Introduction

The Isle of Wight lies approximately 3 miles off the south coast of mainland England and covers an area of 146.8 sq miles (38.016 hectares, or 380.16 km²).

Based on the mid-2010 population figure, 140,500 people currently live on the Isle of Wight making it the tenth largest Unitary Authority in the South East region (Source ONS).

The Island's countryside offers a diverse range of natural environments, including rolling chalk downs, salt marshes, forestry & woodland, together with land dedicated to agricultural use. Distributed across the more rural parts of the Island are a number of small villages and hamlets

Urbanisation and greater population density occurs in the main towns of <u>Newport</u>, <u>Ryde</u> and <u>Cowes</u> (East and West), with <u>Sandown</u> and <u>Shanklin</u> linking together down the east coast to form 'The Bay' area and almost meeting with <u>Ventnor</u> as the coastline sweeps towards the southern most tip of the Island.

Newportc.17,300 personsRydec.18,800 personsWest Cowesc.14,800 personsEast Cowesc.7,600 personsSandownc.7,300 personsShanklinc.7,300 personsVentnorc.6,100 persons

Based on 2010 ward projections mid-2010, Source: Office for National Statistics (ONS)

Geography and Coastline

- The Island's coastline is approximately 57 miles (92 km) in length.
- The Island's three main rivers are the Medina, the East Yar and the West Yar. All three flow north and drain into the Solent or Spithead.
- The exact centre of the Island is at Shide Corner, on the south-eastern outskirts of Newport. Latitude - 50° 41" north, Longitude - 1° 18" west.
- The highest point is St. Boniface Down at Ventnor, which is 240 metres (787 feet) high, although generally speaking the highest ground extends from Culver Cliff to Tennyson Down above the Needles, as an east-west alignment of chalk downs which straddle the Island.

The Isle of Wight became separated from the mainland some 7,000 years ago following the melting of the ice sheets created during the Ice Age, which had led to the rise in sea levels.

The geology of the Island is made up form a mixture of different rock types with a significant feature of the Island's physical geography being the <u>chalk</u> downs that run across the centre of the Island. To either side of these, the northern half of Island is made up of mainly Tertiary clays, while the southern half is formed of <u>Cretaceous</u> rocks.

These Cretaceous rocks indicate that the Island's climate was once suitable for <u>dinosaurs</u> and their bones and footprints can be seen in and on the rocks exposed around the Island's southern beaches. As a result, the Island has been nicknamed <u>Dinosaur Island</u>.

Climate and Weather:

The southerly location combined with warm south westerly winds contributes to provide the Isle of Wight with warm summers and mild winters. The temperatures that are experienced by inland and coastal towns may vary, but usually not by more than a couple of degrees. Ventnor and the Undercliff are renowned for their microclimate which encourages the growth of many species of subtropical plants many of which can be seen at the <u>Botanic Gardens</u>.

The Island also has one of the best records for sunshine in the south of England, with Sandown, Shanklin and Ventnor often averaging 5 hours per day, with peaks of up to 8 hours per day during the summer months.

The benefits of its temperate climate, combined with the natural beauty of its environment, have proven to make the Island popular as both a place to visit and holiday as well as to move to and live.

The winter temperatures experienced on the Island are not normally as severe as the mainland, which as a tourist resort has helped to extend the holiday season, with increasing numbers of people visiting in the autumn and winter months. (Island Breaks provides a quarterly breakdown on a range of topics related to tourist visits and weather.)

For up to date detail for weather conditions on the Island: <u>Isle of Wight</u> <u>Weather Station Network</u>

Areas of Outstanding Natural Beauty (AONB)

<u>AONB</u>s are judged to be 'treasured' places where the landscape is considered worthy of protection by law for future generations being 'designated' under the National Parks and Access to the Countryside Act 1949,. Designation is intended to help protect the natural features of the area, together with the settlements and working environments that are unique characteristics of the countryside.

The Isle of Wight AONB was designated in 1963, made up of five distinct land parcels with much of this located to the south and west of the Island and covering approximately 189 km^2 equivalent to about a half of the Island.

