area is fundamental in maintaining its role as a tourist resort, a significant sector of the local economy. Local Heritage is promoted through the three registered museums, Torquay Museum (17,000 visitors a year), Brixham heritage museum (8,000 visitors a year) and Torre Abbey (20,000 visitors a year).
- 5.4.2 Table 5.1 is taken from the Torbay Heritage Strategy 2004⁸⁸ and sets out the key assets of Torbay into themes that tell the story of Torbay's Heritage.

⁸⁷ 'Our Environment: Our Future' Regional Strategy for the South West 2004 – 2014, South West Regional Assembly and South West Regional Environment Network

⁸⁸ Torbay Heritage Strategy 2004, Torbay Coast and Countryside Trust

Table 5.1 Key Heritage Themes and Assets of Torbay

Theme	Key Heritage Assets	
The making of the Bay and its original inhabitants	<ul style="list-style-type: none"> • Geological Sites of Special Scientific Interest • Limestone grassland plant communities • Cirl Buntings 	<ul style="list-style-type: none"> • Greater horseshoe Bats • Marine life • Coastal landscapes
The first humans	<ul style="list-style-type: none"> • Kents Cavern • Wall's Hill 	<ul style="list-style-type: none"> • Broadsands Tomb • Brixham Cavern
Early settlement / rural life	<ul style="list-style-type: none"> • Torre Abbey • St Michael's Chapel • Paignton Bishop's Palace • Ancient lanes and local archaeology • Cockington Court and Village • Historic town centres 	<ul style="list-style-type: none"> • Higher Brixham • Churston Ferrers • Galmpton • Orchards, rural landscapes • Occombe Farm • Devon dialects and customs
Maritime and industrial life	<ul style="list-style-type: none"> • Brixham Harbour • Brixham Heritage Fleet • Paignton Harbour 	<ul style="list-style-type: none"> • Shipwrecks • Cockington Forge
A nation at war	<ul style="list-style-type: none"> • Berry head ancient monument • Battery Gardens ancient monument 	<ul style="list-style-type: none"> • WWII slipways, Torquay Harbour
The tourist Resort / Urban life	<ul style="list-style-type: none"> • Torquay Harbour • Victorian Villas • Markets • Churches: <ul style="list-style-type: none"> ○ Babbacombe, All Saints ○ Montpelier road, St. John the Evangelist • Oldway Mansion and gardens 	<ul style="list-style-type: none"> • The Pavilion • Paignton Pier • Torbay cinema • The Palace Theatre • Princess Gardens / Rock Walk • Coastal walks • Railway heritage • Brunel Woods
Famous inhabitants and connections	<ul style="list-style-type: none"> • Agatha Christie / Greenway • Isambard Kingdom Brunel / Brunel Woods • William Froude • Rudyard Kipling • Rev. Lyte 	<ul style="list-style-type: none"> • William of Orange • William Pengelly • P. Singer • The Cary Family • The Palk Family

5.4.3 Nationally important structures, habitats, geology, species and collections are key strengths for Torbay's heritage. There are also high quality urban and natural landscapes, including the marine environment. Strong links between economy, heritage and culture are recognised and Torbay's heritage is considered to be a driver for regeneration initiatives. A large proportion of heritage assets are in public ownership and / or open to the public. Most of

Torbay's Heritage features are covered by statutory and advisory designations and there is a growing use of heritage assets for education and training.

5.4.4 There are, however, threats to this heritage which include:

- Reductions in the availability of grant support or lack of funding
- Difficulties of conserving landscape – scale features with multiple ownership
- Inappropriate use and over use
- Falling out of use
- Coastal erosion
- Incremental small – scale losses
- Haphazard development of heritage projects that fail to co-ordinate activities
- Insufficient community participation
- Uncertainty over the impacts of changing policy for example the Common Agricultural Policy

5.4.5 Buildings which display Torbay's heritage include Oldway Mansion, the Palace Theatre, the Pavilion, Paignton Town centre, Brixham and Torquay Harbourside area⁸⁹.

5.4.6 There are a total of 24 conservation areas in Torbay, which have been designated due to their special architectural or historic character and which should be preserved or enhanced. These are listed below in Table 5.2 and shown on Figure 5.2.

Table 5.2 Conservation Areas in Torbay

Torquay Conservation Areas	Torquay Harbour, Warberries, Lincombes, Chelston, Cockington, St. Marychurch, Babbacombe downs, Maidencombe, Barton, Cary Park, Belgravia, Watcombe Park, Torre, Tormohun, Upton, Abbey Road
Paignton Conservation Areas	Old Paignton, Polsham Park, Roundham, Shorton
Brixham Conservation Areas	Churston Ferrers, Brixham Town, Higher Brixham, Galmpton

5.4.7 It is recognised that buildings in some of these areas, often of low density, are becoming subject to inappropriate development including extensions, changes in boundary features and building design. This has been exacerbated by the need for housing which has placed additional pressures for development.

⁸⁹ Torbay Council (2004) 'Chill Out it's Your Life: Developing Torbay's Culture' – Draft

- 5.4.8 Torquay Harbour Conservation Area has a completed Management Plan and Character Appraisal, which actively seek to enhance and improve the existing character of the area. The Conservation Area covers 38ha, including Harbour installations but excluding enclosed water. Within the Conservation area are examples of fine buildings and urban development from every decade from the end of the eighteenth century.
- 5.4.9 The Harbour is where the majority of the town's earliest buildings are to be found, providing evidence of the rapid transformation of Torquay from a small fishing village to a popular resort during the nineteenth century. Within the Conservation Area the following key features are located:
- Princess Park
 - 80 listed buildings (covering nearly 150 properties, one listed grade 1 and 2 groups of grade 2)
 - Items of architectural and historical interest (harbour installations, walls, gates etc.,)
 - Key buildings of historical value
- 5.4.10 The area as a whole is sub divided into five distinct sub areas: The Harbour and Coastal Fringe; Fleet Street; Madrepore Road, the Terraces and Bradons Hill Road West; Bradons Hill Road East and Lower Torwood; Park and Vane Hills.
- 5.4.11 As well as the recognised threats to buildings within the Conservation Areas, the most obvious non – building problems in the area include:
- Heavy traffic flows which conflict with pedestrian movement, especially in the Strand and Torwood Street Area
 - Run down pedestrian links such as stairways and alleys
 - Lack of co co-ordinated interpretation of the historic environment, such as heritage trails and poor quality signage.
- 5.4.12 Torbay has 861 listed buildings of historic or architectural interest⁹⁰. These cover a range of buildings including chapels, windmill towers, lodges and farm buildings as well as infrastructure such as garden walls, gate piers and defence structures such as ramparts and magazines of Berry Head. The Buildings at Risk register held by the Torbay Council⁹¹ indicates that 44 of the listed buildings in Torbay are at risk (although this figure is subject change), of which 9 are in category 1, the highest risk. More information is needed on the state of repair of these buildings. The council is currently identifying the needs of these sites in order to organise funding proposals. Regionally in 2002-2003 nearly one in 12 listed buildings was subject to planning applications of which 89% were granted consent.

⁹⁰ English Heritage (2006) The State of the South West's Historic Environment 2006

⁹¹ Torbay Council, Buildings at Risk (BAR) survey 2004

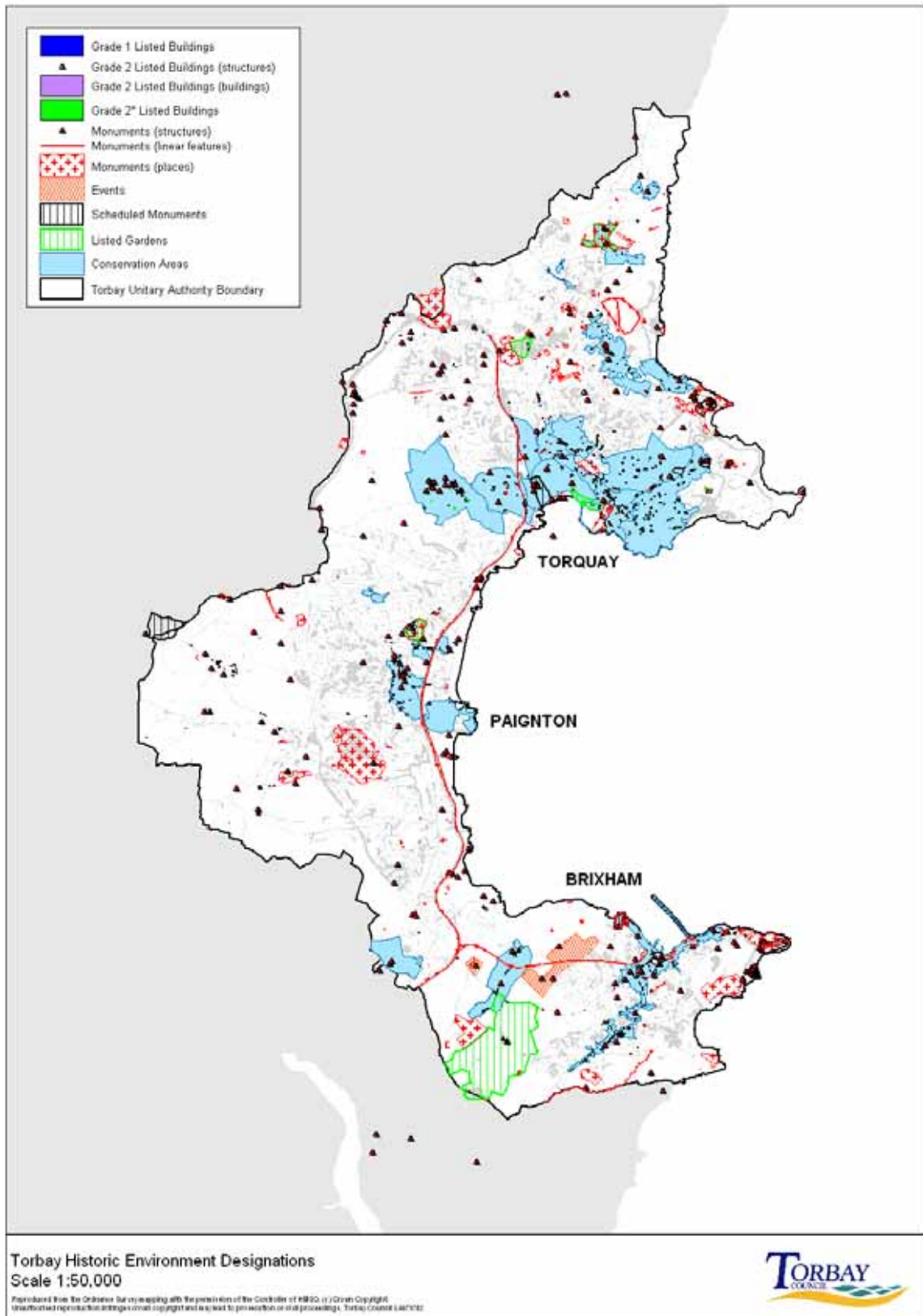


Figure 5.2 Torbay’s Historic Designations

5.4.13 Two further areas of interest in terms of heritage include:

- Winner Street in Paignton; where funding was provided to restore traditional shop fronts, regenerating this area which has suffered decline through increasing numbers of vacancies, residential use and inappropriate shop fronts.
- Torquay Harbour Townscape Heritage Initiative; where Grant Aid has been awarded by the Heritage Lottery Fund to improve the built environment in and around Victoria Parade and Beacon Terrace. The aim is to encourage awareness of, and accessibility to, heritage for residents and visitors. Funding will be used to repair buildings and re-instate historic features to improve the streetscape.

5.4.14 The number of historic parks and gardens in Torbay (see figure 5.2) has increased from three in 1983 (Watcombe Park, Castle Tor and Lupton Park) to six, with additional sites added in 1997 (Oldway Mansion), 2001 (Princes Gardens and Royal Terrace Gardens) and 2002 (Barton Road Cemetery). The register of Parks and Gardens of Historic Interest is currently being reviewed by the University of York.

5.4.15 Torbay has some 13⁹² Scheduled Ancient monuments (see figure 5.2) including buried sites and shipwrecks which are protected by law⁹³. However there are also a large number of sites which do not hold such high levels of protection but are recorded for their archaeological value by the Historic Environment record. More information is needed concerning the condition of these monuments.

5.5 Streetscape and Urban Design

5.5.1 Streetscape has been described as ‘the design quality of the street and its visual effect, particularly how the paved area (carriageway and footway) is laid out and treated’⁹⁴. It includes the buildings, the street surface, and also the fixtures and fittings such as bus shelters, signage and planting schemes⁹⁵.

5.5.2 The main problems for streetscape involve the condition of the paving surfaces (poor) and the state of the street furniture and the condition and cleaning of litterbins (unsatisfactory)⁹⁶. English Heritage has highlighted the damaging effect of inappropriately located and designed transport infrastructure on the character of the wider landscape and public realm⁹⁷.

5.5.3 The Torbay Streetscape guidelines 2004 – 2007 outline the following problems:

1. There is a lack of an overall, co-ordinated strategy for Torbay’s streets;
2. Government guidance has favoured the car over pedestrians;
3. There is limited funding available for improvements;

⁹² English Heritage, Heritage Counts, the State of the South West’s Historic Environment 2005

⁹³ Torbay Council (2004) Adopted Local Plan 1995-2011

⁹⁴ CABE, Paving the Way, May 2005, p.15

⁹⁵ Torbay Council (2004) Torbay Streetscape Guidelines 2004 - 2007

⁹⁶ Local Environmental Quality Survey of England, ENCAMS (Tidy Britain), September 2002.

⁹⁷ Streets for all South West, English Heritage, 2005.

4. There has been a gradual degradation of the streetscape;
5. Clutter;
6. Damage to streets by poorly reinstated utility works;
7. A low standard of maintenance;
8. Under –investment in the urban fabric and inappropriate advertising and signage.

6 SEA Topic: Population and Human Health

6.1 Population Structure

6.1.1 Torbay has an estimated resident population of 132,800⁹⁸. Population projection estimates show a relatively high growth rate for Torbay in comparison to regional and national projections. Table 6.1 shows population growth projections over the next 25 years. A high population growth within Torbay has implications for the future provision of services and increasing pressures for development and generation of traffic. It should be noted that in addition to the resident population, Torbay experiences significant increases in population at peak times in the tourist season adding a further 80,000 visitors across the bay.

Table 6.1 Estimated Population Growth for Torbay compared to other areas of Devon, South West Region and England⁹⁹

Area	2004 Mid Year Estimate ('000s)	Estimated Population Growth from 2004 to:				
		2010	2015	2020	2025	2029
Torrige	61.9	8.9%	15.5%	22.1%	27.9%	32.0%
Mid Devon	72.4	7.6%	13.5%	19.5%	25.0%	28.7%
Torbay	132.5	6.6%	11.9%	17.2%	22.1%	25.7%
East Devon	128.8	6.1%	11.0%	16.1%	21.4%	25.2%
Exeter	115.2	7.7%	12.8%	17.2%	21.5%	24.6%
Devon	724.7	6.0%	10.7%	15.4%	20.0%	23.3%
Teignbridge	123.9	5.2%	9.6%	14.2%	18.9%	22.2%
North Devon	89.9	5.5%	9.9%	14.3%	18.6%	21.6%
West Devon	50.2	5.2%	9.4%	13.7%	17.9%	20.7%
South West Region	5038.2	4.0%	7.3%	10.7%	14.0%	16.4%
England	50093.1	3.2%	5.8%	8.5%	11.0%	12.7%
South Hams	82.4	2.3%	4.5%	7.3%	10.2%	12.3%
Plymouth	244.4	2.4%	4.1%	6.0%	8.0%	9.4%

6.1.2 Development patterns are such that the majority of Torbay's population is contained within the urban areas of Torquay, Paignton and Brixham. These urban areas are constrained by natural topography and have a high average population density relative to other areas within Devon. The average density in Torbay is 20.6 persons per hectare ranging from 1 to 10 people per hectare in rural fringes surrounding the towns, to concentrations in excess of 90 people per hectare in parts of Ellacombe (Torquay) and Roundham and Hyde (Paignton) (see Figure 6.1). This can be compared to 1.1 persons per hectare in Devon, 2.1 in the South West Region and 3.4 in England and Wales.

⁹⁸ Office of National Statistics, 2005 Mid Year Estimates

⁹⁹ Office of National Statistics, Sub National Population Projections, October 2006

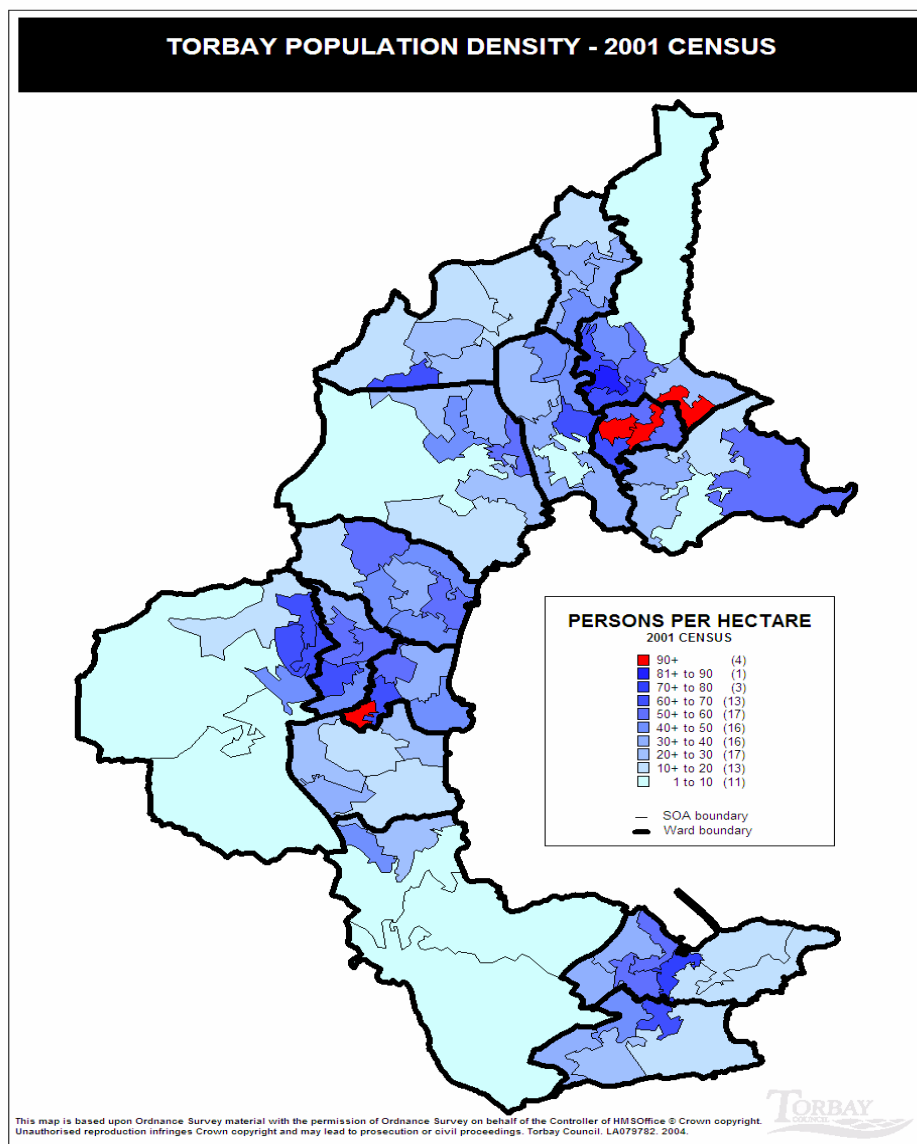


Figure 6.1 Torbay Population Density: 2001 census¹⁰⁰

6.1.3 Figure 6.2 illustrates that Torbay’s population is skewed towards a high proportion of elderly residents compared to national averages. This emphasises Torbay’s role as a place to retire with 23% of the population aged over 65 compared to a national figure of 16%¹⁰¹. This has implications for health care and service provision as well as for increasing pressures for single person households. This is a similar trend to that which is found amongst several coastal areas in the South West for example Dorset, East Devon and the neighbouring South Devon coastline. The high proportion of elderly is matched by a smaller than average proportion of population in the working age group of

¹⁰⁰ The Consultation and Research Team, Torbay Council (2004) ‘Quarterly Key Statistics for Torbay’

¹⁰¹ Primary Care Trust (2004) Director of Public Health - Annual Report for Torbay 2003-2004

20-45. This may be attributed to poor career opportunities which encourage young qualified and older experienced workers to move elsewhere in search of better job prospects. The working population is predicted to decrease from 48.5 to 45.1% of the total by 2021¹⁰².

