

Sustainability Appraisal Scoping Report

March 2017



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Introduction

The purpose of this Sustainability Appraisal Scoping Report is to promote sustainable development in the preparation of the Portsmouth Local Plan through improved integration of social, environmental and economic considerations. The Local Plan will set out a framework for future growth in the City, following the principles of the National Planning Policy Framework issued by the Department for Communities and Local Government in March 2012.

The National Planning Policy Framework published in 2012 states in Paragraph 165:

'A sustainability appraisal which meets the requirements of the European Directive on strategic environmental assessment should be an integral part of the plan preparation process, and should consider all the likely significant effects on the environment, economic and social factors.'

In Paragraph 167 it states:

'Assessments should be proportionate, and should not repeat policy assessment that has already been undertaken. Wherever possible the local planning authority should consider how the preparation of any assessment will contribute to the plan's evidence base. The process should be started early in the plan-making process and key stakeholders should be consulted in identifying the issues that the assessment must cover.'

The Portsmouth Local Plan needs to contribute to the principles of sustainable development (which are also set out in Section 19 of the Planning and Compulsory Purchase Act 2004) by carrying out a Sustainability Appraisal of each of the proposals in a Local Plan.

It assesses the extent to which the emerging plan, when judged against reasonable alternatives, will help to achieve relevant environmental, economic and social objectives. The appraisals are part of the EU Directive 2001/42/EC.

Within Portsmouth the three factors set out in the National Planning Policy Framework cover a range of issues;

- Social issues The Sustainability Appraisal will need to address the issue of providing sufficient homes for all sections of the community, e.g. the ageing population, sufferers of long term illness or disability and others. It also needs to look at the quality of the housing stock, fuel poverty, deprivation and any attendant crime problems, and the impact on the health of the population
- Environmental The Sustainability Appraisal will need to protect and enhance
 the marine environment and the Special Protection Areas (and its supporting
 habitat), the SSSIs and ensure protection and even enhancement of the
 supply of greenspace within the city. Congestion is another issue to consider
 as well as the quality of the air and there is a need to move towards a modal
 shift in how people commute and travel in the city

 Economic - the economy is an important issue nationally and locally, and the SA will need to consider if there is scope for Portsmouth to diversify the types of employers while building on its strengths in the marine sector and capitalising on its location

Of key importance for the National Planning Policy Framework and Portsmouth are the impacts of climate change, which includes considerable areas of the city being increasingly vulnerable to damage by flooding from the sea. There are also the effects of coastal change as sea levels rise and habitats are lost, affecting protected environments and the species that depend on them.

Water is also an important issue, from flooding as the water table rises, to contamination by leachate from existing areas of the city or poorly constructed landfill from many decades ago. These can also pollute watercourses and the marine environment. There are also the impacts of other contaminants such as agriculture, which is the single largest user of freshwater resources, using a global average of 70% of all surface water supplies. All this means water quality and water supply are increasingly threatened as the area grows.

Strategic Environmental Assessment

The Strategic Environmental Assessment Directive is a European Union requirement that seeks to provide high level protection of the environment by integrating environmental considerations into the process of preparing certain plans and programmes. In the case of Local Plans they should be addressed as an integral part of the Sustainability Appraisal process.

The Strategic Environmental Assessment will be integrated with the Sustainability Appraisal at each stage of production. It is an opportunity to consider ways in which the plan can contribute to improvements in the environmental, social and economic conditions via the strategy and policies in the Local Plan.

This approach satisfies the provision of the Strategic Environmental Assessment regulations which requires assessment of plans which are likely to have significant impacts on the environment. It also allows the City Council to identify and mitigate against any adverse effects the plan might have.

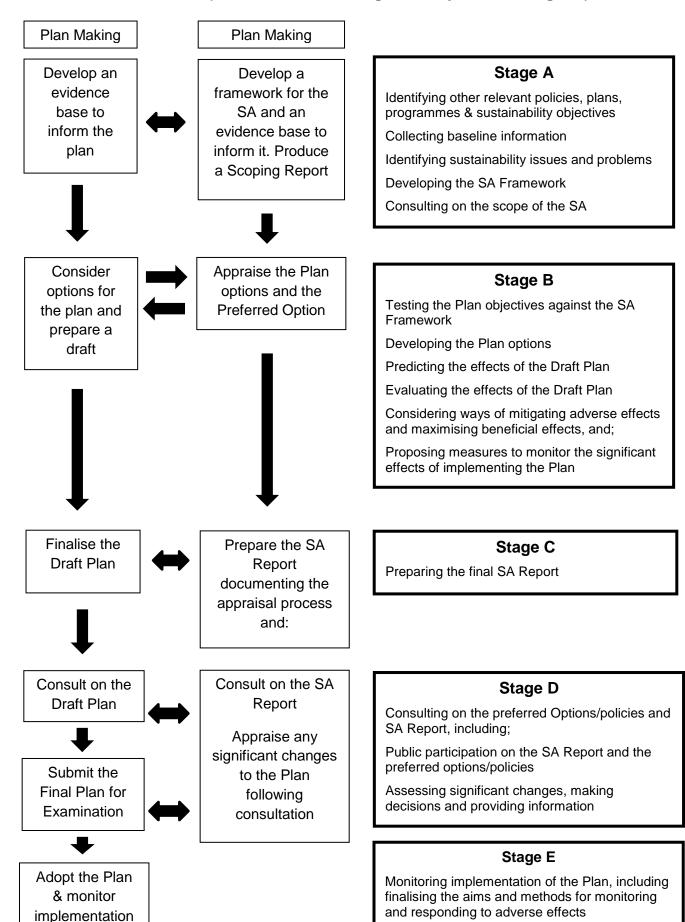
Equalities Impact Assessment

An Equalities Impact Assessment will also be carried out. This process is related to the Council's duties under the Equalities Act 2010 and the Crime and Disorder Act 1998. This assesses the impact of new policies in the Local Plan on people of different ethnicities.

Health Assessment

A Health Assessment is not a statutory requirement but is generally recognised as good practice, to promote health gains for the local population, reduce health inequalities and ensure new policies do not actively damage health. This follows on from the Health and Social Care Act of 2012.

Table 1 the SA Process (based on the Planning Advisory Service diagram)



What the Sustainability Appraisal will encompass

The Portsmouth Local Plan will cover the whole of the Portsmouth area, from Southsea on the shores of the Solent northwards to the chalk ridge of Portsdown Hill. It will contain policies promoting or protecting the key areas of housing, employment, transport, the historic and natural environment, retail, leisure and open space. It will also allocate appropriate sites for development and redevelopment.

This Scoping Report sets out in more detail the areas the Sustainability Appraisal work will cover. Portsmouth produced a Sustainability Appraisal for the Portsmouth Plan in 2012, which was the Core Strategy document under the old style LDF suite of documents.

The Sustainability Appraisal accompanying the Portsmouth Plan in 2012, is relatively recent and therefore the Council has undertaken a review of this to identify which issues are current and whether new ones have arisen. The scope of the Appraisal will be amended accordingly, taking into account updates to the list of guidance, policies, plans and projects list in 2016.

The document 'Local Plans: Report to the Communities Secretary and to the Minister of Housing and Planning' by the Local Plan Expert Group in March 2016 said in Paragraph S31 in the third bullet point;

'Preparation of a simple Sustainability Statement auditing the local plan against the NPPF would be sufficient to meet the legal requirement for Sustainability Appraisal - thereby dramatically reducing the burden of one of the most time consuming aspects of plan making.'

Although this document is not Government guidance or reflected in the planning regulations the underlying message regarding the appropriate nature and depth of the Sustainability Appraisal work is that it should focus on the key issues. The Council are taking the approach of producing a focussed document dealing with areas where Local Planning Policy can make a difference.

The stages of a Sustainability Appraisal

There are five key steps in production of a Sustainability Appraisal (see Table 1 on the previous page). This Scoping Report is part of the first step which develops a framework for the Sustainability Appraisal and the evidence base to inform it.

- Within the first step there are five stages to be carried out:
- 1. The first stage in a Sustainability Appraisal process involves identifying other relevant plans and programmes
- 2. The second stage is the collection of baseline data
- 3. The third stage is the identification of sustainability issues and problems

- 4. The fourth stage is the development of the Sustainability Framework against which the Local plan will be assessed
- 5. The fifth stage will be consulting externally on the scope of the Scoping Report
- The second step once this Scoping Report is finished is to appraise the Local Plan Options
- The third step is preparing the final Sustainability Appraisal Report
- The fourth step is consulting on the that report
- The fifth and final step is appraising any significant changes to the Local Plan (if any) following consultation

The first stage in the Sustainability Appraisal process - review of policies, plans, programmes, strategies and initiatives (PPPSI) - Stage A1

A review of all the documents that affect the parameters of the Local Plan has been carried out. A summary of all this baseline data is available in Appendix 1.

The key areas covered in Appendix 1 are:

- International and European Union Legislation
- UK Legislation, Government guidance and strategies as well as best practice on a number of topic areas
- Regional Guidance, strategies and research as well as the Partnership for Urban South Hampshire (PUSH)
- County Council strategies and research
- Portsmouth City and other local strategies and research

This current Scoping Report takes key Government objectives from the National Policy Framework to form an appropriate structure for the Sustainability Appraisal themes.

Ten themes have been identified for inclusion in the Sustainability Appraisal;

- Building a strong, competitive economy in Portsmouth
- Ensuring the vitality of the city centre and other retail centres in Portsmouth
- Promoting sustainable transport in Portsmouth
- To tackle climate change, flooding and coastal change in Portsmouth
- Delivering high quality homes in Portsmouth
- To promote healthy communities
- Conserving and enhancing the historic environment and good urban design in Portsmouth
- Conserving and enhancing the Natural Environment in Portsmouth
- Facilitating the sustainable use of natural resources in Portsmouth

Within these themes are a range of issues for the Local Plan to address.

General introduction to Portsmouth

Portsmouth (along with Southampton) are the two key cities in the polycentric area of urban south Hampshire, running along the south coast. Strategic planning needs of South Hampshire are addressed by the Partnership for Urban South Hampshire (PUSH), a partnership of local authorities in the Hampshire sub-region.

Portsmouth itself is the only island city in the UK and Portsea Island itself is mainly flat and low lying. It began life as a small town around 1180, and grew in importance as a port. In 1494 Henry VII strengthened the town's fortifications and built a dockyard in 1495 where royal warships could be built or repaired. In 1663 a new wharf was built for the exclusive use of the Navy. At the end of the 17th century the town began to expand to house dockyard workers and sailor's families.

By 1871 the population of Portsmouth had grown to 100,000, and as it continued growing the surrounding villages were swallowed up. Today the island part of Portsmouth is the most densely populated area outside of London, with people living and working on 40 square kilometres of land.

The City Population at the 2011 census was 205,100 people, an increase of 9.9% compared to the 2001 census. Current Nomis projections put the population at 209,100, of which 105,900 are male and 103,200 female. Within this there are 78,719 households.

The surrounding county of Hampshire is the third most populous county in England and is home to one in seven of people in the South East region (excluding London). The population of the PUSH sub-region in 2014 was 1,217,500 and 17.2% of this population live in Portsmouth.

Portsmouth International Port opened in 1976 and is Britain's most successful municipal port. It is owned by the City Council which is also the Competent Harbour Authority for the whole of Portsmouth Harbour and the approaches (excluding the Ministry of Defence facilities).

Over 58% of total employment in the UK is concentrated in cities and 72% of knowledge-intensive employment. Portsmouth City is a key employer in the subregion providing 101,900 jobs, with marine manufacturing related to defence, other marine and aerospace and information and communications technology.

Portsmouth Naval Base is the home of the Royal Navy and has almost two-thirds of the Royal Navy's surface ships based there. In 2017 it will be home to two new aircraft carriers.

The University of Portsmouth is in the top 2% of the world's universities in the Times Higher Education World University Rankings 2015. They have 23,000 students - around nine percent of the City's population, 4,000 of whom are international students from over 120 different countries.

Gunwharf Quays retail location is a popular draw from outside the city, and is the location for the iconic Spinnaker Tower, the defining image of the new Portsmouth while looking back to its maritime history.

The nearby Historic Dockyard attracts visitors from across the region and beyond with a variety of attractions including HMS Victory, which was Nelson's flagship at the Battle of Trafalgar in 1805.

South of the city is Southsea with its shingle beach and a promenade overlooking the sea and the Isle of Wight. The wide open space of Southsea Common is a popular area and Southsea itself was first recorded as a place name in a Royal plan in 1577. Local houses were built for the skilled workers to serve the castle and the street names still reflect those trades such as Stone Street, Copper Street, Flint Street and Silver Street as well as Castle Road. Henry VIII attended the castle in 1545 and witnessed the sinking of the warship Mary Rose in the Solent.

In the Victorian age with the advent of the railways Southsea developed as a seaside resort. The area is still a popular tourist destination with two piers, amusement arcades, the D-Day Museum, the Royal Marines Museum plus a number of traditional seaside facilities and cafes.

87.8% of the Portsmouth population at the Census were born in the UK, a reduction from 92.5% in 2001. The next biggest region is Europe at 4.8%, then Africa at 2.0%, the Americas and Caribbean at 0.6% and Oceania at 2.0%.

52.2% of the population stated they are Christian (a large drop since 2001 when it was 68.1%). The next largest group is Muslim at 3.5%, then Buddhist and Hindu 0.6%, Sikh 0.2%, Jewish 0.1%, Other 0.5%, No Religion 35% and Not Stated was 7.3%.

43.5% of the population in Portsmouth are single, 36.9% are married, 10.3% are divorced, 6.1% widowed, 2.9% separated and 0.3% are in a civil partnership.

Up to 2036 the population of the city is forecast to increase between 13.0% and 16.7% (Subnational Population Projections). The highly developed nature of Portsmouth means that most future growth will be focussed within its boundaries.

PART 1

Collection of baseline data - Stage A2

Baseline data gives a context for assessing all the matters covered by a Sustainability Appraisal. It covers a broad range of issues, including important ones related to health and equalities.

Baseline information needs to cover national as well as local data for purposes of comparison, and give a picture of the underlying state of Portsmouth. The data also needs to be appropriate material for setting targets and regularly updated so the Council can monitor trends. This section outlines the current state of Portsmouth based around the themes identified for the Sustainability Appraisal.

1 Building a strong, competitive economy in Portsmouth

Current Economic Performance

The state of the economy is a key issue for the UK as well as Portsmouth. The 2015 UK government debt amounted to £1.56 trillion, or 81.58% of total Gross Domestic Product. In 2015, there were 5.4 million private sector businesses in the UK, up by 146,000 or 3% since 2014. Since 2000, the number of businesses in the UK has increased each year, by 3% on average. In 2015, there were 1.9 million more businesses than in 2000, an increase of 55% over the whole period.

It is of note that spending in the UK on public pensions (state pension, benefits and public service pensions) is projected to rise from an annual cost of 8.9 per cent to 10.8 per cent of GDP between 2016 - 2017 and 2061 - 2062, a rise of 1.9 percentage points. This is equivalent to a rise of around £33 billion.

Updated baseline forecasts suggest that total employment in the Solent area will grow by 10% over the period from 2014 - 2030. Gross Value Added (GVA) was estimated at £25.8 billion in 2014, and is expected to grow by an average of 2.8% pa from 2014 to 2030.

In the PUSH area employment rates (age 16+) are predicted to reach 83.7% by 2030. Unemployment is expected to fall relatively quickly over the next couple of years and stabilise at around 1%.

Employee Jobs in Portsmouth

Portsmouth and Southampton are the centres of employment in the PUSH subregion; Portsmouth provides 101,900 jobs, 15.5% of the total (2015 figure). Southampton provides 16.5% of the total and the other nine authorities contribute to the total of 451,300 jobs. These range from Winchester providing 11.6% of jobs to Gosport providing the lowest at 3.1%.

Portsmouth sees 40,425 people commuting into the city to work, and 22,480

commuting out to work. Of the total amount of people working here 63.9% are residents within the city, so there is a good degree of self-containment compared to neighbouring Southampton which has 56.67% of the total amount of people working there who are residents, and Test Valley has 40.25%.

In the city 66,200 jobs are full time, 66.5% of the total compared to the South East average of 67.8% and the UK average of 68.3%. 35,000 jobs are part time, 34.6% of the total, compared to the South East average of 32.2% and UK average of 31.7%.

Portsmouth has key sectors in defence, aerospace and information and communications technology. Leading technological blue chip companies include Airbus, IBM, BAe Systems, Rolls Royce, Pall Europe, City Technology, QinetiQ and Magma Global. The Royal Navy is the largest employer with 12,000 people, Queen Alexandra Hospital is part of the Portsmouth Hospitals NHS Trust which employs 6,000 people, Portsmouth City Council employs about 3,000 people, and Portsmouth University employs around 2,500 people.

Key industrial estates are located at Airport Estate (including Voyager Park, Nelson Centre, Mitchell Way, Quadra Point, Portfield, Interchange Park, Broadoak Works etc.), Railway Triangle, Harbourgate, Farlington Industrial Estate, Walton Road, Rodney Road, Trafalgar Wharf, Limberline Estate. The Kendall Group operates a marine aggregate wharf at the Langstone Harbour shoreline.

Key office locations are at Lakeside Business Park, Compass Business Park, Portway, Acorn Business Centre / Quay Point, Rudmore / Kingston Crescent / Connect Centre. Portsmouth Enterprise Centre is at Quartremaine Road and the Challenge Enterprise Centre at Sharps Close. A 50-acre stretch of farmland owned by the council at Dunsbury Hill in neighbouring Havant is currently being developed as business park.

A nationwide Government survey of broadband availability revealed that Portsmouth has above average connectivity of 43.5 Mbps compared to the UK average of 29.4 Mbps and exceeds the coverage available in similar sized cities across the Country (City of Portsmouth Business Needs, Site Assessments and Employment Land Study April 2016).

The main sectors of employment

The largest sectors in the PUSH region (in terms of employee jobs) are health, education and retail. Across the eleven local authorities, there are more than 90,000 jobs in healthcare and over 70,000 in retail and in education.

In Portsmouth health provides 14.5% of jobs compared to 1.6% as the UK average, and education provides 12.2% compared to 4.2%, and retail provides 10.4% compared to 8.3%. Public administration and defence is also a large employer in Portsmouth at 7.2% of jobs, compared to 0.3% as the UK average.

Portsmouth also has a high level of manufacturing jobs; 8% compared to Southampton at 3%. The highest concentration of manufacturing jobs is the subregion is in Gosport at 12.8% and Havant at 11.8%. Nationally the manufacturing

sector accounts for 5% of businesses and 10% of employment. However this sector in the sub-region is predicted to lose 50,000 jobs, while the public sector is predicted to lose 18,000 jobs. However Oxford Economics updated baseline forecasts indicate that total employment in the sub-region will grow by 10% from 2014 to 2030 (Economic and Employment Land, PUSH May 2016).

Between 2009 and 2013 there were already large jobs losses in various sectors in Portsmouth; 20% in public administration and defence, 18.6% in business administration and support services, 15.3% in health, 12.2% in construction and minus 9.1% in property.

Construction jobs provide 3.5% of jobs compared to the UK average of 11.6%. Information and communications are currently a relatively small sector in the PUSH region providing only 5% of total employee jobs, but in Portsmouth it provides 8.5% of jobs and this sector is expected to grow further. Business administration and support services are also key employment sectors in the city.

Jobs that are under-represented are arts and entertainment at 4.45% of jobs compared to 6.9% as the UK average, and wholesale are 3.0% compared to 15.7% of the UK average. Full details of the city employees are in the Table below.

Table 2 - Portsmouth employees (2014 figures)

SECTOR	Amount	Portsmouth %	UK %
Agriculture, forestry and fishing	100	0.09%	6.2%
Mining, quarrying and utilities	1,200	1.1%	0.5%
Manufacturing	8,100	8.0%	5.5%
Construction	3,600	3.5%	11.6%
Motor Trades	1,800	1.7%	4.4%
Wholesale	3,100	3.0%	15.7%
Retail	10,600	10.4%	8.3%
Transport & storage (including postal)	3,900	3.8%	3.1%
Accommodation and food services	8,200	8.1%	6.2%
Information and communication	7,100	7.0%	7.6%
Financial and insurance	1,600	1.5%	1.9%
Property	1,000	0.9%	3.6%
Professional, scientific and technical	4,200	4.1%	17.3%
Business administration & support	7,700	7.6%	7.7%
services			
Public administration and defence	7,300	7.2%	0.3%
Education	12,400	12.2%	1.6%
Health	14,700	14.5%	4.2%
Arts, entertainment, recreation & other	4,500	4.45%	6.9%
services TOTAL	101,100		

Source: Business Register and Employment Survey 2014 (figures are rounded)

The Nomis business statistics for December 2015 show that 6,945 businesses are registered in the city. The majority of these, 78% are classified as micro businesses with a small amount of staff (see Table below). The national figure for micro businesses is 95%.

Table 3 - Size of businesses in Portsmouth

Size of	Micro business	Small	Medium	Large
company	with 0 - 9 staff	business	business	business with
		with 10 - 49	with 50 -	250 + staff
		staff	249 staff	
Number of	5,475	1,125	295	45
companies				
As a %	78.8%	16.2%	4.2%	0.6%
South East %	84.8%	12.3%	2.5%	0.4%

Over 99% of businesses are small or medium sized businesses - employing 0 - 249 people. 5.1 million (95%) businesses were micro-businesses - employing 0 - 9 people.

Although the vast majority of businesses in the UK employ fewer than 10 people, they only account for 33% of employment and 18% of turnover. Large businesses, with more than 250 employees are only 0.1% of businesses but provide 40% of employment and 53% of turnover in the UK.

A third of UK businesses are in London or the South East (976,000 in London and 878,000 in the South East).

The ONS business structure database shows that the percentage of creative small and medium enterprises in Portsmouth is 3.7%, the lowest in the South East. The highest is Brighton at 12.4% (it is also the highest in the UK).

The high tech and digital sector figures in the South East show that Portsmouth is low at 8.9% of its businesses (Southampton is 9%), with only Hastings having less at 7.6%. The highest is Reading at 20.5%.

Future requirements

The future needs for office floorspace in the PUSH area are predicted to see growth in the following;

- Finance and insurance
- Property
- Professional, scientific and technical
- Business administration and support service

In 2015, the professional, scientific and technical sector accounted for the largest number of businesses, with 17.8% of all registered enterprises in the UK. The professional, scientific and technical sector also had the largest growth in the UK

between 2014 and 2015, an increase of 26,000 businesses. In the Solent LEP area this increased from 8,610 in 2010 to 10,670 in 2015, although the majority of this growth was in Winchester.

The industry sectors likely to expand within the Portsmouth area will include;

- Marine/Dockyard supply chain
- E-Commerce/internet shopping/home deliveries/reverse logistics
- Trade counter operators/materials suppliers
- Advanced/niche engineering/R&D activity
- Defence/aeronautical/space technology
- Composites/specialist materials research and production
- Educational/University use
- Professional services

Recent evidence suggests however that there is a lack of available space in the subregion, and this could have an impact causing rents to rise. Also speculative office development outside London had been limited since the economic downturn, but this is changing and the market is starting up again in the UK and this will have implications locally. The warehousing sector is also forecast to grow along the M27 corridor.

The target for Portsmouth in the 'Push Spatial Position Statement' of June 2016 is to see 92,000 square metres of office floorspace and 28,000 of mixed B-Class floorspace between 2011 - 2034. This will include current allocations and planning permissions as well as new allocations. GL Hearn who produced the Statement also believe there may be a surplus of employment floorspace in the sub-region.

A key location for new office floorspace will be the city centre as part of its regeneration.

The Marine and Maritime Sector

Portsmouth has a strong Marine and Maritime sector, which is also one of the largest and most productive business sectors in the wider Solent area. It contributes 20.5% of the PUSH area GVA and 5% of private sector jobs.

Further potential for expansion exists with the global growth in maritime trade, the rapid expansion of the cruise sector, rising demand for leisure marine and specialist vessels, expansion in marine renewables and in technology-led industries. Many of these businesses prefer coastal locations. There is however a limited number of marine site opportunities with water access directly located within the city boundaries (City of Portsmouth Business Needs, Site Assessments and Employment Land Study April 2016).

GL Hearn have identified 97 key waterfront sites in the sub-region, four of them are in Portsmouth and include Town Quay and Ben Ainsley Racing, Port Solent Quay, Trafalgar Wharf and Tipner West.

Portsmouth International Port

Portsmouth International Port deals with over 2 million passengers and 600,000 vehicles a year and is the second busiest Cross Channel ferry port. In modern times, the harbour has become a major commercial ferry port, with regular services to Le Havre, Cherbourg, St Malo, The Channel Islands and the Isle of Wight. The commercial quay serves over 300 ships per year and handles over 100,000 million tonnes of imports and exports, including 70% of the UK's banana trade. The port employs around 100 people and contracts out work too. There has been a slow decline in passenger volumes and freight units in the last five years, reflecting a national trend.

Tourism

These jobs are spread across a wide range of service sectors from catering and retail to public service jobs such as in local government. Tourism related expenditure supported around 9% of these jobs in the City in 2014. Total direct visitor expenditure in Portsmouth and Southsea is £439.4 million. It is estimated that expenditure on second homes and on goods and services purchased by friends and relatives the visitors were staying with, or visiting, generated a further total £10.4 million expenditure associated with overnights trips in 2014. This brings direct expenditure generated by tourism in the City in 2014 to £449.8 million, up 1.3% compared to 2013.

Direct expenditure translates to almost £601.6 million worth of income for local businesses through additional indirect and induced effects (multiplier spend). Compared to 2013, this represents an increase of 1.4% in total tourism value.

An unbalanced employment market

Growth in economic output has not been accompanied by large increases in private sector employment in the wider Solent area. As a result Portsmouth has 24% of total employment is in the public sector (while Gosport has 22.6% and Southampton has 21.6%); all three are therefore more dependent on the public sector than the wider South East. However across the sub-region the percentage of jobs is 18.1% and similar to the national average.

The recession has had a considerable impact on the Solent's companies and business confidence remains low. Due to the nature of supply chains in the Solent, the closure of large companies and public sector cuts are seen as major threats to business survival.

Economic performance of residents

In Portsmouth the occupational profile is;

- 41.1% of workers are managers and professional occupations
- 12.1% are skilled trades
- 45.5% are employed in low-skilled occupations

In terms of being employed, the city residents are performing below par with only 70.7% of the economically active people actually working compared to the South East level of 76.9% and the UK level of 73.7%.

Unemployment in Portsmouth is 6.9% (at 7.0% the Isle of Wight is marginally above the city and is the highest in the PUSH region). Southampton has a rate of 6.0% (which is also the UK average). However, the number unemployed in Portsmouth has fallen since 2007 by 1,110 and this follows the national trend where unemployment has dropped from 2.5 to million 1.8 million in the last five years.

Job Seeker Allowance claimants are a sub-set of overall unemployment and in the sub-region the highest is in Portsmouth at 1.6% of residents, then Isle of Wight and Havant with 1.5%, Southampton and Gosport 1.3%. However the rate has fallen notably over the last three years.

The average gross weekly pay in Portsmouth is £513.7, lower than the South East average of £574.9 and lower than the UK average of £529.6. It is also notable the male full time workers earn more at £530.9 per week compared to £462.4 for women.

Qualifications

In Portsmouth, 9.3% of the economically active population have no qualifications (around 13,000 people), compared to the South East at 6.3% and the rest of the UK at 8.6%. Improving the skills profile will be important in driving productivity growth and attracting and creating higher value-added jobs.

The lack of qualifications is reflected in school performance; educational attainment in Portsmouth declines throughout primary school (the progress pupils make between key stage 1 and key stage 2 is not as good as nationally). At the B GCSE level (key stage 4) Portsmouth pupils have some of the worst results in England.

The national standard seeks for all pupils to achieve at least five GCSEs graded A* to C, including English and Mathematics. Portsmouth pupils have never achieved the national average and, indeed, in 2013 Portsmouth achieved the third lowest of 151 local authorities (47.6% compared to 59.2% nationally).

School attendance is lower than the England average with overall pupil absence at 6% of sessions missed compared to 5.2% nationally.

The national Adult Skills Survey showed that:

- 6.5% of Portsmouth's working population have numeracy at Entry Level 1 or below (equivalent to not being able to select floor numbers in a lift)
- 15.9% of Portsmouth's working population have numeracy at Entry Level 2 (not being able to use a cashpoint)
- 25.4% of Portsmouth's working population have numeracy at Entry Level 3

(not understanding price labels on pre-packaged food or paying household bills)

All these skill levels are equivalent to below GCSE Grade G. This means 47.8% of Portsmouth's population aged 16 - 64 years are unable to carry out these everyday activities using numeracy skills. But it is slightly better than the England average of 49.2%.

The Ofsted Report of 16th March 2016 to Portsmouth City Council stated 'The achievement of pupils and learners in Portsmouth is not improving quickly enough.' The Council announced an Action Plan to tackle this on the 1st July 2016.

It also notable that Portsmouth and Southampton have the highest level of the elderly with no qualifications in Hampshire. It needs to be recognised that the education system and the opportunities to learn were very different in the past and this reflects the national situation.

Black and Minority Ethnic minorities in England have become better qualified but continue to experience inequalities in education and the labour market. For example, diversity in the teacher workforce does not match the diversity of pupils in schools (Explaining Levels of Wellbeing in BME Populations in England 2014).

Business survival rates

For new start-up businesses, in England after 5 years there is an average survival rate of 41.8%, while in the South East it is 43.8%. The area with the highest survival rate is the South West region of 45%. Portsmouth has at 37.4%. Meaningful comparisons are difficult as these figures do not indicate what type of sectors are starting up.

The highest business start-up rates are in London (18% in 2014), but so are the highest rates of business deaths at 11%. In the South East it is 13% birth and 9% deaths in 2014.

The proportion of businesses that employ people in the UK has fallen since 2000 from around a third, to around a quarter due to the growth in self-employment. There is a continuing need for start-up areas for new businesses in Portsmouth. 20% of SME start-ups are women.