In 1974, two areas, equivalent to 90% of the Island's coastline, became designated by European environmental legislation with much of it classed as <u>'Heritage Coast' or of 'Outstanding</u> <u>Natural Beauty'</u>.

Further information is available from www.wightaonb.org.uk

Nature Reserves and Sites of Special Scientific Interest

There are a number of <u>nature reserves</u> located across the Island, many of which offer unique environments in which a variety of plant, insect and animal species can be found and viewed. Some of these sites are operated and managed by the council while others remain independent or are operated by national charities such as the Royal Society for the Protection of Birds (RSPCB).

The Island's Environment and Highways

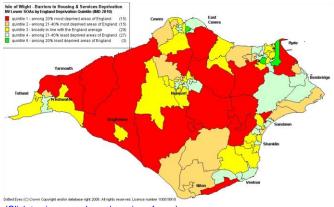
The Island also has around 40 <u>designated Sites of Special</u> <u>Scientific Interest</u>, covering around 11% of the Island's land area these contain areas of national biological and/or geographical interest. Many are in private ownership or under the stewardship of a variety of conservation bodies, with large areas owned and managed by the National Trust.

Access to key Services

The impact of social deprivation and health inequality are often more visible and easily recognisable in urban areas, due in part to their greater population density. As a result programmes and strategies that seek to improve on the factors contributing to deprivation may sometimes create unforeseen 'barriers' that impact and increase the effect of such deprivation on rural communities, which may have similar issues but that are less obvious and dispersed in nature.

To illustrate this, the 'Barriers to Housing and Services' deprivation levels can be applied (2010 Indices of Multiple Deprivation). This measured the physical and financial accessibility of housing and key local services in an area, falling into two sub-groups: geographical barriers – relating to the physical proximity of local services, and wider barriers – which included issues relating to access to housing such as affordability.

While the situation had shown some improvement between the 2007 and 2010 results, 15 of the Island's Lower Super Layer Output Areas (LSOAs) remained amongst the 20% most deprived areas in England (seven in the 10% most deprived), with the majority in rural locations – see map below.



(Click to view an enlarged version of map)

The <u>Commission for Rural Communities</u> also offers information about the availability of services in rural areas 'by distance', based on a calculation along the road network from the centre of a postcode to the nearest outlet of a particular service. **Note:** Rural households are those defined by the 2004 Rural and Urban definition as 'Hamlet and isolated dwelling' 'village' and 'town and fringe'.

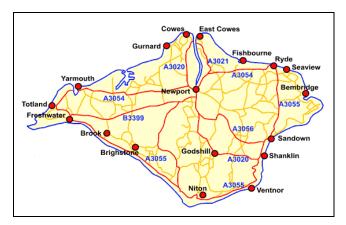
While the Island's results for rural verses urban demonstrated few exaggerated variances, there were some examples where access to certain services by rural communities was more clearly less available than from urban areas:

% of households within given distance via road network	Rural	Urban
Supermarkets (4km)	72%	100%
Dentists (4km)	64%	100%
Banks and Building Societies (4km)	60%	100%
Job Centre	37%	75%

Source: Commission for Rural Communities (January 2011)

Transport and Accessibility

Access to and from the Island for both commercial and private traffic is via the <u>three principal ports</u> of Yarmouth, East Cowes and Fishbourne and are operated by just two companies. In addition high speed 'passenger only' services operate into West Cowes and Ryde. Ryde is also the terminus for a Hovercraft service to and from the mainland.



Currently, there are approximately 497 miles (800km) of adopted highway maintained by the Isle of Wight Council. There is no motorway and only a very limited distance of dual carriageway, with much of the road network located across the more rural parts of the Island.

Public transport comprises a bus service operated by <u>Southern</u> <u>Vectis</u> that provide services across much of the Island together with a single stretch of <u>electrified rail link</u> operated by Island Line between Shanklin and Ryde Pier Head. In addition there are a small number of Community Bus projects being developed and introduced in areas such as the West Wight, to meet local need.

Currently the council is preparing for the start of the <u>Isle of</u> <u>Wight Highways Private Finance Initiative</u> (PFI) in 2013. The PFI will cover a period of twenty-five years to completion, combining improvements to the standard of the Island's roads with an ongoing maintenance contract.