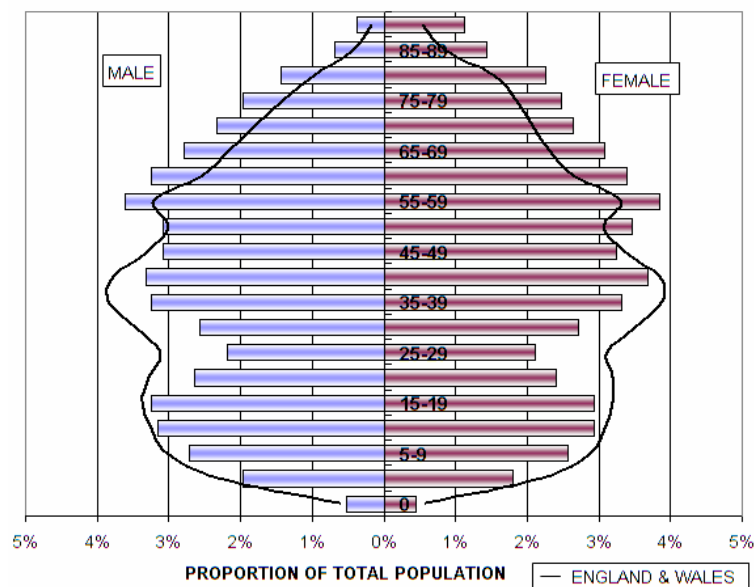


Figure 6.2 2005 Mid-Year Estimate Population Pyramid for Torbay compared with England and Wales¹⁰³

6.2 Life Expectancy and Mortality

6.2.1 Life expectancy has been generally increasing across Torbay for both males and females since 1991 and consistently remains slightly above national averages. Male life expectancy for 2001-2003 stood at 76 years and female at 81 years¹⁰⁴.

6.2.2 Mortality from circulatory diseases (under 75 years of age) has declined substantially from 1995/1997, parallel to England's trends and in 2002/2004 still remains below the local threshold set for the PCT by the Department of Health. Deaths from cancer dropped between 1995 and 2001 after which figures have risen slightly to just above thresholds set by the PCT.

6.2.3 The majority of cancer deaths are from lung cancer which has brought the National anti-smoking campaign to a local level. Figures from November 2004

¹⁰² Torbay PCT and Teignbridge PCT (2004) 'Strategic Service Development Plan 2004-2014'

¹⁰³ The Consultation and Research Team, Torbay Council (2006) 'Key Statistics for Torbay – Sept 2006'

¹⁰⁴ Primary Care Trust (2005) Director of Public Health - Annual Report for Torbay 2004-2005

show a National and Torbay prevalence of smoking at 28%¹⁰⁵. Local opinion polls indicate support for smoke-free workplaces and public spaces. This is being pursued through Torbay Community Plan targets.

6.3 The Elderly

6.3.1 The high proportion of elderly population in Torbay places pressure on the local health care systems. This has resulted in a situation where places in nursing homes, residential homes and provision of domiciliary care are difficult to obtain and provided largely by the private sector. Torbay has a higher than National and South West average number of pensioners living alone¹⁰⁶. As a consequence of this increased pressure is placed on family and friends to provide unpaid care. The 2001 census recognised that 14,000 people in Torbay were providing unpaid care of family members or friends. Table 6.2 illustrates that this is high in comparison with other areas.

Table 6.2 Proportion of population providing unpaid care¹⁰⁷

England	9.93%
South West	10.05%
Torbay	10.70%

6.3.2 Attempts to alleviate the pressures of caring for the elderly have been addressed through Government funding to provide a special grant for additional breaks. In 2003/2004 6,655 additional breaks were organised with 7,250 planned for 2004/2005.

6.4 Dental Care

6.4.1 There have been notable difficulties associated with provision of dental care both nationally and locally in recent years. Dentists as independent contractors can choose the amount of NHS work they undertake. In Torbay this has resulted in a reduction of those registered with a dentist to receive NHS care. The system of NHS dental registrations has changed in the past year and will cease from April 2006. Torbay has noted a deregistering of at least 840 children and 2,400 adults. A proportion of these have transferred to private dental care but a proportion unwilling or unable to pay the private fees are without dental care¹⁰⁸.

6.4.2 The problem is recognised at both national and local level. The Primary Care Trust (PCT) has been working with local dentists and the Department of Health

¹⁰⁵ Torbay Primary Care Trust Personal Communication Debbie Stark Torbay PCT (March 2005)

¹⁰⁶ Primary Care Trust (2005) Director of Public Health – Annual Report for Torbay 2004-2005

¹⁰⁷ Source: 2001 Census, ONS

¹⁰⁸ Primary Care Trust (2004) Director of Public Health - Annual Report for Torbay 2003-2004

(DH) to assist in recruiting additional dentists to work with patients offering NHS care. There are positive plans to increase NHS capacity, but this will take months rather than weeks to show improvements in patients being able to access ongoing NHS care. There is also a background of all dentists who offer any NHS care needing to move to a new contract before April 2006, and that increases local uncertainty. The PCT has been working with South Devon Healthcare Trust to improve capacity within the salaried dental service for unregistered patients with an urgent dental need to be seen. An additional surgery has been created and recruitment of a dentist is progressing. This is fundamental to improving access for unregistered people whilst other plans are put in place for ongoing care¹⁰⁹.

6.5 Obesity

6.5.1 Obesity is an increasing problem both nationally and locally with 20% of men and women being obese (Health Survey for England)¹¹⁰. In 1998 in Torbay 60% of men and nearly 75% of women were not active at the desired level. Recognised barriers to physical activities are identified by PCT as including cost of and distance to facilities, safety concerns, street lighting, quality of parks and open spaces, and presence or absence of cycle routes and footpaths. Efforts are currently underway through the PCT to promote nutritional advice through the '5 a Day' concept, as well as a number of schemes for promoting physical activity such as the Fitbay scheme operating at Barton.

6.5.2 A National health survey in 2003 (all adults) sampled more than 14,000 adults nationally and calculated a prevalence for obesity of 22%. Records for prevalence in Torbay (age group 15-75) indicates that of those people's who's BMI has been recorded in a 15 month period in 2004/2005, 27% had a BMI of 30 or greater (i.e. considered obese). This comparison raises concern over obesity in Torbay. A similar trend is arising for increasing obesity levels in children, however the sample is too small to be truly significant¹¹¹. From 2006 there will be a national annual survey of children of certain age groups to measure weight and height ratios.

6.5.3 There are recognised associated health risks with obesity including increase risks of premature morbidity and mortality, coronary heart disease, certain cancers and early signs of Type II diabetes.

6.6 Smoking

6.6.1 Smoking prevalence plays a significant role in the health of Torbay residents, causing 20% of all male deaths and 10% of female deaths between 1998 and 2002. This is in line with national averages, as is the prevalence of smoking in

¹⁰⁹ Torbay Primary Care Trust Personal Communication Debbie Stark Torbay PCT (March 2005)

¹¹⁰ Primary Care Trust (2004) Director of Public Health - Annual Report for Torbay 2003-2004

¹¹¹ Primary Care Trust (2005) Director of Public Health – Annual Report for Torbay 2004-2005

Torbay at 28%. This compares to Teignbridge at 25%, South Hams at 23% and 32% in Plymouth¹¹².

- 6.6.2 There is also concern over the health risks of passive smoking. A recent Viewpoint Survey¹¹³ indicated that 29.4% of people would be encouraged to visit pubs and nightclubs more if there were more non-smoking areas.

6.7 Mental Health

- 6.7.1 The centre for Public Mental Health has compiled a Mental Illness Needs Index (MINI) for 2000 using deprivation and population data of those in the age ranges of 16-59. It shows Torbay has the highest level of mental illness needs in Devon, in particular the wards (under the old ward structure) of Coverdale, Tormohun and Torwood.

- 6.7.2 Of particular concern is a recently identified trend (ONS May 2005 for years 2001 and 2002) which indicates that mortality from suicide in Torbay is significantly higher than England and South West values. This appears to be an emerging trend for seaside and countryside holiday destinations, which feature in 5 out of the 10 areas with the highest suicide rates. Torbay has the second highest rate in the country¹¹⁴.

6.8 Alcohol

- 6.8.1 The rate for alcohol related deaths in Torbay is slightly higher than national levels and significantly higher than the South West level. A large proportion of these deaths are concentrated in Roundham and Hyde and Wellswood and the majority are in the age group of over 50 years. A viewpoint health survey in November 2001 indicated that 13.8% of females aged 17 and over consumed over 14 units a week and 19% of males aged 17 and over consumed over 21 units per weeks¹¹⁵. The Department of Health recommends no more than between 14-21 for women and 21-28 for men.

- 6.8.2 At a national level this problem has been highlighted by the Public Health White Paper which has identified harm reduction from alcohol misuse as one of its main priorities. Locally the TSP has agreed to champion the development of a bay wide alcohol harm reduction strategy¹¹⁶.

6.9 Teenage Conceptions

- 6.9.1 There has been an identified need to reverse the trends for teenage conceptions which, although erratic, remain largely above Torbay and England

¹¹² Primary Care Trust (2005) Director of Public Health – Annual Report for Torbay 2004-2005

¹¹³ Research Team, Torbay Council (2005) 'Viewpoint 9'

¹¹⁴ Primary Care Trust (2005) Director of Public Health – Annual Report for Torbay 2004-2005

¹¹⁵ Torbay Council Research Team (2001) Viewpoint Panel: Health Survey'

¹¹⁶ Primary Care Trust (2005) Director of Public Health – Annual Report for Torbay 2004-2005

targets (see Figure 6.3). The rates of teenage conceptions are highest in wards with high levels of deprivation, linked to a lack of job opportunities, high numbers of looked after children and school exclusions, a lack of youth provision, and homelessness.

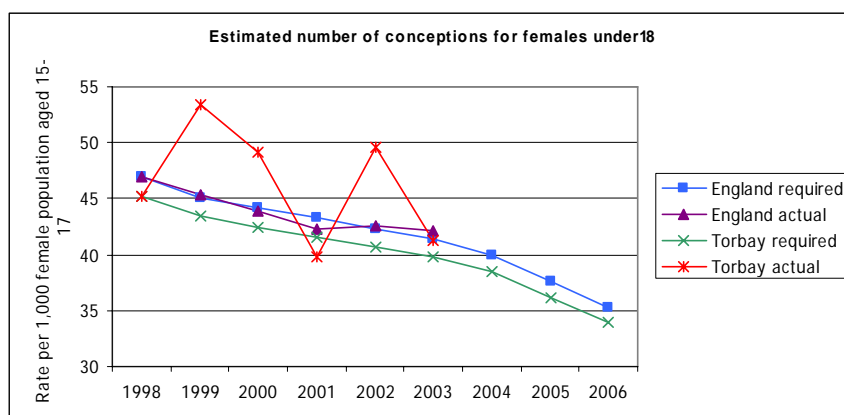


Figure 6.3 Estimated Number of Teenage Conceptions¹¹⁷

6.10 Health Service Provision

6.10.1 The standards of healthcare provision in Torbay is high as indicated by an NHS Performance Rating for 2004 which awarded the Primary Care Trust a 2* rating and a pass, the maximum score possible. This indicates that the Trust has achieved a high level of performance across a set of key targets relating to hospital performance and health care delivery, and a generally high level of access to quality services¹¹⁸.

6.10.2 The Strategic Service Development Plan¹¹⁹ outlines a number of Primary Care Trust priorities for investment in Torbay's healthcare. These include:

- Replacement of Brixham Hospital and clinic. There is a recognised need to improve the healthcare infrastructure of the South Devon Hospital which serves the Torbay area. The redevelopment of the existing site is required to provide intermediate care, improve waiting times and the potential to meet anticipated demands of new technology¹²⁰. The hospital has planning permission for redevelopment of a large proportion of the existing site to try and meet these changing demands.
- Reconfiguration of Fairweather Green at Paignton Hospital as an intermediate care facility.

¹¹⁷ Torbay Council Research Team (2001) Viewpoint Panel: Health Survey'

¹¹⁸ Healthcare Commission NHS Performance Ratings 2003/2204

¹¹⁹ The Strategic Service Development Plan 2004-2014 Issue No 8 (2004)

¹²⁰ South Devon Healthcare (2001) 'Modernisation Healthcare in South Devon'

- The development of an Integrated Care Facility in both Torquay and Paignton. These sites are designed to provide a one-stop shop for a range of health services addressing the problems of physical separation of related facilities. It also allows rationalisation of existing smaller sites.

6.10.3 Many forms of ill health are associated with deprivation as a result of insufficient health education, poor physical access and financial restraints. The Indices of Multiple Deprivation for Torbay (2004) highlight 4 areas which fall within the top 10% in England including parts of Roundham with Hyde (Paignton) and Ellacombe and Torhmohun (Torquay)¹²¹.

6.10.4 Accessibility to health services is raised in the Primary Care Trust Strategic Service Development Plan (2004) as an issue in terms of physical access and local provision of services. This is especially problematic for the elderly and socially isolated and is exacerbated by the topography and lack of local General Practices serving new developments (e.g. Great Parks, Scotts Bridge and Chestnut Drive). This has resulted in accessibility to GP practices being dependent on private cars and taxis.

6.10.5 The South Devon Hospital at Torquay has a patient transport service for the elderly and mobility impaired however there is a need to increase the capacity of this service to reduce the number of patients left to make their own transport arrangements. There is also a need to improve accessibility of the hospital out of hours and at weekends, in particular through the development of a more direct and reliable public transport system.

6.11 Road Traffic Accidents

6.11.1 Data relating to casualties (Figure 6.4) caused by road accidents is erratic in nature but indicates a definite downward trend in the number of fatal and serious casualties, which remain below the Department of Transport target. The Local Transport Plan Annual Progress Report 2004¹²² indicates that the number of pedestrians killed or injured is also low and remains well below the target set by the DfT. The number of children killed or seriously injured has also decreased since 1999 and remains below Department of Transport targets. These decreases are likely to be associated with a range of engineering measures, road safety and enforcement action for identified issues. This is supported by an increase in the number of schools implementing safer routes to school schemes which aim to improve pedestrian infrastructure especially new footpaths to link schools and their catchments.

¹²¹ Research Team (2004 – Revised) 'The English Indices of Deprivation 2004 – Key findings for Torbay'

¹²² Torbay Council (2004) 'Annual Progress Report - Local Transport Plan 2001-2006'

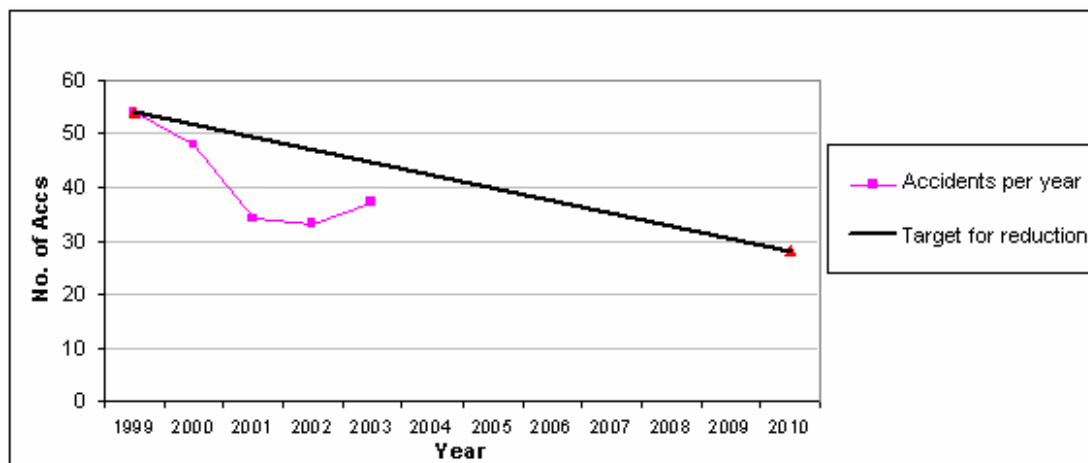


Figure 6.4 Fatal and serious road traffic accidents in Torbay¹²³

6.12 Noise

6.12.1 There has been little detailed work carried out on noise levels in Torbay. However it is generally recognised that the main sources of ambient noise in Torbay are derived from two main sources:

1. Traffic, particularly along main transport links and at rush hour times.
2. Noise generated by Torbay's expanding evening economy. This source is concentrated where clusters of pubs and nightclubs exist, for example Torquay Harbour and Paignton seafront and train station. Noise levels become particularly elevated when nightclubs close, resulting in a sudden concentration of, often loud, young people on the street. This issue is raised in the Viewpoint 9 survey in which 42.7% of respondents felt that people being drunk or rowdy in public areas is a very big problem¹²⁴.

¹²³ Torbay Council (2004) 'Annual Progress Report - Local Transport Plan 2001-2006'

¹²⁴ Torbay Council Research Team (2004) 'Viewpoint 9 Survey: Satisfaction with Council Services and Community Safety'

7 SEA Topic: Social Inclusiveness

7.1 Introduction

7.1.1 More than a third of people in Torbay live in an area that is within the top 20% most deprived in England on the Rank of Living Environment Deprivation (See Figure 7.1) and almost 22% live in an area within the top 10% most deprived in England on the same index. Areas within the top 10% include Torquay, Paignton and Brixham town centres and Queen Elizabeth Drive in Paignton¹²⁵. Such areas experience conditions such as poor social and private housing condition, poor air quality and an increased likelihood of road traffic accidents involving injury to pedestrians and cyclists. At a national level more than a quarter of child pedestrian casualties happen in the most deprived 10% of wards¹²⁶.

7.1.2 The Indices of Deprivation for living environment is one of a series of indices which cover a broad range of issues. Of particular concern is that a small number of areas which appear to be in the top 10% most deprived in England for a number of different sorts of deprivation. Such areas include Roundham with Hyde, Blatchcombe, Ellacombe, Tormohun and Watcombe. Careful consideration is required for these areas to identify and address the key issues which result in such high levels of deprivation.