The Gross Value Added (GVA)

The GVA is the measure of the value of goods and services produced in an area, industry or sector of an economy. The GVA for Portsmouth is £25,735 per resident, and compares well next to Southampton which is £23,572, while the highest in the sub-region is both Winchester and New Forest at £26,479. A high GVA is seen as a good thing, although it can disguise areas with high levels of poverty and yet present a buoyant statistic. The Solent LEP wishes to see GVA growth of 3% pa in the sub-region, which is higher than baseline forecasts (Economic and Employment Land Evidence Base Paper May 2016).

Baseline sources:

Anchoring Growth; an Economic Assessment of the Solent Area May 2013 http://www.push.gov.uk/centre_for_cities_report_-_solent_area_may_2013.pdf

Portsmouth Health Profile 2015

file:///C:/Users/426795/Downloads/HealthProfile2015Portsmouth00MR%20(4).pdf

Transforming Solent Growth Strategy by Solent LEP October 2014 http://solentlep.org.uk/uploads/documents/LR_Solent_LEP_Brochure_Final.pdf

Transforming Solent - Solent Strategic Economic Plan 2014 - 2020 Final submission 2014

https://www.lepnetwork.net/modules/downloads/download.php?file name=32

Solent LEP EU Structural & Investment Fund Strategy 2014 – 2020 Version 3 February 2016

http://solentlep.org.uk/uploads/documents/EU_Structural_Investment_Fund_Strategy_V3.pdf

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http://www.push.gov.uk/marine maritime supplement march 2014.pdf

Economic and Employment Land Evidence Base Paper by PUSH May 2016 http://www.push.gov.uk/item_10_annex_3_economic___employment_land_evidence_paper.pdf

The Economic Impact of Tourism - Portsmouth 2014 by Tourism South East Research Unit

Not on the internet

Portsmouth visitor survey 2010 Report of Key Findings by Tourism South East Research Unit

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Socio-Economic Impact Assessment of Portsmouth Naval Base by the University of Portsmouth Centre for Economic Analysis and Policy, Solent Local Enterprise Partnership, PUSH June 2012

http://solentlep.org.uk/uploads/documents/Socio-

Economic_Impact_Assessment_of_Portsmouth_Naval_Base_2012.pdf

The 2015 Index of Multiple Deprivation

http://www3.hants.gov.uk/factsandfigures/figures-economics/deprivation indices.htm

House of Commons Library Briefing Paper, 7 December 2015 Business statistics file:///C:/Users/426795/Downloads/SN06152%20(2).pdf

2015 IMD Deprivation Factsheets by Hampshire County Council http://www3.hants.gov.uk/factsandfigures/figures-economics/deprivation indices.htm

Weblinks only

Various labour market statistics

https://www.nomisweb.co.uk/

Regional and local economic growth statistics

www.parliament.uk - regional and local growth statistics (15th March 2016)

Hantsweb Employment Statistics by Hampshire County Council

http://www3.hants.gov.uk/factsandfigures/keyfactsandfigures/key-facts/kf-portsmouth.htm#emp

UK Business Counts Local Units

https://www.nomisweb.co.uk/query/construct/summary.asp?reset=yes&mode=construct&dataset=141 &version=0&anal=1&initsel=

Office of National Statistics - Business Demography

http://www.ons.gov.uk/businessindustryandtrade/business/activitysizeandlocation/datasets/businessdemographyreferencetable

Earnings by residence (2015)

https://www.nomisweb.co.uk/reports/lmp/la/1946157284/report.aspx?town=Portsmouth#tabearn

Part of Monitoring poverty and social exclusion 2015 by the Joseph Rowntree Foundation

https://www.jrf.org.uk/mpse-2015/commentary

2 Ensuring the vitality of the city centre and other retail centres in Portsmouth

Retailing in the UK

There are 539,000 businesses operating in the retail sector in the UK, forming 10.3% of UK businesses. It is an important sector and is the third largest employer in the PUSH area providing 11.3% of jobs, the same at the national level.

In Portsmouth retailing provides 10.5% of jobs, a total of 10,700 people.

In 2014, consumers in the UK spent around £378 billion in the retailing sector. The sector is changing and nationally the average vacancy rates in town centres and retail parks have just gone below 14% for the first time in four years. At its peak in 2012, vacancy rates nationally were 14.6%. There are regional disparities, with the North East of England at 18.8%, while London had the lowest vacancy rate of 8.7%.

The main shopping centres

Portsmouth has three major shopping areas;

- The city centre based around Commercial Road and Cascades Shopping Centre - with a vacancy rate of 13.8%
- Southsea shopping centre with a vacancy rate of 6.8% and;
- The Gunwharf Quays designer outlet with a zero vacancy rate

The District and Local Centres

There are also the key District Centres at Albert Road & Elm Grove, Cosham, Fratton and North End. There are also a cluster of seventeen Local Centres throughout the city. These are located at; Allaway Avenue, Castle Road, Copnor Road North, Copnor Road South, Eastney Road, Fawcett Road, Havant Road, Kingston Road, Leith Avenue, Locksway Road, London Road North, London Road South, Portsmouth Road, St James Road, Tangier Road, Tregaron Avenue and Winter Road. These centres to tend to encourage travel on foot and by bicycle, and are sustainable from being close to people.

The District and Local Centres have a number of chain stores and eating or takeaways, but there are also independent local shops. These centres therefore provide a locally distinctive mix and local jobs.

Retail Rankings

Portsmouth has been slipping in the retail rankings. The Retail Study, 2015 ranked Portsmouth at 98th in the UK. This compares to Southampton which currently sits at 19th, the most popular retail destination in the sub-region.

The 2008 economic crisis caused a reduction in spending in the UK and a variety of recognised stores went into administration including, Woolworths, Clinton Cards, Blacks, Peacocks, Game, JJB Sports, Austin Reed, Comet and in 2016 British Home Stores. Over the long term, however, analysts believe spending in the retail sector has grown and recreational shopping (seen as a fun activity rather that a necessity) has grown in popularity, as have consumer expectations.

High car ownership means out of town retail parks and supermarkets are popular. However recent trends suggest local convenience stores run by the large supermarket chains such as Tesco Express are increasing their share from the larger stores.

Out of town retail parks do pose a challenge to traditional town centres, and also supermarkets diversifying to sell a range of other products such as clothing, electronics, media and white goods (large electrical goods such as fridges). However retail parks nationally are seeing vacancies too.

Portsmouth City Centre

Portsmouth city centre has seen no new retail development since the Cascades Centre opened in 1987 (with refurbishment in 2006 - 2007). The Tricorn Centre built in the 1960s was demolished in 2004 to provide opportunities for new retail development. Currently the site is vacant. The vacancy rate in the city centre was 13.8% (2016) and is essentially the same as the national average of 13.6% and indicates a moderately successful centre. The vacancies in the city tend to be located in the secondary retail areas, in particular the northern end of Commercial Road.

In the Portsmouth Plan, Policy PCS4 seeks a minimum of 75% of A1 retailing in the city centre. The current figure is 73.17%.

Table 4 - Land use Classes in the city centre

Land Use Class	Frontage (m)	Percentage
A1	1,789.62	73.17%
A2	266.96	10.91%
A3	120.45	4.92%
A4	55.03	2.25%
A5	3.45	0.14%
B1a	19.81	0.81%
B2	-	0.00%
C1	-	0.00%
C3	-	0.00%
D1	107.05	4.38%
D2	32.96	1.35%
Sui Generis	50.63	2.07%
Total	2,445.96	100.00%

Source: Portsmouth City Council survey

Impacts on the city centre

Town centres are in increasing competition with each other and there is an increasing divergence between the success of larger centres and the struggle of smaller centres to secure investment and retailers (Portsmouth Retail Study 2015).

A place with a good range of shops draws people from wide distances, increasing their market share and 'consumer loyalty.' It is notable that Portsmouth has limited draw beyond its urban area for comparison goods sales. The city's sub-regional competitors are Southampton with the West Quay development and Chichester, which is rising in the national rankings.

The Push Spatial Position Statement, 2016 defines Portsmouth centre as a regional city centre.

The city centre has a limited evening economy with three public houses clustered on Edinburgh Road and off Surrey Street. There is a scattering of takeaways in the general area. After 6:00 pm the centre is empty, creating an unappealing environment.

In the City Centre Masterplan there is an aspiration for a 'Purple Flag' accreditation. A Purple Flag is an indicator of where to go for a good night out, recognising excellence in the management of city centres at night and bringing positive publicity for successful city centres.

Lunchtime visits from office workers as well as after work socialising, plus local residents living in the centre would support a diverse eating, drinking and leisure offer. The presence of nearly 2,000 students in the new developments at Greetham Street and Stanhope Road (with other developments planned) will also pump some money into the evening and retail economy.

Southsea shopping centre

Southsea centre is used mainly by local people and has a small market share of the cities non-comparison goods retail trade (18%). However ,it offers shops the town centre lacks and has a vacancy rate half that seen in the city centre. It also has a healthy share of eating and drinking establishments, giving it a vibrancy and footfall at night that the main centre lacks.

Gunwharf Quays

This has a mix of stores open in the evening until 8:00 pm, six days a week. This draws in after work shopping and provides eating and drinking options at the thirty restaurants and bars. It also has a cinema, as well as a casino and nightclub. There is a range of upmarket apartments and penthouses.

Gunwharf Quays is however mainly a specialist destination for designer outlet shopping.

Internet retailing in the UK

Despite the economic downturn, online shopping has increased dramatically, from 2.7% of all retail sales in January 2007 to 12.8% in January 2014. It is estimated 75% of all adults in the UK buy some goods or services on-line.

The online sector is now the main driver of growth in European and North American retailing, achieving growth rates of 18.6% in 2015. The European online market is dominated by three countries, the UK, Germany and France, which are responsible for 81.5% of sales.

However the annual growth rates for all other types of retailing ranges between 1.5% and 3.5% per annum. This shows that the continued growth of internet retailing could come at the expense of conventional stores.

Click and Collect

Retailing trends are changing nationally with click and collect growing in popularity. Between 5% and 10% of many fashion retailers sales are now online and this could increase to as much as 25% by 2025. Some companies are offering next day delivery on click and collect if orders are placed by midnight. Consumers now visit stores and see them as places for display and advice, then use smartphones or computers to order goods (Portsmouth Retail Study, 2015).

This means the idea of large retail stores with an array of goods could be replaced with smaller floorspace and more areas for collecting clothes bought online. Inevitably this will see more vehicle movements making these deliveries (and probably collections) but no projected data is available. But generally this is viewed as a positive development that would seem to indicate a future role for city and town centres. However the exact structure of these new approaches has not been fully explored, for example drive thrus are being provided by some retailers and while this may benefit that particular company, it does not lead to 'linked trips,' when other retailers and food outlets may get trade at the same time.

Baseline sources:

Portsmouth Retail Study April 2015 DPDS Ltd April 2015

The retail industry: statistics and policy - the House of Commons Library Briefing paper Number 06186, 2 October 2015 www.parliament.uk the retail industry statistics and policy

Weblinks only

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Centre for retail research - article on online retailing http://www.retailresearch.org/onlineretailing.php

Guardian newspaper online article on click and collect shoppers https://www.theguardian.com/business/2014/sep/17/click-collect-shoppers-65bn-goods-online-2019

3 Promoting sustainable transport in Portsmouth

Travel to work statistics

Travel to work in Portsmouth at the 2011 census showed:

- There has been a small decrease in those driving a car (50.5% in 2001 down to 49.6% in 2011) - lower than the UK average of 54.5%, and a lower figure than surrounding areas
- There has been an decrease in passengers in a car from 6.5% in 2001 to 5.8% in 2011 higher than the England and Wales average of 5.0%
- There has been a decrease in use of a motorcycle/scooter/moped from 1.3% to 1.1% - higher than the England and Wales average of 0.8%
- There has been an increase in those walking (14.8% in 2001 up to 16.1% in 2011) higher than the England and Wales average of 10.7%
- There has been an increase in cycling (7.1% in 2001 up to 7.3% in 2011) higher than the England and Wales average of 2.8%
- There has been an increase in train use (2.4% in 2001 up to 3.5% in 2011) lower than the UK average of 5.2%
- There has been an increase in those working at home; (6.7% in 2001 up to 7.3% in 2011) lower than the UK average of 10.3%
- There has been a decrease in those using the bus (8.6% in 2001 down to 7.3% in 2011) close to the England and Wales average of 7.2%
- 34% of the population in the city do not have access to a car (this is the same level as in 2001 despite population increase) and is higher than the UK average of 25%. The highest rate of non-car ownership in Charles Dickens, Nelson and St Thomas Wards

There is also a commuting service from and to the Isle of Wight using the only commercial hovercraft in the world, as well as ferries and catamarans. 4,802 people commute out of the Isle of Wight to other local authorities, and 736 of these commute to Portsmouth. 2,109 people commute from other local authorities to the Isle of Wight, and 176 of them are from the city (Nomis).

There is also a pedestrian ferry service from and to Gosport, 453 residents commute on foot to Portsmouth and 1,096 use bicycles. The number of cyclists commuting into Portsmouth is 1,884 and many of these are from Gosport, so it is assumed nearly all of these are using the ferry.

Out of the 40,425 commuters into Portsmouth, 29,793 come by car or van, 1,827 are a passenger in a car or van, 2,259 by train, 2,117 by bus, 1,884 by bicycle, 1,512 on foot, 753 by motor cycle or scooter, 97 by taxi.

Clearly, the car is the dominant travel mode for commuters both in and out of the city. The nearby areas of Havant, Fareham and Gosport depend on Portsmouth for jobs (although Havant is also a large employer for Portsmouth residents).

Table 5 - Commuter flows using a car or van in and out of Portsmouth

Local Authority	Origin of	Destination of
	commuters	commuters
Havant	8,284	5,074
Fareham	6,162	3,134
Winchester	1,866	1,980
Chichester	1,272	1,444
East Hampshire	2,120	1,233
Eastleigh	1,252	1,033
Southampton	1,233	983
Gosport	3,065	850
Basingstoke & Deane	108	300
New Forest	376	281

Source: Nomis

How people travel to work is interesting on a ward by ward basis, where the percentage of people walking to work can be as high as 33.7% (in Charles Dickens ward where 63% of households do not have access to a car compared to 33.4% across Portsmouth as a whole).

Cycling is highest in Central Southsea at 9.7%, while the highest level of car use is in Paulsgrove, Drayton and Farlington. However, car use in Cosham is lower than some of the wards on Portsea Island.

The Table below contains more details of the main modes of travel in the Wards of Portsmouth.

Table 6 - main modes of travel in each ward of Portsmouth (excluding motorcycle, taxi and other)

	Car	Work at	Walked	Train	In a car	Bus	Cycle
		home					
Paulsgrove	57.4%	6.1%	10.6%	1.9%	7.9%	9.2%	3.8%
Cosham	54.5%	8.0%	13.7%	3.7%	6.6%	6.5%	4.7%
Drayton &	64.7%	9.5%	7.3%	2.5%	5.4%	4.4%	4.2%
Farlington							
Hilsea	56.8%	6.4%	10.2%	2.0%	6.2%	9.7%	6.0%
Copnor	55.4%	6.6%	12.1%	1.8%	6.1%	8.0%	7.1%
Nelson	47.8%	5.4%	15.9%	1.4%	7.7%	10.0%	8.4%
Charles	30.5%	6.6%	33.7%	4.1%	6.2%	8.0%	8.0%

Dickens							
Fratton	45.5%	5.8%	18.2%	4.4%	6.6%	8.0	8.0
Baffins	56.6%	7.2%	9.8%	1.5%	6.0%	7.6%	8.2%
Milton	51.5%	6.6%	12.2%	4.0%	5.2%	8.4%	9.5%
Central	41.2%	6.8%	22.6%	6.8%	4.6%	5.0%	9.7%
Southsea							
Eastney and	52.9%	10.1%	9.7%	3.9%	4.5%	7.3%	8.2%
Craneswater							
St Thomas	38.3%	8.6%	28.5%	5.4%	4.0%	4.8%	6.8%
St Jude	42.4%	9.6%	21.5%	5.8%	4.4%	5.3%	7.9%

Taken from Census 2011 Ward data

Congestion in Portsmouth

Portsmouth has three road entrances onto Portsea Island (the M275, A3 and A2030). These roads are where most of the Air Quality Management Areas have been designated and they get congested at peak times. Any incidents affecting traffic on one road can cause disruption to the entire network.

Commuter traffic is concentrated on the M275, carrying 46% of all inbound traffic. But even on a weekend the M275 can be heavily congested and very slow moving, which affects traffic to the ports, Southsea, Gunwharf Quays and the city centre.

The annual Traffic Index from TomTom shows that average UK journeys in 2015 took 29% longer than they would in free-flowing conditions, an increase from a 25% delay in 2010.

Portsmouth is one of the top 25 most congested towns and cities in the UK, ranked at number 22 (Southampton is number 20 and Brighton and Hove is number 5).

The Solent LEP's Transport Investment Plan predicts a 10% increase in vehicle trips in the sub-region and average speeds declining from 45 kph to 42 or 43 kph, while congestion will increase at key pinch points. It also indicates further investment is needed on the regions transport infrastructure.

A key solution to congestion reduction is to encourage modal shift amongst regular travellers. This can sometimes be initiated temporarily during planned network disruption such as the closure of a road or reduction in its capacity (e.g. lane closure). The resulting adjustment of traveller behaviour might include stopping making particular trips, condensing several trips into one, re-timing trips to a less congested time, or switching to public transport, car sharing, walking, bicycling or motorcycles.

Air Pollution and Air Quality Management Areas

Air pollution is a problem caused by the emission of pollutants, which either directly or through chemical reactions in the atmosphere lead to negative impacts on human health.

Air pollution also damages ecosystems through:

- Acidification where chemical reactions involving air pollutants create acidic compounds which can cause harm to soils, vegetation and buildings (including as acid rain)
- Eutrophication where nitrogen can be deposited in soils or in rivers and lakes through rain, affecting the nutrient levels and diversity of species in sensitive environments, for example encouraging algae growth in lakes and water courses
- Ground-level ozone where chemical reactions involving air pollutants create the toxic gas ozone which can damage wild plants, crops, forests and is a greenhouse gas

In Portsmouth domestic road transport makes up to 24% of the total emissions, and in the UK accounts for around a quarter of UK greenhouse gas emissions and affects air quality at the roadside. Industrial and domestic pollution together with their impact on air quality, tend to be steady or improving over time. In the UK the major threat to clean air is now posed by traffic emissions (Defra). HGVs remain the highest polluter comparatively when considering the number of each type of vehicle.

Local authorities have a statutory obligation to review and assess local air quality from time to time to determine whether it is likely to meet National Air Quality Objectives set out in the Air Quality (England) Regulations 2000 (as amended).

The key indicators monitored by the roadside are;

- Particulate matter (PM2.5)
- Nitrogen dioxide (NO2)
- Ozone (O3)
- Particulate matter (PM10)

Urban background and roadside particulate pollution has shown long-term improvement in the UK with small decreases in concentration between 2014 to 2015. The main drivers of the average number of days when air pollution is moderate or higher are particulate matter and ozone, for both urban and rural pollution monitoring sites in the UK.

The 'Air Quality Plan for the achievement of EU air quality limit value for nitrogen dioxide (NO2) in Portsmouth Urban Area' was published by Defra in December 2015 using 2013 baseline data. It looked at the Portsmouth Urban Area agglomeration zone (UK0012), which encompasses areas of Havant, Fareham and Gosport. This showed that roadside annual mean nitrogen dioxide concentrations were being exceeded at a number of locations. Within Portsmouth these were on the M275 and the A3 entering Portsmouth, the M275, the A3 near the continental ferry port and the Naval Base.

For all road links monitored, concentrations of NOx (oxides of nitrogen) from diesel cars were approximately four times greater than NOx emissions from petrol cars.

NOx concentrations from petrol LGVs are a small component of total NOx concentrations and less than 2% of total NOx from LGVs.

The Renewable Transport Fuel Obligation is one of the Government's main policies for reducing greenhouse gas emissions from road transport in the UK. It requires that a certain percentage of the supply of road transport fuel is renewable.

A WHO Report in May 2016 highlighted problems with air pollution in over 40 UK cities. There are 11 urban areas across the UK and Ireland breaching the safe limit set for PM10, and more than 40 towns and cities across Britain and Ireland breaching the safe levels for another measure known as PM2.5.

Top of the air pollution list was Glasgow, while Southampton was 7th on the list, and Portsmouth is 13th. It is of interest that Oxford is 15th on that list, even though 17% of the population cycle to work.

In the short term, air pollution can irritate the eyes, nose and throat and cause upper respiratory infections. It also aggravates the conditions of people with asthma and emphysema, and a prolonged exposure to pollution can cause more serious problems and damage the lungs of growing children. They do not have fully developed immune systems so are more vulnerable, they also respire at a rate twice that of adults and are thus more susceptible to the toxicity of airborne particles and gases.

A study published in June 2016 in the peer-reviewed journal BMJ Open has linked air pollution, even at low levels, to increased mental illness in children. The study is the first to establish a link and is consistent with growing evidence that air pollution can also affect mental and cognitive health.

Air Quality Management Areas

The City Council designated thirteen Air Quality Management Areas (AQMAs) covering various parts of the city on the 5th April 2005 after a Detailed Assessment carried out in 2004 predicted that the annual mean NO² National Air Quality Objectives would be exceeded in these areas. They were all related to road pollution.

However, in 2010 the Council revoked eight of the AQMAs (Numbers 1, 2, 3, 4, 5, 8, 10 and 13), and retained 4 AQMAs (6, 7, 9 and 12) and re-designated AQMA 11. The reduction of Air Quality Management Areas clearly shows an improvement in air quality. The fitting of catalytic converters to motor vehicles has had an impact on improving air quality and ensuring progress towards meeting the UK's air quality objectives and European air quality limit values.

In 2010, Portsmouth City Council published their Air Quality Action Plan. Local road traffic is the dominant source in the exceedance locations, and the largest concentration comes from cars. A key measure adopted in the Action Plan was to review the existing road traffic management systems in Portsmouth to ensure that road traffic is 'maintained at maximum fluidity so that road transport-related pollution was kept to a minimum'.

In 2013 the Optimisation of Road Traffic Management Control System desk top study was set up by Portsmouth City Council to carry out computer modelling. In 2015 the Council published the document 'For the Purpose of Local Air Quality Improvement 2015 Traffic Management Control Systems'. On Page 7 of the document it states;

The proposed traffic management measure scenarios are unlikely to result in significant changes in ambient air quality in Portsmouth. The predicted changes in annual mean NO2 concentrations at all modelled sensitive receptor locations are negligible. It is therefore impossible to make any air quality based recommendation for any scenario, in any corridor, that would result in a significant improvement in local air quality.

The modelling work carried out showed that a number of areas would be operating at or over capacity. Traffic management measures such as junction timings and physical changes in the areas affected could help reduce this problem. Currently the AQMAs are still being monitored and may be reviewed in either 2017 or 2018.

The document 'The Western Corridor Transport Strategy' by Atkins in 2010 stated;

The forecast impact of the additional demand generated by new development, not only in Portsmouth, but surrounding local authorities would lead to a 41% increase in traffic on the approaches to the City. More importantly a significant proportion of that increase would occur on the M275/Western Corridor. The resultant levels of congestion and delays could act as a barrier to further growth of the City and provide a negative impression of the area for investment.

Electric vehicles

These vehicles have no tailpipe emissions of CO² or the air pollutants which can have a detrimental effect on human health compared to vehicles which run on petrol or diesel fuel. Although these are clean vehicles they are still mainly charged up by electricity from fossil fuels. They can only travel a relatively short distance before they have to be recharged (around 64 to 160 kilometres).

The plug-in electric car captured a 0.59% market share of new car sales in the UK, but this is expected to grow. About 71,000 plug-in electric vehicles have been registered in the UK (up until March 2016), including plug-in hybrids and all-electric cars and about 4,000 plug-in commercial vans.

There are seven locations for electric charging points in Portsmouth, and there is a charge for using them, except for the two located at Portsmouth Park and Ride, which are free to use. The other locations are: Crasswell Street NCP Car Park (4 charging points), Gunwharf Quays (4 points), Lakeside North Harbour (2 charging points), The Marriot Hotel (2 charging points), Snows BMW (2 charging points) and Renault Portsmouth (2 charging points). The City Council has five electric vehicles (three cars and two vans) and 20 hybrid including some of its mini buses and tipper vehicles, and all its waste vehicles run on biofuel.

A Modal Shift

The car is a key polluter in the city as identified in a Defra report, 2013. It recommended achieving a shift towards public transport modes, walking and cycling and reducing single occupancy car journeys. A key influencer to achieving modal shift are employers; they can encourage and incentivise employees to change their travel habits with options including working flexible hours which helps reduce peak time commuting, subsidies on cycle loans and equipment. Technology also helps individuals make more informed travel choices, with real-time traffic and travel information readily available for road and public transport. In the UK if 5% of people changed their travel plans it could reduce traffic congestion on main roads by 30%.

In the document 'Door to Door' the Government states:

'When people travel, we want them to get from A to B with a smaller environmental footprint - using sustainable means whenever possible. Such a shift to leaner, greener travel will not only reduce carbon emissions, but also help to ease congestion on our roads, supporting economic growth, and lead to a healthier nation.'

Solent Transport is a partnership of Hampshire County Council, Portsmouth City Council, Southampton City Council and the Isle of Wight Council. Solent Transport works strategically with businesses, key stakeholders and other agencies to deliver improved transport infrastructure, networks and systems crucial to keeping the region moving and supporting sustainable economic growth. This includes reducing the need to travel, improved public transport options, optimisation of the road and rail network through improved management and targeted investment in road capacity particularly on the strategic road network.

Portsmouth City Council opened a Park and Ride in April 2014 at Tipner, as part of a move to encourage sustainable transport in the City. It has 650 car parking spaces and was funded with £19.5 million from the Department for Transport and £8.5 million from the city council. The current service runs from Junction 1 on the M275 to the City Centre and The Hard transport interchange. There is scope to expand its use and a new Park and Ride on the eastern side of the city may even be feasible.

The City Centre Masterplan states:

An attractive and well-connected public realm has a key role to play in maximising opportunities for sustainable forms of transport, particularly in improving the pedestrian and cyclist environment and access to all parts of the city centre including the station and bus interchange facilities.

Cycling

According to a survey by the European Commission in 2013 only 4% of UK respondents cycle daily. Along with Luxembourg and Spain, this is the lowest percentage of the 28 countries currently in the European Union except for Cyprus (2%) and Malta (1%). In contrast, the survey report says:

Approximately four in ten respondents in the Netherlands (43%) cycle daily. Roughly three in ten respondents in Denmark (30%) and Finland (28%) also cycle daily.

In some respects cycling is an easy mode to use in Portsmouth, which is flat and journey times are relatively short. As stated above an average of 7.3% of residents cycle to work, set against the UK average of 2.9%. The UK highest is Cambridge, where 29% of residents cycle to work, next is Oxford at 17%. However Portsmouth has the highest rate of commuter cycling in the south-east region. Whilst this is positive, more could be done to encourage local journeys being undertaken by bicycle or on foot and improve safety.

Like many major cities Portsmouth does suffer from cycling collisions, which tend to be at peak traffic periods between Monday and Friday. There is a peak in July for under 16's and this is assumed to be due to good weather bringing less experienced cyclists onto the roads. 17 to 25 years olds are the highest casualties. The A2047 through North End and Fratton is the highest casualty road, with the majority of collisions occurring at junctions when vehicles are turning left.

Table 7 - Portsmouth Cycling Collisions with motor vehicles 2011 - 2015

	2011	2012	2013	2014	2015
All collisions	201	172	191	183	173
Killed or	44	27	40	32	26
seriously injured					

169 were killed or seriously injured in the last five years. During the Winter months (October to January) Portsmouth has an increase in cycle collisions with 40% of these collisions occurring in darkness. As part of the 'Be Bright Campaign' in the winter of 2015 (working with the Police), the council's Road Safety Team stopped cyclists at a number of locations.

The Cycle Defect Rectification Scheme means police can issue £30 fines to cyclists without lights. They can avoid the fine by taking their T61 ticket to an approved cycle shop and buying lights, and asking staff to stamp or sign the PINK part of the T61.

- Fratton Bridge the total cyclists engaged and received hi-viz bag covers 161
- Cyclists with inadequate lighting, receiving temporary lights 52,
- T61/Cycle Defects issued 20
- Offending percentage 32%
- Western Road 8/12/15 the total cyclists engaged and received hi-viz bag covers - 149
- Cyclists with inadequate lighting, receiving temporary lights 47
- Cycle Defects issued 0
- Offending percentage 31%
- London Road (North End High St) 3/12/15 the total cyclists engaged and

received hi-viz bag covers - 109, Cyclists with inadequate lighting, receiving temporary lights - 42

- T61/Cycle Defects issued 0
- Offending percentage 38%
- Overall results for the winter of 2015 showed;
- 419 cyclists engaged with and received hi-viz rucksack covers
- 141 cyclists with inadequate lights
- Offending percentage 34%

Of the 920 casualties between 1st January 2011 to 31st December 2015 we find;

- 74% of casualties were men
- 78% occur at junctions (722 accidents out of the total), and
- 84% occur on 30 mph roads

The Police accident report found;

- 31% of collisions were the fault of the cyclist, and
- 69% were the fault of vehicles
- The bulk of the vehicle collisions at 90% were car drivers (7% of this figure were taxis)

3,401 cyclists were seriously injured last year on Britain's roads, a jump of 8.2% on the year before. The figures have increased in nine out of the last 10 years, and are up significantly from 2,174 serious injuries in 2004.

In the UK there were 1,775 reported road deaths in 2014, an increase of 4% compared with 2013. The 1,775 road deaths in 2014 are the third lowest annual total on record after 2012 and 2013. There were 45% fewer fatalities in 2014 than a decade earlier in 2005.