Activity based pursuits

With its diverse landscape and extensive areas of countryside, the Island offers lots of opportunities for outdoor activity. The following provides a taster to what can be done but is not a definitive list of the full range of opportunities available on the Island:

Walking -

- There are over 500 miles of maintained paths and public rights of way on the Island. Contributing to these is a coastal path which extends some 60 miles in length.
- There is an active <u>Ramblers</u> group participating on the Island with a separate group for <u>younger walkers</u>.
- An annual <u>Walking Festival</u> is organised each year by the Isle of Wight Council's Events Team, which includes a range of walks designed for people of all ages and capabilities.
- There is also an annual <u>Walk the Wight</u> event which continues to gain popularity, while raising funds for the Isle of Wight Hospice.

Cycling -

• The Island offers around 200 miles (300 km) plus of Bridle ways and <u>Cycle Tracks</u> that are accessible to cyclists.

The Island's Environment and Highways

- An annual <u>Cycling Festival</u> organised by Isle of Wight Council takes place at the end of each summer, with a variety of routes designed to meet the varying abilities of cyclists, from the beginner to the more experienced.
- In addition the <u>Randonnee 2012</u> is due to take place in May 2012, offering a choice of two routes of different lengths.
- While for those that want more of a challenge and like the idea of helping to raise money for charity at the same time, the annual <u>Wight Challenge</u> comprises a course involving, canoeing, cycling and running.

Sailing -

- The Island has a rich heritage both as a sporting venue and as a builder of yachts and boats, sails and rigging.
- <u>Sailing Clubs</u> of differing sizes are located across the Island offering activities aimed at different levels of experience, ranging from the smaller offshore activities through to ocean class racing, with regattas and activities taking place mainly between Easter and late summer.
- The most famous of these events that is the annual <u>Cowes</u> <u>Week</u> regatta that takes place early each August.

Open areas

- The coast is important for both recreation and leisure activities, particularly those that rely on good quality <u>beaches</u> and easy access to the sea. It also supports a thriving tourist industry and a number of commercial and industrial interests along its length. The continuation of these industries remains essential to the economy of the Isle of Wight as a whole.
- Located across the Island are a number of <u>Parks</u> and gardens. These offer places for play and exercise or to just walk and relax.
- In addition there are a number of natural environments including the chalk downs, woods and forests. Each offers the opportunity the freedom to walk and observe the varied flora & fauna for which, in some cases, the Island provides a unique haven.

Sports and Leisure

There are two main leisure centres operated by the council, one at <u>Newport</u> and the other at <u>Sandown</u> each offering swimming pool and gym facilities. In addition squash courts, together with a gym facility are available at a centre on the outskirts of <u>Ryde</u>. There are also independent sports facilities in <u>Freshwater</u> and a swimming pool on <u>Ryde Esplanade</u> (operated by Waterside Community Trust).

Future challenges and demands

Future increases in population numbers

Projections suggest the Island will experience an average annual growth in population of 1,250 persons over the next 22 years (2033). These same projections imply that the Island's aged population will grow, with a significant increase in those aged 65 and over compared to a gradual reduction in the rates for those aged 64 and below.

Irrespective of age groups, this population increase will add to the demand for housing, increasing pressures for the development of land leading to a further expanse of urbanisation on the outskirts of existing towns, and potential development in more rural areas.

The anticipated increase in numbers of older residents, in part drawn from increased numbers electing to retire to the Island may also influence the types and natures of accommodation being built with communal developments becoming a feature.

Increases in traffic

As the Island's population continues to grow it may be assumed that the levels of traffic seen on Island roads will also increase, both in the numbers of private vehicles and the levels of commercial freight supplying shops and supermarkets that fulfil the needs of this increased population.