7.1.3 The report by the Social Exclusion Unit (2003)¹²⁷ 'Making the Connections' highlights five areas as being the most important in terms of accessibility, namely:

- Access to employment, in terms of job finding and attendance for work
- Access to learning, for all age groups
- Access to healthcare, including hospital, dentist and GP and other primary services
- Access to food, especially for those without a car
- Access to cultural and sporting facilities

7.1.4 In addition the report highlights that major new developments such as shops, offices, leisure complexes, hospitals and colleges are frequently placed in locations difficult to reach without access to a car. Public transport provision has often not adapted rapidly enough to new developments. Torbay Council is trying to address this through co-operation with bus operators.

¹²⁵ Research Team (2004 – Revised) 'The English Indices of Deprivation 2004 – Key findings for Torbay'

¹²⁶ Social Exclusion unit (Feb 2003) 'Making the Connections: Final Report on Transport and social Exclusion' ODPM

¹²⁷ Social Exclusion unit (Feb 2003) 'Making the Connections: Final Report on Transport and social Exclusion' ODPM

7.1.5 This baseline survey covers the five areas outlined by the report¹²⁸. It also highlights the major issues concerning access to housing and crime statistics for Torbay.

¹²⁸ Social Exclusion unit (Feb 2003) 'Making the Connections: Final Report on Transport and social Exclusion' ODPM

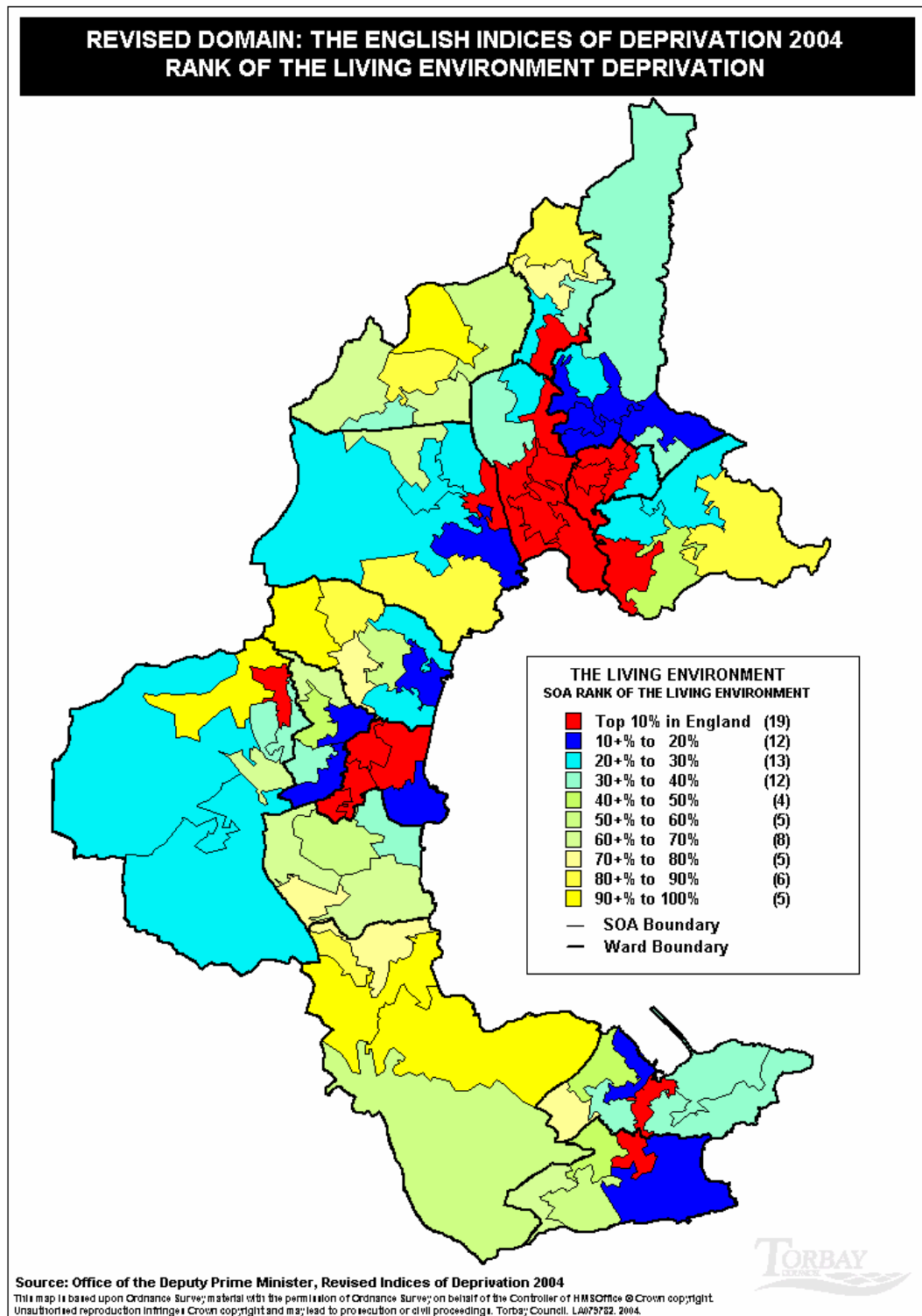


Figure 7.1 Indices of Deprivation by Living Environment for Torbay¹²⁹

¹²⁹ Research Team (2004 – Revised) ‘The English Indices of Deprivation 2004 – Key findings for Torbay’

7.2 Access to Employment

- 7.2.1 Employment in Torbay is mainly discussed in section 4. In terms of accessibility Torbay has many, part – time, low paid employees, mostly working in tourism related jobs, or shops concentrated in the town centres. Semi skilled employment is concentrated around Brixham Harbour, an area west of Paignton and smaller employment areas within Paignton and Torquay. Professional and semi professional employment is concentrated around Torbay Council, South Devon College, Torbay Hospital and a small number of other employers.
- 7.2.2 These patterns combined with a significant commuter population create a number of issues in terms of access. For those using public transport cost becomes a significant problem in terms of finding and attending employment. There is a need to provide direct bus links from the most deprived areas of Torbay to employment areas in Paignton. There is also a need for longer distance, direct bus services to the relatively remote western side of Paignton. Additionally 24 hour, 7 day per week bus services are required to service shift workers and those with early starts or late finishes¹³⁰.

7.3 Access to Learning

- 7.3.1 Compared to other regions the range and attainment of education of the population, both under and over 16 in the South West is good. However this regional data masks a number of disparities linked to socio-economic factors. Employer demand for skills in the region is low offering unskilled and less productive employment.
- 7.3.2 Education in Torbay is provided through 33 primary schools, 3 special schools, 3 grammar schools, a bi-lateral secondary school, an ecumenical secondary school, three comprehensive schools and a college of further education. High quality education is essential in Torbay in order to provide opportunities for high income levels and diversification and improvement to the local economy. Generally Torbay imports pupils from surrounding areas because of the quality and diversity of provision and its large rural catchment.
- 7.3.3 The standard of teaching and learning in schools is regularly assessed by Ofsted and Torbay schools have a good track record. No school is considered to have a serious weakness requiring special measures. Schools are improving in line with national progress and receive focussed support. Ofsted also inspect the work of the LEA in its leadership and development of the education service. The inspection of the LEA in 2004 noted that there needs to be a greater shared understanding of inclusion and improved support for 14 to 19 year old education¹³¹. These are two priority areas for the LEA.
- 7.3.4 Achievement levels across Torbay are generally at or above National Levels. For example in 2003 in Torbay 89% of pupils achieved 5 or more GCSEs grade

¹³⁰ Torbay Council, Torbay Draft Provisional Local Transport Plan (2006 - 2011)

¹³¹ Torbay LEA, Inspection Report Summary', 2004

A* to G, compared to 86% nationally; and in Torbay 52% of pupils achieved 5 or more GCSEs grade A* to C, compared to 53% nationally¹³².

- 7.3.5 However despite this positive feedback there remain a small number of problematic pockets of deprivation in relation to education. The 2004 Indices of deprivation¹³³ indicate that 3 Super Output Areas (SOAs) are in the top 10% in the ranking of education deprivation, skills and training and a further 7 in the top 20%. Such areas include Watcombe and Ellacombe in Torquay and Roundham with Hyde and parts of Blatchcombe in Paignton (see Figure 7.2).
- 7.3.6 Torbay has a relatively high number of children who are not taught in mainstream schools. There is a marked need to reduce this number through an effective inclusion strategy and better provision of early intervention and support for families experiencing difficulties¹³⁴.
- 7.3.7 Additionally there is a recognised need to further promote lifelong learning and help people develop the skills and knowledge necessary to improve income levels and diversify the economy. There is also a recognised need to provide high quality information and services for adults wishing to learn and increase their employability¹³⁵ and in association with this a need to expand the number of vocational courses available. A lower than average rate of Torbay's workforce have formal qualifications. Around 1 in 5 of Torbay's workforce is qualified to NVQ4 or above compared to 1 in 4 of Regional and National workforce. This highlights the issue of out-migration of skilled labour, which could, in part, be addressed by promotion of life long learning for Torbay's residents¹³⁶.
- 7.3.8 Torbay is experiencing falling rolls in primary schools. Numbers have fallen since 2000 and continue to fall, in line with national trends. Despite significant new housing developments in Torbay, these are not enough to counteract the fall in birth rates. Forecasts indicate that across the bay there will be a drop of 700 primary aged pupils between 2000 and 2007. In order to avoid excess surplus school placements with their ensuing financial and educational problems, it may be necessary to adjust school capacity. This may mean for example removing poor quality accommodation, closing two larger schools and building a new smaller school. The Council has already reorganised primary education in Brixham and is about to consult on building a new 420 place school in Foxhole to begin this process in Paignton¹³⁷.

¹³² Torbay Learning and Cultural Services, 2005

¹³³ Research Team (2004 – Revised) 'The English Indices of Deprivation 2004 – Key findings for Torbay'

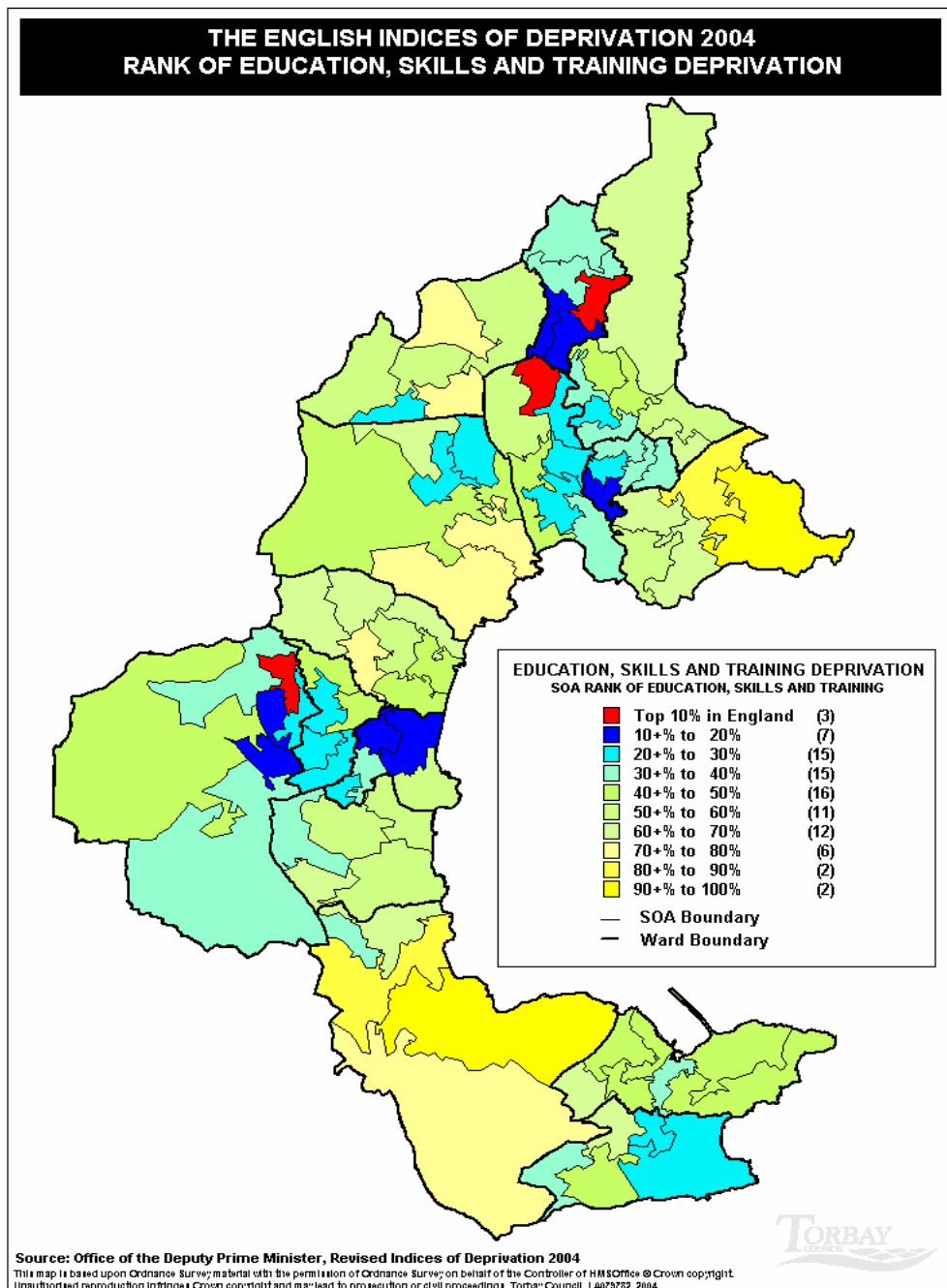
¹³⁴ Social Exclusion unit (Feb 2003) 'Making the Connections: Final Report on Transport and social Exclusion' ODPM

¹³⁵ Torbay Strategic Partnership (2004) 'Torbay Community Plan'

¹³⁶ Torbay Council (2005) 'South West Regional Spatial Strategy – Torbay Council First Detailed Proposals – Appendix 1- Technical Information and related research'

¹³⁷ Torbay Council (June 2004), 'Review of Primary School Places in Torquay and Paignton,' Report to Business and Development Meeting (unpublished)

7.3.9 The education Development Plan Activities 2003/04 Review has inclusion as a major priority (Priority B). Ofsted however, found that the LEA’s strategy for social inclusion was “unsatisfactory, despite good examples of collaborative working and operational strength in important areas”¹³⁸. The report also found that there had not been enough consultation with young people and the minority ethnic population. Torbay recognises in its self evaluation that effectiveness in promoting racial equality is unsatisfactory.



¹³⁸ Torbay LEA, Inspection Report Summary’, 2004

Figure 7.2 Education and Skills Deprivation¹³⁹

7.3.10 Currently Torbay Council is promoting School travel plans. The 2005 'Hands Up' Survey¹⁴⁰ recorded how pupils travel to school, with a response rate of 90%. Brixham Community College, Torquay Community College and Upton St. James Primary School had the highest walk to school levels in Torbay at 68% (see Figure 7.3).

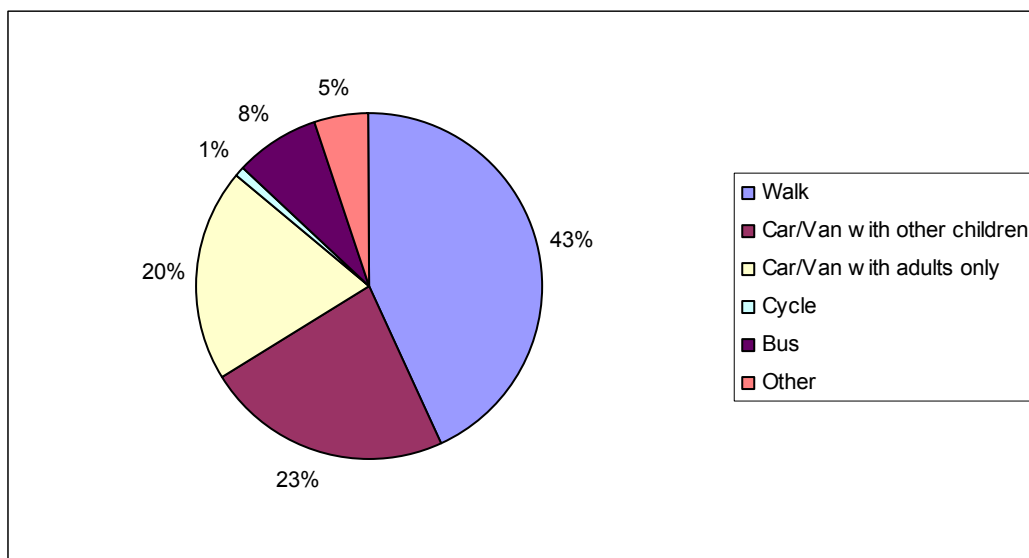


Figure 7.3 Travel to School Patterns in Torbay (2005)¹⁴¹

7.3.11 In theory widespread education provision should reduce the need to travel. Although widespread throughout Torbay, a number of areas have insufficient education provision for mainstream schooling. These include the Willows (Torquay) and Great Parks (Paignton) areas. A lack of sixth form facilities in Brixham means that these students have to travel at least as far as Paignton. The main facility for adult learning is South Devon College which is currently relocating to the edge of Paignton.

7.4 Access to Healthcare

7.4.1 The health care baseline is discussed in Section 6. NHS hospital services are provided by three main sites at Torbay, Paignton and Brixham Hospitals. Primary healthcare is mainly provided by GPs located throughout Torbay. Dentists and pharmacies are located mainly in town centre locations. The high proportion of elderly residents places pressure upon local health care systems, with many elderly cared for by unpaid family and friends.

¹³⁹ Research Team (2004 – Revised) 'The English Indices of Deprivation 2004 – Key findings for Torbay'

¹⁴⁰ Transport Team (2005) 'Hands Up Survey 2005,' Torbay Council

¹⁴¹ Transport Team (2005) 'Hands Up Survey 2005,' Torbay Council

- 7.4.2 Problems with access to an NHS dentist are discussed in, Section 6.4. Access to GP services, especially by the elderly can also be difficult. The challenges associated with the large proportion of elderly residents in Torbay are also discussed in Sections 6.1 and 6.3. There are many reasons for these difficulties, including a lack of facilities in areas such as the Willows (Torquay), Great Parks (Paignton) and Chestnut Drive (Brixham), and the cost of transport, the car and taxis being the main forms of transport to GP facilities.
- 7.4.3 South Devon Healthcare Trust operates a fleet of ambulances and a non-emergency hospital car service for the elderly and mobility impaired. However the capacity of this service is limited, and most patients and all visitors make their own transport arrangements, usually by car. Torbay Council has improved public transport access to Torbay hospital through several schemes, for example by widening the internal hospital roads and by subsidising new bus routes the 66, 64 and 65¹⁴².

7.5 Access to Food

- 7.5.1 Torbay has a number of seriously deprived areas in terms of economic, social and health parameters. Access to healthy and affordable food is an important issue, especially as some of these areas are in peripheral locations, for example Queen Elizabeth Drive (Paignton), Foxhole Estate (Paignton) and Chestnut Drive (Brixham).
- 7.5.2 Devon Food Link, Surestart Torbay and Torbay Primary Care Trust are concentrating on three initiatives namely: food co-operatives; farmers markets; and grow your own schemes including allotment developments. Improved links between residential areas, town centres and supermarkets will also increase access to food¹⁴³.