In Portsmouth, cycle routes are not as comprehensive as those in Oxford and Cambridge. What exists is mainly focused on the north south routes and mostly shared pavement space, not attractive to commuter cyclists, although suitable for slower cyclists, children and those that are less confident. There is a good cycle route along the esplanade from Eastney to Southsea, but better connectivity between jobs, homes and leisure is needed throughout the city.

Although fully segregated routes would be ideal on key routes, the limited highway space available does make this a difficult option. However residents have stated they feel safety is an issue that deters them.

Walking

Walking is the most accessible method of active travel and is something that almost everyone does at least once per week. Traditionally, cycling tends to get the majority of public interest and funding, while walking often takes a back seat. Given that walking to work is on the increase in Portsmouth more can be done to promote it as

a viable travel method especially if walking routes are linked to reliable methods of public transport and a better public realm.

Walkable cities and the public realm

To make walking more attractive, residents require an attractive, quick and safe environment to travel through. Many streets in Portsmouth are cluttered and crowded, they feel unsafe and are hard to navigate. Therefore, like cycling, promoting this mode of travel needs a greater priority, for example by creating pedestrianised precincts in commercial areas. Crossing points need to be on 'desire lines' and give priority to pedestrians and the severance effect of dual carriageways may need to be addressed in some locations. Making streets attractive for recreational walking with clear links and wayfinding areas of historical interest, natural beauty and local commercial centres would also help promote walking in Portsmouth.

The Government in Manual for Streets has stated;

Places and streets that have stood the test of time are those where traffic and other activities have been integrated successfully, and where buildings and spaces, and the needs of people, not just of their vehicles, shape the area. Experience suggests that many of the street patterns built today will last for hundreds of years. We owe it to present and future generations to create well-designed places that will serve the needs of the local community well.

As part of this there needs to be a need to define the place function of streets, and understand there is a difference between a street and a road. A road is there to move traffic, a street has buildings and public spaces, and while movement is still a key function, there are several others, of which the place function is the most important. There is also the scope to create more shared surfaces where vehicle movements are slowed and made to feel subordinate to walkers and cyclists.

Creating more 'places' in Portsmouth can turn it into a walkable and safer city with a high quality public realm that encourages business and investment as well as resulting in a healthier population.

Car parking

Car parking is problem in Portsmouth, the terraced streets are lined with parked cars, and in some areas a permit is required. Often the need for a permit pushes the problems somewhere else that doesn't have a permit zone. The issue is worse in areas of Southsea when visitors also park on the streets all day, preventing residents from parking.

Creating developments without car parking provision is likely to see people acquiring a car parking permit and putting pressure on the adjacent streets. Residents walk many streets from their front door with shopping, or move their cars in the middle of the night if spaces become available. 34% of the population in the city do not have access to a car.

Creating higher densities is likely to worsen this problem, unless we see change. In May 2016 the Guardian reported;

In the latest attempt from a big city to move away from car hegemony, Barcelona has ambitious plans. Currently faced with excessive pollution and noise levels, the city has come up with a new mobility plan to reduce traffic by 21%. And it comes with something extra: freeing up nearly 60% of streets currently used by cars to turn them into so-called 'citizen spaces'.

An article in the Guardian back in 2012 however discussed the fact that car use is falling in the USA and the UK, and for the young car ownership was also too costly. They reported; *All age groups appear to be moving toward mixed communities where schools, businesses, residences, and shops are in close proximity – even walking distance.*

The elderly and also disabled needs

The Council needs to continue to ensure access for the disabled, mobility impaired and vulnerable is factored in to new routes and crossings, especially as there will be increasing numbers of older people in the city. The City also has a higher level of disabled people than the national average.

Transport for the elderly continues to come out as a top priority in local surveys, which emphasises the importance of this within the city. Poor public transport can leave the elderly isolated and unable to access services, basic facilities or even visit friends. This can be worse for disabled travellers who may be less able to walk to facilities.

The Citizens Advice website states;

Under Rail vehicle accessibility regulations disabled people have rights when travelling by train. Disabled people should be able to:

- Get on and off trains in safety and without unreasonable difficulty and do so in a wheelchair
- Travel in safety and reasonable comfort and do so while in a wheelchair

However, there is concern 24 hours' notice is required for disabled help to be booked which hinders the ease of access to railway travel.

The disabled also need to have access to buses, and under the Disability Discrimination Act all single-decker buses had to be 'low floor' by January 2016, and double-decker buses by January 2017. Coaches will not have to comply with this legislation until 2020. There are still difficulties if buses are queuing for a place at the bus stop where disabled people are waiting and they may deposit and collect passengers from further back and then depart. There is also limited wheelchair user space on buses.

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4 To tackle climate change, flooding and coastal change in Portsmouth

Greenhouses Gases

There are four main types of gas widely considered to contribute to global warming; carbon dioxide, methane, nitrous oxide and fluorinated gases. The largest contributor is carbon dioxide and this makes it the focus of many climate change initiatives.

The two main sources of the gases are;

- natural processes like animal and plant respiration
- human use of fossil fuels, deforestation, intensive livestock farming, use of synthetic fertilizers and industrial processes

It is human activities and emissions that scientists have raised concerns about. The key source of greenhouse gases in the UK are fossil fuel use for energy, which typically produce 85% of total emissions of CO_2 , CH_4 and N_2O .

Reducing greenhouses gases is a long term objective for the UK, leading to a move towards a low-carbon economy.

The G7 declaration in 2015 supports a cut in global emissions at the upper end of the 40 - 70% range by 2050 as recommended by the Intergovernmental Panel on Climate Change by 'striving for a transformation' in energy production. Options to reduce fossil fuel use include solar panels (photovoltaic for electricity or panels for heating water), wind turbines, water powered turbines and combined heat and power (using gas or biofuels).

Tidal power may also be an option and south of the Isle of Wight may have potential for this. A few years ago 'tidal power' meant 'tidal barrage', but these days there are other design options. Technology is constantly improving and will continue to do so during the lifetime of the plan.

In July 2016 the Committee on Climate Change identified the need for action. The key messages in the report included;

- Flooding and coastal change risks to communities, businesses and infrastructure
- Risks to health, well-being and productivity from high temperatures
- Risk of shortages in the public water supply, and for agriculture, energy generation and industry
- Risks to natural capital, including terrestrial, coastal, marine and freshwater ecosystems, soils and biodiversity

- Risks to domestic and international food production and trade
- New and emerging pests and diseases, and invasive non-native species, affecting people, plants and animals

Areas at risk of surface water flooding

Portsmouth City Council is designated as a Lead Local Flood Authority under the Flood and Water Management Act of 2010. It has a statutory duty to develop, maintain, implement and monitor a Local Flood Risk Management Strategy. At present, approximately 47% of the city's land area is designated within Flood Zones 2 and 3 (the areas of highest risk).

The coastal frontages of Portsmouth are almost entirely defended from either wave overtopping or tidal flooding by some form of coastal defence.

As a consequence of climate change, the city faces increased flooding from both surface water and rising sea levels, as well as a threat from extreme weather events..

The Surface Water Management Plan by the City Council shows there have been hundreds of surface water flooding events throughout Portsmouth, but the most serious clusters are in Southsea in the Great Morass area (where one of two marshes lay south of Southsea in the 1800's). Water tends to settle into this low lying area.

Estimates suggest that peak rainfall intensities in the UK could increase by up to 30% by the year 2115. There are currently 14 areas of Portsmouth identified as most at risk of surface water flooding, designated as 'flooding hotspots.'

In developed areas, surface water flooding occurs when intense rainfall is unable to soak sufficiently into the ground and when road gulley's and/or sewers have insufficient capacity to allow all the water to enter them. In late 2014 Southern Water (which deals with waste water in the whole PUSH area) completed a £20 million project to reduce the risk of sewer flooding in parts of Portsmouth and Southsea.

In addition to flooding from surface run off, flooding can also occur as a result of water flowing back out of manholes and gullies when the pipe system becomes overwhelmed. Also, at locations where the water table is near the ground surface the pipe network system is surrounded by groundwater and if the pipe joints are not properly sealed, water enters and can overload them.

Areas at risk of sea flooding

The key issue for Portsmouth is the increasing risk of sea flooding due to rising sea levels globally, and also extreme weather events driving water onto the land.

In Portsmouth, the situation is aggravated by the fact that due to a complex geological phenomenon known as 'forebulging' the Netherlands and areas of

Southern England, including Portsmouth, are slowly sinking. According to work by the University of Durham this could be around 5 cms over the next century, adding between 10% and 33% to the projected impact of sea level rises.

Portsmouth has a shoreline with a total length of 43.5 km, 32 km around Portsea Island and 11.5 km on the mainland. It also has 3 km of drainage channels. The Council is directly responsible for 23 km of Portsmouth's coastline with the remaining 21 km in private ownership, predominantly the Ministry of Defence.

Regionally important transport links are at risk from coastal flooding and erosion include the mainline railway links from Portsmouth and the M27 and the M275. Within Portsmouth city, there are large areas of land currently at risk of coastal flooding, with 4,211 residential, 364 commercial and 48 Ministry of Defence properties identified as well as current and former landfill sites. These all have a present value of over £1.25 billion.

However, by the next century, the number of properties at risk increases to 9,355 residential, 950 commercial and 117 MoD properties, HM Naval Base, Historic Dockyards including the HMS Victory and Mary Rose, Continental Ferry Port, 15 areas of landfill, main road and rail arteries on and off Portsea Island, Eastney pumping station, hospitals, schools, colleges, emergency services and power supplies, 40 scheduled monuments and more than 450 listed buildings and 70 sites of archaeological interest.

In the wider Solent area, 24,894 properties are currently at risk of flooding and in the long-term these figures increase to over 46,000. Currently 2,767 commercial properties are at risk increasing to 4,777 over the same time period.

The Flood Risk Management Hierarchy

There are 5 recommended stages to dealing with flood risk, known as the Flood Risk Management Hierarchy;

- Step 1 Assess Carry out appropriate flood risk assessment
- Step 2 Avoid Apply the sequential approach
- Step 3 Substitute Apply the Sequential Test at Site Level
- Step 4 Control Use SUDs, design of sites, use flood defences
- Step 5 Mitigate Flood resilient construction (improving flood performance of new buildings/areas)

In Portsmouth the situation is complicated. The Local Development Framework Development and Tidal Flood Risk Statement of Common Ground in March 2011 produced by the Environment Agency and Portsmouth City Council showed that the level of development expected for Portsmouth cannot be achieved in areas at low risk of flooding. The city is dependent on sites within Flood Zones 2 and 3.

Step 5 Mitigation involves the management and control of flood water movement, such as redirecting flood run-off through the use of floodwalls and flood gates, rather than trying to prevent floods altogether. This works well with river systems where the water can be slowed or speeded up to minimise harm along its course. Portsmouth cannot control the movement of the key threat of flood water from the sea; all it can do is defend the city from inundation. This is discussed further in the next section.

The North Solent Shoreline Management Plan

This covers 386 km of coastline between Selsey Bill to Hurst Spit, including Chichester, Langstone and Portsmouth Harbours & Southampton Water as well as areas of the Isle of Wight. It covers the entire boundary of Portsea Island. The plan seeks to achieve balanced sustainability, i.e. it considers people, the natural environment, historic features and economic realities.

In Section 3 it states;

Although the conservation of ecological features in a changing environment remains key in terms of environmental sustainability, future management of the coast needs to allow habitats and features to respond and adjust to change, such as accelerated sea level rise. It is recognised that coastal habitats cannot always be protected in situ because a large element of their ecological interest derives from their dynamic nature and this is important to ensure the continued functionality of any habitat. This poses a particular challenge for nature conservation and shifts the emphasis from 'preservation' to 'conservation'.

All Shoreline Management Plans describe how the stretch of shoreline is most likely to be managed to address flood and erosion. Stretches of coast are divided into 'management units' and for each of these one of four different management policies are agreed;

- No Active Intervention there is no planned investment in defending against flooding or erosion, whether or not an artificial defence has existed previously
- Hold the Line to build new or maintain artificial flood defences so that the position of the shoreline remains the same
- Managed Realignment allowing the shoreline to move naturally, but managing the process to direct it in certain areas
- Advance the Line new defences are built on the seaward side

For the urban and industrial areas of the shoreline in Portsmouth (and at other key locations) Hold the Line policies are taken to maintain and improve existing defences where it is economically viable to do so. This is to minimise risk to property and assets along the extensively developed sections of the two estuaries of North Solent. The costs for providing defence are estimated at between £6 million and £20 million per kilometre.

The whole of the Langstone Harbour and Portsmouth Harbour related to the city, and the south of Portsea Island overlooking the Solent will need Hold The Line defences for the next hundred years.

Managing Flood Risk

The work needed in the city will consist of raising seawalls, building new defences and improving seawall structural integrity as well as establishing sustainable methods of retaining beach materials. The whole life cost of the scheme (excluding inflation) is £372 million, including a £131 million contingency fund.

The Portsea Island Coastal Strategy carried out modelling work and found Portsea Island consists of 7 independent 'flood cells' (blocks of land liable to flood). This means that if one cell area was to flood (or be breached) from the sea, the water does not flood a neighbouring flood cell.

Funding for capital improvement and capital maintenance schemes for flood defences is principally sourced from Flood and Coastal Erosion Risk Management Grant in Aid, allocated by the Environment Agency. However, the availability of funds is determined by the strength of the case for investment which will vary across the Portsmouth area.

Whilst some frontages will be eligible for full Grant in Aid funding, others will score less highly and require supplementary sources of funding to contribute to the full cost of a scheme. It is possible to broadly categorise the frontages depending upon their eligibility for Grant in Aid funding.

Table 8 - Frontages likely to be eligible for full Grant Aid in Funding *

Flood cells	Comments
Flood Cell 1 - Southsea	Funding secured. Construction anticipated to begin in 2018 and be completed in 2025.
Flood Cell 4 – North Portsea	Funding secured. A phased approach to construction is being taken. Construction of two of the phases (Anchorage Park and Milton Common) is now complete. All phases are due to be completed by 2022.

Table 9 - Frontage eligible for partial Grant in Aid funding and for which supplementary sources of funding have been identified

Portchester	Business case currently being developed however although
Castle to	supplementary sources of funding (developer contributions)
Paulsgrove	have been identified, these alone are not sufficient and there is still a shortfall in reaching the 100% partnership funding score required to received Grant in Aid funding.

Table 10 - Frontage eligible for partial Grant in Aid funding and for which supplementary sources of funding need to be identified before a scheme can be progressed

Flood Cell 2 – Fraser Battery	This area includes existing residential properties, as well as Fort Cumberland and former Qinetiq site (a defence technology company) which was declared surplus to requirements. Currently, this flood cell is eligible for a small proportion of Grant in Aid funding. The majority of funding would need to come from alternative sources, and it is expected that any new developments in this areas would have to pay for flood defences.
Flood Cell 3 – Eastney Lake	Currently, this flood cell is eligible for a reasonable proportion of Grant in Aid funding towards a flood risk management scheme. A funding shortfall does, however, remain. The case for investment will be revisited within the next 5 - 10 years. If supplementary funding can be secured, or if the case for full Grant in Aid funding can be made, any construction would not be begin until around 2026. Since 2012 the Eastern Solent Coastal Partnership has monitored the condition of the coastal defences and undertake repairs as and when necessary.
Flood Cell 6 – Continental Ferry Port	Currently, this flood cell is eligible for a small proportion of Grant in Aid funding. The majority of funding for a flood risk management scheme would need to come from alternative sources. Since 2012, the Eastern Solent Coastal Partnership has monitored the condition of the coastal defence assets and undertaken repairs as and when necessary.
Flood Cell 7 – HM Naval Base	Any flooding within the area at risk is anticipated to affect land under the control of the Royal Navy, which has no current plans to strengthen defences.
Flood Cell 5 – Tipner	Flood defences are needed to allow development to proceed. Flood Cell 5 has requested Grant in Aid funding, which in the latest capital programme refresh (Spring 2016) was requested from 2022 - 2023 onwards. However the Partnership Funding score is only 3%, so 97% of the £8.8m estimated project costs would need to be sought elsewhere (most likely through developer contributions).
M27 & Farlington Marshes	Flood defences will need to be raised in Year 50 to ensure that the risk of flooding to the residential areas to the north of the M27/A27 does not increase. The future of the sea wall at Farlington Marshes will be subject to the outcome of studies looking at the long term impacts on the area of holding the line or realigning the existing defences. Further work is needed before a decision can be made. There is a line in the capital programme for this scheme, which has requested Grant in Aid

Funding from 2019 - 2020. This may potentially be pushed
back in this year's capital programme refresh.

^{*}contributions have still been sought to promote efficient spending of available funds

£654m worth of assets in Southsea are at risk of flooding from the sea over the next 100 years and the Southsea scheme is reviewing the 4.5 km of coastal defences from the Garrison Church to the Royal Marines Museum. Current defences are reaching the end of their existing life; some of them were put in place in World War 2.

The Southsea Cell has been divided into seven sub-frontages and three design options are currently being considered for all of them;

- Vertical primary defences
- Sloping primary defences, and
- Set back defences

In areas along Eastney Esplanade in Southsea some parts of it are actually built on the sea wall, which prevents seawater inundation and shingle being thrown onto the road. Even so there are times during extreme weather when a gate is swung across and the road is closed.

Increasing the height of the sea wall could mean blocking out the view; this is already the case in a section of defence beyond the entrance to the Rose Garden heading east to St Georges Road. What is there is a simple concrete block wall, with steps to climb over it to access the beach.

Tourism is of vital importance to the economy in Portsmouth and Southsea and it is important that the sea defences do not have a detrimental impact on that and the appeal of the entire area. The southern coast of Portsea Island has fine views to the Isle of Wight, the Palmerston Forts and shipping in general including Royal Naval vessels. There are also many parking bays to enjoy this view, and all of this could be lost. The entire esplanade facing the sea is a feature for visitors, walkers and joggers and the two sections where cars can park next to the beach is over 3 kms long.

The south of the city needs to be defended and the defences will need to take into account the tourism importance of the area.

Flood risk assessments

Flood Risk Assessments have to be submitted alongside planning applications in areas that are known to be at risk of flooding (within Flood Zones 2 or 3) and/or are greater than 1 ha in size. Flood risk assessments need to be proportional to the development proposed; for small scale extensions etc. it may be that an applicant can undertake their own simple flood risk assessment based on guidance that is readily available. Planning permission will not be granted until a satisfactory flood risk assessment is produced.

The Environment Agency updated its guidance 'Flood Risk Assessments; Climate Changes Allowances' in 2016. Making an allowance for climate change in flood risk

assessments helps to minimise vulnerability of homes and businesses and provide resilience to flooding and coastal change in the future.

Sustainable Drainage Systems

Currently proposals are being discussed to retrofit Sustainable Drainage Systems which could significantly reduce surface water flood risk at different locations around the City. One was installed in November 2016 at the seafront between Blue Reef Aquarium and the D-Day Museum.

These are being applied to the existing systems as a way of managing the release of water to prevent overloading due to extreme rainfall events. It is anticipated that major new developments will need to have appropriate Sustainable Drainage Systems.

Coastal squeeze and the Regional Habitat Creation programme

The Hold the Line defences will mean that in the area around Portsea Island where sea defences are built habitats may be unable to relocate. Normally a habitat migrates landward, adapting to increasing sea levels when there are no barriers. Where they exist it ends up 'squeezed' against these defences and disappears. This means replacement habitat has to be re-created elsewhere, known as compensation habitats.

In Portsmouth the estimated loss of intertidal habitat due to coastal squeeze over 100 years is 56 ha, with 132 ha of habitat changing from upper to lower salt marsh. The Environment Agency's Regional Habitat Creation Programme has identified potential sites for the creation of new saltmarsh habitats. One way of doing this is to actively remove historic sea walls which are acting as barriers to saltmarsh migration. This 'managed realignment' means that defences may be built to a lower extent or further inland, thereby preventing coastal squeeze, but still protecting the communities behind. This is not possible in Portsmouth.

A managed realignment project was undertaken at Medmerry near Selsey Bill in 2013 and cost £28m. It has delivered extensive new intertidal and freshwater habitat as compensation for losses elsewhere in the region, especially Portsmouth. The project was led by the Environment Agency in partnership with the RSPB and is the largest open-coast scheme in Europe, providing 300 ha of habitat and 1,000 times better flood protection for nearby settlements than the previous defence system.

Other sites are also being looked at for creating similar compensation habitats; all of them are east of Portsea Island, and all but one of them are in other Districts where there is less development pressure.

Several sites in the Solent area are not granted the level of protection accorded an SSSI, SPA or Ramsar, but are still important sites. The large area of Farlington Marshes Local Nature Reserve has been identified as a large and complex site whose loss as a roost and feeding area for birds could not be compensated for in the short-term. It is part of a network of high tide roosting sites. It is a Wildlife Trust reserve and the existing sea defences are owned by the City Council but maintained

by the Environment Agency.

The Portchester to Emsworth Coastal Defence Strategy has proposed a Hold the Line policy for ten years at Farlington Marshes while further detailed assessment is undertaken on the feasibility of Managed Realignment for creating compensation habitat. If this were to happen this compensation habitat would then require more compensation habitat for the loss of roosting function.

Coastal maintenance

The Local Authorities across the Eastern Solent Coastal Partnership frontage invest resources each year into maintaining their existing coastal defence structures. Examples of some of the maintenance work undertaken are:

- Shingle recycling
- Beach nourishment
- Replacement of timber planking on groynes and revetments
- Concrete repairs to seawalls
- Construction/basket repairs to gabion seawalls
- Re-pointing to masonry seawalls
- Construction of permeable concrete revetments

An inspection of these features is undertaken annually, and decisions made on what needs maintenance work.

Higher temperatures

The Met Office predicts Britain will have hotter and drier summers and heatwaves could become more frequent across Europe by the 2040s. In England, there were over 2,000 excess deaths over a 10 day heatwave period in August 2003, compared to the previous five years over the same period. Pensioners in particular struggled to cope with the heat and more than 20,000 people died across Europe. Excess heat can also harm those who are chronically ill or have asthma or heart disease and it also harms the very young.

Urban areas such as Portsmouth often experience elevated temperatures compared with the surrounding countryside because of extensive heat absorbing surfaces, such as concrete and tarmac, and concentrated heat production plus impeded air flow. The centre of London is on average 5°C warmer than surrounding rural areas.

Heat waves during the summer therefore pose significant health risks to urban populations either directly from the heat or from increased air pollution. During the 2003 heat wave, a temperature difference between urban and rural areas of up to 10°celsius was recorded for London and estimates suggest that 40% of the 600 excess deaths (the number of actual deaths minus the number of expected deaths) in London were due to the urban heat island effect.

Prolonged sunshine can accelerate the growth of blue-green algae, which can cause problems for aquatic life, including fish, as well as toxic algal blooms, causing problems for public recreational water activities.

The Heatwave Plan for England 2013 recommends the use of Green Infrastructure in urban areas to lower air temperatures through the evaporation of water from vegetation.

Water stress

High temperatures can also have adverse effects on farmer's crops, and require more water in a sub-region that is already 'stressed'; areas at high risk of environmental impacts as a result of excess water abstraction.

The South Hampshire Integrated Water Management Strategy from 2008 suggested the area had sufficient licensed resources to meet future demands for water. However there was concern expressed and companies began the process of installing water meters in all households. Forecasts suggest that this may reduce demand by between 5 - 15%. Southern Water and Portsmouth Water have told PUSH they have sufficient supply for more homes than those being proposed.

Portsmouth Water has no reservoirs and relies upon groundwater reserves in the chalk aquifers of the South Downs and abstracts its water from wells, boreholes and springs. It has one river abstraction licence for Gaters Mill on the River Itchen, and if extraction is excessive it can affect the flow of the river. However if an excessive amount of water is taken out of the boreholes it can also affect the flow of the River Hamble, Meon, Wallington, Ems and Lavant.

Groundwater levels can fluctuate by as much as 20 metres. At the end of December 2015 groundwater levels were close to the long term average as a result of average Autumnal rainfall. The high rainfall of January saw groundwater levels rise approximately 6 metres above the long term average and be considered 'high' in comparison to the average levels.

Water levels in summer 2016 began to fall as usual for that time of year, remaining approximately 2.7 metres above the long term average.

Water quality

The Water Framework Directive requires that all countries throughout the European Union manage the water environment to consistent standards. The classification scheme for surface water ecological status has five categories: High, Good, Moderate, Poor and Bad.

Each country has to prevent deterioration in the status of aquatic ecosystems, protect them and improving the ecological condition of waters and aiming to achieve at least Good status for all water bodies by 2015. Where this is not possible and subject to the criteria set out in the Directive, they must aim to achieve Good status by 2021 or 2027 (this follows six years cycles for achieving better water).

Portsmouth is within the South East River Basin Management Plan area, and although no river flows through the city nearby watercourses affect the quality of the marine environment. There are four watercourses flowing into Portsmouth Harbour

and Langstone Harbour that are monitored by the Environment Agency twelve times a year and tested for chemistry, biology and nutrient levels;

- Boarhunt Mill at Fareham Good
- Hoeford Lake stream at Fareham High
- Warblington Stream at Emsworth Moderate
- Hermitage Stream at Havant Good
- Ems at Emsworth Good

The key threats to river water quality that affect the classifications are:

- Abstraction and other artificial flow regulation problems related to taking too much water from rivers, lakes and aquifers
- Nitrates an essential plant nutrient composed of nitrogen and oxygen that is found in fertiliser and sewage effluent, it can cause environmental problems in excessive quantities
- Organic pollution an excess of organic matter such as manure or sewage which depletes the oxygen available for wildlife
- Pesticides chemical and biological products used to control pests
- Phosphate a plant nutrient found in sewage and fertiliser which can cause too much algae to grow in water
- Physical modification changes to the structure of water bodies, such as for flood defence
- Sediment undissolved particles floating on top of or suspended within water, it can smother river life and spread pollutants from the land into the water environment
- Urban and transport pollution a range of pollutants related to urban areas and the transport network

The next six year cycle will seek improvements to Warblington Stream at Emsworth as well as improve or maintain the others.

Climate change and the built environment

Every year hundreds of new homes are built in the city, as well as other new developments, all of which can be designed to help tackle climate change and the impacts above. The building and construction sector is responsible for 30 per cent of global CO² emissions, and there is a need to tackle climate change at this level. Reducing energy demand in the building sector is one of the most cost-effective strategies for achieving significant greenhouse gas reductions

Heating and hot water for UK buildings make up 40% of our energy consumption and

20% of our greenhouse gas emissions. The issue of fuel poverty is also discussed later in this report. It will be necessary to significantly reduce these greenhouse emissions by around 2050 to meet the targets in the Climate Change Act and to maintain the UK contribution to action under the Paris Agreement of 2015.

Water scarcity can also be addressed through design, for instance conventional flush toilets are responsible for up to 40% of domestic water use. Putting a displacement device in the cistern will save some of this water, but a more efficient solution is to fit a low-flush toilet, that uses less than 4 litres of water per flush, cutting use in half. Efficient fixtures for taps and showers and low water use white goods can all help (although people can uninstall the latter). Rainwater can also be recycled through grey water systems or even the use of water butts.

There are many ways to create 'greener' buildings, including better design and insulation, alignment to improve solar gain and so on. Whole volumes have been written on this, and BREEAM is the world's leading sustainability assessment method for masterplanning projects, infrastructure and buildings. It addresses a number of lifecycle stages such as New Construction, Refurbishment and In-Use. They were involved with the LandRover Ben Ainslie Racing building in Old Portsmouth which achieved BREEAM Excellent building on a brownfield site.

Many of these improvements in design will reduce emissions and contribute towards modern, affordable, comfortable homes and workplaces.

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5 Delivering high quality homes in Portsmouth

The housing shortage

England has a shortage of housing; with fewer homes being built than the amount of new households being formed each year, while historically there has been a shortfall in building rates over many decades.

Nationally, seven times people's incomes are needed to achieve home ownership and the average first-time buyer is now thirty seven years of age. The trend in home ownership has been reversed in the last decade. In 2015 around 40% of young adults aged 15 to 34 in the UK were living with their parents.

The Office of National Statistics has said the number of households in England is set to increase at an annual average of 210,000 over the years to 2039. England will see the formation of an additional 5.3 million households over the 25-year period to 2039, around one-third of which are projected to be single occupants.

The housing charity Shelter believes 250,000 new homes are needed each year to meet demand. However in 2014 - 15, only 124,520 new homes were completed in England. The Government is pushing the housebuilding industry to increase output, as the planning permissions exist but take up is slow.

Historically Local Authorities were major suppliers of housing with a peak of over 400,000 per annum in the 1970s. Current production is around 0.5% of the amount of new homes being built.

Portsmouth has 85,473 households, 17% of the total households in the PUSH subregion. One person households are the largest in the city, followed by married couples (excluding same sex marriages as these only began to be counted in 2015).

To 2036 the rate of household growth is projected to increase from 85,473 to 104,964.

At the moment 64.8% of all the properties in Portsmouth are owner-occupied, this is close to the County level of 68.9% and the UK level of 64%. 35.2% of properties are rented compared to the UK level of 36%. The highest level of home ownership in the sub-region is found at Fareham at 86.2% and the lowest is Southampton at 57.6%.

Portsmouth home building rates

The current Portsmouth Plan 2012 has a target for the delivery of 12,254 homes, equalling an average of 584 homes per year. Between 2006/7 and 2014/5, 4,900 dwellings were completed.

Table 11 - Dwelling completion rates in Portsmouth

Years	Completions		
2006 - 2007	526		
2007 - 2008	712		
2008 - 2009	1,309		
2009 - 2010	726		
2010 - 2011	317		
2011 - 2012	276		
2012 - 2013	379		
2013 - 2014	236		
2014 - 2015	419		

Source: Portsmouth City Council

In the last five years 1,627 homes have been delivered, an average of 325 a year. There was an increase to 419 homes delivered in the 2014 - 2015 period. Government expects any past under-supply of housing should be addressed in the first five years and added to the target.

PUSH produced a Strategic Housing market Assessment in 2016 which assessed the Objectively Assessed Housing Need for Portsmouth up to 2036 as 18,500 homes. However it was also recognised there are limits to the number of new homes Portsmouth can provide. Therefore the target for Portsmouth in the 'Push Spatial Position Statement' of June 2016 was 14,560 homes to be provided between 2011 - 2034.