Reflecting on past Census results, between 1981 and 2001 the ratio of households **not** having a car dropped by just under 12 percentage points, while numbers with two or more cars showed a steady increase:

Households with:	1981	1991	2001
No Car	36.2%	29.6%	24.7%
1 Car	49.3%	48.4%	47.6%
2 Cars	14.5%	18.1%	21.8%
3 Cars	N/A	3.9%	5.9%

Source: ONS, 2001 National Census results

Implementation of the Highways PFI should benefit traffic flow on the Island through improved infrastructure and improved efficiency of the road network, which combined with increased introduction of cycle-ways will change peoples attitudes to how the roads network is used.

However, the economic climate may influence this projected increase, with its pressure on wages, and domestic budgets, levels of employment and wage scales, determining the relative wealth of the resident population while for the older population the level of pension received and rate of interest on savings held, will each contribute both to the viability to purchase and maintain vehicles and to the affordability of fuelling these vehicles.

Further information on the council's third Local transport plan due to run until 2038: (Link)

Information about traffic volumes on Island roads is available from the Department for Transport: $(\underline{\mathsf{Link}})$

Waste and Recycling

A further consequence to the projected rise in population will be a need to manage the increased levels in household waste being produced each year.

The current contract for waste collection with Island Waste Services (IWS) is due to expire in October 2015. This contract currently provides kerbside collection of recyclables, food and residual waste, operation of the Household Waste Recycling Centres (HWRCs), operation of composting activities and the management of the disposal of residual waste via both landfill and under a separate arrangement a gasification plant.

In 2009/10, 75,700 tonnes of municipal waste were collected, with a recycling rate of nearly 32% achieved and 38,700 tonnes of waste diverted from landfill.

Developing the Waste Management Strategy:

With the need to review and start a new contract for waste collection there is the opportunity to review the way in which all municipal waste is managed on the Island and to position the Isle of Wight well for future waste challenges.

The Island's Environment and Highways

The main elements of the strategy concern the collection and treatment of waste.

The council remains committed to exceeding the European and national recycling target of 50% by 2020 and through reviewing the kerbside collection scheme the council will seek to increase the recycling rate by enabling more recyclable and compostable waste to be extracted.

At the beginning of 2012 a revised collection process was introduced with clearer distinction being made between recyclable waste, food waste and other domestic waste. These revisions are anticipated to provide for a significant and sustained reduction to volumes of waste going to landfill.

Access to Superfast Broadband

In conjunction with the government and European funding available to help develop improvement in broadband coverage across the UK, a project team within the council is currently engaged in bidding for funding to help introduce across the Island a more complete broadband connectivity coverage with improved download speeds.

While availability of broadband connection has proved to be less of an issue in the more urbanised parts of the Island, as with other rural environments nationally, a lack of availability, or slower download speeds persist in many rural areas.

Improved coverage and access to faster broadband connection will offer benefits both to individual households and to those businesses operating in rural communities across the Island.

The establishment of faster broadband connection, allied to the natural beauty of the environment available, may also prove an attractive proposition for further development of businesses located across rural areas. This would not only provide a boost to the local economy but also bolster the vibrancy and health of many communities across the Island.

Global Warming and coastal erosion

The topic of Global Warming has seen extensive commentary by both the National and International media. The debate continues over what the possible effects and consequences of climate change may be.

- Changes to the climate may potentially result in an increase to the numbers, and severity of weather fronts producing storm conditions. This in turn would influence the rate and level of coastal erosion experienced, particularly in those areas already susceptible to such issues such as Blackgang Chine.
- In addition, it has been suggested that a rise in sea levels will be seen, increasing the threat of flooding to low level, coastal areas of the Island as well as areas adjacent to river estuaries. The Environment Agency have developed maps outlining areas that could be affected with supporting suggested advice in respect of the <u>risk of flooding from</u> <u>rivers and the sea</u>.

Coastal Management:

A Risk Management Plan exists for the Island's Coast (IW Coast Shoreline Management Plan), together with a series of strategy studies. These provide a more detailed assessment for specific sections of the coastline and the best approach to coastal defence. The Plan is currently under review, employing Defra (Department for Environment, Food and Rural Affairs) advice and guidance.

A further study (Coastal Evolution and Risk Mapping) attempts to develop an understanding to the way the Island's coastline is evolving and where there are potential risks from erosion, land sliding, flooding and impacts from climate change

Further information is available from www.coastalwight.gov.uk