7.6 Access to Cultural and Sporting Activities

- 7.6.1 A wide range of activities are included in this category. Culture in Torbay needs to meet the needs of the local population as well as giving due consideration to provision of culture to draw people into the area for tourism. A careful balance is required between these two groups in order to address the challenges posed by a large influx of visitors to the local character and its cultural facilities.
- 7.6.2 Local facilities include: major attractions (for example Living Coasts, Paignton Zoo); libraries and museums (Torquay, Brixham Heritage and Torre Abbey); theatres and cinemas; sports facilities (including a number co-located with schools); social clubs and day centres for the elderly and disabled; and public open spaces and parks (for example Cockington Country Park). Naturally occurring features also offer recreational facilities, for example 18 local beaches and the South West Coast National Trail.

¹⁴² Transport Team, Personal Communication with Geoff Coleman, Senior Public Transport Co-ordinator, April 2005

¹⁴³ Torbay Council, Torbay Draft Provisional Local Transport Plan (2006 - 2011)

7.6.3 Families in the South West spend more on recreation and culture than they do on either housing, or food and non-alcoholic drinks. Recreation and culture is the second largest category of weekly household expenditure in the South west, after transport. Although the region's population as a whole invests heavily in cultural activity, cultural events and activities can be socially exclusive with participation rates much higher for wealthier and better educated groups than for the more disadvantaged¹⁴⁴.

7.6.4 In terms of community facilities the following key issues have been identified in the Local Transport Plan¹⁴⁵:

- The need to provide out of hours access, often till late, or through the night
- Access for the elderly and mobility impaired creates a need for more widely available community transport and low level wheel chair accessible transport.
- The need to provide sustainable access to all locations, requires that these facilities be incorporated into public transport services as far as possible

7.6.5 The Torbay Cultural Strategy¹⁴⁶ outlines a number of issues with provision of cultural facilities in Torbay. In particular:

- Fragile position of many of the areas cultural organisations with a good number operating on a financial knife edge
- Low success rate in securing external funding for local cultural activities
- Lack of awareness amongst local people about what cultural activities are already taking place across the areas and in some case, local people finding activities too expensive or difficult to access reducing participation levels.
- Lack of sufficient local activities aimed at young people and children
- Need to generate greater excitement and 'buzz' through higher profile events of a national/ international significance, local street theatre and public art in open spaces and town centres.

7.6.6 Community facilities in Torbay are generally well dispersed. However there remain issues with the quality of sporting infrastructure. Surveys commissioned by Torbay Council indicate that 30% of facilities are considered to be in poor or very poor condition. Accessibility to community facilities is also an issue due to income and employment deprivation¹⁴⁷.

7.6.7 In 1994 the Council commissioned research into playing pitch provision and found that there was a shortfall of 75.3 hectares in Torbay¹⁴⁸. The study also

¹⁴⁴ South West Observatory website, 'Culture Home Page and Highlights' accessed 02/02/05

¹⁴⁵ Torbay Council (2006) Local Transport Plan 2006 - 2011

¹⁴⁶ Torbay Council (2003) 'Chill Out: It's your life. Developing Torbay's Culture'

¹⁴⁷ Torbay Council (2001) 'A Sports Strategy for Torbay – Consultation Draft'

¹⁴⁸ 'Pitching it Right – Torbay Study of Pitch Demand and Provision' Bennetts Recreation Planning Research, (1995)

identified serious dissatisfaction with the quality of existing facilities, with car parking identified as one of the main problems, along with social facilities, drainage and the quality of the pitch surface.

- 7.6.8 Social inclusiveness requires recognition of the differing needs of various groups in terms of what they require from green spaces. Consideration should therefore be given to a range of groups including young children, teenagers, families, the elderly and the disabled. The Viewpoint 9 Survey (2005)¹⁴⁹ indicated that in terms of provision of cultural and recreational activities and venues, Parks and Open Spaces have received the highest level of overall satisfaction at 75.5%. However it also received the highest level of dissatisfaction (10.7%). This difference in opinion could be attributed to differences in quality of different open spaces or could be associated with what people perceive a good quality open space (i.e. related to varying needs).
- 7.6.9 The current provision of different types of green spaces in Torbay is outlined below in Table 7.1.

Table 7.1: Provision of different types of green space across Torbay¹⁵⁰

Type of Green Space	No. of sites	Total sq.m
School Green spaces	28	471,505
Cemetries	2	166,201
Allotments	18	147,131
Pathways	-	-
Spaces for young people	8	14,421
Spaces for children	54	47,768
Playing fields	16	186,494
Outdoor facilities	29	589,607
Countrywide Areas	89	7,893,766
Parks and gardens	43	760,320
Amenity Green spaces	137	961,636
Playground areas		186,494

- 7.6.10 Whilst this table is useful in identifying the number of each type of green space it is their distribution and accessibility by walking which influences social inclusion. In order to identify gaps in provision of green spaces a set of buffer zones were set up of walking distance around each of the publicly accessible green spaces (i.e. country parks, strategic green space, coastal amenity green space, town parks and community parks). A number of areas within Torbay were not covered by any one of these buffers and are listed below. However it should be noted that other types of provision may be evident in the area e.g. playing fields, other amenity green space e.g. open countryside.

- 7.6.11 Areas of under provision as identified through the above methodology include:

¹⁴⁹ Viewpoint 9 (2005) Torbay Council's Resident's Research Panel

¹⁵⁰ Draft officer guidance note, prepared by CABE (2004)

- The densely populated area stretching from the north west fringe across the south of Brixham town centre to St Mary's Bay to the east (Berry Head with Furzeham and St Mary's with Summercombe)
- Intersection of the wards of Blatchcombe, Preston and Clifton with Maidenway
- St Michael's in Paignton
- Whites Rock Area (Churston with Galmpton)
- The bottom of Shiphay Lane (Cockington with Chelston)
- Plainmoor (St Marychurch)
- Area bounded by Edginswell and Newton Road (Shiphay with the Willows)
- The north west section of the housing development at Barton (to the west of Centenary Way)

7.6.12 In terms of providing for Torbay's young children, analysis has indicated that playground provision is adequately located within the areas where the highest concentrations of children live. Only in a few areas were deficiencies noted:

- Either side of Newton Road at Shiphay
- Chelston Ward (although play areas provided through adjacent Cockington Country Park)
- Wellwood which has no playground provision but a low proportion of children aged 0-16

7.6.13 The maintenance of this playground equipment was surveyed as part of the Greenspace Strategy survey¹⁵¹ with the majority scoring an average of 3/5, only 1 (Cockington Country Park) scoring 5/5 for maintenance and 1 (St Michaels RG) of poor quality scoring only 1/5. The need for better maintenance of existing play areas before provision of new was also highlighted through public consultation of the Greenspace Strategy. Public consultation also highlighted concerns over feelings of intimidation of younger children by older children.

7.6.14 In terms of teenagers there is a recognised under-provision of green spaces for youths between 8-13 years. This has been highlighted through Greenspace Strategy survey work which has identified only 7 sites (out of 96) which have scored average or above for provision of appropriately designed areas for teenagers to congregate. Public consultation highlighted the need for skate parks and outdoor activity areas for this age group.

7.6.15 Due to the high proportion of elderly in Torbay it is essential that their specific needs are provided for in green spaces. Survey work carried out by the Green Space Strategy Group indicated that as many as 75% of green spaces surveyed scored below average for provision of facilities and activities for the elderly. In relation to this a significant proportion of green spaces surveyed indicated very poor repair and location of seating, something which is fundamental to attractiveness of green spaces for the elderly.

7.6.16 Accessibility to green spaces should also meet the needs of the disabled community. Survey work carried out by the Greenspace Strategy Group

¹⁵¹ Greenspace Strategy, Torbay Council, Pending Publication

indicated that 75% of the Green space Surveyed scored less than average in meeting the requirements of the Disability Discrimination Act.

7.6.17 Torbay's recreational provision includes a number of water based activities including diving, sailing, rowing and windsurfing. All three towns have a yacht club with associated marine activities. Beacon Quay in particular is undergoing a scheme of regeneration to provide major improvements to the water facilities¹⁰.

7.6.18 In terms of access to retail, Torquay is the dominant shopping centre in Torbay and in the South Devon Sub-region. It is classified as a major centre along with Plymouth and Exeter. Within Torbay there are 3 district centres and 27 local centres. The quality of these centres is monitored by the Strategic Planning Group of Torbay Council. A few issues have arisen of concern in regard to a number of localised areas. In particular the high number of charity shops and discount shops and localised concentrations of vacancies¹⁵². These factors place limitations on the provision of a range of good quality services available locally and may force people to travel further to get the goods they require. Such a trend can lead to a deterioration of local centres making them unsustainable as people favour other centres. The Council is currently commissioning a Retail Study to help identify the key issues within Torbay which may need addressing through the LDF process.

7.6.19 Torbay is running out of cemetery land and the existing cemeteries have no room for expansion. Two new sites have been allocated at Collaton St. Mary in Paignton and Mathill Road, Brixham.

7.7 Access for the Disabled

7.7.1 Torbay Council Policy on inclusion has three broad objectives as set out in the Equality and Inclusion Policy Document 2004-2005. These are:

- Everyone has the right to be included
- Everyone has the right to be treated fairly
- Everyone has the right to equality of access

7.7.2 The policy document also includes training for staff to improve awareness of equality issues. The term 'disabled people' has been adopted by the Council as including those with physical and sensory impairment, learning disabilities and mental distress.

7.7.3 Shop mobility facilities are available within Torbay providing motorised scooter services. In Torquay they provide disabled access to the Town Hall and the shops in Union Street and Fore Street. In Paignton they are available for the shops, seafront, Victoria Park and the library. In Brixham they provide a service to the harbour and Fore Street shops. There is also a 'ring and ride' service which transports disabled people both within Torbay and to other towns such as

¹⁵² Torbay Council (2005) 'Torbay Retail Monitor 2005'

Dawlish and Totnes. This is supported by a community bus that is wheelchair accessible and available for hire by community groups and other organisations.

7.8 Access to Housing

- 7.8.1 Across the UK housing demand has been on the increase as a result of social changes and migration. Such trends have been particularly notable in the South West which experienced the highest growth in the number of dwellings between 1991 and 2003, more than any other region in England¹⁵³. Despite this, if current house building rates continue there will be a shortfall of 13,000 dwellings by 2016 as targeted in Regional Planning guidance. Of concern is the noted lack of affordable housing available with only 10% of new homes providing social housing. With the exception of London, the South West is said to be the least accessible region for affordable housing¹⁵⁴.
- 7.8.2 This situation is evident in Torbay in particular, where the need for affordable housing is linked to high levels of deprivation. Torbay suffers consistently high levels of unemployment and average earnings below regional and national levels¹⁵⁵ linked to the predominance of low paid service sector jobs and poor alternative employment opportunities (see Economic Factors Section 4).
- 7.8.3 The lack of availability of affordable housing is reflected in the proportion of social rented housing which stands at present at 7.7% compared to a national average of 24% and regional average of 17%. The housing needs survey of 2003 indicates the need to provide 1816 units of affordable housing per year over the next five years. In the case of Torbay this is four times the predicted average annual completion rate of all dwellings in the monitor for his period. A certain number of new affordable units are gained through the planning system each year and over the last 7 years has averaged 88 units a year. However in addition to this a few units are provided through Registered Social Landlords who acquire properties for this purpose. The Local Plan Target is to provide an additional 130 units of affordable housing each year.
- 7.8.4 Average house prices in Torbay are slightly lower than regional and national averages (see Figure 7.4). However there has been a rapid increase in house prices in Torbay over recent years, which has been much higher than the national average. The overall average property price in Torbay has increased by 154.7% from £71,437 in 1999 to £181,930 in 2006. This compares to an increase of 134.4% for England and Wales, and 149.4% for the South West region¹⁵⁶.

¹⁵³ South West Observatory www.swo.org.uk/state_of_the_south_west/housing.asp 'State of the South West' (accessed 31/01/05)

¹⁵⁴ Ibid.

¹⁵⁵ Torbay Housing Partnership (2004) 'The Future of Housing in Torbay - A Partnership Strategy 2003-2006'

¹⁵⁶ Key statistics for Torbay – Sept 2006, Consultation and Research Team, Torbay Council.

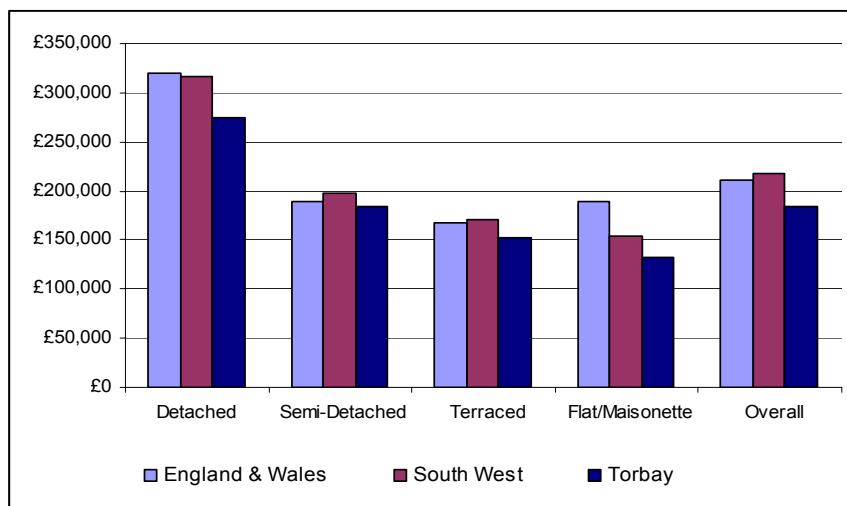


Figure 7.4 Average property prices (July –September 2006) for Torbay, South West, and England and Wales¹⁵⁷

7.8.5 Whilst house prices in Torbay are still below the regional and national averages, properties are less affordable due to the lower incomes (see Section 4.1). Housing affordability is a significant problem in Torbay with the average house price worth around 10 times the average salary. An indicator of affordability can be derived by dividing average house price by average gross annual earnings. The higher affordability ratio for Torbay when compared both regionally and nationally, highlights the affordability problems for residents in Torbay (see Figure 7.5)

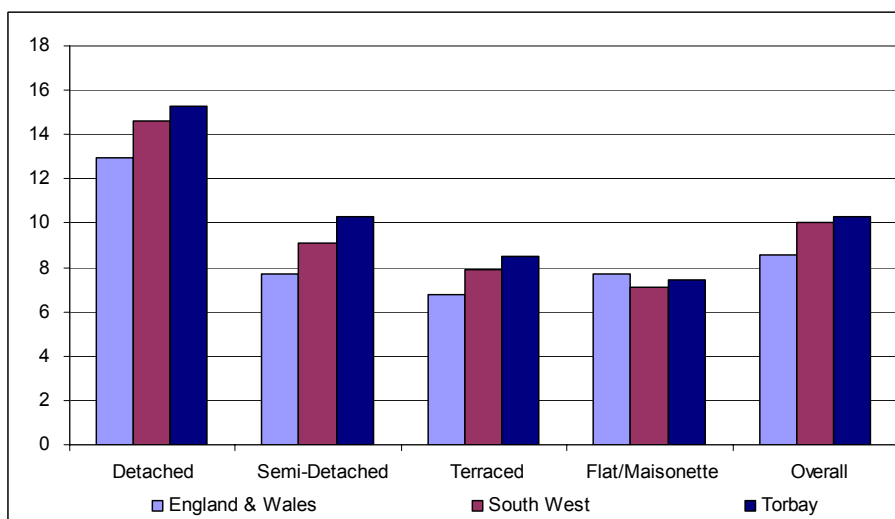


Figure 7.5 Affordability ratio of average property price (July – Sept 2006) to ASHE¹⁵⁸ mean place of work pay¹⁵⁹.

¹⁵⁷ Source: HM Land Registry

¹⁵⁸ Annual Survey of Hours and Earnings

¹⁵⁹ Source: HM Land Registry and Office for National Statistics

- 7.8.6 The Housing Needs survey of 2003¹⁶⁰ indicated that 3.1% of households in Torbay are in housing need (that is they cannot afford to buy or rent a property at prevailing market levels), compared with levels in inner London of 3.2% and the South West at 1.5%. Within this there is a marked need for several different types of affordable housing including sheltered housing for the elderly and starter units for young people.
- 7.8.7 There are also a number of groups in society who have special needs for housing. The 2003 Housing Needs Survey identified 8,335 households containing members with special needs (almost 14.1% of all households), nearly half of which is for the physically disabled and a quarter for the frail elderly¹⁶¹.
- 7.8.8 There is a significant problem with the provision of starter housing for young people. The 2004 Housing Land Monitor¹⁶² indicates that the accessibility of low cost housing has decreased in line with house price inflation which has pushed up the average price of a property in Torbay by 26% per year between 1999-2004 compared to a national average of 19.2%. Although house prices seemed to have peaked in 2004, only 1 bedroom flats are now considered to fall within the lower quartile of the housing market compared to 2002/2003, when 1bed and some 2 bed flats were included. In 2005 there were 47 units of low cost housing provided (12 % of all completions). Although this represents a significant reduction since 2004 (75 units) 143 units were under construction and are likely to become complete in 2006. Figures for affordable housing are generally erratic as they are reliant upon the type of development coming forward in Torbay. A large proportion of small units coming through are derived from conversions and subdivision of large properties which provide an important component of housing supply in Torbay.
- 7.8.9 Homelessness is also an important issue in Torbay with the total number of households accepted as homeless and in priority need during the year 1999/2000 rising from of 185 to 339 in 2002/2003. A snapshot taken in March 2004 revealed 438 households living in temporary accommodation. There are obviously social implications of families being placed in temporary accommodation (holiday flats and B&B) and the financial cost of approximately £910,000 per year. Due to the social implications for the homeless of housing people in bed and breakfast accommodation there is a marked push by the Housing Services of Torbay Council to reduce their use and provide alternative forms of accommodation.
- 7.8.10 Key worker housing for hospital staff will be located in Torbay at Newton Road, where 68 units are to be provided by Signpost Homes. A further 70 units of key worker housing is to be allocated over the next 2 years.

¹⁶⁰ The Housing needs Survey 2003 Fordham's Research on behalf of Torbay Council

¹⁶¹ Torbay Council (Sept 2003)'The Problem of Affordable housing in Torbay: Supplementary Planning Guidance to the Torbay Local Plan (1995 – 2011)' Revised Deposit Version

¹⁶² Torbay Council (2004), 'Torbay Housing Land Monitor 2004, Strategic Planning Group

7.9 Crime

7.9.1 Recorded offences in England and Wales decreased by 1.49% over 2004/05 to 2005/2006. In Torbay the total number of recorded offences decreased by 5.64% from 14,438 to 13,624 over the same period. Torbay’s total number of recorded offences per 1000 resident population has decreased in recent years and is now just below the national average. Figure 7.6 shows Torbay figures for this year and last year, compared to national data and neighbouring authorities.