The existing housing stock

There is a larger amount of terraces compared to other parts of Hampshire and England and Wales (see Table below). Gosport is closest with 36.3%. There is also a high level of flats compared to the sub-regional average, although Southampton has even more at 40%. The lowest amount of flats is in Fareham at 21.8%. The percentage of terraced housing has decreased (47.9% in 2001 to 44.8% in 2011) whilst flats have increased (31.3% in 2001 to 35.3% in 2011). This is probably due to some terraced houses being converted into flats.

Table 12 - the housing stock in Portsmouth (2011 census figures)

	Detached	Semi-	Terraced	Flat	Caravan/
		detached			Other mobile
Portsmouth	4.5%	16.1%	47.9%	31.3%	0.2%
England and Wales	22.6%	30.7%	24.7%	21.6%	0.4%
Hampshire	34.3%	26.4%	22.4%	16.1%	8.8%

Source: 2011 census

Affordable Housing

Affordable housing is defined as Social rented, affordable rented and intermediate housing, provided to eligible households whose needs are not met by the market. Eligibility is determined with regard to local incomes and local house prices. Affordable housing should include provisions to remain at an affordable price for future eligible households or for the subsidy to be recycled for alternative affordable housing provision.

The PUSH 'Objectively Assessed Housing Need Final Report' published in April 2016 has figures for current unmet affordable housing need. The total for the PUSH area is 33,651, and for Portsmouth they believe 7,391 affordable homes are needed.

In 2014 - 2015 the number of affordable housing units completed in Portsmouth was 190. This was 45% of the net number of dwellings completed during the monitoring period. This is a higher figure than in previous monitoring periods and higher than the 40% target set in Policy PCS19 in the Portsmouth Plan. This figure includes both 100% of affordable schemes from registered providers of social housing, as well as affordable housing from market housing developers through Section 106.

However the 2015 Portsmouth Authority Monitoring Report shows a mixed picture; the Council is securing affordable housing or getting offsite contributions, but developers are also arguing against provision using viability as an argument.

The Government announced in December 2014 that 100,000 first-time buyers in the UK will be able to purchase new houses or flats at a 20% discount (later this became 200,000). The aim is to deliver these by 2020. Buyers will need to be under 40 years of age, and cannot have owned their own home previously.

Family Homes

The Policy PCS19 in the Portsmouth Plan requires 40% of dwellings in new development to be 3 bedroom family homes. This was to counter the trend of 84% of new homes being built in the city being apartments, of which two thirds had two bedrooms.

In 2014 - 2015 there was a net gain of 99 dwellings of 3 bedrooms or more. While higher than previous figures, it only represented a quarter of all housing completions. This trend towards an imbalance in the supply of new homes is still continuing.

The PUSH Strategic Housing Market Assessment of 2014 data suggests in the period between 2011 and 2036 that around 78% of the requirement is for homes with one or two-bedrooms with around 22% of the requirement being for larger homes with three or more bedrooms.

In the PUSH area the SHMA estimated dwelling requirement by the number of bedrooms between 2011 and 2034 was that 10.5% of all new housing should be 1 bedroom, 32.8% should be 2 bedrooms, 44.5% should be three bedrooms and 12.5% should be 4+ bedrooms. Within this were variations for each area (see

Portsmouth figures below).

Table 13 - Portsmouth dwelling requirements by number of bedrooms 2011 to 2036

I bed	2 bed	3 bed	4 bed	
10.3%	30.6%	46.8%	12.2%	

Source: PUSH SHMA Final Report 2014

Brownfield land and higher densities

Most of the new development in Portsmouth will be on brownfield sites (also called previously developed land). The problem is the viability of such sites due to the costs of decontamination. In a recent submission to Parliament the Homes Builders Federation cautioned against a presumption that all brownfield land would be viable for redevelopment, and called for the introduction of tax breaks to assist in increasing the viability of brownfield sites. Tipner is the largest brownfield site coming forward in Portsmouth with considerable decontamination needed.

Self-Build housing

Local Authorities in England have been required since April 2016 to maintain a list of people and groups interested in building their own homes. The Government hopes to double the amount of self-build by 2010.

There is a legal duty on Council's to provide sufficient plots, however that is likely to be difficult in Portsmouth where most sites are brownfield as the extra costs of demolition and decontamination may prove too much for an individual.

The Private Rented Sector (PRS)

The private rented sector has expanded rapidly in recent years in the UK, after being in decline through most of the last century. With 4 million PRS properties housing 9.1 million people in England in 2012 - 2013, which is 18% of the population. In 2011 - 2012, the sector overtook social renting as the second largest tenure behind owner occupation.

There is an increased focus on the role the PRS can play in housing people who cannot access social housing or afford to buy a property. The Government's Housing Stimulus Package, announced in September 2012, included a commitment to build an additional 5,000 homes for rent at market rates in line with proposals outlined in Sir Adrian Montague's report to Government in 2012 on boosting the private rented sector. This figure has since increased to 10,000 with a £1 billion fund to kick start the process.

The first contract from Government for 102 private rental units was at Centenary Quay in Southampton in July 2013. The process was ongoing and by June 2015 three new Build to Rent funded developments were announced in London which took the total number of homes funded to 4,200.

The UK does not compare favourably with much of Europe in the area of institutional real estate investment; the highest in Europe is the Netherlands with 47% of the residential market PRS compared to less than 1% in the UK. It is believed increasing this investment will increase the supply and quality of private rented sector housing.

Work carried out for the Government shows that without help to reduce delivery costs schemes struggle. Along this area of the south coast most areas are medium viability with some low viability, however Portsmouth and Gosport stand out as being categorised as no viability. With reduced delivery costs and reducing unit size (discussed next) Portsmouth only comes up to low viability.

The limited availability of suitable sites for PRS developments has also been identified as a major constraint. It is clear that encouraging this sector to increase supply with be a challenge in Portsmouth. However major redevelopment sites such as the city centre may generate opportunities.

Post Brexit initiatives

The Government has produced a housing market stimulus package to place the building of housing at the centre of economic growth, and improve the supply of new homes. The multi-billion pound fund is administered through the Homes and Communities Agency.

It includes the provision of a £10 billion government guarantee to support the delivery of market rented and affordable homes, a capital investment of £300 million into affordable housing provision and changes to section106 and the planning system.

Minimum space standards

A Joseph Rowntree Foundation study in 2003 found that rooms were shrinking. A survey carried out by the Royal Institute of British Architects in their 2011 document 'The Case for Space' found that the average new home is only 92% of the recommended minimum size. The introduction to the study states;

Space is an important factor when people are choosing a home, but many feel that newly built homes aren't big enough. Existing research suggests that consumers are right to be worried. A lack of space has been shown to impact on the basic lifestyle needs that many people take for granted, such as having enough space to store possessions or even to entertain friends. In more extreme cases, lack of adequate space for a household has also been shown to have significant impacts on health, educational attainment and family relationships. Consumers buying or renting newly built homes in the UK are likely to get less space than their European neighbours. In the rest of Western Europe new homes being built are bigger, even in countries with similar population densities to our own.

New homes in the UK are the smallest in Western Europe. By way of comparison in Ireland, new homes are 15% bigger, in the Netherlands they were 53% bigger and in

Denmark, new homes were 80% bigger. The Netherlands has a higher population density than us and are able to build larger, more suitable homes.

Recent efforts have been made in London to ensure homes have enough space, with the introduction of minimum space standards. National space standards have now been published. It is important that the rush for more homes does not provide the problem homes of tomorrow, and that homes with enough space are provided.

Housing energy efficiency and fuel poverty

The Select Committee on Environmental Audit has said that emissions from housing could constitute over 55% of the UK's target for carbon emissions in 2050. In Portsmouth 31% of the CO² kilotonnes emissions comes from domestic electricity, gas and fuels.

The UK housing stock is amongst the least energy efficient in Europe. The energy efficiency characteristics, as measured by the Government's SAP show that the City Council housing stock lies within the top quartile of local authority housing.

A new measure for fuel poverty was developed in 2013 which calculates the overlap between low income in a household, and higher than usual energy costs. This is called the Low Income High Cost (LIHC) Indicator.

Under the LIHC measure 12.3% of households in Portsmouth across all tenures were deemed to be in fuel poverty in 2013. This is higher than the English average of 10.4%. Each winter in Portsmouth fuel poverty can cause between 150 and 300 preventable deaths which are known as Excess Winter Deaths. This is significantly worse than the English average. Increases in the cost of food, fuel and rent have hit lower-income families harder than average families, as these items make up a greater share of expenditure for people further down the income spectrum (Joseph Rowntree Foundation annual report on Monitoring Poverty and Social Exclusion).

In addition people living in homes at temperatures between 12° and 15° Celsius have an increased tendency to suffer from colds, flu and chest infections, as the cold lowers resistance to respiratory infections and impairs lung function, it can also thicken the blood and lead to strokes.

Locally many people struggle to keep their homes warm (new health guidance states that a minimum temperature of 18° Celsius is recommended, but for older people and individuals with pre-existing medical conditions this may need to be higher).

The voluntary partnership Portsmouth Together is working on an Energy Champions initiative in Fratton, with the local community, which addresses excess winter deaths by promoting energy saving techniques and health promotion advice. The Property and Housing Team are also working to improve energy efficiency in homes around the city through their fuel poverty workstream.

Decent homes standards

In 2012 in the UK 4.9 million dwellings (22%) failed to meet the decent homes

standard, a reduction of around 2.8 million homes since 2006, when 35% of homes failed to meet the decent home standard. The private rented sector had the highest proportion of non-decent homes (33%) while the social rented sector had the lowest (15%). Meanwhile, 20% of owner occupied homes failed to meet the decent homes standard in 2012.

No statistics are available for the Council owned stock, although a rolling programme off refurbishment over the last thirty years has taken place.

While housing conditions improved in all tenures between 2006 and 2012 in the UK, the greatest progress occurred in the social rented sector where the number of non-decent homes almost halved from 1.1 million (29%) in 2006 to 581,000 (15%) in 2012.

The age of the city housing stock

The age of the city's current housing has implications on repair, maintenance and improvement for both the Council and homeowners. Studies into residential property conditions commissioned by the council demonstrate that nearly half (compared to a fifth for England) of Portsmouth's housing is terraced and predates the First World War.

There are currently over 15,000 council housing units within the city and on land owned by Portsmouth City Council in the Borough of Havant. The age of and condition of some of the city's homes can lead to fuel poverty with poor energy efficiency being a significant feature. This has an impact on people's living conditions, particularly those who are older and other vulnerable people. Social rented housing, especially that owned by Housing Associations (now called Registered Providers) is newer and more efficient because most of it has been built in the last 30 years. Almost half the Council's own stock of properties in Portsmouth and neighbouring Havant predates 1960. Some small scale new build is taking place on parcels of infill land such as redundant garages.

City centre housing

To bring life back to the city a residential element is needed either through living above the shops or adjacent to the main streets. Much of the housing adjacent to the city centre is low rent social housing with people on low incomes. This type of housing is needed, but also needed to support the local economy are young professional people who are looking for smart apartment style living. This group help to support a vibrant city with a 24/7 lifestyle.

The City Centre Masterplan from 2013 says:

It is essential that city centres provide a high-quality and safe environment if they are to remain attractive and competitive. Well-designed public spaces and buildings, which are fit for purpose, comfortable, safe, attractive, accessible and durable, are key elements that can improve the health, vitality and economic potential of a city centre. Also good design can improve the quality of the existing environment, attract business and investment and reinforce civic pride

and a 'sense of place'

Houses in Multiple Occupation (HMOs)

Shared accommodation provides a way of meeting low cost housing needs of many people in Portsmouth and will continue to do so in the future, particularly as a source of accommodation for people on low incomes and benefit payments, young professionals, students and the growing number of one person households.

The Council however is concerned that high concentrations of HMOs are presenting a challenge to the future sustainability of many of our city's communities where streets have become dominated. Fewer family homes are available because many properties have been converted for shared use.

Policy PCS20 in The Portsmouth Plan seeks to ensure that the future supply of family housing is not jeopardised by unchecked conversion to shared accommodation. The council also published an SPD on this in 2012 making use of Article 4 direction which operates by removing permitted development rights.

Disabled housing

The number of people waiting for disabled-friendly homes in the UK increased to 17% in 2015 according to the organisation Leonard Cheshire. Currently, one in seven people on housing waiting lists in England are disabled, up from one in eleven people five years ago. The organisation believes the Lifetime Homes 16 design criteria can be universally applied to new homes for an average cost of £1,100. For example, Lifetime Homes have walls strong enough to fit grab rails near the bath or shower, wider doors to allow wheelchairs in if needed and wide enough stairs to fit stair lifts.

There are over 11.5 million disabled people in the UK (of whom 5 million are over the state pension age). A report 'The hidden housing market' by the Papworth Trust and Habinteg Housing Association believe there are 1.8 million people with unmet disabled needs in the UK. No data is available for Portsmouth.

At the moment in Portsmouth 23.5% of the population are registered as disabled. This is higher than the UK figure of 15.62% of the population. In the UK there are also 777,000 disabled children, and that equates to one child in 20.

Portsmouth has 240 flats in the city for disabled use but not all of these are built to wheelchair standards.

In 2015 - 2016 Portsmouth City Council built 64 units of disabled accommodation. This means that 19.5% of the homes being provided by the Council are for the disabled this year. Some units come from the refurbishment of existing buildings, and others are new build after demolition. The mix includes houses and flats. Registered Providers now tend to want larger plots to help with viability issues.

Segregation of communities

The ratio of ethnic minorities in the city has grown between 2001 and 2010 (Census figures) from 8.1% of the population to 16.0%. The minorities have also grown in diversity from 40 different countries to 80. The largest ethnic group is the Bangladeshi community at around 8% of the local population. Other minority groups include the Chinese, Vietnamese, African, Caribbean, Asian and Arab. Portsmouth is also a designated cluster area where asylum seekers are housed by a private company contracted by the Home Office.

A report from the Social Integration Commission in 2014 highlighted that residential segregation by ethnicity is increasing in the UK.

Lesbian, gay, bisexual and transgender housing

Stonewall Housing is the specialist lesbian, gay, bisexual and transgender (LGBT) housing advice and support provider in England. They believe the needs of older LGBT people and communities are often overlooked in housing and care planning. Many older LGBT people feel they have limited housing and care options.

Very little reliable data is available about the size and profile of the LGBT population. A 2014 survey by the Office for National Statistics (ONS) suggests 1.1% of adults are gay or lesbian. 0.5% of adults identified themselves as bisexual. No transgender statistics are available. This figure suggests over 2,000 people fall into the category in the city and may need specialist care when older.

Housing for the ageing population

29.5% of the UK population will be aged over 60 by 2037 - increasing from 23.2% in 2015. Between 2010 and 2035, the amount of people aged over 85 will more than double, from 1.4 million to 3.5 million, according to the Office for National Statistics. The current number of pensioners in the UK is equivalent to the combined populations of Finland, Latvia, Lithuania and Estonia (the International Longevity Centre).

Between 1981 and 2011, the population of Hampshire aged 65 and over grew at a rapid pace, from 201,850 to 301,560 people, which represents an increase of almost 50% or an additional 99,710 older people.

In the PUSH area, the total of people aged 75 or older is 17.1%. There are considerable variations; nearby Havant for instance has 34.4% of its population aged 75 or older, in Gosport it is 25%. However with the two cities of Portsmouth and Southampton since 1991 both numbers of those aged 65 and over as well as the proportion of the total population in this age group has fallen. Cities tend to have younger age structures than surrounding areas.

Table 11 - Change in Population age structure

	Under 15	15-29	30-44	45-59	60-74	75 & over
Portsmouth	8.4%	24.8%	-3.7%	23.2%	13.6%	-7.4%
PUSH	-0.2%	14.1%	8.7%	14.6%	26.1%	17.1%

Source: PUSH Objectively-Assessed Housing Need Update April 2016

In Portsmouth between 2015 and 2030 the population aged 65+ years is estimated to increase by 35% and those aged 75+ years by 41%. The working age population (16 - 64 years) is estimated to increase by 5%, and those aged less than 16 years are expected to increase by 8%.

An increase in the 'vulnerable' older people - many in the 85+ age group - who have physical and cognitive impairments, means that they are likely to have higher support needs. This will be less so for Portsmouth than surrounding areas of course with its younger age profile. However current nursing homes in the city tend to be located in older housing stock and have not been adapted to modern nursing home standards. There will in the long term be a need to develop new, purpose built nursing homes within the city for frail elderly people and those with dementia.

There is also the need to consider initiatives such as HAPPI - Housing our Ageing Population Positive Ideas, which promote best practices in new homes for the elderly. The first HAPPI exercise in 2009 Housing our Ageing Population: Panel for Innovation was based on an international study tour showed the UK lagging behind other European countries.

The document HAPPI 3 published in July 2016 discusses the fact Government policies for new house building are concentrated on extensive support for first-time buyers. They believe that new homes for older people can not only meet their needs but can potentially create the housing solutions for the younger generation as well.

The growth of ethnic minorities in the city has as well as the growing diversity of them creates a challenge for making services accessible as many elderly people from minority groups do not speak English and rely on family assistance. The ethnic workforce is well represented in the NHS in the UK, although there is what has been called an 'ethnic gradient' within the workforce; with BME staff being represented in larger numbers at lower pay grades and lower status roles among medical and non-medical employees.

Carers

The number of people in their 80s or older who are relied on as carers has soared, according to Age UK. It says one in seven of the 'oldest old' - an estimated 417,000 people, up from 300,000 seven years ago - now provides some form of unpaid care to family or friends, with over half of these working more than 35 hours a week.

The Health Survey for England 2012 shows that most care was provided to a parent, and most of those providing care did so for one person. The majority of care was to

someone in a different household.

91% of carers are aged 45 - 84 years, with 45% of carers being over 65 years. 62% of carers support someone with a physical support need. The next highest support need is those with mental health problems.

The 'Portsmouth Carers Strategy 2015 - 2020' has data on the amount of people giving care and the hours they work. It is clearly a growing issue and the hours being worked by some are considerable and can have an impact on the carers own health. The City Council has a carer's team based at Queen Alexandra Hospital, and there is also a Carers Centre in Southsea.

Table 12 - Unpaid caring rates in Portsmouth

Providing unpaid care	Number in 2001	Number in 2011		
1 - 19 hours a week	9,988	10,794		
20 - 49 hours per week	1,569	2,239		
50 plus hours a week	3,426	4,103		
Total number of carers	14,983	17,136		
% of the population	8.03%	8.36%		

Source: Portsmouth City Council

The 2011 Census showed that in Portsmouth, the proportion of carers in full-time employment is 34.9% compared to 40.4% of non-carers. Carers are more likely to be in part-time employment.

Nationally BME carers face particular difficulties in accessing and using support services, over and above those experienced by white carers. Language difficulties are a part of the problem as well as their being unaware support exists. However it needs to be noted that the BME category does not cover a homogenous group and that their needs are diverse.

Baseline Sources:

Implementing the national dementia strategy - an action plan for Portsmouth 2014 https://www.portsmouth.gov.uk/ext/documents-external/cou-policies-dementia-action-plan.pdf

Portsmouth's Ageing Population Strategy 2010-2020

https://www.portsmouth.gov.uk/ext/documents-external/pln-local-dev-housing-ageing-population-strategy.pdf

Portsmouth Authority Monitoring Report 2015

https://www.portsmouth.gov.uk/ext/documents-external/pln-amr-2015.pdf

Affordable Housing Supply: April 2014 to March 2015 England by DCLG https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/481303/Affordable_Housing_Supply_2014-15.pdf

Portsmouth Carers Strategy 2015 - 2020

https://www.portsmouth.gov.uk/ext/documents-external/hlth-carersstrategy-2015-2020.pdf

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Portsmouth City Council December 2005

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Portsmouth's Housing Strategy 2005-10 By Portsmouth City Council

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Fuel Poverty & Affordable Energy Guide for frontline staff (How to help people struggling with their fuel bills) by Portsmouth's Fuel Poverty and Affordable Energy Partnership

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Hampshire Ageing Profile by Hampshire County Council Spring 2015 http://documents.hants.gov.uk/population/AgeingProfile-FinalDraft-March15.pdf

Objectively assessed housing need update PUSH Final Report April 2016 http://www.push.gov.uk/item_12_-_appendix_2_housing_oan.pdf

How integrated is modern Britain? By the Social Integration Commission 2014 http://socialintegrationcommission.org.uk/SIC_Report_WEB.pdf

Portsmouth City Profile May 2015 and Portsmouth City Profile Appendix May 2015

Ageing, longevity and demographic change: A factpack of statistics from the International Longevity Centre-UK July 2013

http://www.ilcuk.org.uk/index.php/publications/publication_details/ageing_longevity_and_demographic _change_a_factpack_of_statistics_from_the_i

HAPPI 3 Making Retirement Living A Positive Choice Housing our Ageing Population: Positive Ideas

http://www.housinglin.org.uk/Topics/browse/Design_building/HAPPI/?parent=8649&child=10165

Building the new private rented sector - House of Commons Briefing Paper 12th August 2015

http://researchbriefings.parliament.uk/ResearchBriefing/Summary/SN07094#fullreport

Weblinks only

Disability

www.leonardcheshire.org

Homelessness charity

www.shelter.org.uk

Dementia charity

www.dementiauk.org

Starter Homes

http://www.new-homes.co.uk/starter-homes-qa/LGA Daily News Headlines 18th May 2016

UK Housing market statistics

http://www.economicshelp.org/blog/5709/housing/housing-market-stats-and-graphs/

Brownfield sites

http://www.publications.parliament.uk/pa/cm201516/cmselect/cmcomloc/703/70307.htm

Government housing stimulus package

http://www.housing.org.uk/resource-library/browse/governments-housing-and-growth-package/

6 To promote healthy communities

The Health and Social Care Act

The Health and Social Care Act of 2012 meant upper tier and unitary authorities have taken on new responsibilities to improve the health of their populations, backed by a ring-fenced grant and a specialist public health team.

A number of issues are noted with regard to Portsmouth:

- Poor health is linked to poverty, and within Portsmouth 23.8% of the population are categorised as suffering deprivation. It is higher than the UK average of 20.4%
- 23.5% of children are living in poverty, higher than the UK average of 19.2%
- The amount of obese children in Year 6 is 20.3%, higher than the UK average of 19.1%
- The amount of obese adults is 25.1%, higher than the English average of 23.0%
- The percentage of physically active adults is 51.1%, lower than the English average of 56%
- 22.5% of Portsmouth residents smoke (set against the South East level of 17.2%). Compared to England, Portsmouth also has significantly higher rates of deaths from lung cancer. Smoking also causes emphysema and chronic bronchitis.
- In 2010 2012, Portsmouth's alcohol-specific mortality rate for males and females was higher than the rates for England.
- In 2012 2013, Portsmouth had a significantly higher rate of alcoholattributable recorded crimes (9 per 1,000 population) and violent crimes (8 per 1,000 population) compared to England and the South East region
- In 2012 2013, there were 3,908 patients on the chronic obstructive pulmonary disease (1.8% of registered patients of all ages compared with 1.7% in England).
- In 2012 2013, there were 13,907 patients on the asthma register (6.4% of registered patients of all ages compared with 6.0% in England)
- In 2012 2013, 9,255 people aged 17+ years had either Type 1 or Type 2 diabetes. (5.3% of people aged 17+ years compared with 6% in England)

Areas marginally better than the UK average are;

- In 2012 2013, there were 6,495 patients on the coronary heart disease register (3.0% of registered patients of all ages compared with 3.3% in England)
- The amount of adults of excess weight is 57.9%, which is lower than the English average of 63.8%
- In 2012/13, there were 3,234 patients on the Stroke or Transient Ischaemic Attacks register (1.5% of registered patients of all ages compared with 1.7% in England).

There are also a number of other health related issues where the Portsmouth statistics are worse that the English average, these include incidences of malignant melanoma, statutory homelessness, mortality rates for cardiovascular diseases and cancer. The Council also provides six rehab flats for people to recover from alcoholism.

Nationally, 'feeling good and functioning well' varies between different ethnic groups in the UK. Even accepting the social and economic factors known to influence wellbeing, people from Black and Minority Ethnic (BME) communities report lower levels of wellbeing than their White counterparts (Explaining levels of wellbeing in BME populations in England 2014).

BME groups are also much more likely to be in poverty (on an income of less than 60 per cent of the median household income) than white British people. In 2015, Pakistani and Bangladeshi communities were the most likely to be in 'persistent poverty', followed by Black African and Black Caribbean communities (Institute of Race Relations website).

It is also noted across the UK for the ageing population that gains in life expectancy have outstripped gains in healthy life, meaning a longer life is lived with ill health.

In 2008 Portsmouth joined the UK Healthy Cities network, one of 11 UK cities out of a global network of 100. It is a movement for urban health that is led and supported by the World Health Organisation. Currently the Council is looking at issues relating to air pollution, congestion, accidents and reviewing the possibility of active travel strategies to address these as well as reducing the decline in physical activity that is a national and local issue around health and wellbeing.

Deprivation

The Indices of Deprivation are a group of 10 indices that all measure different aspects of deprivation. The Index of Multiple Deprivation is a combination of seven indices to give an overall score for the relative level of multiple deprivation experienced in every neighbourhood in England. The indices are income; employment; health deprivation and disability; education, skills and training; barriers to housing and services; crime; and living environment.

Within Hampshire and the Isle of Wight there are 44 areas in the 10% most deprived areas in England, and 16 of these are in Portsmouth. Seven Districts in Hampshire have a 0 score.

Nationally Portsmouth is ranked 84th in the deprived area list out of 324 local authorities (excluding counties). This puts it just outside the most deprived quartile within the UK.

The most deprived ward in Portsmouth is Charles Dickens Ward with unemployment at 9% (2011 Census). 7.2% are long term sick or disabled, 16% are retired and 15.3% are students. Also educational attainment is poor with 31.5% of the population having no qualifications. 67.0% of Charles Dickens households socially rent, significantly higher than either Portsmouth as a whole (18.3%) or the national level. The residents also report a higher proportion of poor health and disability than Portsmouth as a whole.

The most commonly used threshold for income poverty is below 60% of median income. It 2013 it was estimated that approximately 27,700 households (excluding student households) in Portsmouth have a net annual income below 60% of the median income.

'Portsmouth's Tackling Poverty Strategy 2015 - 2020' states poverty is one of the key determinants of life expectancy and health outcomes more generally. In one ward of the City over 40% of the children are living in poverty. The Public Health Profile for Portsmouth categorises the children in poverty as being 'Significantly worse than England average.'

ONS figures cross ward boundaries, and they show that parts of three wards (Charles Dickens, Fratton and Nelson) have 47.1% of households living in poverty. This is close to half the population in this part of the city. The adjacent area has 46.2% of the population living in poverty. The remainder in these areas are unlikely to be much better off. This compares to Cosham Ward with only 12% of the households being in poverty.

In terms of physical and mental health outcomes, males in Portsmouth's most deprived areas tend to die 9.4 years earlier than males in Portsmouth's least deprived areas. The gap in life expectancy for females is 5.8 years.

Between 2009 - 2011 circulatory diseases (including coronary heart disease and stroke) caused 64 more male deaths and 52 more female deaths in Portsmouth's most deprived areas compared to the least deprived areas. These are also the biggest killers of the over 65 age group nationally. Lung cancer was responsible for 39 more male deaths and 28 more female deaths; chronic obstructive pulmonary disease responsible for 44 more male deaths and 17 more female deaths.

About 22,100 adults aged 18-64 years in Portsmouth (60% being women) are estimated to have a common mental disorder. However rates of depression are 5.5% which is slightly lower than the England average of 5.8%, although there are

variations within the city.

Smoking remains the main reason for the gap in life expectancy between rich and poor and is the primary cause of preventable illness and premature death in the UK, accounting for approximately 96,000 deaths a year (ASH Fact Sheet - Smoking statistics June 2016). In the UK, 22% of adult men and 17% of adult women are smokers. However smoking rates have more than halved since 1974 when 51% of men and 41% of women smoked.

Obesity

England is one of the most obese countries in the world, with one quarter of adults obese and another third classed as overweight. Nationally it's estimated that 64% of the adult population (16+) is above normal weight (36.9% is overweight; 24.8% obese and 2.5% morbidly obese), with 1.8% underweight, which means only 36.5% of the UK population falls within the healthy weight range. Among the 55 - 64 years of age group, 76% of men and 68% of women nationally are obese or overweight.

In Portsmouth an estimated 57.9% of the population are above normal weight, and 25.1% of the population were classified as obese. The document 'Portsmouth Health Profile 2015' also shows the percentage of physically active adults is 'significantly worse than England' average.

The document 'Fat Chance? Exploring the evidence on who becomes obese Research Paper' in 2015 discusses the evidence that links poverty, deprivation and lower socioeconomic people to obesity (as well as having poorer health across nearly all categories such as diabetes, cardiovascular diseases and cancer).

'The Healthy Weight Strategy for Portsmouth 2014 - 2024' discusses the increasing challenges associated with obesity for the individual, their family, our communities, society and economy. They discovered people want to cycle more but traffic, poor infrastructure and lack of cycle training and organised events acted as a barrier.

The document discusses Planning's involvement with regard to;

- Open spaces (seafront, parks, green spaces etc) and maintaining and enhancing them
- Urban infrastructure (safe and attractive walking/cycling routes, street lighting, transport routes etc)
- Children's centres and adventure playgrounds
- Community Allotments (all but one of the cities allotments are in the north)
- Care homes which are also able to work with dementia patients (although this tends to need specialist training rather than perhaps any specific buildings)
- Parks, Multi Use Games Area's, outdoor sports courts, commercial leisure providers e.g. Sports clubs, gyms

There is also evidence that urban characteristics such as good pavements that provide safety from traffic, proximity to necessary destinations and safety from crime are all positively linked to lower Body Mass Index. Similar trends are found among children, where lack of green space and pavements are correlated with a strong increase in obesity among girls, but less so among boys.

The document 'The Great Outdoors: How Our Natural Health Service Uses Green Space To Improve Wellbeing' by Natural England in 2010 discusses the contribution green spaces can make to tackling obesity and facilitating physical activity, and helping with stress, mental and physical health and wellbeing.

However there are now rising rates of obesity within other economic groups in the UK, but the reasons are not yet understood. The only thing we can say with certainty is that obesity as a problem is increasing in the population as a whole. By 2050 it has been estimated that overweight and obese people could cost the NHS £9.7 billion and the wider economy £49.9 billion. In Portsmouth, the Council has had to upgrade the lifts in some buildings from the maximum weight of a 19.5 stone person to a 25 stone person.

UK only statistics show that only 25% of those aged 65 and over are currently getting the recommended level of exercise.

Research suggests that lifestyle hubs can contribute to reducing inequalities in health outcomes associated with lifestyle behaviours. The Council and Portsmouth NHS Clinical Commissioning Group is keen to develop them and create a city where individuals, families and the wider community take responsibility for their health and the health of others through self-help and community empowerment.

Crime

The Portsmouth Community Safety Survey 2012 was conducted by the Institute of Criminal Justice Studies for Portsmouth City Council. It was based on a representative sample of residents.

It showed that in Portsmouth there is a difference between concern about crimes and actual experience of them. The top 3 most feared crimes in Portsmouth were being a victim of burglary at 58%, with only 11% actually experiencing it, being robbed/mugged at 39% with only 3% actually experiencing it and being assaulted at 30% with only 6% actually experiencing it.

Crime is however an issue in Portsmouth, with categories including anti-social behaviour, burglary, drugs offences, robbery, shoplifting, vehicle crime and violence and sexual offences. A number of areas were avoided through fear of crime, the highest being Somerstown and Fratton.

The website Police.UK shows that in the year ending December 2015, the crime rate in Portsmouth was higher than average for the Hampshire area (the data covers 14 local authorities). It is slightly less than Southampton, but both cities have higher crime rates than the other local authority areas.

The Crime Survey for England and Wales has shown that only 4 in 10 crimes are actually reported to the police. The December 2015 Survey shows 6.4 million incidents of crime against households and resident adults aged 16 and over in the UK. This represents a 7% decrease from the estimated 6.9 million incidents in the previous year.

The role of urban design in preventing crime and reducing criminal activity without compromising the enjoyment and usability of places by legitimate users is important. A Design Out Crime Consultancy is based within Hampshire Constabulary and supported by the Police and Crime Commissioner.

Dementia

As the population ages and lives longer so the number of people living with dementia is increasing. It is estimated that 670,000 people in England suffer dementia, two thirds of whom live at home. An estimated 21 million people (42% of the population) know a close friend or family member with dementia. One in three people aged over 65 will have dementia by the time they die.

Dementia is one of the top four diseases in the UK (the others being cancer, stroke and heart disease). In Portsmouth dementia rates are 0.7% of the population, higher than the UK average of 0.6%. This is despite the fact the City has a younger age profile than the UK average.

The current estimates for rates of dementia are;

- 2,186 Portsmouth residents will currently have some form of dementia
- 55% (1,202) will be mild
- 32% (700) will be moderate
- 13% (284) will be severe
- About a third (772) will be male and two thirds (1,414) will be female
- 51 will be early onset problems with memory/personality/confusion/ language/vision (65 years old)
- 1,703 will be living in the community and 483 will be living in residential care

The World Health Organisation describes an age friendly city as one that promotes active ageing, that is, to live in security, enjoy good health and continue taking part. An age friendly city recognises the diversity among older people, respects their decisions, and responds to age related needs. Age friendly services not only benefit older people, but make services, facilities and products accessible to the whole population.

Baseline Sources:

Portsmouth Health Profile 2015

file:///C:/Users/426795/Downloads/HealthProfile2015Portsmouth00MR%20(6).pdf

The big picture of health and wellbeing Joint Strategic Needs Assessment Portsmouth, October 2014

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Healthy Weight Strategy for Portsmouth 2014 – 2024

http://democracy.portsmouth.gov.uk/documents/s4219/HW

HAPPI - Housing our Ageing Population: Panel for Innovation by Department for Communities and Local Government, Department for Health, Homes and Community Agency

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/378171/happi_final_report_-_031209.pdf

Tipping the scale: why preventing obesity makes economic sense http://nhfshare.heartforum.org.uk/RMAssets/Modelling/Tipping%20The%20Scales%20-%20CRUK%20Full%20Report.pdf

Fat Chance? Exploring the evidence on who becomes obese Research Paper November 2015

http://www.foodpolitics.com/wp-content/uploads/Fat-Chance-report 15.pdf

Building the foundations: Tackling obesity through planning and development TCPA, LGA and Public Health England

http://www.local.gov.uk/documents/10180/7632544/L16-6+building+the+foundations++tackling+obesity v05.pdf/a5cc1a11-57b2-46e3-bb30-2b2a01635d1a

Explaining levels of wellbeing in BME populations in England 2014

http://www.leadershipacademy.nhs.uk/wp-content/uploads/2014/07/Explaining-levels-of-wellbeing-in-BME-populations-in-England-FINAL-18-July-14.pdf

Weblinks only

The Crime Survey for England and Wales

http://www.crimesurvey.co.uk/

World Health Organisation towards an age friendly world

http://www.who.int/ageing/age-friendly-world/en/

Action on smoking and health statistics

http://www.ash.org.uk/files/documents/ASH_93.pdf

Institute of race relations inequality, housing and employment statistics http://www.irr.org.uk/research/statistics/poverty/

7 Conserving and enhancing the historic environment in Portsmouth

The history of Portsmouth

The area has had human occupation for a long period of time; over 8,000 years ago trees were being felled to allow the growing of crops and rearing of domestic animals. During the Ice Age the northern part of the British Isles was covered in an ice sheet, and the extent of it generally ran from Yorkshire down to the Severn Estuary. The sea level would have been much lower, and Langstone Harbour and Portsmouth Harbour were wooded valleys. They were inundated by the sea around 5,000 to 3,000 years ago

Archaeology of Portsmouth

Prehistoric finds include flint implements and tools, such as axes, picks, arrowheads and scrapers, a large proportion of which have been recovered from around the coastline of Portsea Island and the islands in Langstone Harbour. Briquetage pottery (a coarse ceramic material used to make evaporation vessels and supporting pillars used in extracting salt from seawater) has been recovered from sites in Langstone Harbour and the old foreshore at Paulsgrove. They provide evidence of prehistoric salt production, an industry which continued into more modern times.

On Portsea Island Neolithic axes and Bronze Age flint tools and pottery have been found in areas including Fratton and North End, and Bronze Age palstave hoards (a type of early bronze axe) have been discovered at both St Mary's and St James' hospitals. Stray finds of Iron Age pottery and coins have been recorded at several locations, and Iron Age features and occupation sites have been excavated near the old shoreline at Paulsgrove and in the city. The former Hilsea Bus Depot revealed evidence of late-Iron Age and Roman occupation. A number of stray finds of Roman coins have been recorded at other sites in Old Portsmouth, Southsea, Eastney and Paulsgrove, and coin hoards discovered in Eastney and Drayton.

The only archaeological evidence of Saxon occupation on Portsea Island to be found to date was revealed during excavations at Kingston Crescent in 1977. The excavation of a Saxon log boat in Langstone Harbour in 2003 and the presence of cemetery and burial sites on Portsdown Hill provide further evidence of activity in the Portsmouth area.

Excavations in Oyster Street, Old Portsmouth uncovered evidence of continuous occupation of the area from the 12th century onwards. Few historic records for Medieval Portsmouth have survived, but the archaeology revealed an early commercial site with a 14th century dock and quay, a possible medieval merchant's house, and warehouses. The site was redeveloped a number of times during its long history and its function changed from commercial to domestic. There was also evidence of industrial activity with the construction of two forges during the 16th - 17th century, a complex of 17th - 18th clay tobacco pipe kilns, and at least one

industrial building.

Evidence of medieval buildings and activity and or occupation has been found at a number of locations in Old Portsmouth, including High Street, Grand Parade, Highbury Street and Governor's Green. Medieval pottery and agricultural activity has also been recorded at sites in Portsea, Fratton, Copnor and Cosham.

Examples of post-medieval archaeology relate to the redevelopment of the medieval settlements in Old Portsmouth, Fratton and Copnor, and urban expansion into areas such as Portsea, Southsea and Landport. These included the remains of terraced houses built circa 1809, revealed in Stone Street in 2009 belonging to Croxton Town, the earliest part of Southsea.

Portsmouth's defences

Portsmouth was once heavily fortified with a line of defensive works including walls, bastions, and moats protecting the town of Portsmouth (now Old Portsmouth) and another line encompassing Portsea and the Dockyard. Evidence of the late-medieval and Tudor defences has been recorded during investigations at the Saluting Platform and the Square and Round Tower's, the latter of which are the earliest surviving defensive structures in the city.

The town defences were extensively remodelled by during the 1660s -1680s and were altered again during the 18th and 19th centuries. The Portsea line of defences was constructed during the 1770s. The majority of the fortifications were demolished during the late 19th century. Surviving examples include the Scheduled Monuments King's Bastion, Saluting Platform, Ten Gun Battery, the Square Tower, Eighteen Gun Battery and the Round Tower. A number of the gates survive in different locations, namely Unicorn Gate, Lion Gate and King James' Gate. The Landport Gate is the only one to remain in its original location. The remains of the demolished fortifications have been recorded during archaeological investigations at sites including Gunwharf Quays (Mill Redoubt), Ravelin Park (Town Mount Bastion) and H.M.S Nelson (Portsea line).

Archaeology of Portsdown Hill

Portsdown Hill is an area particularly rich in Prehistoric and early-medieval archaeology. Bronze Age cremation and inhumation burials found at Southwick Hill Crossroads and Gob's barrow are some of the earliest sites in the area. Evidence of Iron Age activity includes a small occupation site recorded during excavations near the George Inn, stock enclosures at Hoylake Road and a field system at Gillman Road. An excavation west of Southwick Crossroads, known as Portsdown Peak, uncovered a Roman pit, which it has been suggested may represent the site of a signalling/look out station. Roman burials have been recorded near Paulsgrove chalk pit and at Chedworth Crescent. Two further burials of an unknown date have also been found at the site of the present Portsdown View apartments.

A Saxon cemetery containing 25-30 individuals was excavated at Southwick Hill Crossroads, and two Saxon burials were also discovered near the George Inn. Twelve burials found by workmen quarrying chalk in the early 19th century, also near

the George Inn, were also probably Saxon. At the eastern end of Portsdown is Bevis Grave Saxon cemetery (outside the Portsmouth boundary).

The remains of a Second World War Interdiction Battery (which prevents land based invading forces from gaining possession of a particular area of ground) relates to more modern activity. This consists of two concrete bearing and range finding plinths, one west of Fort Widley the other east of Fort Purbrook, and one concrete casement to the west of Fort Purbrook. The battery was designed to defend the areas of east Portsmouth, Langstone Harbour, Hayling Island and Chichester Harbour from a land based invasion.

A GPO PR1 Protected Repeater Station built in 1953 survives as an empty shell in New Down Lane. The purpose of the station was to maintain essential war time communications in the event of a nuclear war.

The medieval beginnings

Portsmouth is not in the Domesday Book, but settlements that are now a part of the city are listed; Buckland, Copnor, Fratton, Cosham, Wymering and Drayton. It is regarded as having been founded in 1180 by John of Gisors (Jean de Gisors). However the Oxford Dictionary of British Place Names gives the Anglo-Saxon name 'Portesmūða' as late as the 9th century.

In 1181 Gisors granted land to Augustinian monks at Southwick Priory to build a chapel dedicated to Thomas Becket. This chapel continued to be run by the monks until the Reformation after which its possession was transferred to Winchester College. The modern Portsmouth Anglican Cathedral is built on the original location of the building.

In 1200 King John was planning to invade Normandy and established a naval base at Portsmouth, and in 1212 the first docks were established. In 1338 the French attacked the city and burnt most of the buildings to the ground. They attacked again in 1339, 1377 and 1380. The Round Tower was built by Henry V around 1418 to protect the entrance to the harbour, in the 1490s it was rebuilt in stone and is still there today.

The Royal Navy in Portsmouth

In 1495 the first dry dock was constructed at Portsmouth and in 1512 the town became the centre for building the 'Kings Ships.' These were gathered when needed and only took shape as a standing navy during the 16th century under King Charles II. The Royal Naval Academy was established in 1733 at Portsmouth Dockyard as a facility to train officers for the Navy.

By 1850 Portsmouth dockyard was considered the largest industrial complex in the world. In 1905 the arms race with Germany led to the construction of the Dreadnought Battleships and as the First World war approached a warship a year was being built at Portsmouth. There was a need for larger dry docks that can still be seen today.

In the Second World War Portsmouth dockyard had a workforce of approximately 25,000 men and women. The dockyard serviced and repaired thousands of ships and smaller vessels in dry dock and afloat during the war and played a major role in Operation Overlord; the D-Day landings.

The whole dockyard area has a collection of buildings that are an important part of the UKs maritime history. In 1982 land was released under the 1982 Defence Review and the Portsmouth Naval Base Property Trust was set up in 1985 by the Ministry of Defence and the City Council to oversee the buildings being put to a new use. The Trust is responsible for their long term preservation and English Heritage has been closely involved with the redevelopment of some of the buildings. It covers about one third of the dockyard. Many buildings which were in poor condition have been repaired, and others are being looked at for restoration and re-use.

Part of the dockyard has now become the Historic Dockyard and a major visitor attraction. These include the Mary Rose - the flagship of Henry VIII's navy, HMS Victory - possibly the most famous warship from the age of sail, HMS Warrior - the first Royal Navy ship with an all iron hull, plus the Royal Navy Museum and other attractions in the historic buildings. It also has the Porters Garden, recreated on the original 1754 site, while the Porter's Lodge was built in 1708 (an earlier Porter's Watch House stood at the gate in 1698).

Portsmouth sea defences

The notable coastal defences in Portsmouth include;

The Palmerston Forts - four sea forts built in the Solent designed to protect the eastern approaches to Portsmouth Harbour from the threat of a French Invasion. They are Spitbank Fort, St Helens Fort, Horse Sand Fort and No Mans Land Fort.

The Portsea Island Forts - Fort Cumberland (built in 1746 by the Duke of Cumberland, it was rebuilt as a bastioned pentagonal form in 1794) to guard the entrance to Langstone Harbour), Eastney Fort East (built 1862-67, with later military installations), Lumps Fort (a mid-19th century construction which replaced an earlier fort), Southsea Castle (built in 1544) this is a pentagonal artillery fortification erected to guard the entrance to Langstone Harbour, Point Battery and Hilsea Lines (first defences were built in 1544 and rebuilt in 1870) to protect the northern approach to Portsea Island.

The Portsdown Hill Forts - (constructed as a result of a Royal Commission in 1859) were built on the hill and their guns face inland to prevent a hostile force landing and taking the tactical high ground and shelling Her Majesty's Navy Base rendering Hilsea Lines useless. These were Fort Wallington, Fort Nelson, Fort Southwick, Fort Widley, Fort Purbrook, Crookhorn Redoubt and Farlington Redoubt.

There were also a number of forts built at Gosport where other Navy facilities lay and were at risk in times of war. Defences were also placed on the Isle of Wight at the eastern and western ends of the island, and also provided protection for the approaches to Portsmouth and also Southampton.

Historic buildings in Portsmouth

Despite its long history of human occupation the majority of buildings in Portsmouth date from the Georgian, Victorian and Edwardian eras. Large scale housing development as the dockyard grew mainly took the form of terraced houses for the workforce. Accompanying this were other buildings to serve the growing population such as churches, public houses, shops, cemeteries, banks and schools. Later other building types such as cinemas were added. Modern post war housing estates are generally found further north.

Many of the older buildings in Portsmouth are protected by inclusion in the Statutory List of Buildings of Architectural or Historic Interest. The List was reviewed by English Heritage in 1999 and prioritised greater representations of Victorian and Edwardian buildings. Other buildings are included in Conservation Areas which cover areas of particular character or historic interest mainly in the older parts of the city such as the Dockyard, Old Portsmouth and Southsea.

Portsmouth's Listed Buildings are;

- Almost all buildings built before 1700
- Most Georgian period buildings (1714 to 1837)
- Buildings of quality from the Victorian and Edwardian periods (1840 to 1914)
- Twentieth century buildings of exceptional quality

The city has list entries for 13 Grade I listed buildings, 33 Grade II* listed buildings and 408 Grade II listed buildings. There are also 18 scheduled monuments.

War damage to Portsmouth

Portsmouth's historic built environment suffered loss in the Second World War due to sixty seven air raids between July 1940 and May 1944 aimed at the Royal Navy headquarters and the garrison as well as local industry. It was the 8th most blitzed city in Britain and has the record of being the most damaged after London.

The city saw the destruction of thirty churches, eight schools and one hospital (while another was badly damaged), one hundred and fifty pubs and licenced premises and three major shopping centres. Also damaged were areas of the dockyard, the prison, Portsmouth Guildhall and the Royal Garrison Church in Old Portsmouth.

930 people were killed and almost 10% of the city's 63,000 homes were destroyed, approximately 6,000 were damaged and thousands of houses suffered some form of minor bomb damage. The result of this damage was large scale redevelopment after the war, and the remaining historic environment is therefore all the more important.

Heritage at Risk

Every year Historic England updates its Heritage at Risk register, a process that has been carried on for twenty years since the Buildings at Risk surveys began. However heritage assets can be removed and added more frequently. The last one was published in 2015.

Since the list was published in 2015 Historic England have told us the Church of St George has been removed from the list that is found online, however Fort Purbrook has been added due to structural problems and water ingress. Also in the 2015 report they discuss Trinity Methodist Church at Southsea, and a Heritage Lottery Fund grant that will address the water penetration problems and rectify the damage which has already occurred. This development work is now nearly complete. A successful second round grant application would see further works begin and could result in the church's removal from the Heritage at Risk Register.

Many of the buildings at risk are owned by the Ministry of Defence, one is owned by Historic England, while the Anglican and Catholic church own buildings, and a few are in private ownership. Several are not is use. A common problem in most of the buildings on the list is water ingress and damp, there is also damage to roofs and windows.

The buildings and structures at risk (which may be subject to change) in July 2016 were;

- Wymering Manor, Old Wymering Lane, Cosham
- Fort Cumberland, Eastney
- Hilsea Lines defences
- The Beneficial School, Kent Street
- 2-8 The Parade, HM Naval Base
- Former Royal Naval Academy, HM Naval Base
- Iron and Brass Foundry, Victoria Road, HM Naval Base
- No. 6 Dock, Basin No. 1, Portsmouth Dockyard
- No. 25 Store, Yard Services Manager's Office, HM Naval Base
- Horse Sand Fort, Solent, Southsea
- Fort Southwick, Portsdown Hill
- Church of St Cuthbert, Hayling Avenue
- Church of St Mary, Fratton Road, Kingston
- Church of St Luke, Greetham Street

- Trinity Methodist Church, Albert Road
- Fort Purbrook, Portsdown Hill Road

Conservation Areas

Portsmouth has twenty five Conservation Areas. The designation has various effects, including;

- Consent is needed for the complete or substantial demolition of a building
- Consideration must be given to whether proposals preserve or enhance the Conservation Area
- Work to trees (over a certain size) requires notice to the City Council
- Planning permission is necessary for cladding of houses
- There are limits on the size of the extension which may be constructed without planning permission

These Conservation Areas include Old Portsmouth, the older part of the Royal Navy Base and Thomas Ellis Owen's Southsea (the architect and developer responsible for many notable buildings in Southsea and Gosport). Of the 25 Conservation Areas in the city 23 have published combined area appraisals and management guidelines, and one more I s in production. Two areas without them are owned by the Ministry of Defence, leaving a small gap in the baseline. These Conservation Areas are resurveyed annually at the request of Historic England and in 2016, as in previous years, none of the areas were considered to be at risk.

Other buildings of importance - the Local List

There are many buildings and structures of visual interest in Portsmouth, which are not afforded statutory protection because they do not meet national criteria but which add interest to the character and variety of the city. To help highlight and protect these buildings of local interest, the council has its own local list of historic buildings and structures, with 267 entries relating to approximately 500 addresses.

The buildings adding to the historic townscape include many from the Victorian and Edwardian periods. Schools, churches and public houses all contribute interest and variety to the streetscene and can be landmarks in areas of terraced housing. These buildings are often located in parts of the city such North End, Fratton or Milton which have very few protected buildings.

Victorian schools which are often buildings of substantial scale are major features in the townscape of many parts of Portsmouth. Prominent gables are a feature of schools such as Milton School and Isambard Brunel School. The City Council was responsible for various new buildings in the Victorian period including a park lodge at Victoria Park and cemetery buildings such as chapels and lodges at Highland Road and Kingston Cemeteries. The Carnegie Library in Fratton Road was included in the Local List because it had many original features including internal stained glass partitions and was then statutorily listed in 2011.

Tall Buildings

The Historic England Tall Buildings Advice Note 4 was published in 2015. In the introduction it discusses how tall buildings can significantly affect the image, character and identity of towns and cities. They can also be excellent works of architecture, and some post-war examples of tall buildings are now listed.

However a tall building can also seriously harm the qualities that people value about a place. What might be considered a tall building will vary according to the nature of the local area.

The Council Tall Buildings Supplementary Planning Document was published in 2012. It identifies those parts of the city where tall buildings can be encouraged, and those where they are considered less suitable. This is discussed further in Section 8 Requiring good design in Portsmouth.

Historic England believes one of the principal failings in the design of certain tall buildings was a lack of understanding of the nature of the area around them. There have been many examples of tall buildings that have had a lasting adverse impact and it is important that this is avoided in Portsmouth where the likelihood is that more tall buildings will be built.

Building retention and re-use

New and imaginative re-uses for historic buildings are essential to securing a positive future for heritage assets. The importance of this is demonstrated by the ongoing success of the historic dockyard.

The Palmerston Sea Forts have been adapted for modern use, Spitbank Fort is now a luxury hotel, Horse Sand Fort is open to the public to show off the historical features and No Man's Land Fort opened as a hotel in 2015.

More recently the historic fortifications flanking the entrance to the harbour have been given a new lease of life. The building dates back to the 15th century and was previously an artillery barracks. This site was part of a £1.75 million development jointly by the government's coastal communities fund, the Partnership for Urban South Hampshire and Portsmouth City Council. It was completed in July 2016 and opened as the Hot Walls Studios and has 13 artist studios, as well as an eatery for visitors.

Kingston Prison is another example where work will soon start. It was built in 1877 to a Victorian radial design, and was one of seven prisons in England that closed in 2013. A development company City & Country took over the historic site and consent was granted to convert it to apartments in July 2016.

Historic Parks and Gardens

There are three historic parks and gardens in Portsmouth registered by English Heritage at Grade II. They are;

Victoria Park - located in the city centre and bounded by roads and a railway line it is a traditional park dating from 1878 and originally known as 'The Peoples Park'. It was on land which formed the bank and open land for the defences of Portsea. It is 3.5 ha of grassed area with well-planted flower borders and trees including mature planes as well as a play area for children. Guided 'Tree Walks' take place during the year. At the north west entrance is a single storey lodge with stone-rubble walls and a tiled roof and is shown on the Ordnance Survey map of 1879.

The south east entrance is from Guildhall Square via a semi-circular walled enclosure containing an imposing war memorial. A tunnel leads under the railway embankment into the park. The park also contains a collection of naval monuments (all Listed Grade II) and an iron fountain shown on the 1879 map.

Southsea Common - in 1540 the land on which the common sits was surrendered to Henry VIII who wished to strengthen the fortifications on the coast. The ground used to be a common but in the 1780s boundaries were put around it to prevent development and also ensure a clear field of fire for cannons.

Southsea grew as a leisure and bathing destination in the 19th century, and in 1816 a pump room and baths were erected near the present day Clarence Pier, and by 1820 a large complex was developed including vapour baths, showers, and card playing and assembly rooms. The remaining marshland in the area was drained, leading to the creation of some 2 kilometres of open grassland.

Southsea also began to develop from the 1810s as a residential suburb of Portsmouth as well as a seaside resort. Housing development to the north and east of the Common continued in the 1840s and 1850s under Thomas Ellis Owen. Avenues of holm oaks had been planted around some of the roads by 1870 and after the Council took a lease of the Common in 1884, a walk known as the Ladies' Mile was laid out in 1884 for parades, the Canoe Lake was formed in 1886, and various avenues were planted.

The Common was further planted and developed with gardens after 1922, when it was purchased from the War Office by Portsmouth City Council for use as a public park. Further sports and recreational facilities have been added after the Second World War.

Kingston Cemetery - after a cholera epidemic in 1849 the Borough Council appointed a committee to consider the need for a new cemetery in the Borough. The new cemetery had buildings designed by the architect George Rake and grounds laid out under the supervision of the Board surveyor Charles B Smith, which opened at the beginning of January 1856. By 1866 the cemetery was full and an extension with a series of rectangular plots lined with avenues of trees was created to the north, on land the Board had purchased in 1854 for this purpose. A further extension took place in 1878 and then in 1889 the cemetery was almost doubled in size when land was purchased to the north of the existing site. It reached its full extent of 20 ha in 1910 and was subsequently surrounded by housing.

There are several buildings within Kingston Cemetery, the principal ones being the

twin chapels (Listed Grade II) which stand close to the St Mary's Road entrance. The identical buildings face each other and are constructed of flint with stone dressings under slate roofs in the Neo-gothic style. The west chapel is now used as a store while that to the east is still used for services. The buildings were designed and erected by George Rake in the mid-1850s. There are also monuments to both World Wars and naval battles.

Highland Road Cemetery

Although not listed, Highland Road Cemetery in Southsea has many historical connections, with 8 Victoria Cross holders, 4 Royal Red Cross holders (given to nurses for gallantry), and deceased with connections to Charles Dickens, Arthur Conan Doyle and Rudyard Kipling. There is also a section for Commonwealth War graves, as well the Crimean War dead, Indian Mutiny campaigners, a survivor of the Charge of the Light Brigade and veterans of the Land Wars in New Zealand.

The land was purchased in 1854 from Thomas Ellis Owen, and it tells us something about the mortality rate in those days in Portsmouth that around 40% of those buried in the first twenty years were children under 14 years of age.

The Portsmouth Society

The Portsmouth Society is a voluntary group interested in preserving the best of Portsmouth's environment, including buildings, streets, open spaces and the seashore, and encouraging new buildings and amenities. In 2014 their Best New Building Award went to the Mary Rose Museum at the Historic Dockyard, the Best Restoration Award went to Cumberland House Natural History Museum, and the best Reuse Award went to The Garage Lounge at the corner of Victoria Grove and Victoria Road South.

Baseline Sources:

City of Portsmouth Conservation Areas 1999

Out of print document (see weblink below for details on conservation areas)

City of Portsmouth Local List of Buildings of special Architectural and Historic Interest December 2011

https://www.portsmouth.gov.uk/ext/documents-external/pln-planning-conservation-buildings-of-historic-interest.pdf

Portsmouth Naval Base Property Trust 20 Year review 1986 - 2006 http://www.pnbpropertytrust.org/userfiles/PNBPT_20Year_Review.pdf

The National Planning Policy Framework 2012

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/6077/2116950.pdf

Portsmouth City Council Monument Full Report 22/07/2016 Internal document

Weblinks only:

Conservation areas

https://www.portsmouth.gov.uk/ext/development-and-planning/planning/conservation-areas.aspx

Portsmouth Local List

https://www.portsmouth.gov.uk/ext/development-and-planning/planning/planning-conservation.aspx

Historic England at Risk register

https://historicengland.org.uk/advice/heritage-at-risk/search-register/

City and Country redevelopment of Kingston prison

http://www.cityandcountry.co.uk/in-the-media/city-country-news/redevelopment-plans-for-kingston-prison-approved/

The Blitz and Portsmouth

http://portsmouthblitz.co.uk/

Portsmouth History website on the Blitz

http://www.welcometoportsmouth.co.uk/the%20blitz.html

Langstone Harbour

https://www.portsmouth.gov.uk/ext/documents-external/cul-langstoneharbour.pdf

Parks, gardens and open spaces

https://www.portsmouth.gov.uk/ext/events-parks-and-whats-on/parks/parks-gardens-and-open-spaces.aspx

Highland Road Cemetery

https://www.portsmouth.gov.uk/ext/community-and-environment/community/history-of-highland-road-cemetery.aspx

Memorials at Kingston Road cemetery

http://www.memorialsinportsmouth.co.uk/cemeteries/kingston-westside.htm

Kingston Cemetery

https://historicengland.org.uk/listing/the-list/list-entry/1001679

8 Requiring good urban design in Portsmouth

Good quality urban design

Good design is an essential component of successful development, whether it is in a historic setting, an existing area or an entirely new development.

The National Planning Policy Framework states in paragraph 56;

'The Government attaches great importance to the design of the built environment. Good design is a key aspect of sustainable development, is indivisible from good planning, and should contribute positively to making places better for people.'

The Planning Practice Guidance section on Urban Design states in paragraph 002:

Achieving good design is about creating places, buildings, or spaces that work well for everyone, look good, last well, and will adapt to the needs of future generations. Good design responds in a practical and creative way to both the function and identity of a place. It puts land, water, drainage, energy, community, economic, infrastructure and other such resources to the best possible use – over the long as well as the short term.

Local planning authorities are expected to secure design quality through the policies adopted in the Local Plans.

The Urban Design Group encourage good urban design and training, and on their website states that ;

It is the collaborative and multi-disciplinary process of shaping the physical setting for life in cities, towns and villages; the art of making places; design in an urban context. Urban design involves the design of buildings, groups of buildings, spaces and landscapes, and the establishment of frameworks and processes that facilitate successful development.

What is clear from the Planning Practice Guidance is that sustainability is also a key component of good design (as discussed in the chapter on Climate Change), for example through making effective use of resources, south facing orientations for passive solar gain, and in a water stressed area designs may need to consider use of grey water systems (harvesting rain water for non-consumption use).