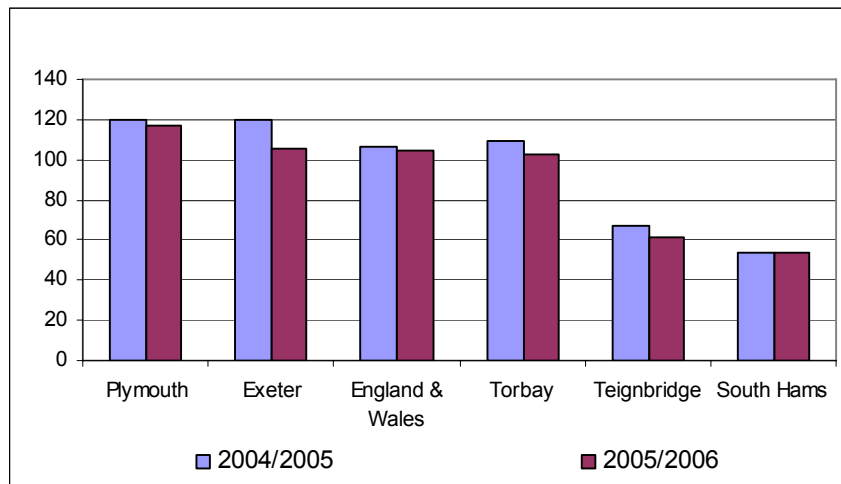


Figure 7.6 Total recorded offences per '000 resident population¹⁶³

7.9.2 When recorded offences are broken down by category, recorded crime in Torbay is predominantly below the national average, with the exception of violence related offences, as shown in Figure 7.7. However, there has been a decrease in recorded violence related offences in Torbay from 2004/05 to 2005/06, as shown in Figure 7.8.

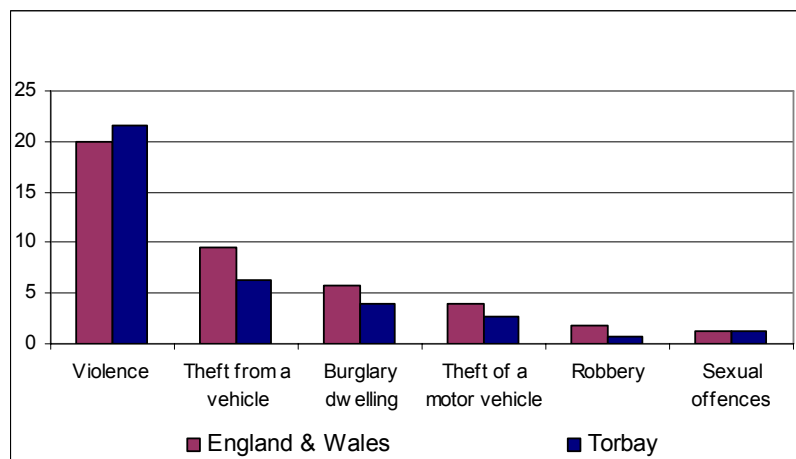


Figure 7.7 Recorded number of offences per '000 resident population by category (2005/06)¹⁶⁴

¹⁶³ Torbay Council, Consultation and Research Team, 2006.

¹⁶⁴ Torbay Council, Consultation and Research Team, 2006

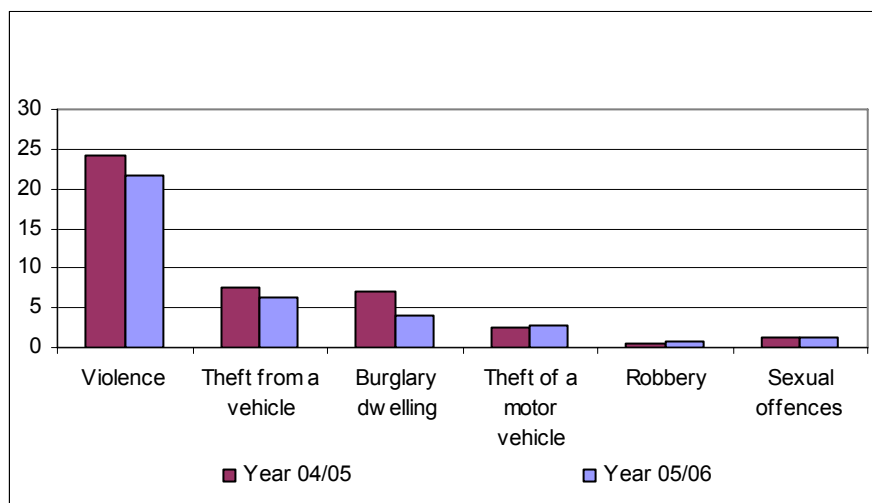


Figure 7.8 Recorded number of offences per '000 resident population by category in Torbay for 2004/05 and 2005/06¹⁶⁵

7.9.3 Fear of crime in Torbay is a significant issue. A number of surveys and consultation exercises were carried out in 2004 and the fear of crime was identified as reasonably high with as many as 75% of respondents considering crime to be a very or fairly big problem in Torbay compared with other issues¹⁶⁶. Particular issues which were highlighted as of concern include speeding traffic, people being drunk/ rowdy in public places, safety of young children, rubbish lying around, vandalism and misuse of drugs. Views on safety after dark contrasted somewhat with 60% of respondents feeling safe in their own neighbourhood after dark as opposed to only 28% in Torbay as a whole.

7.9.4 The Viewpoint 9 Survey (2004) revealed that 80.7% of respondents felt that Anti-social behaviour was a serious issue in Torbay. This is likely to be linked to the expanding evening economy (see licensing section below). The survey also indicated the following five things that people felt would most improve safety and reduce crime:

- More police patrols
- Measures to prevent violent and alcohol related crime
- Taking Action to prevent anti-social behaviour
- More neighbourhood wardens/ community patrols set up by the Council
- More leisure facilities for young people

7.9.5 The Indices of Deprivation for Crime and Disorder are broken down into Super Output Areas and account for burglary, theft, criminal damage and violence. 6,100 residents (0.9% of the Torbay population) live in an area within the top 10% most deprived for Crime and Disorder Deprivation. Significantly 20% the

¹⁶⁵ Torbay Council, Consultation and Research Team, 2006

¹⁶⁶ Safer Communities Partnership Torbay (2005) 'Draft Crime and disorder / Misuse of Drugs audit Summary.

population in these areas are retired highlighting the need to prevent social exclusion of the elderly. Such wards include Tormohun, Ellacombe, St Marychurch, in and around Roundham and Hyde as well subsections of St Mary with Summerland, Wellswood and Cockington with Chelston. Over 12,000 of the Torbay population (9.4%) live in an area within the top 20% most deprived in England for Crime and Disorder Deprivation¹⁶⁷ (see Figure 7.9).

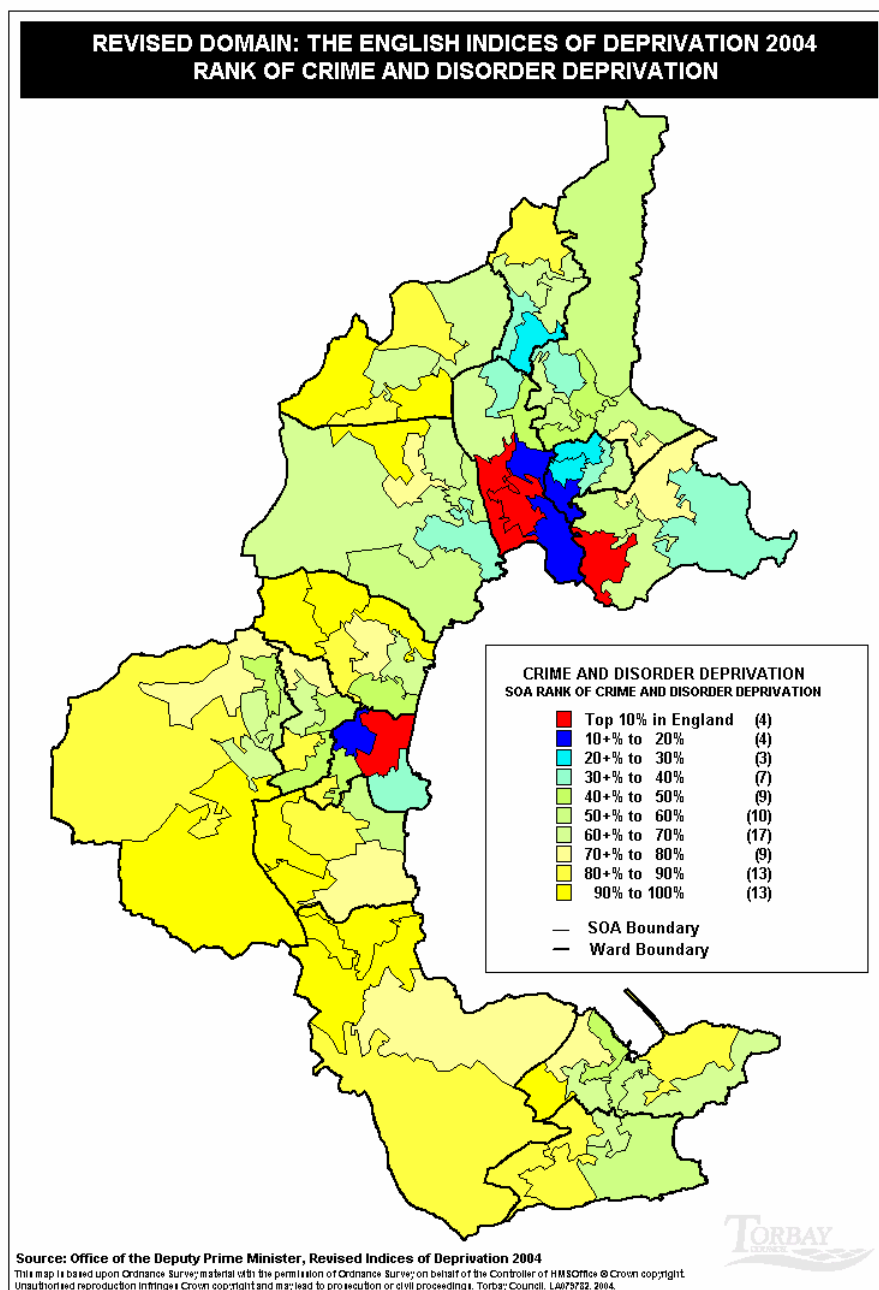


Figure 7.9 Rank of crime and disorder deprivation for Torbay¹⁶⁸

¹⁶⁷ Research Team (2004 – Revised) ‘The English Indices of Deprivation 2004 – Key findings for Torbay’

¹⁶⁸ Research Team (2004 – Revised) ‘The English Indices of Deprivation 2004 – Key findings for Torbay’.

7.9.6 One area of concern highlighted by the Licensing Policy 2004¹⁶⁹ is over the increasing levels of alcohol-related crime. Results of survey work carried out between October 1 2003 and 30 September 2004 identified Torquay Central Area as a cause for concern. This is due to the increasing concentration of drinking establishments (pubs and clubs) in and around the harbour area. In response to this a special saturation policy has been applied to the area delineated in Figure 7.10 where applications for additional licenses or variations to licences will usually be refused.

7.9.7 It is essential to address fear of crime in order to increase the number of people walking, cycling and using public transport. The key issues therefore are: to provide increased security for bus users, both on buses and at bus stops; to reduce antisocial behaviour on streets and at bus stops; to improve the perception of personal safety by improved street lighting, CCTV and better design of open spaces.

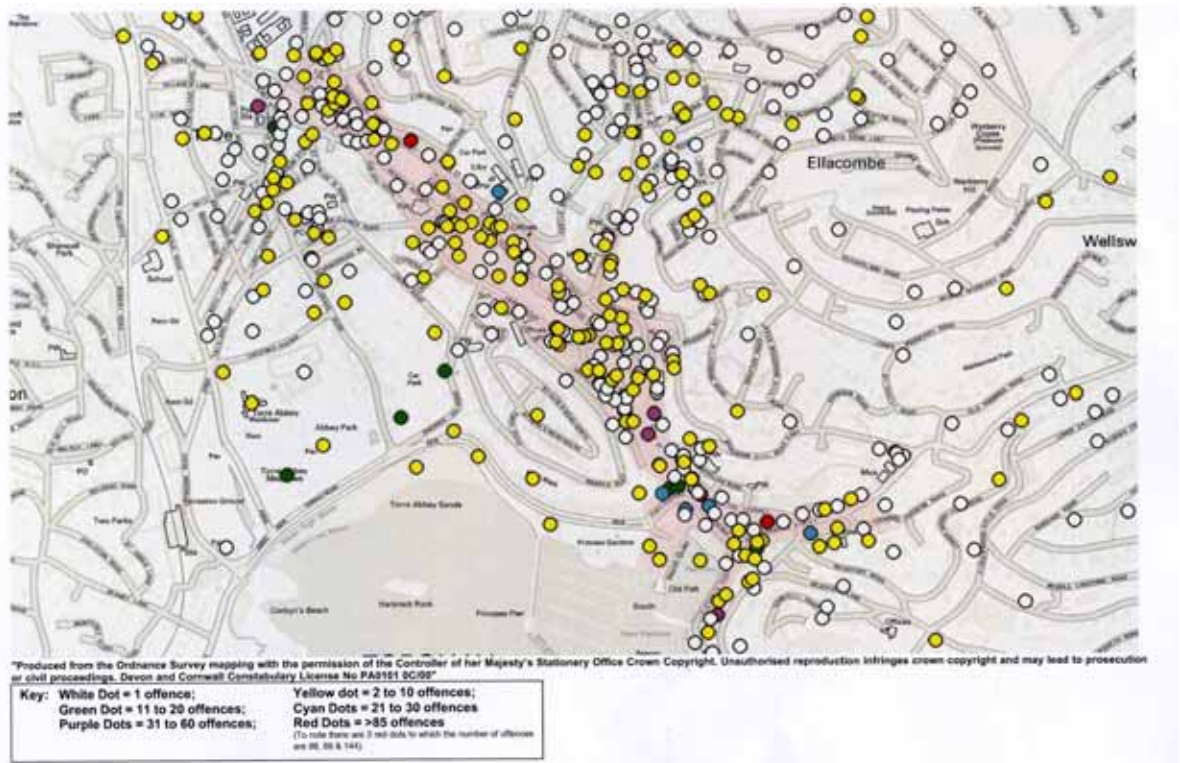


Figure 7.10 Licensing Saturation Zone, Central Torquay¹⁷⁰

¹⁶⁹ Torbay Council (2004) 'Licensing Policy 2004,' Environment Services Directorate

¹⁷⁰ Torbay Council (2004) 'Licensing Policy 2004,' Environment Services Directorate

8 SEA Topic: Soil

8.1 Soil Quality in Torbay

- 8.1.1 In the UK 75% of the land area is used for agricultural activities¹⁷¹. In the South West 80% of land is used for agriculture, which is the highest of any region in the UK¹⁷².
- 8.1.2 In Torbay, however, the largest proportion of land (3,400 hectares) is urban compared to 2,800 hectares of rural land. More than half the land which has not been built over is used for agricultural purpose. There is a limited amount of agricultural land in Torbay and so, wherever possible, the higher grades of agricultural land are preserved and free from development.
- 8.1.3 The Agricultural Land Classification System classifies land into five grades with grade 3 sub divided in to 3a and 3b. PPS 7¹⁷³ refers to the 'Best and Most Versatile Land' which consists of categories 1, 2, and 3a. This land is the most flexible, productive and efficient in terms of food and non food uses such as pharmaceuticals. The best quality land in Torbay is to be found in Cockington (grades 2 and 3), Collaton St. Mary (grades 2 and 3), Churston (mostly grade 3, some grade 2) and Barton (mostly grade 3, some grade 2)¹⁷⁴ (see Figure 8.1).
- 8.1.4 Policy L7 from the Torbay Local Plan¹⁷⁵ states the best agricultural land, i.e. grades 1, 2, and 3a, will only have development upon them if there is an overriding need for development, which cannot be accommodated on lower grade land that does not have environmental value recognised by a statutory designation. Where a development is proposed and there is a choice between sites of different grades, development should take place on the land of the lowest grade possible.

¹⁷¹ Defra (2005) National Statistics 'The Environment in your Pocket 2005'

¹⁷² <http://www.defra.gov.uk/erdp/docs/swchapter/section11/topography.htm> (accessed 22.09.05)

¹⁷³ Planning Policy Statement (PPS) 7 'Sustainable Development in Rural Areas'

¹⁷⁴ Defra (March 2005) 'Provisional Agricultural Land Classification, Torbay unitary Authority' Rural Development Service, Reading

¹⁷⁵ Torbay Council (2004) Adopted Torbay Local Plan 1995-2011

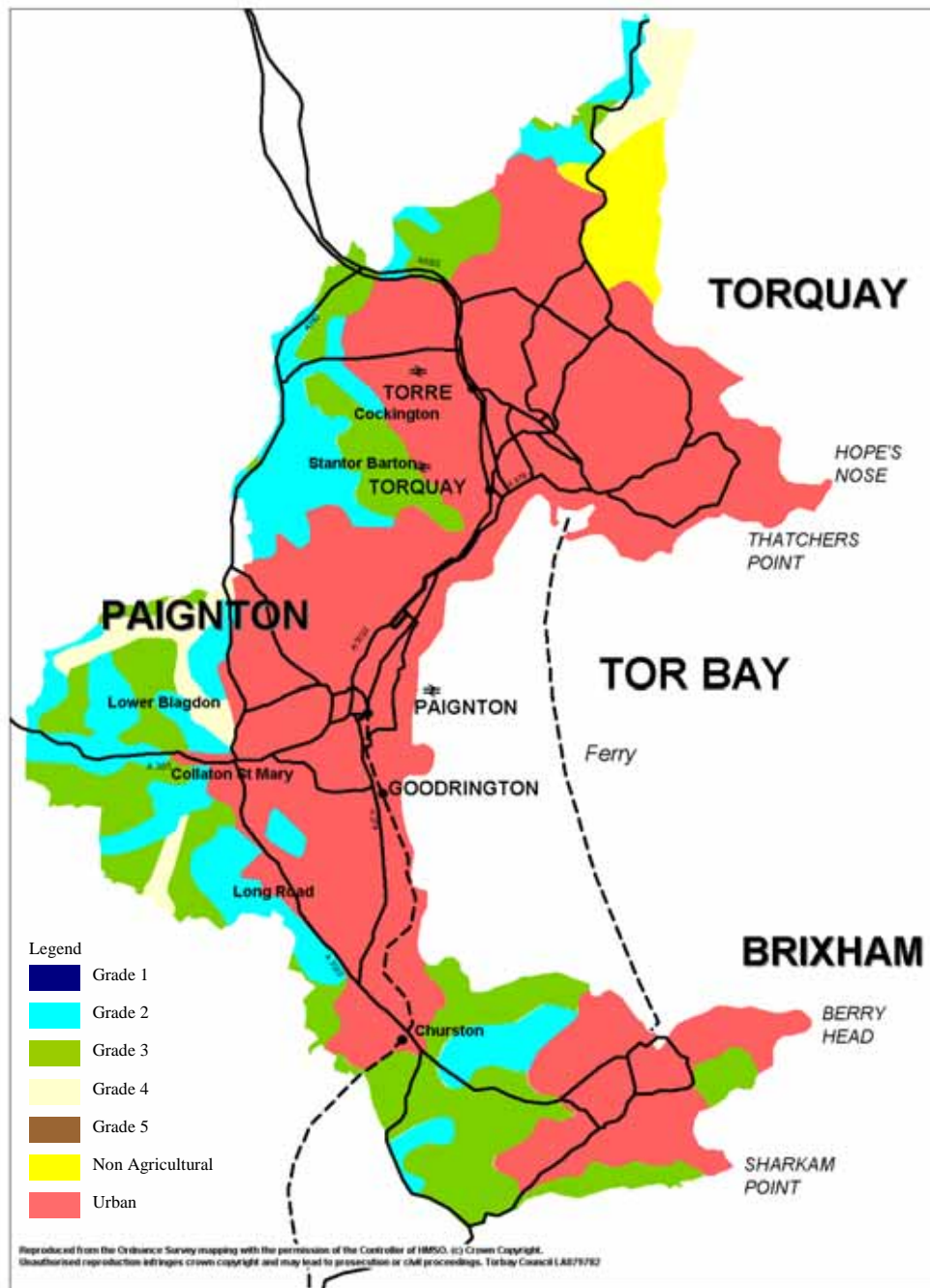


Figure 8.1: Agricultural Land within Torbay¹⁷⁶

8.2 Brownfield Land

8.2.1 Effective land use through re-use of previously developed land (or brownfield land) is a key objective of PPS3¹⁷⁷, and there is an annual national target that at

¹⁷⁶ Defra (March 2005) 'Provisional Agricultural Land Classification, Torbay unitary Authority' Rural Development Service, Reading

least 60% of new housing should be provided on previously developed land. The effective use of such land is a fundamental objective of the Torbay Local Plan (1995-2011)¹⁷⁸ and influences the Council's approach to planning for sustainability in urban areas.