Other principles of good sustainable urban design identified by the City Council in its Tall Buildings SPD (discussed next) are;

- Re-use of land and buildings
- Conserving energy, materials, water and other resources through design
- Ensuring designs make the most of natural systems both within, and around

the building

- Reducing the impacts of noise, pollution, flooding and micro-climatic effects
- Treating and attenuating water to minimise pollution and the risk of flooding
- Building in accessibility and adaptability
- Fostering and maintaining biodiversity

Good urban design can follow well recognised and fundamental principles. The ones used in the Commission for Architecture and the Built Environment (CABE) Councillors Guide To Urban Design (CABE was merged into the Design Council on 1 April 2011). It discusses;

- Character
- Continuity and enclosure
- Quality of the public realm
- Ease of movement
- Legibility
- Adaptability

The overarching form and shape of developments are important too, and there are four overarching principles that tend to overlap each other;

- Layout the relationship between new and existing buildings
- Scale the pattern and size of different streets
- Appearance building types and their visual impacts and the material used
- Public Realm the design of a place right down to microclimate

For Portsmouth as a whole one of the key challenges will be how it can improve the public realm.

The public realm, how well it functions for pedestrians and cyclists is another key challenge, as discussed in the section on Transport, and how well the townscape and historic aspects of the city relate to each other. A poorly designed building - whether residential, employment or retail - can sit incongruously within or adjacent to the historic townscape. Equally good design can complement it.

The 14,560 homes to be provided between 2011 - 2034 is a challenging target, and will also have an impact on the type and style of new residential areas. These will require very careful design. Of course there is scope to produce modern buildings, for instance in the regenerated city centre and around transport nodes, but these must be produced to high design standards.

The city also needs more bespoke design, reflecting the local setting. In an article in 2016 in The Independent the writer Jonathan Meades has criticised the fact that only 25% of construction projects use architects. As a result of this he said modern homes too often appear 'banal' and unimaginative.

Tall Buildings Supplementary Planning Document

The Council Tall Buildings Supplementary Planning Document identifies those parts

of the city where tall buildings can be encouraged, and those where they are considered less suitable.

In the context of Portsmouth the city is characterised by large areas of two storey housing within a predominantly flat landscape. It was therefore considered necessary to define a tall building as:

- Any building above 5 storeys in height (i.e. 6 storeys or more in height)
- Any building of 20 metres or above in height

The document has also identified the following sites as being sensitive to the intrusion of tall buildings;

- The Spinnaker Tower
- St Thomas's Cathedral
- St George's Church
- HMS Warrior
- HMS Victory
- Semaphore Tower
- The Guildhall
- St Jude's Church
- St Mary's Church
- Southsea Common

The Portsmouth SPD states:

All new tall buildings should give consideration to how they sit within the existing urban rhythms, architectural language, and historic setting of the area. It is essential that they make a positive contribution to their surroundings through an appropriate form, setback, massing and architectural language.

The key urban design principles that need to be taken on board for tall buildings are; alignment, mass, scale, form, urban grain, streetscape, public realm, climatic impact and the use of lighting. The SPD also identifies the following areas of opportunity for tall buildings;

- The Hard
- City Centre/Dockyard/Ferry Port
- Whale Island
- Kingston Crescent/Estella Road
- Fratton
- Tipner
- Port Solent
- Horsea Island
- Cosham
- Southampton Road/Western Road

These Areas of Opportunity are on the western side of the island and the city centre and railway station at Fratton where large development exists.

Portsmouth Urban Characterisation Study

The Urban Characterisation Study of 2011 aims to capture and summarise the various characteristics of areas throughout the city. It describes the combination of features that give each area its own 'sense of place' or local distinctiveness. It has also been possible to identify characteristics that are common throughout Portsmouth and identifies twenty five character areas.

Character types identify areas with broadly similar patterns of land use, architectural style (and age of development) as well as the block pattern. Some character types apply to a number of areas (such as inter and post-war housing), while others relate to only one (such as the historic core).

Due to historic development patterns across the city some of the areas may be seen to contain a mix of different character types. In such instances, the area was grouped according to its predominant type. It total there are 21 Urban Character Areas and nine character types;

- The Historic Core
- Early Victorian Expansion
- Pre-War Terraces
- Inter and Post-War Housing
- Post-War Estates
- Mixed-Use
- Civic/University Core
- Harbours
- H.M. Naval Base

The character study states in paragraph 2.13 and 2.14;

Post war development in Portsea, Somerstown, Buckland, Landport, and Paulsgrove, consisting of low and high-rise tower blocks, now cover a large proportion of the city and have a significant impact on the perceived character of the city. While development in recent years has delivered good quality schemes such as Gunwharf Quays and Admiralty Quarter, large parts of the city are still characterised by poor quality urban design.

As most new development in Portsmouth will be in established areas of the city it is important that it has regard to the existing urban character and not repeat past mistakes. In the right circumstances infill development can make a useful contribution to the need for new homes and add to the overall quality of the townscape.

This is especially the case when an effort is made to complement the local area in terms of design, scale, mass, density and layout so that the new infill development looks as though it had been planned as part of the original area. Unsympathetic buildings can damage the appearance of a street or area and destroy the sense of place.

Current thinking

The idea of compact cities and lifestyles is one Portsmouth can embrace, indeed it must embrace, and one that offers a real challenge in terms of urban design that must encompass holistic, creative and ambitious thinking to make it work.

Baseline Sources:

The Councillors Guide to Urban Design by CABE

http://www.designcouncil.org.uk/sites/default/files/asset/document/councillors-guide-to-urbandesign.pdf

Shaping Neighbourhoods - A Guide for Health, Sustainability and Vitality by Hugh Barton, Marcus Grant and Richard Guise 2003

By Spon Press

Portsmouth Urban Characterisation Study March 2011

https://www.portsmouth.gov.uk/ext/documents-external/pln-local-dev-design-urban-characterisation.pdf

Tall Buildings Supplementary Planning Document By Portsmouth City Council June 2012

https://www.portsmouth.gov.uk/ext/documents-external/pln-tall-buildings-spd.pdf

Happy City: Transforming Our Lives Through Urban Design by Charles Montgomery By Farrar, Straus and Giroux

The End of Suburbs: Where the American Dream Is Moving by Leigh Gallagher By Portfolio

Weblinks only:

Planning Practice Guidance on good design

http://planningguidance.communities.gov.uk/blog/guidance/design/the-importance-of-good-design/

Jonathan Meades on urban design

http://www.independent.co.uk/arts-entertainment/architecture/builders-of-banal-modern-homes-urged-to-hire-architects-to-design-their-housing-a6926656.html

Portsmouth Society website

http://www.portsmouthsociety.org.uk/

9 To conserve and enhance the natural environment in Portsmouth

The Solent European Marine Sites

The Solent European Marine Sites (SEMS) is one of a number of European marine sites in the UK which are designated as internationally important sites for their habitats and species. The SEMS covers all the harbours and estuaries, as well as areas of open coast and inshore water around the Solent. There are sixteen Component Sites of Special Scientific Interest (SSSI).

The site stretches from Hurst Spit in the west and Chichester Harbour in the east, including areas along the north coast of the Isle of Wight from Yarmouth to Bembridge Harbour, as well as the mainland shores. It is 781.1km² in size. The SEMs project was set up in November 2000 with the aim of developing a strategy for managing the marine and coastal resources of the Solent in a more integrated and sustainable way.

The Solent and its inlets are unique in Britain and Europe for their complex tidal regime with long periods of tidal stand at high and low tide, and for the complexity and dynamic nature of the marine and estuarine habitats present within the area.

Many of the intertidal areas within the Solent European marine site are important for a number of nesting, roosting and feeding birds. The mudflats range from low and variable salinity in the upper reaches of the estuaries to very sheltered marine muds in Chichester and Langstone Harbours. The intertidal and shallow subtidal waters of the site also support a number of important fish nursery areas.

The wider Solent supports more than 90,000 waders including Bar-tailed Godwit; Black-tailed Godwit; Dunlin; Grey Plover; Little Egret; Redshank; Ringed Plover; Teal and over 10 % of the global population of Brent Geese. Many of these birds travel thousands of kilometres to over-winter here from the arctic circle.

The SEMS Annual Monitoring Report of 2015 identified a number of issues. Access and land recreation is raised as a critical issue affecting wildlife, and although the Solent Mitigation Partnership is in place, it only addresses the recreational disturbance from new housing development. The Footprint Ecology work for the Solent Disturbance and Mitigation Project showed there was already an impact from existing levels of recreation.

Natural England reported a general rise in water sports across the SEMS area due to increasing accessibility and reduced costs of equipment. The Southern Inshore Fisheries and Conservation Authority reported a decrease in fishing following the introduction of byelaws, as well as a temporary restriction and increased enforcement in the Solent area. Despite this, the level of fishing still has an impact on the SEMS. The public have reported the capture of undersized or illegal fish and shellfish in Langstone Harbour.

Agricultural run-off from artificial fertilisers has produced high levels of dissolved inorganic nitrogen in the estuaries. Nitrogen levels from human sewage is also contributing to the problems and proliferation of the seaweed macroalgae (which feeds on nitrogen). These form mats which smother estuarine habitats and restrict the growth, distribution and variety of food available for wetland birds. The reduction of fresh water into the Solent due to abstraction from rivers can also worsen the problem.

Many of the Solent estuaries are not meeting Water Framework Directive requirements for Good Ecological Status/Potential. A failure to meet these standards will also result in a failure to meet Favourable Conservation Status for the European sites. The following water bodies/estuaries are particularly affected: Portsmouth Harbour, Langstone Harbour, Chichester Harbour, Hamble Estuary, Newtown Harbour, Eastern Yar, Western Yar and Wootton Creek.

The Environment Agency and Natural England recognise that to meet the requirements of both the Habitats Directive and Water Framework Directive further reductions in the amount of nitrogen and phosphorous entering the Solent is needed. Most of this reduction needs to be achieved by farmers.

However it is also important that nitrogen inputs from development growth do not keep increasing or this will erode the rate of reduction in agricultural inputs that has been delivered. This is likely to be a challenge in the Solent area due to the scale of planned growth, but without further action to mitigate development growth the risk of local deterioration cannot be ruled out.

PUSH has recently commissioned a study on a new Integrated Water Management Study to cover the period to 2036. It is to assess whether there is sufficient environmental carrying capacity for the broad level and distribution of growth planned. This study will be used to inform Local Plans in the PUSH area and will be published in March 2017.

The study is required to take a strategic approach to assess the constraints and requirements that will arise from the potential growth on the water environment. This will include a focus on ensuring that potential solutions can be identified to facilitate the envisaged level and broad distribution of growth, without adverse effects on the water environment (and where possible enhancing it).

Only Chichester Harbour Conservancy recorded an increase in recreational boating in 2015. The number of Annual Harbour Dues sold in Langstone Harbour during 2014 was down very slightly to 1,081 and Daily Harbour dues showed a greater decrease, down to 16% to 485. Despite this reduction in numbers, Langstone Harbour Board considers that the level of recreational boating activity has not returned to a level that avoids deterioration of the SEMS.

From the annual survey eight authorities reported no change in the level of littering, and one noted a decrease. Langstone Harbour Board reported that plastic litter has continued to enter Langstone Harbour in significant quantities as a result of unscreened sewage discharges from the Combined Sewer Overflow at Fort

Cumberland in Eastney run by Southern Water. In 2015, the company completed a £10 million investment scheme to improve storm tanks at Fort Cumberland, Portsmouth. However the company notes on its website that the improvements will not stop storm water releases into Langstone Harbour during heavy rain.

Plastic lasts hundreds of years and causes entanglement and ingestion problems for wildlife. It can also smother saltmarsh vegetation and eventually break down into micro particles of toxic materials that enter the marine food chain (and eventually humans).

Faecal contamination of water arises from numerous sources such as recreational boating, dog and bird faeces, run off from fields with livestock and also sewage treatment works. In October 2014 the native oyster beds *Ostrea edulis* in Langstone Harbour were reclassified at Class C (formerly Class B) as a result of the presence of extremely high levels of the faecal coliform E. coli in the shellfish flesh. During February 2015 all shellfish beds in Langstone and Portsmouth Harbours were closed to commercial fishing following an outbreak of Hepatitis A in the city which coincided with extended periods of storm water discharges. The Environment Agency has stated that In Portsmouth Harbour E.Coli pollution needs to reduce by 89%. There are several sources; urban areas eg Port Solent, marina and recreational boat discharges, water company discharges, agriculture and also leachate from landfill.

Chichester Harbour Conservancy is concerned as to why numbers of Shelduck are continuing to decline. The numbers in Chichester Harbour and Langstone SPA are now more than 70% lower than they were when the site was designated as an SPA. The 2013 - 2014 peak count of 309 in January 2014 was the lowest ever recorded since records began in 1965. The nationally important threshold for Shelduck is 610 individuals.

The Solent Maritime Special Area of Conservation

The Solent Maritime is a Special Area of Conservation (SAC), one of 235 of such designations in England. It was created on 1 April 2005. It covers 11,243 ha and encompasses areas of Portsmouth (Langstone Harbour) the west Hampshire coast, Southampton water and the Isle of Wight. Unlike a SSSI designation which ends at the mean low water mark SACs cover a wider area of water and subtidal habitats.

The SAC designation was put in place because the Solent encompasses a major estuarine system with four coastal plain estuaries - (Yar, Medina, King's Quay Shore, Hamble). It also has four bar-built estuaries (these have a sediment bar across their mouths and are partially drowned river valleys that have subsequently been inundated) - Newtown Harbour, Beaulieu, Langstone Harbour, Chichester Harbour.

The Solent and its inlets are also unique in Britain and Europe for their four tides each day, and for the complexity of the marine and estuarine habitats present within the area.

The area is the only site for smooth cord-grass in the UK, and is one of the few remaining sites for townsend's cord-grass and has extensive areas of common cord-grass, all four occurring in close proximity. It also contains the second-largest

aggregation of Atlantic salt meadows in south and south-west England and is a composite site composed of a large number of separate areas of saltmarsh.

As a whole the site is less truncated by man-made features than other parts of the south coast and has rare and unusual transitions to freshwater reedswamp and alluvial woodland as well as coastal grassland. A priority feature in selection of this site was the presence of coastal lagoons, areas of shallow, coastal salt water, wholly or partially separated from the sea by sandbanks, shingle or, less frequently, rocks.

Table 13 - Solent Maritime SAC general site character

Character type	Size
Tidal rivers, estuaries, mud flats, sand flats, lagoons	
(including saltwork basin)	
Salt marshes, salt pastures, salt steppes	23%
Marine Areas, sea inlets	14%
Shingle, sea cliff, islets	3%
Coastal sand dune, sand beaches, machair (grazing land)	0.5%
Broad leaved deciduous woodland	0.5%

Source: JNCC website

SACs are strictly protected sites designated under the EC Habitats Directive. Article 3 of the Habitats Directive requires the establishment of a European network of important high-quality conservation sites. Their aim is to conserve 189 habitat types and 788 species identified in Annexes I and II of the Directive. The listed habitat types and species are those considered to be most in need of conservation at a European level (excluding birds).

The document 'Common Standards Monitoring for Designated Sites: First Six Year Report' was published in 2006 (it is the most up to date information available). It was part of a national survey of SSSIs, SPAs, Ramsar and SACs. 1,570 assessments were carried out of 12,937 features (covered 57% of features in the UK).

56% of sites were assessed as being in one or other of the 'favourable' condition categories; 43% in one or other of the 'unfavourable' condition categories; with the remaining 1% assessed as being either partially or wholly destroyed.

No local data on the status of the Solent Special Area of Conservation exists, however condition assessment work is being planned for 2016 - 2017.

The coastal Special Protection Areas and Ramsar Sites

In the UK there are 80 Special Protection Areas (SPAs), which are part of the European wide network of Natura 2000 sites. These are designations under the European Union Directive on the Conservation of Wild Birds, Special Areas of Conservation and Ramsar sites (which here are wetland habitats of international importance). They cover over 18 % of the EU's land area and almost 6 % of its marine territory and is the largest coordinated network of protected areas in the world, offering a haven to Europe's most valuable and threatened species and

habitats.

In the UK, SPAs cover 677,443 ha of land or 2.7% of the UK land total. The Special Protection Areas were designated because the intertidal habitats are an internationally important wildlife resource for over wintering birds.

There are three SPAs/Ramsar Sites in Portsmouth;

- Portsmouth Harbour SPA/Ramsar Sites 1,248.77 ha in size
- Chichester and Langstone Harbours SPA/Ramsar Sites 5,810.03 ha in size
- Solent and Southampton Water SPA/Ramsar Sites 5,505.86 ha in size

The intertidal area, particularly the mudflats, shingle and saltmarsh provide ideal feeding and roosting grounds for these species which are especially adapted to feeding in such a habitat.

The UK biodiversity indicators by DEFRA comprise 24 indicators and 50 measures which monitor the state of biodiversity in the UK. Wetland birds, seabirds and over wintering waterbirds are all classified under short term change (2008 - 2013) as deteriorating. This continues a long term trend of deterioration since 1973 for the first two categories, although wintering waterbirds were seen to be improving until 2008.

In 2007, only 5% of UK habitats listed on Annex I of the Habitats Directive were in favourable conservation status, decreasing to 3% in 2013. The conservation status of 48% of habitats was unfavourable-improving in 2007, decreasing to 31% in 2013. The conservation status of 30% of the habitats was unfavourable-declining in 2007, decreasing to 25% in 2013

In 2007, 26% of UK species listed on Annexes II, IV or V of the Habitats Directive were in favourable conservation status, increasing to 39% in 2013. The conservation status of 18% of species was improving in 2007, decreasing to 10% in 2013. The conservation status of 13% of the species was declining in 2007, increasing to 15% in 2013.

In 2013 - 2014 the populations of the wintering waterbirds in the UK were 85% higher than in 1975 - 76. This demonstrates the importance of the local SPAs.

Site Improvement Plan - Solent

Site Improvement Plans have been developed for each Natura 2000 site in England as part of the Improvement Programme for England's Natura 2000 sites. Natura 2000 sites is the combined term for sites designated as Special Areas of Conservation (SAC) and Special Protected Areas (SPA).

This Site Improvement Plan covers the following Natura 2000 sites;

- Chichester and Langstone Harbours SPA
- Portsmouth Harbour SPA
- Solent & Southampton Water SPA, and
- Solent Maritime SAC

The Site Improvement Plan identifies priority issues that pose threats to the Solent site:

- Public Access/Disturbance
- Coastal Squeeze
- Commercial fisheries; marine and estuarine
- Water pollution
- Changes in species distributions
- Climate change
- Invasive species
- Direct land take from development
- Change in land management
- Inappropriate pest control
- Air pollution: impact of atmospheric nitrogen deposition
- Hydrological changes
- Extraction: non-living resources shingle

The measures to tackle this and delivery bodies are identified (in some cases the latter has not yet been determined). This document is a non-statutory framework.

The Solent Recreation and Mitigation Partnership

Recreation activity in designated areas (and supporting habitats) can have an adverse impact on bird populations. This particularly applies to a number of sites across the country, including the Thames Basin and Dorset Heathlands, as well as the Solent coastline and other coastal areas in North Kent and the Exe Estuary.

Human disturbance of birds can have several impacts. Birds may be more alert, resulting in a reduction in the amount of food eaten, or they may fly away from the disturbance. A bird flying away loses valuable feeding time whilst in the air and also uses energy in flying - a double impact. If the disturbance is sustained then food-rich areas may be little used or avoided altogether. Other areas end up hosting a higher density of birds with increased competition for the available food.

The disturbance can even disrupt the feeding patterns of migrating birds to the extent that they are not sufficiently strong to successfully complete the return journey to their breeding grounds in the spring. In some cases areas of suitable habitat are no longer used by the birds due to a high level of disturbance.

Natural England has stated that the cumulative impact of additional development up to 5.6 km from the designated sites, in terms of the likely increase in recreational use of the Solent coastline, is likely to have a significant effect on these sites.

Due to this, the Solent Disturbance and Mitigation Project was initiated in 2007 by the Solent Forum on behalf of the local planning authorities as a way to gather evidence and develop a joint way forward. The project group includes the local planning authorities that operate along the Solent coastline, Natural England, the Environment Agency, RSPB, and the Hampshire and Isle of Wight Wildlife Trust and

others.

Phase I of the project collated existing data on the distribution of housing and human activities around the Solent, gathering data on bird distribution around the Solent and outlining a range of mitigation measures. In 2012 a Report was published; 'Solent Disturbance and Mitigation Project Phase II Predicting the impact of human disturbance on overwintering birds in the Solent'.

The document discusses the computer simulations that were run to try and predict the impact of different activities on the birds. The following species were included in the computer models; Dunlin, Ringed Plover, Redshank, Grey Plover, Black-tailed Godwit, Bar-tailed Godwit, (Chichester Harbour model only), Oystercatcher and Curlew. A simpler approach was used to assess how disturbance may be affecting Brent Geese in the Solent. The results of the work suggest human disturbance may be affecting the survival of all the waders in the Solent. The loss of intertidal feeding areas will also have a deleterious impact.

Using the housing levels in 2012 a total of 52 million household visits per year to the Solent coast were predicted. Using the growth housing data from local authorities visitor numbers were predicted to rise by around 8 million household visits, to a total of 60 million, an overall average increase of 15%.

Visitor rates vary throughout the Solent, with the highest levels being where there is the highest density of housing. Areas of Portsmouth and Langstone Harbours are generally expected to see an increase of 10% to 20% in visitors. A study in 2010 for the Solent Forum showed a clear correlation between the amount of visitors and bird disturbance.

Brent Geese and waders were considered in detail in the Solent Waders and Brent Goose Strategy. Important issues for the birds feeding are the size of individual sites and the spacing and ease with which birds can move between them. A high proportion of each site needs to be away from visitor access routes to minimise disturbance to birds. It has been suggested this could be achieved through a network of larger sites or by preventing visitor access through, or close to, smaller sites.

Concern is expressed in the PUSH Green Infrastructure Strategy over the conflict between recreational access and the needs of overwintering birds. In particular it is believed that eliminating off-lead dog walking will give the largest opportunity for improving survival of the birds.

Both intertidal and land based food resources are important to the Brent Goose. Intertidal areas provide higher food value but die back or become depleted during the autumn and early winter. On land, the birds graze on playing fields and other open spaces. Previous models of Brent Geese have predicted that the loss of land based habitat will do the most damage to their survival chances; therefore conserving this habitat is of crucial importance.

The Hampshire Biodiversity Information Centre's Annual Biodiversity Monitoring Report for 2013 - 2014 shows that the Brent Goose population trend has been stable but the most recent report shows a decline. This report covers 50 species (birds,

plants, mammals and insects) of which 16 are in decline.

Maintaining a suitable network of saltmarsh sites will also be important as the total area of saltmarsh declines with sea level rises. The impact of coastal squeeze on the saltmarsh habitats was discussed in the climate change section.

The area of intertidal mudflats in the Solent as a whole is however predicted to change very little over the next 100 years. Therefore, the loss of these areas is not expected to be a factor affecting birds, although changes in the quality of the habitats (for example damage through pollution) may be an important issue.

The Solent Waders and Brent Goose Strategy published in November 2010 had a number of non-statutory policies which have a range of objectives. This includes recognition by Planning Authorities of the importance of wading bird and Brent Goose sites outside the statutory areas. It also considers the important sites outside international designations to be considered for designation as County Wildlife Sites or Local Nature Reserve status.

The strategy also wishes to see the enhancement of existing and potential sites, and where feasible the creation of new sites, with compensatory measures if there are impacts on sites outside the statutory designations.

Mitigation

Developers whose schemes will have a recreational impact on the Solent SPAs have the option of paying a developer contribution towards mitigation measures as set out in the Interim Solent Recreation Mitigation Strategy (2014 - 2017), or providing their own mitigation. During 2014 - 2015, planning permission was granted for 2,302 dwellings which were judged to require mitigation.

All but one of the planning applicants opted for the developer contribution option, which underlines that the Strategy provides a way for developers to address the mitigation issue quickly, simply and at minimal cost.

During 2014 - 2015, there were three appeal decisions on individual planning applications in which the principle of the developer contribution was challenged. Two resulted in the approval of eight dwellings, with both planning inspectors supporting the need for a financial contribution to mitigation.

The Solent Recreation and Mitigation Partnership is currently preparing the Definitive Mitigation strategy which is due for adoption in December 2017. The Definitive Strategy is likely to incorporate a package of measures; a team of wardens, a coastal dog walking project, the review of parking and watersports zones, a code of conduct packs, site specific projects, Suitable Alternative Natural Greenspaces sites, alternative roost sites and monitoring of all these measures.

Suitable Alternative Natural Greenspaces (SANGs)

There are inherent conflicts between a growth agenda and conservation. Visitors to the Solent coast travel relatively short distances, most less than 9 kilometres. Dog walking is the most frequent activity, with walking, cycling and jogging being other common ones.

Management and education of users is ongoing with creation of rangers team in 2016 covering the area between Hurst Castle near Lymington and West Wittering, including Chichester, Portsmouth and Langstone Harbours, and on the Isle of Wight coast between Colwell (near Freshwater) and Bembridge.

However the creation of Suitable Alternative Natural Greenspace (SANGs) in less sensitive locations is also seen as having the potential to deflect human pressure away from the SPAs.

A new country park is also being created on the former Horsea Island landfill site in the north west of the city. Horsea Island Country Park has received Local Enterprise Partnership Funding to enhance the new country park into a SANG. Proposals include tree planting, grass areas, wildflower meadows, footpaths and cycle routes. Planting began in 2017. The finished site will have 52 hectares of public open space, the equivalent size of 86 football pitches. It will also be the site of one of 60 diamond woods being created across the UK as part of the Woodland Trust's project to mark the Queen's 60th jubilee, with the planting of 50,000 trees and shrubs. The Solent Recreation and Mitigation Project intends to monitor the site after opening to ascertain its effectiveness as a SANG.

Milton Common Local Nature Reserve-has been identified as a potential SANG, subject to enhancements as set out in the Milton Common Local Nature Reserve Restoration and Management Framework to encourage its use by residents from new housing at Milton and Langstone. This should help reduce potential impacts on Langstone Harbour Special Protection Area.

Milton Common was partially reclaimed from Langstone Harbour in various stages since the 1800s. Between 1962 and 1970 a chalk and clay bund was built and the confined area was progressively drained and filled with domestic refuse and other waste. This was later capped and grassed over, although subsidence has led to an uneven surface.

Southsea Seafront and Southsea Common are key attractions that also serve to draw people away from more sensitive areas. The Common is home to a collection of mature elm trees, believed to be the oldest and largest surviving set in Hampshire, which escaped Dutch Elm disease owing to their isolation.

The majority of the other larger trees are Huntingdon Elms planted in the 1920s. The Ladies' Mile is also home to several semi-mature Canary Island Date Palms. These palms are now some of the largest in the UK and for the last few years have fruited and produced viable seed, the first time this species of palm has been recorded doing so in the UK.

Sites of Special Scientific Interest

This is a UK Conservation Designation that covers 1,084,544 ha in the UK (land and sea), or 4% of the total. An SSSI may be made on any area of land which is

considered to be of special interest by virtue of its fauna, flora, geological or physiographical / geomorphological features. The notification can include dry land and land covered by freshwater.

There are three SSSI's in Portsmouth and a summary of Natural England data on their website is in the Table here.

Table 14 - Condition of SSSIs in Portsmouth

Site	Favourable	% meeting favourable or	
		unfavourable recovering	
Portsmouth Harbour	11.72%	99.47%	
Portsdown Hill	9.19%	97.41%	
Langstone Harbour	8.96%	100.00%	
England average	38.54%	95.75%	

Source: Natural England

The statistics for favourable conditions average out at 9.95% between the three SSSIs (essentially 10%) and this is poor when set against the England average of 38.54% and the Hampshire average of 42.5%.

Biodiversity Opportunity Areas

Hampshire Biodiversity Information Centre has identified Biodiversity Opportunity Areas. There are 11 in total in south Hampshire (and 41 in the County as a whole). The ones in the Portsmouth area are;

- Chichester/Langstone Harbours where they wish to see improvement to Coastal Grazing Marsh, Coastal Salt Marsh, Purple Moor Grass and Rush Pastures
- Portsmouth Harbour where they wish to see improvements to Coastal Grazing Marsh, Purple Moor Grass and Rush Pasture, Coastal Salt Marsh and Vegetated shingle
- Portsdown Hill where they wish to see improvement to the Lowland Calcareous Grassland

Local Wildlife Sites

A key component of nature conservation are the Local Wildlife Sites, and more than 42,000 of them cover at least five per cent of England's land area.

The State of Nature report published in 2013 by a partnership of conservation organisations, revealed that over the past 50 years, 60 percent of 3,148 native wildlife species studied have been in decline, with 30 percent in sharp decline. Currently, more than one in ten of all the species assessed are under threat of disappearing altogether

A number of sites were designated as part of the Local Plan;

- Hilsea Lines
- Adjacent to Farlington Playing Fields
- Great Salterns
- Great Salterns Lake
- Milton Common
- Land West of Fort Cumberland
- Eastney Beach

The council has also identified a list of 'candidate sites' for inclusion, these are;

- East and west of Gillman Road
- Fort Cumberland
- James Callaghan Drive
- Kings Bastion Moat
- Paulsgrove Chalk Pit, and;
- The Foreshore to the west of Tipner Ranges

Hampshire Priority Habitats

Hampshire has a number of priority habitats under the categories of grasslands, woodlands, wood-pasture and parkland, arable, orchards and hedgerows, open water, wetland, coastal and marine.

Due to its urban nature Portsmouth has very few of the land based habitats, and what it does have are only a small percentage of the city area. Of these Lowland Calcareous Grassland is the highest habitat, and this is only 1.05% of the total area.

On the coastal habitats intertidal mudflats are the highest at 1,124 ha or 18.70% of the Portsmouth total (this figure is not fully verified by the Environment Agency and not all the coastal habitats figures are fully comprehensive).

Nevertheless it is obvious that Portsmouth has a limited supply of terrestrial priority habitats and this will not change in the foreseeable future (see the Table overleaf).

Table 15 - Portsmouth's contribution to the Hampshire Priority Habitats 2014

Habitat	PCC area	% of PCC
	Ha	area
Lowland calcareous grassland	63 ha	1.05%
Lowland dry grassland	7 ha	0.12%
Lowland meadows	20 ha	0.33%
Lowland mixed deciduous woodland	8 ha	0.13%
Wet woodland	2 ha	0.04%
Wood pasture and parkland	10 ha	0.16%
Coastal and floodplain grazing marsh	84 ha	1.39%
Reedbeds	21 ha	0.35%
Coastal saltmarsh	58 ha	0.97%

Coastal sand dunes	-	0.01%
Coastal vegetated shingle	26 ha	0.43%
Intertidal mudflats	1,124 ha	0.43%
Saline lagoons	4	0.06%
Seagrass beds	3	0.05%

Source: Hampshire Biodiversity Information Centre

Greenspace

Local authorities in England and Wales have a key role to play in the conservation of biodiversity and this is recognised and formalised within Section 40 of the Natural Environment and Rural Communities (NERC) Act 2006; every public body must, in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity.

The Government has stated in 'Natural Choice' in 2011 that it wants this to be the first generation to leave the natural environment of England in a better state than it inherited. The 'Natural Environment White Paper Implementation update report October 2014' by Defra states;

Our 2020 mission is to halt overall biodiversity loss, support healthy wellfunctioning ecosystems and establish coherent ecological networks, with more and better places for nature for the benefit of wildlife and people

In the UK, over 40% of priority habitats and 30% of priority species were declining in the most recent analysis. Ecosystems have changed markedly in the last 60 years, and the production of food from agriculture increased dramatically at the expense of habitats (such as hedgerow removal, ponds being drained, scrub and woodland felled, flower meadows depleted, chalk downland ploughed up).

Portsea Island has a high proportion of terraced housing which lacks the areas of open space common in housing built after World War Two. Approximately 87% of Portsmouth's administrative area is covered by development.

The area is therefore very urban; there is no open countryside with habitats such as wildflower meadows or areas of woodland. There is the nearby South Downs National Park, but access is difficult for the 33.4% of the population lacking a car, and public transport is limited.

Therefore, the green and open spaces in the city have a very important role in providing 'green lungs' - areas within a town or city that provide a healthier environment and places to walk and take part in informal recreation and be more active. Within Portsmouth there are 67 areas of parks, gardens, cemeteries and open spaces that provide areas for informal recreation and also enhance local biodiversity.

Some of the key ones are:

Portsdown Hill - a chalk ridge north of Portsea Island and designated as a Site

of Special Scientific Interest

- Farlington Marshes a large area of Langstone Harbour reclaimed from the sea in 1770 by the Lord Mayor of Farlington
- Victoria Park it is quite small compared to other towns and cities, however it is well used
- Southsea Common the largest area of open space in the city that was purchased by the Council from the War Department in 1922
- Milton Common 40 ha of reclaimed semi-natural land composed of grass, brambles and lakes hosting over 200 species
- Fort Cumberland Open Space natural coastal heathland used by the military as a rifle range before being bought by Portsmouth City Council in 1979
- Great Salterns where salt was once harvested from Langstone Harbour this large open space has changed considerably over the years, but there still remains a significant natural area that is of wildlife interest
- Hilsea Lines a green corridor separating Portsea Island from the mainland, within its 80 hectares it has woodland, hedgerows, meadows, both fresh and brackish water areas, marshland and coastal habitats

A Houses of Parliament Postnote on Urban Green Infrastructure from November 2013 says;

Low income areas systematically have fewer and poorer quality green spaces compared with more affluent areas in the same city. Investment in green infrastructure has a greater positive effect in economically deprived areas than affluent areas, since economically deprived communities spend more time in their neighbourhoods, and the quality of these green spaces has a larger impact on their health and wellbeing. The use of green infrastructure might also vary between ages, gender, ethnic groups and socio-economic backgrounds, making it difficult to predict the effect of a green space on the health and wellbeing of a local community. However, there is evidence that successful and well-maintained projects are those that have public support and engagement.

This is especially the case in Portsmouth where deprived wards do have a limited supply of greenspace. Opportunities to create new areas or enhance the existing ones and improve links to them are therefore important.

Tall Buildings and wildlife

Tall buildings can be a danger for birds in American cities with some very tall buildings, and the numbers of deaths run into hundreds of millions. There is little evidence that it is as big a problem in the UK; however the RSPB believe tall buildings can be a hazard for migrating birds.

A Southampton Wetland Bird Flight Path Study carried out in 2009 however showed that the principal movements of waterfowl were mostly confined to the estuarine river corridors with movements up and down the rivers. There were limited cross-city movements, although there were some flight lines close to the city centre. This suggests that birds using the SPAs in Portsmouth will avoid the built up area, although the resident gulls scavenge for food in the city centre.

The siting of tall buildings is still an issue; a lone one near a site popular with birds is more likely to be a hazard than one that is built in a developed stretch of coast. Tall buildings can also provide perches for predators to watch birds going past, giving them an unnatural advantage.

Birds such as Black tailed godwit and Dunlin require clear views of 200 metres to allow early detection of predators when feeding and roosting. Brent Geese however require views greater than 500 metres.

From surveys carried out in 2010 the number of buildings surrounding a feeding site was identified as an important factor for waders, but less important for Brent Geese. Important sites for waders tended to be further away from roads and also to be more isolated from other wader sites, but important sites for Brent Geese were less isolated from each other. They have been seen grazing on playing pitches near busy roads in Portsmouth and Southsea.

Green Infrastructure

The 'PUSH Green Infrastructure Strategy' from June 2010 identifies existing green infrastructure and considers what enhancements should be made and recommends how the Strategy might be delivered. Their guiding principles for green infrastructure use connectivity and multifunctionality to create robust networks of green spaces to address identified deficits and needs.

The work expresses concerns that the pressure for development in Portsmouth may lead to the loss of green infrastructure. The city, along with Gosport and Southampton, are areas that they identified as being deficient in greenspaces. Portsmouth (along with Gosport, Havant and Southampton) are also areas identified where greenspace is needed to benefit the health of the local population.

The strategy has a number of suggestions for Portsmouth;

- Enhancing Portsmouth Seafront (including Southsea Common)
- Creating and enhancing links around Portsdown Hill
- A Country Park for Portsmouth (Horsea Island is underway)
- Establishing and promoting an improved network of pocket parks with better linkages across Portsmouth (this is established in Policy PCS13 of the Portsmouth Plan for development sites of 50 ha per 1,000 population)

Baseline Sources:

Parks and Open Spaces Strategy 2012 - 2022 by Portsmouth City Council https://www.portsmouth.gov.uk/ext/documents-external/cul-parks-strategyentirelowresolution.pdf

Solent Special Protection Areas Supplementary Planning Document 2014 by Portsmouth City Council

https://www.portsmouth.gov.uk/ext/documents-external/pln-solentspas-spd-adoptionspd.pdf

Site Improvement Plan: Solent

http://publications.naturalengland.org.uk/publication/4692013588938752

Milton Common Local Nature Reserve Restoration and Management Framework July 2015

https://www.portsmouth.gov.uk/ext/documents-external/pln-miltoncommon-lnr-framework.pdf

Solent Waders and Brent Goose Strategy November 2010

http://www.solentforum.org/forum/sub_groups/Natural_Environment_Group/Waders%20and%20Brent%20Goose%20Strategy/Solent%20Waders%20and%20Brent%20Goose%20Strategy.pdf

Conservation Advice for Portsmouth Harbour SPA

https://www.gov.uk/government/publications/marine-conservation-advice-for-special-protection-area-portsmouth-harbour-uk9011051

The Natural Choice – securing the value of nature by Defra 2011

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/228842/8082.pdf

Interim Solent Recreation Mitigation Strategy - by the Solent Forum (various datsets and documents)

http://www.solentforum.org/forum/sub_groups/Natural_Environment_Group/Disturbance_and_Mitigati on Project/

http://www.solentforum.org/forum/sub_groups/Natural_Environment_Group/Disturbance_and_Mitigati on_Project/SDMP_Phase2_report_Feb2012.pdf

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UK Biodiversity Indicators 2015 by DEFRA

http://jncc.defra.gov.uk/pdf/UKBI 2015 v3a.pdf

Hampshire Biodiversity Information Centre Annual Report for 2014 - 2015 http://documents.hants.gov.uk/biodiversity/HBICAnnualreport2014-15.pdf

Solent European Marine Sites Monitoring Response Report 2015 Prepared by the Solent Forum on behalf of the SEMS Management Scheme

https://www.google.co.uk/?ion=1&espv=2#q=Solent+European+Marine+Sites+Monitoring+Response +Report+2015+Prepared+by+the+Solent+Forum+on+behalf+of+the+SEMS+Management+Scheme

Solent European Marine Sites Annual Monitoring Report 2015 November 2015

http://www.solentems.org.uk/publications/

The Status of Local Wildlife Sites 2014 by the Wildlife Trusts

http://www.wildlifetrusts.org/sites/default/files/files/Status%20of%20Local%20Wildlife%20Site%20Systems%202014%20REPORT%20Final%20Dec%2022.pdf

Natural Environment White Paper Implementation update report October 2014 https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/366526/new p-imp-update-oct-2014.pdf

Southampton Wetland Bird Flight Path Study by Geodata Institute for Southampton City Council

http://www.solentforum.org/resources/pdf/natconsv/Southampton%20CC%20Wetland%20Bird%20Flightpath%20study_Final.pdf

HBIC Annual Biodiversity Monitoring Report for 2013 - 2014 Internal document

Water Quality - Protecting the Marine Environment in Solent by the Environment Agency and Natural England

Conservation Advice for Portsmouth Harbour SPA

https://www.gov.uk/government/publications/marine-conservation-advice-for-special-protection-area-portsmouth-harbour-uk9011051

Draft Conservation Advice for Solent Maritime SAC

https://www.gov.uk/government/publications/marine-conservation-advice-for-special-area-of-conservation-solent-maritime-uk0030059

Weblinks only:

The Wildlife and Countryside Act 1981

http://www.legislation.gov.uk/ukpga/1981/69/contents

The Convention on Wetland Habitats of International Importance especially as Waterfowl Habitat (the Ramsar Convention) 1971

http://portal.unesco.org/en/ev.php-URL_ID=15398&URL_DO=DO_TOPIC&URL_SECTION=201.html

Convention on the Conservation of Migratory Species of Wild Animals (or Bonn Convention) 1979

http://www.cms.int/en/convention-text

Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention) 1979

http://www.coe.int/en/web/conventions/full-list/-/conventions/treaty/104

Convention on Biological Diversity 1992

https://www.cbd.int/doc/legal/cbd-en.pdf

UK National Ecosystem Assessment - Synthesis of Key Findings (several documents) 2011 By UKNEA

http://uknea.unep-wcmc.org/Resources/tabid/82/Default.aspx

The Birds Directive. Directive 79/409/EEC in April 1979. Amended in 2009, it became the Directive 2009/147/EC

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The Habitats Directives (92/43/EEC)

http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:31992L0043:EN:HTML

Hampshire Biodiversity Information Centre Site Summary Milton Common 2007 https://www.portsmouth.gov.uk/ext/documents-external/cul-hbicspecieslist-miltoncommon.pdf

Parks and Open spaces section of Portsmouth City Council website

https://www.portsmouth.gov.uk/ext/events-parks-and-whats-on/parks/parks-gardens-and-open-spaces.aspx

https://www.portsmouth.gov.uk/ext/documents-external/cul-parks-openspaces.pdf

SPAs on Defra website

http://jncc.defra.gov.uk/page-1399

Biodiversity Indicators data

https://www.gov.uk/government/statistical-data-sets/env09-england-biodiversity-indicators

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https://designatedsites.naturalengland.org.uk/

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http://www.bloomberg.com/politics/articles/2016-05-27/tall-buildings-are-bigger-threat-to-birds-than-wind-power

RSPB article on bird strikes to buildings

http://www.rspb.org.uk/news/details.aspx?id=264770

Solent Maritime Designated Special Area of Conservation

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Southern water website on sewer outfall at Fort Cumberland

https://www.southernwater.co.uk/fort-cumberland

10 Facilitating the sustainable use of natural resources in Portsmouth

The NPPF's presumption in favour of sustainable development includes the need to facilitate and encourage the sustainable use and reuse of natural resources.

The goods and products we all use every day contain natural resources of raw materials and energy. The final disposal of these materials as 'waste' is not only a lost opportunity to re-use these natural resources, but can also lead to the degradation of natural ecosystems, the release of greenhouse gas emissions and potential public health issues. Minerals are also finite natural resources which need to be used prudently, and in some cases require protection from overlying development that could prevent future exploitation.

Portsmouth City Council, as a minerals and waste planning authority, works in partnership with Hampshire County Council, Southampton City Council, New Forest National Park Authority and the South Downs National Park Authority ('the Hampshire Authorities') on minerals and waste matters in the County. Together the Hampshire Authorities produced the Hampshire Minerals and Waste Plan (2013) that aims to enable the delivery of sustainable minerals and waste development up to 2030.

Waste

The Waste Management Plan for England (Defra, 2013) sets out the Government's ambition to work towards a more sustainable and efficient approach to resource use and management. National guidance indicates that the planning system should ensure that waste management is considered alongside other spatial planning concerns, such as housing and transport.

The Hampshire Minerals and Waste Plan (HMWP) commits to meeting the Waste Management Plan's goal of working towards a 'zero waste' economy (100% of waste diverted from landfill) and shifting the management of wastes up the waste hierarchy; the 'hierarchy' gives order and priority to waste management options, from prevention through to disposal (e.g. landfill). The HMWP acknowledges that the best way to reduce the need for waste disposal is to avoid its creation in the first place, by recognising waste as a resource.

National guidance (NPPG on Waste, para. 010) suggests that approaches to sustainable waste management might involve:

 Promoting sound management of waste from any proposed development, such as encouraging on-site management of waste where this is appropriate, or including a planning condition to encourage or require the developer to set out how waste arising from the development is to be dealt with:

- Including a planning condition promoting sustainable design of any proposed development through the use of recycled products, recovery of on-site material and the provision of facilities for the storage and regular collection of waste;
- Ensuring that collections of household and similar waste are organised so as to help towards achieving the higher levels of the waste hierarchy.

Waste Arisings

The HMWP estimates Hampshire's total estimated waste arisings to be around 4.8 million tonnes per annum (in 2010); almost half of which was generated by Construction, Demolition and Excavation (CDE) wastes (49%), followed by lesser amounts of Commercial and Industrial (C&I) (34%) and Municipal (Household) Wastes (17%).

CDE wastes (e.g. concrete, brick, glass, soils and clays) are largely considered to be 'inert wastes'; a substantial source of secondary and recycled aggregates. While CDE wastes are recycled or recovered where possible, the HMWP indicates that most inert waste arisings in Hampshire are landfilled for uses in construction, restoration or engineering works.

HMWP Policy 25: Sustainable Waste Management commits the Hampshire Authorities to contribute to achieving 60% recycling rates and 95% diversion from landfill of non-hazardous waste arisings by at least 2020. In order to contribute to reaching these targets, the reduction, beneficial reuse or recycling of non-hazardous wastes is therefore a key issue for Portsmouth.

Wastewater

Sustainable waste management also covers wastewater. Raw wastewater collected in sewers and transferred to Wastewater Treatment Works (WWTWs) where it is treated in such a way to produce largely reusable sewage sludge and effluent that is discharged to watercourses.

The HMWP considers that the projected increases in population and housing in the County can be managed by the existing WWTWs, without the need for further capacity in the plan period (up to the end of March 2030). However, it is important that the capacity of WWTWs facilities in areas of planned development should be kept under review.

Safeguarded waste facilities

There are eight existing waste sites within the Portsmouth City Council area, safeguarded. Under Policy 26 of the HMWP, their capacities are considered to be of strategic importance in the County and are therefore safeguarded from alternative development as well as encroachment from incompatible uses, unless it can be demonstrated that:

• The merits of the development clearly outweigh the need for safeguarding; or

- The infrastructure is no longer needed; or
- The capacity of the infrastructure can be relocated or provided elsewhere.

Consideration of the current location and operational capacity of these sites will need to be taken into account in the planning of future land uses in Portsmouth.

Minerals

National planning policy (NPPF, para. 143) requires the safeguarding of the following:

- Existing, planned and potential rail heads, rail links to quarries, wharfage and associated storage, handling and processing facilities for the bulk transport by rail, sea or inland waterways of minerals, including recycled, secondary and marine-dredged materials;
- Existing, planned and potential sites for concrete batching, the manufacture of coated materials, other concrete products and the handling, processing and distribution of substitute, recycled and secondary aggregate material; and
- Known locations of specific minerals resources of local and national importance.

There is an area safeguarded at the HM Naval Base and commercial docks in Portsmouth for a potential minerals and/or waste wharf infrastructure under HMWP Policy 34, should the land be released from the present military or port uses by the Port Authority. However, the area was also previously identified in the Portsmouth's Core Strategy (2013) for potential employment land and port uses (Policy PCS11). This could present some conflicting priorities for the long term development of the area if it were to become available; the strategic importance of wharf infrastructure to deliver minerals to Hampshire vs. the potential employment and regeneration related opportunities of the waterfront site for the City.

Mineral Infrastructure Safeguarding also applies to two concrete batching sites located in Copnor and Drayton and Farlington (as per HMWP Policy 16). Their operational capacity should be protected unless there are overriding reasons, as per the waste infrastructure safeguarding policy in the previous section.

The Portsmouth City Council area also contains relatively minor safeguarded reserves of Brick Clay, Superficial Sand and Gravel and Soft Sand (HWMP Policy 15). Although deposits are largely focused in constrained areas where future development would be very unlikely, such as land adjacent to Langstone Harbour, Southsea Common and the onshore area off Portsea, there are Brickclay reserves around Tipner that will need consideration as part of any development proposals.

The NPPF also requires mineral planning authorities to take account of the contribution that substitute or secondary and recycled materials and minerals waste would make to the supply of materials, before considering extraction of primary materials, whilst aiming to source minerals supplies indigenously (para.43). While Portsmouth City Council and the other Hampshire Authorities do not control how

much aggregate is recycled, it is possible to:

- Enable and encourage recycling facilities to meet demand.
- Encourage the utilisation of inert wastes to produce secondary and recycled aggregates for use in construction relates activities, to reduce its use as 'fill' material or disposal to land

Baseline Sources:

Waste Management Plan for England. Defra 2013

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/265810/pb14100-waste-management-plan-20131213.pdf

National Planning Policy Framework (2012)

https://www.gov.uk/guidance/national-planning-policy-framework

National Planning Policy for Waste. DCLG, October 2014

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/364759/141015_National_Planning_Policy_for_Waste.pdf

National Planning Practice Guidance on Waste. DCLG, October 2015 https://www.gov.uk/guidance/waste

Hampshire Minerals and Waste Plan. Hampshire Authorities October 2013 http://documents.hants.gov.uk/mineralsandwaste/HampshireMineralsWastePlanADOPTED.pdf

PART 2

The Key Sustainability Issues

Identifying sustainability issues and problems - themes

The baseline data has identified the key themes for the appraisal. These are summarised by each theme in the tables below. The Sustainability Appraisal framework has been developed based on these themes and criteria set reflecting the key issues against which each of the Local Plan issues, sites and policies will be assessed. Accompanying this is a set of indicators, which are used to assess the effectiveness of policies as part of the Authority Monitoring Report.

The aim of the SA therefore is to identify and respond to significant effects of each policy and proposal.

Sustainability Issue 1 - Building a strong, competitive economy in Portsmouth

- A supply of land to establish fledgling businesses and grow the existing ones
- Supporting a rise in GVA while also creating a more diverse employment market to create a balanced economy
- Providing suitable water frontage sites to support the marine sector
- Ensuring protection of land to provide a range of locations for new businesses, including small start ups
- Making provision for new facilities for the tourism and visitor economy as well as hotels and conference centres
- Sixteen areas within the city are deprived and a stronger economy provides more opportunities to work
- Supporting infrastructure is needed to support further growth in the city

Sustainability Issue 2 - Ensuring the vitality of the city centre and other retail centres in Portsmouth

The main issues are:

- Ensuring the city centre achieves a mixture of retail, leisure, cultural and evening economy facilities
- Seeing the city centre become a residential and office location to support its diversification
- Adapting to compliment the role of internet shopping
- Allowing Gunwharf to maintain its role for factory outlet retailing to complement the city centre
- Supporting Southsea shopping centre
- Reviewing and supporting the District and Local Centres in Portsmouth
- Creating more office space in the city centre to support its regeneration

Sustainability Issue 3 - promoting sustainable transport in Portsmouth

- Encouraging a modal shift and public realm improvements including expansion of Park and Ride
- Creating a walkable city where people take priority over the needs of the car
- Tackling congestion and air pollution
- The need for a better and safer network of routes for cyclists and walkers to connect to jobs, homes and leisure facilities
- Ensuring better access for the disabled to public transport
- Problems with on street car parking

Sustainability Issue 4 - to tackle climate change, flooding and coastal change in Portsmouth

The main issues are:

- Reducing greenhouses gases
- Reducing flood risk to new and existing development
- Balancing provision of new defences with the tourist and visitor appeal of the promenade and seafront
- Use of Sustainable Urban Drainage Systems in the city where appropriate
- Avoiding coastal squeeze or creating new saltwater habitats to replace those lost where possible
- Achieving high environmental standards on all new buildings, especially in the city centre

Sustainability Issue 5 - Delivering high quality homes in Portsmouth

- The housing shortage and the need for affordable, starter homes, provision of self-build plots and the private rented sector
- The need for more family homes, and providing dwellings with sufficient space for storage
- Re-use of brownfield land and problems with decontamination affecting the viability
- Housing for the disabled, the ageing population, young people, graduates and families
- High concentrations of HMOs presenting a challenge to the future sustainability of many of our city's communities

Sustainability Issue 6 - To promote healthy communities

The main issues are:

- The high levels of deprivation and the prevalence of poor health and unemployment associated with it
- Improving accessibility to surgeries
- High levels of obesity and the need to get the population more active
- To design out crime
- Energy efficiency and fuel poverty in the existing stock
- The rising amount of dementia as the population ages, together with health care issues for the elderly
- Ensuring access to good quality greenspace

Sustainability Issue 7 - Conserving and enhancing the historic townscape

- Protecting and enhancing the historic environment and cultural townscape
- Encouraging retention of the historic heritage buildings and their reuse
- The careful siting of tall buildings in the context of placemaking
- Will it provide for increased access to and understanding and enjoyment of the historic environment?

Sustainability Issue 8 - Requiring good urban design in Portsmouth

The main issues are:

- To ensure higher and bespoke standards of design that provide high quality place making
- To create a compact city with contemporary design and lifestyles
- To create rooftop gardens and green roofs for biodiversity in the city centre
- Creating connections that encourage walking and cycling and a modal shift

Sustainability Issue 9 - To conserve and enhance the natural environment in Portsmouth

- Ensuring sufficient greenspace in Portsmouth to meet a range of needs from informal recreation to organised sports
- Protect and enhance the Solent European Marine Sites
- Protecting the Sites of Special Scientific Interest and improving them
- Providing a network of Local Wildlife Sites (SINCs) to encourage biodiversity throughout the city
- Mitigation and creation of Suitable Alternative Natural Greenspace (SANGs)
- Water quality in Portsmouth and Langstone Harbour

Sustainability Issue 10 - Facilitating the sustainable use of natural resources in Portsmouth

- To consider waste as a resource along other planning priorities
- Support the ambition of a 'zero waste' economy for Portsmouth
- Ensure sufficient WWTW capacity by keeping local facilities under review
- The need to monitor the availability of the safeguarded land at HM Naval Base and commercial docks
- Encourage the production of secondary and recycled aggregates
- Ensure safeguarded mineral resources and minerals and waste infrastructure are protected from incompatible uses

PART 3

The SA Framework

SA Objectives	Assessment Criteria	Potential Indicators
SA - 1 Building a strong, competitive economy in Portsmouth SA Themes; Population Human health	 Will it provide new employment floorspace? Will it tackle income/employment deprivation and promote social equity? Will it help with diversification of the economy? Will it provide learning, training and skills? Will it support tourism? 	 Amount of new employment floorspace Amount of vacant employment space Reduction in unemployment levels Employment per economic sector Improvement in educational attainments Amount of visitor spend Business start ups

SA Objectives	Assessment Criteria	Potential Indicators
SA - 2 Ensuring the vitality of the city centre and other retail centres in Portsmouth SA Themes; Population Human Health Material Assets	 Will it contribute to the vitality of District and Local Centres? Will it create new retail/leisure/employment/housing/ office development in the city centre? 	 New retail/leisure/office development in the centres Change in Portsmouth's position in the national retail rankings Reduction in retail vacancy rates in the city centre and other key centres
SA - 3 Promoting sustainable transport in Portsmouth SA Themes; Air Climatic Factors Human Health Population	 Will it have easy and safe access from homes to shops and services? Will it reduce air pollution? Will it encourage walking and cycling to create a healthier city? Will it encourage public transport? 	 Achieving a modal shift and decrease in commuter car use in the city Decrease in amount of and/or severity of AQMAs Increase in new cycle routes
SA 4 To tackle climate change, flooding and coastal change in	 Will it include climate change mitigation or adaptation measures? Will it contribute to coastal flood risk 	 Decrease in Portsmouth's greenhouse gas emissions Planning applications approved in accordance with climate change mitigation or adaptation related

SA Objectives	Assessment Criteria	Potential Indicators
Portsmouth SA Themes; Population Human Health Climatic factors Water Material Assets	 mitigation measures? Will it include surface water management and/or water consumption and efficiency measures? 	 Progress on flood defences being built No change or reduction in the level of water stress
SA 5 Delivering high quality homes in Portsmouth SA Themes: Population Human Health Material Assets	 Will it provide homes to meet the diverse housing needs of the city? Will the needs of the ageing population be taken account of? Will this help replace poor quality housing stock? Does it provide homes that meet minimum space standards? 	 Proportions of housing types Amount of homes suitable for or capable of adaptation to elderly/disabled use Redevelopment or improvements/upgrading old housing stock Amount of homes that meet or exceed the minimum space standards
SA 6 To promote healthy communities SA Themes: Air Human Health	 Will it have/improve access to health and community facilities and other services? Will it improve access to open space and/or healthy lifestyles? 	 Distance to facilities The amount of super output areas in Portsmouth The amount of residents classified as obese or excess weight

SA Objectives	Assessment Criteria	Potential Indicators
Population	Will it benefit deprived communities?Will it help reduce crime?	New layouts designed to Design Out Crime standards
SA 7 Conserving and enhancing the historic townscape SA Themes: Cultural Heritage Material Assets	 Will it protect and enhance the historic/ cultural townscape and assets? Will it provide for increased access to and understanding and enjoyment of the historic environment? 	 The number and proportion of heritage assets and Conservation Areas on the Historic England Heritage at Risk Register Buildings of historic interest given a new use/restored
SA 8 Requiring good urban design in Portsmouth SA Themes: Human Health Material Assets	 Will it secure good urban design? Is it a tall building outside the 'Areas of Opportunity'? 	 The amount of Planning Applications refused on urban design terms The amount of tall buildings refused for being outside the areas of opportunity for tall buildings Any new developments winning an urban design award
SA 9 Conserving and enhancing the natural environment in	 Will it protect and/or enhance the local ecological systems? Will it protect and/or enhance green 	 Loss of greenspace/increase in greenspace Condition of SPAs and SSSIs in Portsmouth

SA Objectives	Assessment Criteria	Potential Indicators
Portsmouth SA Themes: Biodiversity Fauna Flora Material Assets Landscape Soil	infrastructure and/ or open spaces in the city?	 Any schemes to enhance biodiversity Creation of pocket parks on schemes of 50 plus homes
Water SA 10 Facilitating the sustainable use of natural resources in Portsmouth SA Themes: Human Health Climatic factors Population Landscape	 Will it contribute to reducing waste generation and/ or diverting waste from landfill? Will it contribute to the reuse/recycling of minerals resources? Will it avoid unnecessarily sterilisation of safeguarded minerals and waste infrastructure or mineral resources, or encroachment from incompatible land uses? 	 Arisings, treatment and movement of waste Secondary and recycled aggregate capacity/ sales Planning applications granted contrary to an objection from HCC on minerals and waste infrastructure or mineral resource safeguarding grounds

APPENDIX 1

List of guidance, policies, plans and programmes July 2016

International

Document	Summary	Relevance / Implications for the Local Plan
The Convention on Wetland Habitats of International Importance especially as Waterfowl Habitat (the Ramsar Convention) 1971	The definition of wetlands are areas of marsh, fen, peatland or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, including areas of marine water the depth of which at low tide does not exceed six metres. Many birds are ecologically dependent on wetland.	Portsmouth is surrounded by coastal habitats with protection as SPAs and Ramsar
Convention on the Conservation of Migratory Species of Wild Animals (or Bonn Convention) 1979	The Convention on Migratory Species, also known as the Bonn Convention aims to conserve terrestrial, aquatic and migratory species throughout their range	Large numbers of birds use the area around Portsmouth for winter feeding grounds
Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention) 1979	This protects over 500 wild plant species and more than 1,000 wild animal species.	Of particular importance because of migratory species as well as marine ecosystems.
Convention on biological Diversity 1992	The main objectives are the conservation of biological diversity. Biodiversity in the UK is in decline and it is important to preserves and even enhance it.	The Local Plan needs to try and enhance biodiversity.