- 8.2.2 The total amount of brownfield land in sites larger than 0.4 Ha in Torbay is 47.562 Ha (see Table 8.1). The vast majority (73.9%) is owned by the Local Authority. This is much higher than the national and regional averages where over half of such sites are in private ownership¹⁷⁹. Brownfield land in Torbay that has Allocated Permission or Planning Permission is almost 25% of the total (see Table 8.1). In addition to this there are a number of smaller brownfield sites, which are not included in the above survey but are monitored by the Strategic Planning Group.

Table 8.1 Brownfield Land in Torbay on Sites Larger than 0.4 Ha¹⁸⁰

Land Type	Area (ha)	%
Derelict Land and Buildings	32.13	67.55
Land or Buildings in Allocated Permission or Planning Permission	11.625	24.44
Previously Developed Land Now Vacant	3.267	6.87
Vacant Buildings	0.54	1.14
Total	47.562	

- 8.2.3 Figure 8.2 shows the proportion of new housing development on brownfield and greenfield sites over recent years. Annual variations are strongly related to building activity on Torbay's two largest Greenfield sites. It should be noted that there has been a significant increase in the proportion of completions on brownfield land from 59% in 2002/2003 to 81% in 2004/2005. This can be attributed to a decrease in the number of completions on large greenfield sites such as Great Parks and Barton. Annual completions at Barton and Great Parks have been slowing down over the last three years with completions in 2004/2005 at 52 units. In addition 2004/2005 saw a complete halt to development at Great Parks, Paignton which has provided a significant proportion of greenfield development.

¹⁷⁷ Planning Policy Statement 3: Housing, DCLG November 2006

¹⁷⁸ Torbay Council (2004) Adopted Torbay Local Plan 1995-2011

¹⁷⁹ National Land Use Database (NLUD) (Aug, 2003) 'NLUD Previously Developed Land 2002: Regional Summary South West and Torbay Borough (UA) Council', NLUD with Roger Tym and Partners (consultants)

¹⁸⁰ National Land Use Database (NLUD) (Aug, 2003) 'NLUD Previously Developed Land 2002: Regional Summary South West and Torbay Borough (UA) Council', NLUD with Roger Tym and Partners (consultants)

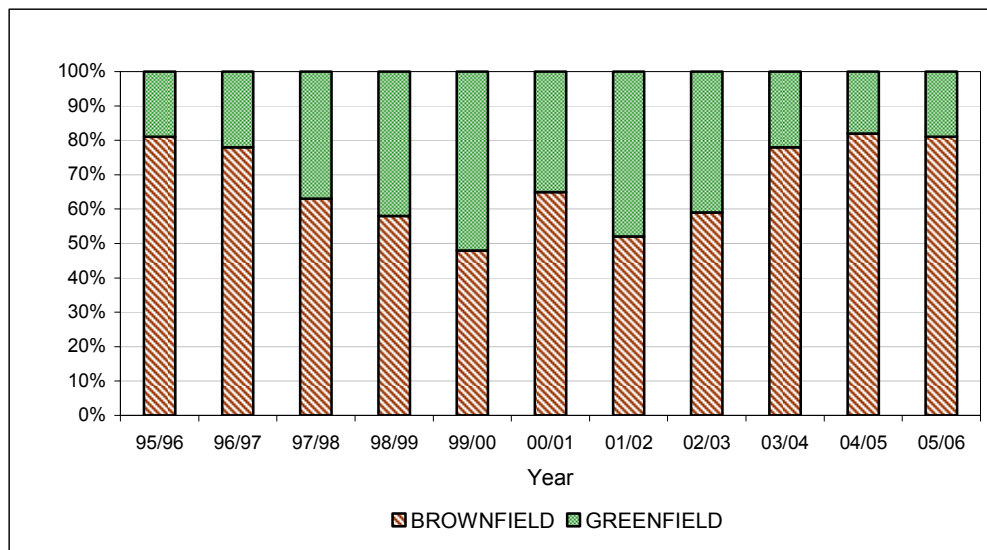


Figure 8.2 Percentage of new dwellings built on brownfield and greenfield land in Torbay¹⁸¹

8.2.4 The current trend for an increasing proportion for development on brownfield sites is set to continue into the next monitor period, as 78% of those units under construction are brownfield and 89% of those sites identified in the monitor as not started (including committed H1 sites) are proposed on brownfield land. In the case of Brixham, the absence of a large active greenfield site means that up to 92% of active housing sites are on previously developed land.

8.2.5 The trend for increasing brownfield development is confirmed through the Torbay Urban Capacity Study (2005), which demonstrates that there is scope to continue providing 70% of new housing on brownfield sites up to 2016.

8.3 Contaminated Land

8.3.1 Torbay Council is continuing to progress with the implementation of its contaminated land strategy in accordance with Part IIa of the Environmental Protection Act 1990. This requires the Council to establish how it will identify and deal with contaminated land within its Local Authority area. Other sites will also be identified through development. These will be dealt with through the planning process to ensure that the site is suitable for its intended use.

8.3.2 A GIS database of land quality and its past uses has been established inline with the strategy¹⁸². Contaminated sites in Torbay mostly consist of land formerly used for tipping, quarrying and pits, and some former railway and industrial land¹⁸³. Table 8.2 shows the previous uses of brownfield sites in

¹⁸¹ Torbay Council (2005) Torbay Housing Land Monitor 2005/2006

¹⁸² Torbay Council Environment Services Directorate (2001) 'Environmental Protection Act 1990 – Part IIA, Contaminated Land Strategy,' Torbay Council

¹⁸³ Torbay Council (2004) Adopted Torbay Local Plan 1995-2011

Torbay from the NLUD Survey (2003)¹⁸⁴. Potentially contaminated sites can be broadly identified as land previously used for industrial and commercial uses, transport, mineral extraction and landfill. This broad classification means that there is potentially 11.85 hectares of land in Torbay that may require some form of remediation (see Table 8.2). If development is proposed on a potentially contaminated site, further assessment may be necessary either in the form of a desk top study or site investigation, to determine if land is contaminated and the appropriate remediation.

Table 8.2 Previous Use of Brownfield Land in Torbay UA

*figures in bold represent land potentially requiring remediation

Previous Use	Area (ha)	%
Vacant Land and Buildings	33.997	71.48
Industrial and Commercial*	5.6	11.77
Transport*	4.85	10.20
Minerals and Landfill*	1.4	2.94%
Residential	1.175	2.47
Community Buildings	0.54	1.14
Total	47.562	100%
Total Land potentially requiring remediation	11.85	29.41%

¹⁸⁴ National Land Use Database (NLUD) (Aug, 2003) 'NLUD Previously Developed Land 2002: Regional Summary South West and Torbay Borough (UA) Council', NLUD with Roger Tym and Partners (consultants)

9 SEA Topic: Waste

9.1 Waste Facilities in Torbay

- 9.1.1 Torbay Council has a statutory duty to collect domestic refuse from over 60,000 properties, and also offers a commercial waste collection service. A kerbside collection scheme is operated for household dry recyclables (see section 9.2).
- 9.1.2 The council operates 63 recycling bank sites which receive materials such as paper, glass, cans, clothing and books. The recycling bank sites are well dispersed throughout Torquay, Paignton and Brixham (see Figure 9.1).
- 9.1.3 A Civic Amenity Recycling Centre (CARC) is based at Yalberton, Paignton. This provides a facility to recycle or dispose of most bulky household waste and garden waste, and provides a facility for commercial waste. Access to this site can be difficult at peak times due to its popularity, with localised traffic congestion in the vicinity of the site.
- 9.1.4 Until recently, a Material Reclamation Facility (MRF) was operated from the Yalberton site. Mixed dry recyclables from kerbside collections were sorted and compacted at the MRF, ready for transport to re-processing plants. However, in March 2007 there was fire that destroyed the Torbay MRF. Household dry recyclables are currently being sent for sorting at a privately run MRF located near Oxford that was able to offer spare capacity to Torbay. This will continue as an interim measure whilst longer term options for dealing with dry recyclables are considered.
- 9.1.5 The Yalberton site is also the location of a transfer station, for the bulking and transportation of waste to a licensed landfill site at Heathfield, Teignbridge (see section 9.5). The location of Torbay Transfer Station / CARC / MRF site is shown in Figure 9.1.



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Figure 9.1 Location of recycling banks and Torbay Transfer Station (the Civic Amenity Recycling Centre is located at the Transfer Station site).

9.2 Household Waste in Torbay

9.2.1 In 2005/06 Torbay produced 63,485 tonnes of household waste, of which 11,965 tonnes (18.85%) were recycled and 4,296 tonnes (6.77%) were composted. The remaining 47,224 tonnes (74.39%) of household waste was sent to landfill (see Figure 9.2).

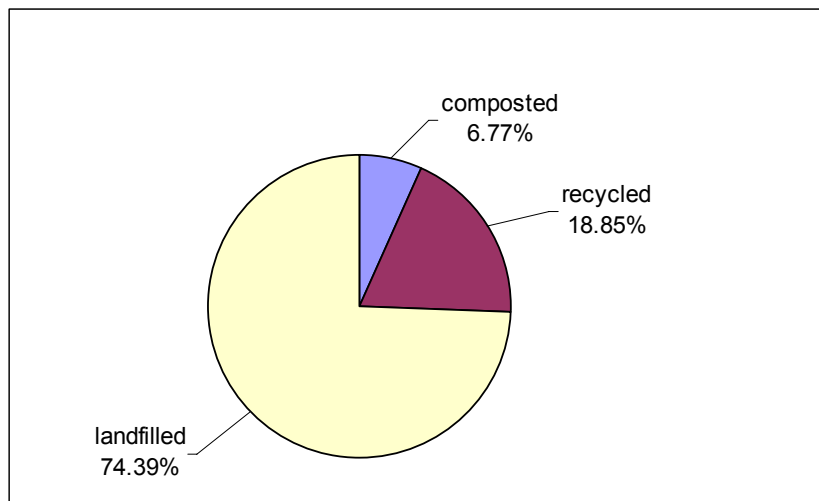


Figure 9.2 Household Waste Disposal in Torbay 2005/06

9.2.2 Total household waste arising, along with a breakdown of recycled household waste materials over recent years are shown in Table 9.1. The data shows an overall increasing trend in the amount of household waste recycled or composted since 2000/01.

Table 9.1 Tonnage of Household Waste Arising in Torbay

Materials for recycling	2000/01	2001/02	2002/03	2003/04	2004/05	2005/6
GLASS	1573	2073	2370	2032	2053	2386
PAPER	2787	3343	3215	3390	3853	4680
CARD	661	748	699	867	920	1125
CANS (mixed)	245	230	245	257	254	290
TEXTILES	272	337	340	390	396	506
PLASTICS	70	85	74	88	87	141
ORGANIC WASTE (composted)	3977	4110	3583	4122	4237	4296
OTHER	1904	2169	1816	1789	2255	2837
TOTAL RECYCLED/ COMPOSTED HOUSEHOLD WASTE	11489	13094	12340	12934	14055	16261
TOTAL NON RECYCLED HOUSEHOLD WASTE	50779	49735	49034	49570	50081	47224
TOTAL HOUSEHOLD WASTE ARISING	62268	62829	61374	62504	64136	63485
HOUSEHOLD WASTE RECYCLED/COMPOSTED RATE	18.45%	20.84%	20.11%	20.69%	21.91%	25.61%

9.2.3 Most materials show a steady increase in amount recycled over recent years, as shown in Figure 9.3. However, for glass and organic (composted) waste, there are deviations from this trend in certain years.

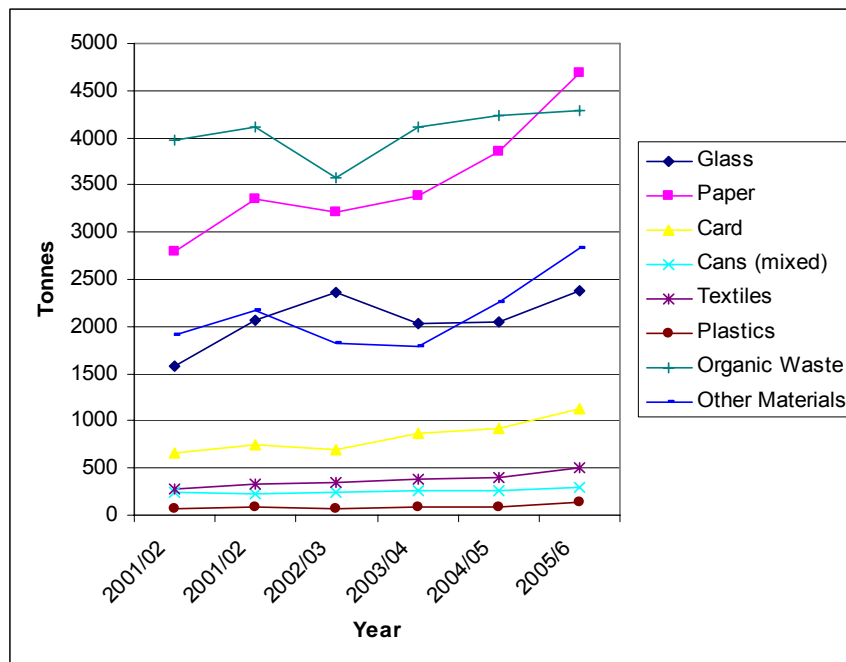


Figure 9.3 Tonnages of household waste materials recycled in Torbay

9.2.4 During 2003/04 Torbay was ahead of the statutory target for household recycling prescribed by the Government in the Waste Strategy 2000¹⁸⁵ (refer to Table 9.2). However, despite a continued increase in the recycling rate, Torbay has yet to meet the 30% statutory target that was set for 2005/06. Torbay achieved a recycling/composting rate of 25.61% in 2005/06.

Table 9.2 Statutory Targets and Actual Recycling Rates of Household Waste for Devon Authorities (Recycling rates include composted household waste)

	2003/04 Statutory Target Recycling Rate ¹⁸⁶	2003/04 Actual Recycling Rate	2004/05 Actual Recycling Rate	2005/06 Statutory Target Recycling Rate ¹⁸⁷	2005/06 Actual Recycling Rate
Devon County Council	33%	26.7%	32.7%	30%	40.6%
Plymouth City Council	16%	16%	16.1%	24%	22.4%
Torbay Council	20%	20.7%	21.9%	30%	25.6%

¹⁸⁵ DETR (2000) Waste Strategy 2000, The Stationary Office.

¹⁸⁶ Statutory targets set in 'Waste Strategy 2000' (DETR, 2000)

¹⁸⁷ Statutory performance standards set by Schedule 8 (Article 10) of the Local Government (Best Value) Performance Indicators and Performance Standards (England) Order 2005

9.2.5 Table 9.3 summarises the types of household waste that can currently be recycled in Torbay (either at the CARC, bring banks or through kerbside collection).

Table 9.3 Provision of recycling facilities within Torbay

Material	Recycled in Torbay	Can be recycled but not currently in Torbay
Telephone Directories	√	
Yellow Pages	√	
Steel Cans	√	
Aluminium Cans & Foil	√	
Newspapers and Magazines	√	
Plastic Bottles (HDPE & PET)	√	
Cooking Oil	√	
Engine Oil	√	
Cardboard	√	
Garden Waste (composting)	√	
Textiles	√	
Car Batteries (lead acid)	√	
Plastic (PVC, LDPE, PP, PS)		√
Food Waste (composting)		√
Mobile Phones		√
Toner cartridges		√

9.2.6 Torbay Council operates a twin bin scheme for the kerbside collection of mixed dry recyclables to around 63% of households in the Bay. A green bin for recyclables (paper, cardboard, plastic bottles, aluminium and steel cans) and a grey bin for residual waste are collected on an alternate weekly basis. The remaining households are served by a weekly collection for residual 'black sack' waste.

9.2.7 In 2005, Torbay Council introduced a 'bag and box' scheme to extend the kerbside collection of recyclables to households not served by twin bins. Households on the bag and box scheme have a kerbside collection of glass and paper.

9.2.8 Through expansion of the twin bin and bag and box schemes, Torbay has increased the % of households served by a kerbside collection of recyclables from 65% in 2004/05 to 88% in 2005/06 and the coverage is continuing to increase.

9.2.9 In 2005/06, 480kg of household waste were collected per head. The cost of household waste collection was £35.95 per household.

9.3 Municipal Waste in Torbay

9.3.1 Municipal Solid Waste (MSW) for the purposes of the Waste Management Strategy is all waste collected by Torbay Council or its agents and includes waste from households, municipal parks and gardens, beach cleansing, some

commercial and industrial waste, materials resulting from the clearance of fly – tipped waste, and materials from recycling banks and the Civic Amenity Centre.

9.3.2 The total MSW arising in Torbay and the proportion recycled / composted, since 1998/99 is shown in Figure 9.4. Table 9.4 gives a more detailed breakdown of the constituents of municipal waste in Torbay from 2000/01 to 2005/06. It demonstrates the range of materials collected for recycling and disposal.

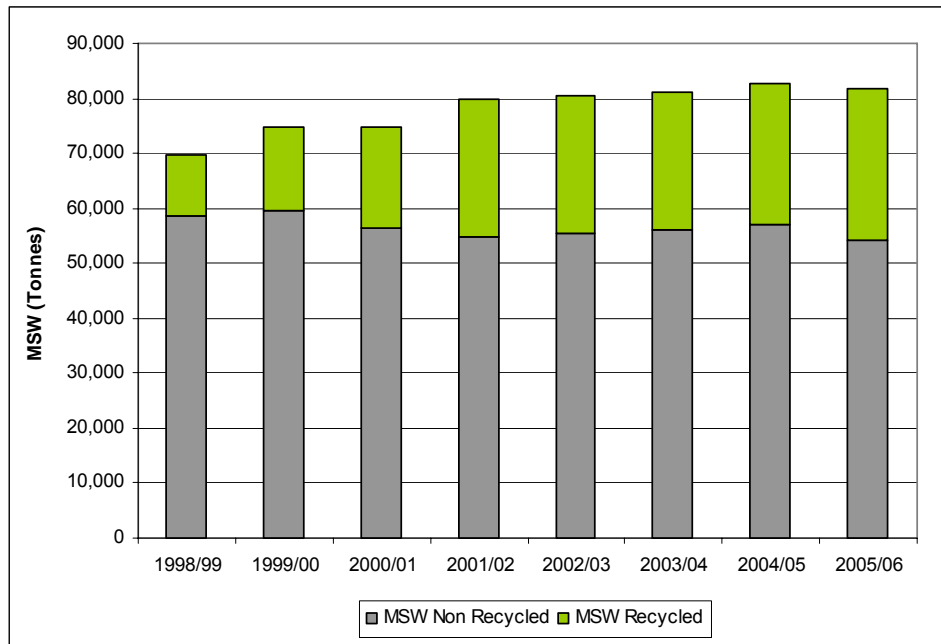


Figure 9.4 Tonnes of recycled and non recycled Municipal Solid Waste (MSW) in Torbay

Table 9.4 Composition of Municipal Solid Waste (MSW) in Torbay from 2000 to 2006 (in Tonnes)

	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06
Non-recycled						
Collection round household (bin) waste	35,434	34,665	36,267	37,150	37,616	36,060
Other collected household waste	2,159	1,996	2,606	2,465	2,612	2,788
Hazardous Waste						45
Civic amenity waste	13,206	12,089	10,185	9,998	9,868	8,490
Collected non-household waste	5,572	6,073	6,551	6,331	6,901	6,708
Non Recycled Total (A)	56,371	54,823	55,609	55,944	56,997	54,091
Kerbside Recyclables						
Paper	2,063	2,352	2,368	2,285	2,754	3,979
Card	472	576	506	645	707	903
Mixed Cans	243	193	213	257	254	290
Textiles	2	0	4	21		0
Plastics	70	85	74	88	87	141
Glass - Mixed					2	308
Kerbside Recyclables Total (B)	2,850	3,206	3,165	3,296	3,803	5,622
Bring (drop-off) Recycling & Composting						
Glass - Mixed	1,573	2,073	2,371	2,032	2,075	2,088
Paper Banks	681	742	711	936	912	670
Paper Third Parties	42	249	136	168	165	30
Paper Commercial	30	56	20	72	54	51
Paper (Yellow Pages)	37	0	47	23	50	0
Household Card	189	171	193	222	213	216
Card Commercial	1,690	1,703	1,607	1,536	861	831
Scrap metal & white goods - Electrical goods	1,346	1,321	949	847	908	996
Commercial Mixed Metals	401	21	277	331	260	343
Textile Banks	142	133	130	144	173	168
Household Textiles	10	15	16	7	6	6
Third Parties Textiles	117	189	187	218	225	331
Oil (1000 litres = 0.9 tonnes)	18	22	21	10	11	18
Household Waste for composting	3,977	4,110	3,583	4,122	4,237	4,296
Commercial Green Composted	405	341	338	402	421	467
Seaweed Composted	1,200	1,176	1,475	1,097	1,725	2,235
Household Wood (not for composting)	561	810	625	704	1,059	1,601
Commercial Wood (not for composting)	663	759	888	805	794	677
Household Fridges	0	0	0	0	188	222
Trade Fridges	0	0	0	0	7	11
Rubble @ Claylands	0	4,629	6,466	6,512	5,769	5,216
Rubble/DIY	2,453	3,215	1,710	1,794	1,886	1,611
Bring (drop off) Recycling & Composting Total (C)	15,535	21,735	21,750	21,982	22,000	22,086
Total MSW (A+B+C)	74,756	79,764	80,524	81,222	82,800	81,799
% of MSW Recycled/Composted	24.59%	31.27%	30.94%	31.12%	31.16%	33.87%

9.4 Landfill Targets for Torbay

9.4.1 The EU Landfill Directive sets targets for the reduction of biodegradable waste sent to landfill and the Government has introduced a system of tradable landfill allowances known as LATS (Landfill Allowance Trading Scheme), to enable the UK to meet these targets. As a Waste Disposal Authority, Torbay Council has landfill allowance targets to meet for the amount of Biodegradable Municipal Waste (BMW) that can be sent to landfill each year, and failure to meet these targets will result in significant financial penalties.

9.4.2 Current LATS projections for Torbay Council are given in Table 9.4. The table identifies the annual target allowances set for Torbay over the period 2005/06 to 2019/20, our estimated tonnages based on current recycling and disposal operations and the potential annual fines incurred based on these tonnages. The projections show that escalating fines from 2008 onwards could result in cumulative costs of over £27 million by 2020. This highlights the need for Torbay Council to address this issue in the Waste Management Strategy and consider strategic alternatives for waste management.

Table 9.5 LATS Projections for Torbay

YEAR	GOVERN'T TARGET (Tonnes of BMW to landfill)	TORBAY FORECAST (Tonnes of BMW to landfill)	VARIANCE (Tonnes)	POTENTIAL FINES AT £150 PER TONNE	NET CREDITS (Tonnes)
2005/06	43,481	40,424 *	(3,057)	-	(3,057)
2006/07	41,604	39,200	(2,404)	-	(5,461)
2007/08	39,103	39,200	97	-	(5,364)
2008/09	35,976	38,808	2,832	-	(2,532)
2009/10	32,224	38,808	6,584	£987,600	-
2010/11	28,637	38,420	9,783	£1,467,450	-
2011/12	25,050	38,420	13,370	£2,005,500	-
2012/13	21,463	38,036	16,573	£2,485,950	-
2013/14	20,542	38,036	17,494	£2,624,100	-
2014/15	19,622	37,655	18,033	£2,704,950	-
2015/16	18,701	37,655	18,954	£2,843,100	-
2016/17	17,780	37,279	19,499	£2,924,850	-
2017/18	16,860	37,279	20,419	£3,062,850	-
2018/19	15,939	36,906	20,967	£3,145,050	-
2019/20	15,018	36,906	21,888	£3,283,200	-
TOTAL FINES				£27,534,600	

* DEFRA Actual for 2005/06.

9.5 Waste Disposal to Landfill

- 9.5.1 There is currently no waste disposal facility within Torbay. Waste for disposal is transported to the nearest landfill site at Heathfield, Newton Abbot, within the boundaries of Teignbridge District Council.
- 9.5.2 The Heathfield land fill facility is operated by Viridor Waste Management. The site covers an area of 157.5 acres and is permitted to accept 450,000 tonnes of waste material per annum. Heathfield has planning permission for a further 3 million cubic metres of material giving an expected life to 2016¹⁸⁸. The landfill site employs 6 full time staff and also operates a division responsible for landfill gas extraction¹⁸⁹. In 2005/06 waste from Torbay accounted for approximately 16% of the total waste sent to Heathfield for landfill.
- 9.5.3 The Heathfield site is registered to ISO14001. The current land fill site at Heathfield is fully lined and there has been no recorded impact on soil or water¹⁹⁰.
- 9.5.4 Landfill gas is captured for electricity generation. Energy recovery from landfill gas extraction at Heathfield in 2005/06 produced approximately 39929 MWh of electricity for export to the national grid. This figure is based on 4.85 MW generating capacity running 92.5% of the time¹⁹¹. Capture and burning of landfill gas converts air emissions from methane into carbon dioxide, a less powerful greenhouse gas. It is not known what percentage of total landfill gas emissions from Heathfield are captured for electricity generation/conversion to carbon dioxide.
- 9.5.5 There are historic landfill sites within Torbay, although the Municipal Waste Management Strategy will not directly influence the management of these sites.
- 9.5.6 Two former landfill sites are currently monitored due to the potential dangers from gaseous emissions into adjacent ground. There are, however, significant gas safety works installed at both sites. Barton Landfill site occupies a total area of 0.213 square km and is 22m deep. Yalberton is spread over 2 sites, with a total area of 0.316 square km and a depth of 13m to 15m. At present, there are no concerns regarding these two locations.
- 9.5.7 For very old landfill sites the information is limited. They are no longer monitored as the chemical reactions within them have ceased and there is no longer a danger from gas emissions. These areas will, however, fall within the investigations undertaken for part IIa of the 1990 Environmental Protection Act which concerns potentially contaminated land.

¹⁸⁸ Personal Communication, Viridor Waste Management (July 2006)

¹⁸⁹ Personal Communication, Viridor Waste Management (September 2006)

¹⁹⁰ Personal Communication, Environment Agency (E-mail 06.11.06)

¹⁹¹ Personal Communication, Viridor Waste Management (October 2006)

9.6 Waste Transportation and the Proximity Principle

- 9.6.1 PPS 23 and PPS 10 advocate the Proximity Principle. The main emphasis is on a self-sufficiency approach to waste management on a regional and sub regional scale in order to reduce the transportation of waste.
- 9.6.2 Torbay complies with proximity principle by transporting its waste for disposal to the nearest land fill site at Heathfield, Newton Abbot, Devon.
- 9.6.3 Garden and green waste is composted at a local farm in Marldon. Sub-regional outlets are also used for wood and scrap metal from the CARC site. Other recyclables can be transported longer distances, depending on the availability of outlets for sorting and re-processing and on market prices. Since the loss of the Torbay MRF due to a fire, mixed dry recyclables from kerbside collection and paper collected from recycling banks are being transported to a privately run MRF in Oxfordshire. Torbay does not have direct control over the final re-processing destinations of output streams from this MRF.
- 9.6.4 Table 9.5 summarises the destination of the main recyclable materials arising from kerbside collection and the CARC site.

Table 9.6 Destination of recyclables from Torbay CARC and kerbside collection.

Material	Destination
Green waste	Composted at Marldon
Wood	Plymouth
Scrap metal	Exeter
Cardboard	N/A*
Aluminium cans, steel cans, paper, plastics	Exported to MRF in Oxfordshire. Final re-processing destinations not under direct control of Torbay Council.
Refrigerators	South Wales
Textiles	Collected by local animals in distress centre at Ipplepen
Glass	Generally exported abroad for re-processing. Destinations can vary depending on market price and re-processing capacity.

* Cardboard bailing facilities currently not operating due to damage caused by MRF fire in spring 2007. Transfer of cardboard for recycling will be re-established once a new bailer is operational.

- 9.6.5 All of Torbay's waste is transported by road. Torbay Council currently operates 11 refuse vehicles for the collection of domestic waste. Two 44 tonne articulated units are operated from Torbay Transfer Station for the daily transportation of waste for disposal at Heathfield. One 32 tonne hookloader vehicle is also operated at the Torbay Transfer Station and is used for the transfer of waste to Heathfield landfill on a supplementary basis when required.

9.7 Community Involvement

- 9.7.1 Torbay has a successful record for working within the community in areas such as education to support recycling within the Bay. Torbay Council has received the Green Apple award for Environmental Best Practice for the last three years running (2004 – 2006). In 2005 the award was presented in recognition of the work that has been carried out targeting the age 55+ sector of residents, informing and educating them on recycling and waste minimisation issues. In 2006, it was awarded in acknowledgement of partnership work with Hollacombe Community Resource Centre and local tourist attractions to provide a recycling collection carried out by adults with learning disabilities.
- 9.7.2 The Council employs a Recycling Officer who works in partnership with other organisations on a number of community initiatives to promote waste minimisation, re-use and recycling, and to provide ongoing information and advice for members of the public about recycling issues.
- 9.7.3 During 2006, the Recycling Officer ran or participated in 26 events aimed at promoting waste reduction, re-use and recycling within the community. A range of different events were organised including talks to community groups, road shows, scrap workshops and composting clinics.

Alupro Trees Campaign

- 9.7.4 Torbay Council is registered to this campaign which is run by the Aluminium Packaging Recycling Organisation (Alupro) in conjunction with Tree Aid. The project aims to promote recycling of aluminium cans and foil and for every kilo of aluminium recycled, trees are provided for planting, either locally, or to support a woodland management project in West Africa. Following participation in the scheme in 2006, Torbay Council's Recycling Officer was selected to visit the Tree Aid project in Burkina Faso, Africa.

Scrapstore

- 9.7.5 Torbay Council works in partnership with the local scrapstore to promote re-use of materials. The scrapstore collects non-hazardous, non-toxic household waste items that can be re-used as play and art resources. The Council works with scrapstore to run workshops at various public events to demonstrate the re-use of materials.

Furniture Re-use

- 9.7.6 Torbay Council works with local furniture projects Mutual Aid Self Help (MASH), Rowcroft Hospice and Refurnish, to enable reusable furniture to be collected by these agencies and sold to people on low incomes. In 2005/06 30.67 tonnes of furniture were collected for re-use by MASH. Data for the first half of 2006/07 show that 14.3 tonnes have been collected so far this year.
- 9.7.7 Torbay Council has worked in partnership with Devon Furniture Forum (DFF) for the past five years, promoting the re-use of furniture and informing residents about local furniture projects. In 2007, Torbay Council intends to extend partnership working with DFF to divert suitable furniture items from its bulky collection scheme to DFF rather than sending to landfill.

Real Nappy Campaign

9.7.8 Torbay Council is part of the Devon Real Nappy Group, with Torbay Hospital, NHS Trusts and other Devon Local Authorities. The group promotes the use of real nappies rather than disposable ones, which is an important element of waste minimisation. A real nappy road show event was run in Torbay during 2006.

Recycling Credits

9.7.9 Torbay Council works with a number of organisations including charity shops, youth and community groups who collect materials for recycling in return for recycling credits that are issued by the Council. Currently 45 organisations are registered to claim recycling credits for collection of materials. Table 9.6 shows an increasing trend in the tonnages of paper and textiles that have been collected for recycling by third party organisations in recent years.

Table 9.7 Tonnages of paper and textiles collected for recycling by organisations claiming recycling credits

	2003/04	2004/05	2005/06
Paper (tonnes)	83.66	164.07	245.20
Textiles (tonnes)	133.74	223.86	330.89

The Elderly

9.7.10 In Torbay, this age group makes up a significant percentage of the population (26%). The Council enlisted the help of local agencies such as Age Concern, housing associations and lunch clubs. During 2005/06, 42 sheltered accommodation establishments (out of a potential 47) were visited by the Recycling Officer. The officer also ran workshops and gave talks at 11 lunch clubs, ran 5 compost clinics, 6 road shows and attended 3 senior life skills open days. The Council has also promoted recycling issues in magazines aimed at this sector.

9.7.11 In 2006/07 the residents are now being visited for a second time, to catch up and in some cases extend the materials that they are collecting. To date, 27 lunch clubs have been revisited, 2 compost clinics have been run and 2 roadshows were held¹⁹². On these second visits the Recycling Officer found that the majority have made good progress with recycling and waste minimisation and are producing high quality recyclate. Via this initiative, the council has contacted over 35% of its target audience and has sold over 350 compost bins.

Schools

9.7.12 The Recycling Officer visited 11 schools in 2005/06 and 13 to date in 2006/07¹⁹³ to promote waste minimisation and recycling (see Table 9.7). A number of these

¹⁹² November 2006 data

¹⁹³ December 2006 data

schools are also registered as Eco Schools which involves criteria for waste minimisation and recycling, as well as other criteria. Currently there are 11 schools within Torbay registered as Eco Schools. Of these, 6 have achieved bronze award status, 5 have silver award status and 2 have achieved green flag status.

9.7.13 The majority of schools within Torbay have been provided with free paper recycling facilities by the Council.

Table 9.8 Schools visited by Recycling Officer in 2006

<u>Name of school</u>	<u>Date (s)</u>	<u>Topics covered</u>
Brixham C of E Infants	Ongoing	Eco school work and promotion of composting of fruit waste via wormery
Chestnut Primary	June	Ongoing promotion of Alupro cans for trees campaign
Cockington Primary	June	2 nd paper making workshop
Coombe Pafford	July	Update on paper recycling project in school
Foxhole Infants	Ongoing	Eco School work
Mayfield	Ongoing	Eco School work
Oldway Primary	Ongoing	Working towards Eco School status
Queensway Primary	July	Revisit re: paper recycling in school, waste audit carried out
Roselands Primary	September	Waste audit, followed by paper recycling within the school
Eden Vale Primary	June	Visit by refuse collection vehicle (Students were joint winners of a CIWM/Torbay Council schools competition)
Torquay Girls Grammar	Ongoing	Paper recycling
Torquay Community College	June	Visit by refuse collection vehicle (Students were joint winners of a CIWM/Torbay Council schools competition)
White Rock Primary	Ongoing	Eco School work

Businesses

9.7.14 The Groundwork Trust has been working with businesses participating in the Envision Business Support Programme. The programme includes waste minimisation and recycling education. Eight businesses within Torbay took part in the 'Envision 1' programme which ran from June 2002 – June 2005. Two of these businesses are currently working towards the BS8555 environmental management system. The second phase of the Business Support Programme ('Envision 2') began in July 2005, with recruitment in Torbay starting in April 2006. Currently 6 businesses within Torbay have signed up to 'Envision 2'. A further 8 businesses have been through Envision training with Groundwork, which provides a framework for initiating environmental efficiency within the

business. Of these, one is working towards the ISO14001 environmental management system and one is working towards BS8555194.

Adults with Learning Disabilities

9.7.15 Torbay Council works in partnership with Hollacombe Community Resource Centre (CRC), on a recycling initiative involving adults with learning disabilities. Clients from the centre deliver collection boxes (supplied by the Council) to local businesses and then collect aluminium cans, plastic bottle and ink cartridges for recycling on a weekly basis. The cans and plastics are sorted, crushed and taken to recycling outlets. The CRC has established working agreements to collect recyclables from Paignton Zoo, Babbacombe Model Village, South Devon College and Oldway Mansion, and aim to establish links with more local businesses in the future.

Home composting

9.7.16 In addition to promoting recycling within the community, Torbay Council also encourages home composting. Torbay Council is working with a local company, West Country Worms, to supply reduced priced compost bins and wormeries to residents of Torbay, and to monitor the number sold each year. During 2005/06 a total of 117 compost bins and 58 wormeries were sold, bringing cumulative totals to 4607 composters and 333 wormeries supplied to Torbay residents. Table 9.8 shows the cumulative numbers of composters and wormeries sold to Torbay households and the estimated tonnage of waste processed through home composting, demonstrating and increased trend in home composting over recent years.

Table 9.9 Home composters and wormeries sold to Torbay residents and estimated tonnages of waste processed

Year	Composters and Wormeries Sold (Cumulative Total)	Estimated Waste Processed (Tonnes) ¹⁹⁵
2000/01	3531	177
2001/02	3814	191
2002/03	4050	203
2003/04	4548	227
2004/05	4777	239
2005/06	4957	248

9.8 Minerals

9.8.1 Torbay is served by a number of quarries in the surrounding area, which have long term reserves. Since the closure of Lummaton Quarry in 1989, Torbay itself has only one operational limestone quarry, located at Yalberton in Paignton. This operation is subject to the Review of Old Mineral Permissions procedure. It is not probable that any of the disused quarries in Torbay will be

¹⁹⁴ December 2006 data provided by Groundwork

¹⁹⁵ Estimated tonnage based on 0.05 tonnes of waste processed per composter / wormery unit per year

revived for mineral extraction. There is no need or scope for mineral excavation within or near to the urban area¹⁹⁶

9.9 Summary

9.10.1 Torbay's waste policies are based on European, National and Regional legislation and guidance. Challenging targets are set for the future and investment in the waste infrastructure will be required to enable Torbay to meet these targets. Reduction and reuse strategies will become more important as Torbay has a growing population producing an increasing amount of waste, and continued work within the community is required to increase awareness of responsibility for minimising and recycling waste. Currently waste that is not recycled is sent to landfill. In terms of government targets, financial penalties and sustainability principles this situation is not acceptable and strategic alternatives will need to be considered.

¹⁹⁶ Torbay Council (2004) Adopted Torbay Local Plan 1995-2011

10 SEA Topic: Water

10.1 Flood Risk

10.1.1 Torbay has 17 watercourses covering 42km in length¹⁹⁷ (see Figure 10.1), of which 13 discharge directly to the English Channel, 2 discharge to the River Dart, 1 discharges to the River Teign and 1 discharges to the public combined sewer system.

10.1.2 Following severe flooding in 1999, the Galmpton watercourse was classified as a main river by the Environment Agency¹⁹⁸. A further 7 watercourses (Higher Brixham, Clennon Valley, Churston, Yalberton, Victoria Stream, Ocombe Valley and Aller Brook) were classed as critical ordinary watercourses by Torbay Council and the Environment Agency. This was a result of their potential to put a large number of people and property at risk¹⁹⁹. In April 2006 these were re-classified to become Environment Agency main rivers²⁰⁰. The remaining 9 watercourses in Torbay are categorised as ordinary watercourses.

10.1.3 The main risks of flooding come from coastal and fluvial flooding as well as a proportion of incidents related to surface water runoff. The Environment Agency identifies a small number of potentially 'at risk' areas from fluvial and coastal flooding (see Figure 10.1). The Environment Agency classifications include:

Flood Zone 3: Extent of a flood with an annual probability of flooding of 1% (1 in 100) or greater from rivers, and 0.5% (1 in 200) or greater from the sea, ignoring the presence of defences.

Flood Zone 2: Extent of a flood with an annual probability of flooding of 0.1% (1 in 1000) or greater from rivers and the sea.

Flood Zone 1: Land not identified in Zones 2 and 3 and has little or no risk

10.1.4 Since May 1999 Torbay has suffered 8 incidences of major flooding which has caused 500 incidences of flooding to properties (although some properties included in this figure are counted more than once due to recurrent flooding). These areas are likely to be placed at increasing risk over future years as sea level continues to rise and more severe rain storms are predicted.

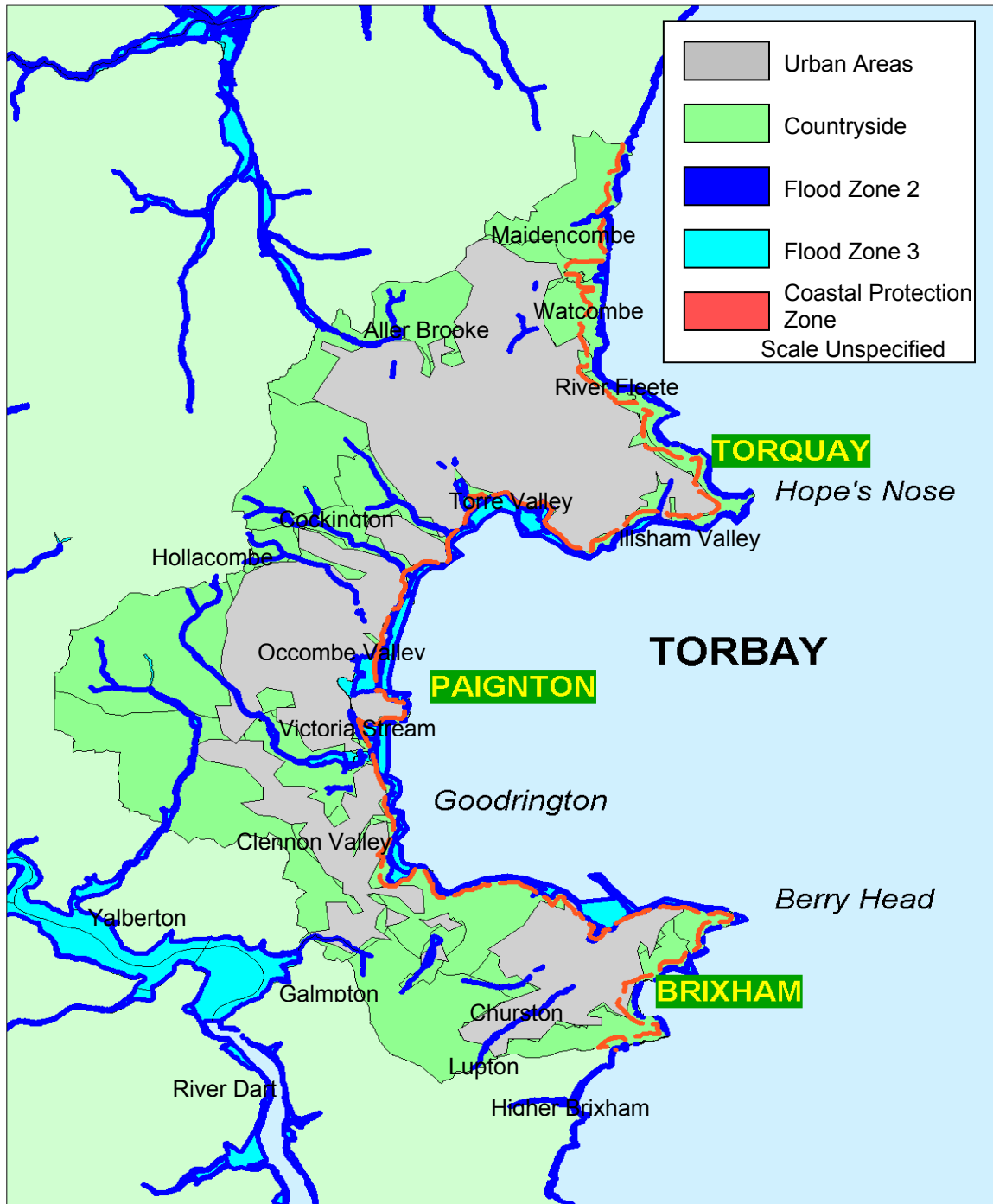
10.1.5 Torbay Council is currently preparing a Strategic Flood Risk Assessment (SFRA). This report will be used to inform the Local Development Framework and provide general guidance for planning officers, developers and other interested parties.

¹⁹⁷ Torbay Council (2004) 'Policy Statement on Flood and Coastal Defence' http://www.torbay.gov.uk/flooding_policy (accessed 10/02/2004)]

¹⁹⁸ Torbay Council (2006) 'Strategic Flood Risk Assessment – Draft Report'

¹⁹⁹ Torbay Council (2004) 'Policy Statement on Flood and Coastal Defence' http://www.torbay.gov.uk/flooding_policy (accessed 10/02/2004)]

²⁰⁰ Torbay Council (2006) 'Strategic Flood Risk Assessment – Draft Report'



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Figure 10.1 Watercourses and flood zones in Torbay

10.1.6 Key areas of Torbay with respect to flood risk are outlined below:

Torquay

- Flooding in the Torquay Harbour from wave overtopping of the harbour wall caused by high tides in combination with easterly winds. At very high tides the surface water outfalls to the harbour become tidelocked, increasing the risk of flooding in the low lying areas around the harbour should a major storm occur.
- An area to the west of Torre Abbey and east of Torquay Station which includes the bowling green and recreational area and the intersection of Torbay and Rathmore Road. This area is currently protected by a sea wall (flood zone 2 and 3) but frequently experiences localised flooding particularly around Kings Drive which causes disruption to traffic flows. Torre Abbey Watercourse discharges directly to coastal waters. At high tides the discharge is restricted due to tidelocking, causing backing up. Torquay Recreation Ground is therefore susceptible to flooding from both the watercourse and coastal waters.
- There is a risk of flooding at Livermead from wave overtopping of the sea wall caused by high tides and easterly winds. Coastal flooding can result in the closure of the main road between Torquay and Paignton, causing traffic disruptions.
- Watercourse flooding has occurred on Torbay Road (Hollicombe watercourse), Teignmouth Road (River Fleet), Newton Road (Aller Brook) and Cockington (Cockington watercourse).

Paignton

- High tides and easterly winds can cause wave overtopping at Preston and Paignton seafronts resulting in flooding.
- Paignton Esplanade stretching back to the low-lying area of Torbay Road and land either side. This area includes a concentration of holiday accommodation in and around Kernou Road, Adelphi Road and the Esplanade as well as a concentration of tourist related shops in Torbay Road. The majority of this area is covered by flood zone 3 with flood zone 2 stretching further into the south of Paignton. As well as a number of key road links, flood zone 2 also covers Paignton Railway Station, the bus station and a substantial area of car parking. Station Lane in particular is prone to frequent flooding as discussed below.
- Victoria Stream catchment is a problematic area as it is drained through a surface water system which discharges to coastal waters. Where high tides coincide with a storm the system is unable to discharge to coastal water hence causing flooding in areas such as Station Lane, Dartmouth Road, Adelphi Road, Queens Road and Sands Road. A flood alleviation scheme aims to address this through, for example, a new pumping station in Paignton, upsizing of culverts and sewers, installation of a tideflex valve and removal of surface water connection to Station Lane Pumping Station.

Following a successful bid to DEFRA, construction work for the flood alleviation scheme has now commenced.

- There are flood areas at Occombe Valley / Shorton Valley from the Occombe Valley main river.
- Flood risk maps indicate a fluvial flood zone extending from Clennon Hill to Goodrington Sands (flood zones 2 and 3). At high tides, the outfall from the Clennon Valley watercourse becomes tidelocked, increasing the risk of flooding during heavy rain. Historically this watercourse has suffered flooding to properties and highways including Kings Ash Road, Totnes Road and Dartmouth Road.
- There is a risk of tidal flooding in and around Goodrington Park from high tides and easterly winds causing overtopping of the seawall. There is a recognised need for remedial works to this wall and DEFRA funding has been secured to carry out this work in 2006/7.
- A small area to the north of Broadsands including parkland and car parking areas is at risk from flooding if wave overtopping of the seawall occurs.
- Land adjacent to the watercourse which flows through Collaton St Mary and Yalberton Industrial Estate could affect a small number of homes and businesses adjacent to the flood zone 2 and 3.
- Galmpton Watercourse, although only a small main river has in the past been highly susceptible to flooding. It has recently undergone remedial works by the Environment Agency to provide new and replacement culverts which has proved to be successful.

Brixham

- Areas in Brixham harbour around Furze Lane, The Strand and Pump Street are included in flood zone 2 and 3. This area currently experiences little flooding except in times of exceptionally high tides.
- Within Brixham the Higher Brixham Watercourse has a history of flooding and although has only a small floodplain it has potential to flood many properties due to the high-density nature of this urban area. Funding was secured from DEFRA for flood alleviation work to this area to improve culverts and upgrade pipes, and construction works were completed during 2005.

10.1.7 In addition to these areas linked to coastal and fluvial flooding, it is important to recognise the role of surface water runoff. This is especially important in Torbay which is urbanised at a high and increasing density. A report to the Development Control Committee on the Review of Flooding in Torbay highlighted the need to consider the increasing risk of flooding from expanding housing developments and increasing number of hard surfaces created. This source of flooding is already problematic in Torbay which has a history of flash floods. This has, in the past been related to an inability of the sewer system to keep up with development rates in Torbay, but has been exacerbated recently

by increasing areas of hard surfaces including roads/ buildings and increased popularity of patios and decking. The public sewers system and existing culverts are currently at capacity so any further development should employ a Sustainable Drainage system (SuDS) which lessens, or at worst equals the runoff from that area of land.

10.2 Flood Alleviation

10.2.1 Torbay has a number of means by which to deal with flooding through both hard and soft engineering. Coastal flood defences are located at the following beaches:

- Meadfoot
- Torre Abbey
- Preston Esplanade
- Paignton Esplanade
- Goodrington
- Broadsands

10.2.2 In addition to the flood defences mentioned above there are numerous flood defences located along the Torbay watercourses including a number of flood storage areas at the following locations:

- Stoke Road storage area – Yalberton Watercourse
- Great Parks storage area – Clennon Valley Watercourse
- Hollicombe Woods storage area – Hollicombe Watercourse
- Coombe Park storage area – Occombe Valley Watercourse
- Sainsbury's storage Lagoon – Aller Brook
- Laywell Reservoir –Higher Brixham watercourse

10.2.3 There are also a number of public open spaces which have potential for flood storage through either natural inundation or man made Sustainable Draining Schemes. These include:

- In Torquay - Illsham Valley, River Fleet, Edginswell, Cockington, Hollicombe, Sherwell Park, Cockington
- In Paignton - Victoria Park, Goodrington Park and Broadsands
- In Brixham - St Mary' Park

10.2.4 Government policy is moving towards 'soft engineering' and avoidance of development in flood risk areas and the allowance of managed retreat. As Torbay's economy is dependent upon the beaches and the directly adjacent tourist infrastructure, managed retreat is therefore unlikely to be an option here. Instead future emphasis is aimed at prevention or minimisation of development in high-risk areas.

10.2.5 Torbay Council has identified a number of remedial works necessary for highways in order to alleviate future flood risk²⁰¹. These are outlined in Table 10.1

Table 10.1 Outstanding schemes required to address highway flooding problems

Location	Problem	Solution	Comments
Occombe Valley Road	Culverted Watercourse in danger of collapse	Reconstruct section of watercourse	Planned for 2007/08
Occombe Valley/Shorton Valley Road	Flooding to highway caused by field run-off	Re-profile access road	Planned for 2006/07
Brixham road at Windy Corner	Flooding on highway	Install new soakaway	Complete
Cockington Lane O/s Rose Cottage	External flooding to property	Install new highway drain	Complete
Dartmouth Road O/s Gliddon Ford	Flooding on highway	Install new soakaway	Complete
Newton Road/Old Woods Hill	Flooding on highway	Install new highway drain	Planned for 2006/07
Wheatridge Lane	External flooding to property	Install new highway drain	Complete
Combe Lane	External flooding to property	Install screen and clean culvert	Planned for 2007/08
Marldon Road	Flooding on highway	Install new highway drain	Complete
Blagdon Road	Flooding on highway	Install new soakaway and drain	Planned for 2007/08
Upton Mannor Road, Brixton	Flooding on highway	Install new highway drain	
Centry Road	Flooding on highway	Install new highway drain	Planned for 2007/08
Newton Road/Old Woods Hill	Flooding Highway	Install new highway drain	Planned for 2006/07
Old Paignton Road/Torbay Road	Flooding Highway	Planned new screen and works to culvert	
Tor Park Road	Flooding on highway	Clean culvert and assess capacity	
Long Road/Stoke Road	Flooding on highway	Install new highway drain	
Browns Bridge Road/Barton Hill Way	Flooding on highway	Install new highway drain	
Old Mill Road/Cockington Lane	Flooding on highway	Modify existing screen arrangement	

10.2.6 It was highlighted by stakeholders that a significant number of businesses in Torbay would benefit from flood alleviation works in Station Lane and Victoria

²⁰¹ Torbay Council 'Review of Flooding Within Torbay' Report OSB/17/04 to the Executive 11.01.05. Adopted by the Overview and Scrutiny Board December 2004.

Park (Paignton), Bolton Street and Fore Street (Brixham) and Torre Abbey (Torquay). Tweenaways Cross was identified as in need of monitoring to assess future need for flood alleviation works. Tweenaways Cross and Torre Abbey both have significant impacts on the transport system due to their importance in the road network of Torbay.

10.3 Water Quality

Inland Waters

10.3.1 Inland water quality is measured by the Environment Agency in only one location in Torbay, on the Aller Brook, near Kerswell Gardens. Water quality at this point has fluctuated in the past, failing to meet water quality targets between 1997- 1999. This is due to its proximity to the Barton Tip landfill site, however there are no current concerns. Compliance with Water quality in the minor tributaries in the remainder of Torbay is not measured²⁰².

Marine Waters

10.3.2 The quality of Torbay's coastal waters is of paramount importance in relation to maintaining the conservation value of the marine environment as well as maintaining the water-based activities and beaches which makes Torbay such an attractive tourist resort.

10.3.3 The quality of marine water in Torbay has been consistently good over previous years with only 4 Environment Agency samples tested for the bathing waters Directive since 1990 being of poor quality. The most recent of these being in 1997, since when all samples have proved to be of good or excellent quality²⁰³.

10.3.4 In 2006 bathing waters in Torbay fell within the following Environment Agency classifications:

- 11 of excellent quality (Maidencombe, Watcombe, Oddicombe, Babbacombe, Anstey's Cove, Meadfoot, Beacon Cove, Preston Sands, Broadsands, Shoalstone and St Mary's Bay)
- 4 of good quality (Torre Abbey, Hollicombe, Paignton Sands and Goodrington)

10.3.5 In both 2005 and 2006 all 15 beaches sampled passed the Imperative bathing water standard, and 11 beaches also passed the more stringent Guideline standards²⁰⁴.

10.3.6 In 2004 and 2005, Torbay contained 3 Blue Flag beaches, located at Oddicombe, Meadfoot and Breakwater (see Figure 10.2). In 2006, an additional 2 beaches, Broadsands and Preston, also received the Blue Flag award.

²⁰² Environment Agency website <http://www.environment-agency.gov.uk/maps> 'What's in your Backyard' (Accessed 10.02.05)

²⁰³ Environment Agency website <http://www.environment-agency.gov.uk/maps/info/bathing/> (Accessed 27.10.06)

²⁰⁴ Torbay Council Environmental Health and Consumer Protection, personal communication October 2006

Torbay has a total of 12 beaches that have been awarded the Encams Seaside Award ('Yellow Flag' beaches). These are also shown in Figure 10.2.



Figure 10.2 Blue Flag and Seaside Award beaches in Torbay²⁰⁵

²⁰⁵ Source: English Riviera Tourist Board (2004), 'The English Riviera 05: Making a Lasting Impression,' English Riviera Tourist Board

10.4 Sewage

10.4.1 Until 2002 untreated sewage sludge was released through sewage outfalls into the sea. Favourable sea conditions meant that the sewage was taken out to sea rather than deposited on the beaches. The processing of Torbay's sewage however, has been vastly improved with the building of a new sewage treatment works at Churston in the disused Brokenbury Quarry. This is the largest state of the art works in the South West and has cost £44 million and taken two years to build, part of the £95 million 'Clean Sweep' project by South West Water.

10.4.2 Before the project, 10 million gallons of crude sewage flowed into the sea from Hope's Nose to the north of the bay, and Sharkham Point to the South. Initially sewage from Brixham and Paignton were treated, in 2003/04 flows from Torquay were treated with the completion of a new pumping station at Ilisham Valley. The new works includes tertiary and UV treatments before releasing the cleaned effluent into Sharkham Point. This is a significant improvement given the high ecological value of Torbay's wildlife²⁰⁶.

²⁰⁶ South West Water website www.southwestwater.co.uk 'Torbay gets the Clean Sweep treatment (accessed 11.03.05)



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