European Union

Documents	Summary	Relevance / Implications for the Local Plan
The Birds Directive Directive 79/409/EEC in April 1979. Amended in 2009, it became the Directive 2009/147/EC	The oldest piece of EU work on the environment. Europe is home to more than 500 wild bird species but at least 32% of the EU's bird species are currently not in a good conservation status. The Birds Directive aims to protect all of the 500 wild bird species	This links up with the Habitats Directive below
The Habitats Directives (92/43/EEC)	This forms the cornerstone of Europe's nature conservation policy with the Birds Directive and establishes the EU wide Natura 2000 ecological network of protected areas, safeguarded against potentially damaging developments	Local Plan growth choices need to be aware of the SPAs and potential impacts
The Water Framework Directive (2000/60/EC)	The directive which commits European Union member states to achieve good qualitative and quantitative status of all water bodies (including marine waters up to one nautical mile from shore) by 2015	The Local Plan will need to ensure growth does not affect local watercourses
The Strategic Environmental Assessment Directive (2001/42/EC)	The SEA Directive applies to a wide range of public plans and programmes (e.g. on land use, transport, energy, waste, agriculture, etc). The SEA Directive does not refer to policies	Key feature of the Local Plan evidence base
EU Renewable Energy Directive 2009/28/EC	The Directive sets out a common framework for the promotion of energy from renewable sources, which include wind, solar, aerothermal, geothermal, hydrothermal and ocean energy, hydropower, biomass, landfill gas, sewage treatment plant gas and biogases	The Local Plan must support any renewable energy proposals
The EU Energy Efficiency Directive	The 2012 Energy Efficiency Directive establishes a set of binding measures to help the EU reach its 20% energy efficiency target by 2020	The Local Plan must promote more energy efficient buildings
The Convention for the Protection of the Architectural Heritage of Europe (Granada	The aim is to recognise that the architectural heritage constitutes an irreplaceable expression of the richness and diversity of Europe's cultural heritage, bears inestimable	The architectural heritage of the city needs protecting

Convention)	witness to our past and is a common heritage of all Europeans	
The European Convention on the Protection of Archaeological Heritage (Valetta Convention)	The Valletta Treaty (formally the European Convention on the Protection of the Archaeological Heritage (Revised), also known as the Malta Convention) is a multilateral treaty of the Council of Europe. The 1992 treaty aims to protect the European archaeological heritage 'as a source of European collective memory and as an instrument for historical and scientific study'.	The architectural heritage of the city needs protecting
The European Convention on the Protection of Archaeological Heritage (Valetta Convention)	The Valletta Treaty (formally the European Convention on the Protection of the Archaeological Heritage (Revised), also known as the Malta Convention) is a multilateral treaty of the Council of Europe. The 1992 treaty aims to protect the European archaeological heritage 'as a source of European collective memory and as an instrument for historical and scientific study'.	The archaeological heritage of the city needs protecting
The Waste Framework Directive (2008/98/EC)	Sets out the basic concepts and definitions related to waste management, such as definitions of waste, recycling, recovery. It explains when waste ceases to be waste and becomes a secondary raw material (so called end-of-waste criteria), and how to distinguish between waste and byproducts. The Directive requires that Member States adopt waste management plans and waste prevention programmes.	Waste is a key issue to tackle in the consumer society

National Legislation and Strategies

The National Planning Policy	Key planning policy document replacing Planning Policy	The key planning guidance from
Framework 2012 By DCLG &	Statements.	Government
National Planning Practice		

Guidance		
Waste Management Plan for England By Defra December 2013	Provides an analysis of the current waste management situation in England and fulfils the mandatory requirements of article 28 of the revised Waste Framework Directive (rWFD)	Develop planning strategies in line with waste management hierarchy
National Planning Policy for Waste by DCLG October 2014 & National Planning Practice Guidance on Waste by DCLG updated 14 October 2015	Detailed waste planning policies in line with the strategy of the National Waste Management Plan for England	Ensure the Plan considers waste management alongside other spatial planning concerns
The Ancient Monuments and Archaeological Areas Act 1979	The Ancient Monuments and Archaeological Areas Act 1979 or AMAAA seeks to protect the archaeological heritage of Great Britain	The archaeological heritage of the city goes back into prehistoric times and the Local Plan will need to protect it
Housing our ageing Population: Panel for Innovation (HAPPI) By CLG December 2009	Local authorities must take the lead in bringing together local housing providers, PCTs, Adult Social Care Services and the voluntary sector to ensure sufficient, well-designed homes, having regard to the ethos of Lifetime Neighbourhoods	The Local plan must support any new homes for the ageing population
The Wildlife and Countryside Act 1981	The Act consolidates and amends existing national legislation to implement EU Directives. The Act sets out protection for birds, other wildlife, certain rare plants. Protection for SSSIs is also set out	A key issue for the Local Plan
The Planning (Listed Buildings and Conservation Areas) Act 1990	Contains the legislation on listing of buildings of special architectural or historic interest	A key issue for the Local Plan
Warm homes and Energy Conservation Act 2000	An Act to requiring the Secretary of State to publish and implement a strategy for reducing fuel poverty; to require the setting of targets for the implementation of that strategy	Fuel poverty is a key problem and must be addressed through design and energy efficiency
Evidence Gathering - Housing in Multiple Occupation and possible planning responses Final Report 2008	Concerned that the concentration of HMOs and certain social groups can result in unintended consequences that can create friction with the local community and can also lead to both positive and negative effects upon a local	Portsmouth City Council has its own SPD Houses in Multiple Occupation Ensuring mixed and balanced communities

		T
By DCLG	housing market area, including social, economic, as well as	
	environmental and physical impacts	
The National Infrastructure Plan	Brings together the government's plans for economic	The lack of certainty over flood risk
March 2016	infrastructure over the next 5 years with those to support	funding may have implications
Updates the October 2010 version	delivery of housing and social infrastructure	
Climate Change and Sustainable	Discusses greenhouse gas emissions, microgeneration,	The Local Plan must support any
Energy Act 2006	energy efficiency, building regulations for fuel and power,	renewable energy proposals
	carbon emissions reduction target, dynamic demand	
	technologies, community energy and renewable heat, and	
	electricity from renewable sources	
The Climate Change Act 2008	To set a target for the year 2050 for the reduction of	The Local Plan must support any
	targeted greenhouse gas emissions	proposals to reduce greenhouse
		gas emissions
The Planning and Energy Act	An Act to enable local planning authorities to set	The Local Plan must support any
2008	requirements for energy use and energy efficiency in local	renewable energy and energy
	plans	efficiency schemes
The UK Low Carbon Transition	The Government set out a five point plan; Protecting the	The Local Plan must support low
Plan - National Strategy for Low	public from immediate risk, prepare for the future, limiting	carbon development and
Carbon Energy	the severity of future climate, building a low carbon UK and	infrastructure
Amended 20th July 2009	supporting individuals, communities and businesses to play	
	their part	
Flood and Water Management Act	Covers flood and coastal erosion mix management, that	The Local Plan must support all
2010	the Environment Agency must develop, maintain, apply	proposals to deal with Flood Risk
	and monitor a strategy for flood and coastal erosion risk	
	management in England, and the lead local flood	
	authorities for areas in England must develop a local flood	
	risk management strategy	
The Air Ouglity (Ctaradanda)		A key issue for the Legal Diag
The Air Quality (Standards)	Action to manage and improve air quality is largely driven	A key issue for the Local Plan
Regulations 2010	by European (EU) legislation. The UK Government and the	
	devolved administrations are required under the	
	Environment Act 1995 to produce a national air quality	

	ctratogy	
The Air Quality Strategy for England, Scotland, Wales and Northern Ireland 2007 By Defra	Sets out air quality objectives and policy options to improve air quality in the UK from now into the long term. Over the past ten years the quality of air has improved and the UK is meeting current objectives for all air pollutants in over 99% cent of the UK	The Local Plan must support any proposals to reduce emissions and improve air quality
National Policy Statement for Ports January 2012 By the Department of Transport	The Planning Act 2008 sets out the thresholds for nationally significant infrastructure projects in the ports sector	The Local Plan must support any proposals for new ports infrastructure providing it does not conflict with SPAs
The Natural Choice – securing the value of nature By Defra 2011	The Government wants this to be the first generation to leave the natural environment of England in a better state than it inherited.	The Local Plan must support improvements to the natural environment
UK National Ecosystem Assessment - Synthesis of Key Findings (several documents) 2011 By UKNEA	The natural world, its biodiversity and its constituent ecosystems are critically important to our well-being and economic prosperity, but are consistently undervalued in conventional economic analyses and decision making	The Local Plan must balance economic needs with preserving and enhancing biodiversity
Biodiversity 2020: A Strategy for England's Wildlife and Ecosystems Services 2011 By Defra	In the UK over 40% of priority habitats and 30% of priority species were declining in the most recent analysis. Ecosystems have changed markedly in the last 60 years	The Local Plan must strive to increase biodiversity
The UK Post 2010 Biodiversity framework 2012	The Four Countries' Biodiversity Group is the lead governance body for the UK Biodiversity Framework.	The Local Plan must strive to increase biodiversity
Coastal Squeeze Implications for Flood Management The Requirements of The European Birds and Habitats Directives Defra Policy Guidance	In the light of the assessment, and having had regard to the advice of the relevant nature conservation body, the plan or project may be authorised if the competent authority is certain that it will not adversely affect the site (meaning there is no reasonable scientific doubt as to the absence of such effects).	Portsmouth needs more flood defences but it needs to avoid coastal squeeze
Monitor of Engagement with the Natural Environment: A pilot to	There are clear social inequalities in how children are accessing natural environments, showing a clear link	There are inequality issues here as well as concern about not valuing

develop and indicator of visits to the natural environment by children	between the frequency at which children visit the natural environment and both their ethnicity and socio-economic status	the natural environment
Fair Society, Healthy Lives (the Marmot Review) - Strategic review of Health Inequalities in England 2010	People with higher socioeconomic position in society have a greater array of life chances and more opportunities to lead a flourishing life.	The Local Plan needs to do its part in raising living standards via regeneration and employment opportunities
National Renewable Energy Action Plan for the United Kingdom Article 4 of the Renewable Energy Directive 2009/28/EC	The document states the UK needs to radically increase its use of renewable energy	The Local Plan must support any renewable energy proposals
Designing out Crime - a Designers Guide By The Design and Technology Alliance against Crime, the Design Council and Home Office March 2015	Changing behaviour is of course one aspect of crime reduction, but design also has an important role to play in preventing crime and reducing criminal activity without compromising the enjoyment and usability of products, places and services by legitimate users.	A key issue for all new developments and any redevelopment initiatives
Natural England; Green Infrastructure Guidance 2009	A good overview of green Infrastructure	Portsmouth has a limited supply that is very important
Door to Door A strategy for improving sustainable transport integration By the Department for Transport March 2013	When people travel the Government wants a smaller environmental footprint - using sustainable means whenever possible. This would lead to greener travel, reducing carbon emissions, ease congestion on our roads, support economic growth, and lead to a healthier nation.	The need for a Modal Shift is a key one for the City
House of Commons Library Briefing Paper, Business statistics 7 December 2015	Update on national statistics	Useful review of UK situation
The Councillors Guide to Urban Design by CABE	A good document outlining the key principles for developments	Urban design is a key issue
Sustainability Appraisal and Strategic Environmental Assessment Historic England	Sets out the key Historic England issues	The surviving historic environment after damage during the war in Portsmouth is important

Advice Note 8	
December 2016	

Portsmouth City Council plans and related strategies

Document/Project	Summary of documents	Relevance / Implications for the Local Plan
North Solent Shoreline Management Plan Document New Forest District Council December 2010	The Shoreline Management Plan has been developed on behalf of the Coastal Local Authorities and the Environment Agency. It provides broad scale assessment of the coastal flooding and erosion risks and advice to operating authorities and private landowners on the management of their defences.	The Local Plan must support this strategy
Interim Solent Recreation Mitigation Strategy - An interim framework to mitigate the impact on the Solent Special Protection Areas of increased visitor pressure arising from housebuilding By the Solent Forum	Some birds in the Solent area will be able to compensate for increased disturbance by altering their feeding habits. But they believe a number of species will suffer increased mortality due to additional visits generated by new housing.	A key issue as a consequence of growth is managing visitors
The South East River Basin District Management Plans Published in 2009 A City to Share, a cycling strategy for Portsmouth by Portsmouth Cycle Forum	By 2015, 18% of surface waters (rivers, lakes, estuaries and coastal waters) are going to improve for at least one biological, chemical or physical element Their vision is that Portsmouth becomes the pre-eminent cycling city of the UK. There are however a high rate of cycle accidents in Portsmouth, above the level of places of similar density in London	It is important that new development does not reverse this process. The data is quite old now There is considerable scope for cycling as part of a Modal Shift
Travel Active Portsmouth - A walking and cycling strategy for 2013 to 2023 By Portsmouth City Council	The document discusses the walking and cycling issues	The Local Plan must promote walking and cycling in the City

	T	
Portsmouth Local Transport Plan	Sets out the context for challenges & transport	The Local Plan proposals and the
3 Context	improvements in Portsmouth, reviewing what others are	LTP need to work closely together
By Portsmouth City Council	also doing including PUSH and the Highways Agency.	
Portsmouth Local Transport Plan 3	One year implementation Plan (due to funding	There are difficulties with the one
Implementation Plan 2015-2016	uncertainties).	year implementation strategy
By Portsmouth City Council	,	
Parking Standards and Transport	The Supplementary Planning Document sets out standards	The Local Plan needs to ensure
Assessments Supplementary	and design principles for car parking in residential and non-	development is compliant with
Planning Document	residential developments.	these standards
By Portsmouth City Council		
July 2014		
Local Transport Plan 3 - Joint	The Joint Strategy seeks to achieve reduced dependence	A key issue for the Local Plan is
Strategy for South Hampshire	on the private car through an increased number of people	promoting a modal shift
	choosing public transport and the 'active travel' modes of	
	walking and cycling	
Hampshire Local Transport Plan	A joint project led by the three Local Transport Authorities	There seems to be no major
Part B: Implementation Plan 2014	of Hampshire County Council, Portsmouth and	implications for the Local Plan
- 2017	Southampton City Councils	'
By Portsmouth City Council		
Air Quality Action Plan	The Council designated 13 AQMAs covering various parts	Air Quality is a key issue for the
Appendix to the Local Transport	of the city on the 5th April 2005. On the 23rd March 2010	Local Plan
Plan (LTP3)	PCC revoked 8 AQMAs, retaining 4	
By Portsmouth City Council	, ,	
Local Development Framework Air	This Section deals with the planning issues associated with	A key issue for the Local Plan
Quality and Air Pollution	the quality of ambient air. Consideration is given only to	
Supplementary Planning	those pollutants identified in the National Strategy for Air	
Document Adopted – March 2006	Quality, prescribed processes and other air pollution	
'	issues.	
Revitalising Local High Streets	This review was to consider how to support a large array of	Of key importance for the Local
and Secondary Shopping areas in	retail offers in the city and how to make an attractive	Plan is the regeneration of the
the city	environment to encourage visitor loyalty and footfall	town centre and provision of
By Economic Development,		enhanced facilities
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Culture & Leisure Scrutiny Panel March 2015 Urban Characterisation Study By Portsmouth City Council Tall Buildings SPD	Identifies areas of the city that have broadly similar characteristics and the key elements that contribute positively and negatively to the overall character of the city. The SPD is intended to direct the development of tall	A key document for the Local Plan and any urban design issues and Policies Further detail of massing and tall
By Portsmouth City Council June 2012	buildings towards specified parts of the city – the areas of opportunity	buildings may be needed
Healthy Weight Strategy for Portsmouth 2014 - 2024 By Portsmouth City Council	The increasing challenges associated with obesity for the individual, their family, our communities, society and economy are increasing	The Local Plan must create an environment that allows people to be active
Healthy Weight, Healthy Lives, a toolkit for developing strategies By the NHS	Overweight and obesity have a substantial human cost by contributing to the onset of disease and premature death	The Local Plan must create an environment that allows people to be active
Joint Health and Wellbeing Strategy: Working better together to improve health and wellbeing in Portsmouth 2014 - 2017 By Portsmouth City Council and the NHS	The document covers a range of issues including mental health, emotional wellbeing in children, sustainable and healthy environments, smoking, alcohol and substance abuse, lifestyle hubs, Clinical Commissioning Group priorities, dementia care, tackling poverties and accessing and sustaining employment	The Local Plan must do its part in supporting these issues, in particular the creation of 'Lifestyle Hubs'
Portsmouth's Tackling Poverty Strategy 2015 – 2020 By Portsmouth City Council	Poverty is one of the key determinants of life expectancy and health outcomes more generally. This strategy has been developed under the umbrella of Portsmouth's Joint Health and Wellbeing Strategy 2014-17	Key issues for The Local Plan are affordable housing and creating employment opportunities
Fuel Poverty & Affordable Energy Guide for frontline staff (How to help people struggling with their fuel bills) Undated By Portsmouth's Fuel Poverty and Affordable Energy Partnership	Under the new measure, 12.3% of households in Portsmouth across all tenures are deemed to be in fuel poverty (DECC 2013) and is above the English average. Each winter in Portsmouth can result in between 150 and 300 preventable deaths which are known as Excess Winter Deaths	In some cases the housing stock is substandard and there may in the long term need to be redevelopment to achieve good quality homes for residents

Houses in Multiple Occupation Ensuring mixed and balanced communities SPD October 2012 By Portsmouth City Council	Policy PCS20 seeks to avoid concentrations of HMOs within the city. A community will be considered to be 'imbalanced' where more than 10% of residential properties within the area are already in HMO use	A key issue is to maintain balanced communities
Portsmouth's Ageing Population Strategy 2010 - 2020 By Portsmouth City Council	In the next decade, demographic trends suggest that there will be a larger number of people aged 65+ living in the city of Portsmouth, particularly those aged over 85, but the growing needs of this age group are currently not fully recognised.	The Local Plan needs to tackle these issues
Parks and Open Spaces Strategy 2012 - 2022 By Portsmouth City Council	Implements a large amount of the 'Greener Portsmouth' section of the Portsmouth Plan regarding the management and improvement of the city's parks and open spaces.	Key issue for the Local Plan is protection and enhancement, creation of new spaces and improving links and access for people
City of Portsmouth - Business Needs, Site Assessments and Employment Land Study April 2016 by Lambert Smith Hampton	Identifies the sites that are suited to meet the needs of modern business; sites that should be safeguarded against competing higher value uses, sites that may be subject to market failure and those sites unlikely to be brought forward for future employment use. Foresees the market to ne increasing.	The Local Plan must support economic growth
Portsmouth Retail Study 2015 Portsmouth City Council DPS Consulting	Main areas of concern is the future of the City Centre which has seen nothing new since the Cascades Centre opened in 1987 (with refurbishment in 2006/7)	The Local Plan must make the City centre a priority
Preliminary Flood Risk Assessment By Halcrow with Southern Water/The Environment Agency For Portsmouth City Council June 2011	The PFRA is a high level screening exercise that compiled information on significant local flood risk (any flood risk that does not originate from main rivers, the sea or large reservoirs)	A key issue for the Local Plan
Local Flood Risk Management Strategy Portsmouth City Council Coastal and Drainage Scheme	As a unitary authority the Council is designated as a Lead Local Flood Authority under the Flood and Water Management Act 2010. It places a statutory duty on LLFA's	A key issue for the Local Plan

Runs up to 2018 Is reviewed annually	to develop, maintain, implement and monitor a Local Flood Risk Management Strategy	
Surface Water Management Plan Final Report By Southern Water, Environment Agency, Portsmouth City Council February 2012	This outlines a surface water management strategy and long term action plan for the management of local surface water flood risk	The Local Plan must support any infrastructure needed
Southsea and North Portsea Island Coastal Flood and Erosion Risk Management Schemes Scoping Stage Report 4 By Eastern Solent Coastal Partnership November 2012	The vision for this and subsequent phases of the Management Schemes is to ensure the sustainable future of the City of Portsmouth by managing coastal flood and erosion risk	The Local Plan must support any infrastructure needed, but be aware of coastal squeeze
Portsea Island Coastal Strategy Study By Portsmouth City Council and Environment Agency April 2010	This is the key document which sets out the flood defence issues and describes the proposals for a 100 year flood and coastal erosion risk management strategy for Portsea Island. The whole life cost of the scheme (excluding inflation) is £372 million, including £131 million contingency	The Local Plan must support this strategy
Landscape Character Assessment - Portsea Island Coastal Defence Flood Risk Areas By Portsmouth City Council and Halcrow in 2012	The document will become integrated in to the Scoping Stage as a technical report which will be used to support any Environmental Statement required for the coastal defence scheme proposals	The Local Plan needs to be aligned with this
Southsea Seafront Strategy 2010 - 2026 By Portsmouth City Council	Numerous studies, and engagement have highlighted that the city does not make enough of its seafront	The Local Plan needs to be aligned with this
Seafront Masterplan Supplementary Planning Document (SPD) - April 2013 By Portsmouth City Council	The document covers the vision for the Seafront, objectives and opportunities	The Local Plan will support any infrastructure needed
Shaping the Future of Portsmouth, a Strategy for Growth and	The vision is that Portsmouth will become a great waterfront city with a globally competitive knowledge	The Local Plan must support the vision

Prosperity in Portsmouth By Portsmouth City Council	economy. In order to do this, the strategy supports economic growth, innovation and enterprise, and enhancing the competitiveness of the city	
City of Portsmouth Local List of Buildings of Special Architectural and Historic Interest	Buildings and features not statutorily listed but of importance to the city	The local Plan must support this document
Portsmouth Urban Characterisation Study March 2011	An understanding of the urban characteristics in the city	An important issue
Tall Buildings Supplementary Planning Document 2012	A guide for the siting of Tall Buildings	A key issue

Wider Portsmouth City Council initiatives

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Portsmouth Equality and Diversity	This document sets out Portsmouth City Council's	The Local Plan must ensure its
Strategy 2014-2017	approach to equality and diversity issues over the years	Policies do not conflict with this
By Portsmouth City Council	(2014–2017). The document also outlines what the Council	strategy
	has done to progress the previous single equality scheme	
Safer Portsmouth Partnership Plan	Crime is down over 20% in Portsmouth since 2006. Over	The main issue for the Local Plan
(2013–18) - Reducing crime and	the next five years the Safer Portsmouth Partnership aims	is designing safer environments
substance abuse	to reduce overall crime by a further 20%	
By the Safer Portsmouth		
Partnership		
The big picture of health and	Gives details of all the health issues affecting the city,	Where the Local Plan can make a
wellbeing Joint Strategic Needs	including physical and mental, addictions as well as	difference this needs to be taken
Assessment Portsmouth, October	educational attainment, poverty, lifestyle hubs	on board
2014		
The Children's Trust Plan (2011–	To improve the well-being of all children and young people	The Local Plan will try to create
14) By Portsmouth Children's	age with issues such as immunisation, obesity, alcohol,	safer environments
Trust May 2011	substance abuse, good education and quality of services	
Improving Mental Health and	This five-year strategy covers all aspects of mental health	Place shaping initiatives may help

Wellbeing in Portsmouth 2016 to 2021	and wellbeing. It is on purpose aspirational	with creating communities
By Portsmouth City Council Implementing the national dementia strategy - an action plan	Four priority areas are good quality early diagnosis, improved quality of care, living well with dementia in care	The Plan would support any facilities, but training staff is the
for Portsmouth 2014/15	homes, reduced use of anti-psychotic medication	most important aspect
Providing affordable housing in Portsmouth, a Summary of Affordable Housing Policies for developers by Portsmouth City Council January 2012	The amount of affordable housing required is on a sliding scale where site capacities are between eight and 15 dwellings. For larger sites with a capacity exceeding 15 dwellings a minimum of 30% affordable housing will be required	A4 leaflet, key issue
Design guide for wheelchair accessible housing By Portsmouth City Council Occupational Therapy Service	This design guide was compiled by occupational therapists and incorporates information from Part M regulations, BS 8300 2001 standards and design briefs of leading housing providers and local authorities.	The Local Plan can support better designed homes

PUSH and economy related

Socio-Economic Impact Assessment of Portsmouth Naval Base By University of Portsmouth Centre for Economic Analysis and Policy, Solent Local Enterprise Partnership, PUSH June 2012	It looks at geographic area of impact assessment. Estimated to produce more than £1.68 billion economic output in the area. It shows too much public sector employers and the need to widen the areas economic base	The Local Plan must support a more diverse economy
PUSH Spatial Position Statement Report	Sets out the cities first as part of the hierarchy of development	Portsmouth is a key employer
Objectively Assessed Housing Need Update Final report April 2016 by GL Hearn	Updates previous work, suggesting	Housing needs is a key requirement

PUSH Modelling Approach (Economic Development) By Oxford Economics December 2011	Overall, the PUSH labour market was estimated to have experienced a deeper and longer contraction in employment terms than the South East	The Local Plan must support economic growth
PUSH Strategic Flood Risk Assessment Update 2016	The primary source of flood risk to Portsmouth is from the sea	The Local Plan must support sea defences
Transforming Solent Marine & Maritime Supplement By Rear Admiral Rob Stevens March 2014	The Marine and Maritime sector is one of the largest and most productive in the Solent	The Local Plan must support economic growth
South Hampshire: Integrated Water Management Strategy Partnership for Urban South Hampshire by PUSH and Atkins March 2009	Only one of the 13 treatment plants (Peel Common) will exceed its consented flow in the period to 2026	The Local Plan must support any improved facilities
Biomass Supply Chains in South Hampshire PUSH and CEN July 2009	The report provides an analysis of how biomass supply chains could be developed within the area. Previous studies have identified that the region is resource rich	The Local Plan must support any biomass power
The South Hampshire Housing Market Assessment 2014 By PUSH and GL Hearn January 2014	The SHMA identifies that 4,160 homes per year would be needed to meet past demographic trends in full. This analysis takes no account of land supply or any development constraints	The Local Plan must support development of new homes
PUSH Green Infrastructure Strategy By UE Associates, PUSH June 2010	Drawing on the GI Framework, the Strategy has identified extant green infrastructure features and prepared a spatial interpretation, known as the GI Architecture	GI is a key issue for Portsmouth
Towards a Green Infrastructure Strategy for South Hampshire: Advice to PUSH By TEP Consultants July 2008	Contains advice and recommendations on protecting, enhancing and expanding green infrastructure in the South Hampshire sub-region	GI is a key issue for Portsmouth

South Hampshire Strategy - A framework to guide sustainable development and change to 2026 By PUSH October 2012	Their vision is that by 2026, South Hampshire will enhance its status as an area offering prosperity and a high quality of life for residents and is a location of choice for growing businesses	Improving homes and employment is a key issue
South Hampshire Strategy Background Paper: Employment floorspace and housebuilding provision figures By PUSH October 2012	The Strategy forecasts were prepared in 2009 - 2010 and were based on an economic outlook that is now regarded as over optimistic	The targets are ambitious, however the Local Plan should support them
South Hampshire Hotel Futures Final Report by Hotel Solutions Executive Summary Prepared for (PUSH) Tourism South East July 2010	Hotel Solutions' analysis suggests that the Sub-region could see the development of up to 38 new hotels. In Portsmouth;	The Local Plan must support new hotels, however there has been little progress in acting on permissions granted

Solent Local Economic Partnership

Anchoring Growth; an Economic Assessment of the Solent Area By PUSH/Centre for Cities May 2013	The area is more dependent on large employers and the public sector than the wider South East, making it vulnerable to business failure and public sector cuts	The Local Plan must support a more diverse economy
Transforming Solent Growth Strategy by Solent LEP October 2014	Aims for transformational change in employment provision, innovation, improving skills and supporting growth and strategic sectors	The Local Plan must support a more diverse economy
Transforming Solent - Solent Strategic Economic Plan 2014-20 Final submission 31/03/2014 By Solent LEP	Their new Growth Plan wants to create 15,500 new jobs, start-up of 1000 new businesses, building 24,000 homes in the Solent by 2020	The Local Plan must support economic growth
Solent LEP EU Structural & Investment Fund Strategy 2014 – 2020	Solent Local Enterprise Partnership (LEP) has been given strategic responsibility for the delivery of £36.9m (€43.1 m) of European Social Fund (ESF) and European Regional	The Local Plan must support economic growth

	Development Fund (ERDF) funding over the 2014 – 2020 period. The proposals build on the strengths of the Solent area	
Solent Strategic transport Investment Plan May 2016	Follows on from the Productivity and Growth Supplement, which highlights the need for significant investment to modernise our transport system, recognising that transport has a vital role to play by bringing businesses and people closer together and fostering the agglomeration economies that make cities work	The Local Plan has a role to play in supporting better transport links. While working towards a modal shift

Related Strategies

The Case for Space By Royal Institute of British Architects September 2011	Recent efforts have been made in London to ensure homes have enough space, with the introduction of minimum space standards. Based on their sample, the average new home in England is only 92% of the recommended minimum size	The Local Plan must set policies to reflect the need for decent sized homes.
Building the foundations: Tackling obesity through planning and development by LGA/TCPA/Public Health England By February 2016	England has one of the highest rates of unhealthy weight of other western countries. If we go on as we are, the amount of obese people is expected to double in the next 40 years	The Local Plan must create places where people can lead healthier lifestyles
Solent Waders and Brent Goose Strategy November 2010	The Strategy relates to internationally important Brent Goose and wading bird populations within and around the Special Protection Areas and Ramsar wetlands of the Solent Coast. It also maps playing fields and open space where these geese graze, which are not protected areas.	The Local Plan needs to align its policies with theirs
The North Solent Management Plan	The document provides a large-scale assessment of the risks associated with shoreline evolution, coastal flooding and erosion and presents a framework to address the risks	The Local Plan needs to align itself with this plan
Promoting and creating built or	Directly related to the built environment and encouraging	Relatively old document but still

natural environments that encourage and support physical	pedestrian/cycling movements and use of open spaces	valid for the Local Plan
activity by the National Institute for Health and Clinical Excellence January 2008		
Fat Chance? Exploring the evidence on who becomes obese By 2020 Health and AB Sugar November 2015	Structural characteristics such as good pavements, plenty of greenspace, proximity to necessary destinations, and safety from crime are all positively linked to lower BMI.	The Local Plan must support initiatives to tackle this
Inequalities in life expectancy; changes over time and implications for policy By The Kings Fund August 2015	Health is influenced and determined by more than genetics or access to health care. More important influences are our lifestyle behaviours	The Local Plan must do what it can to improve the urban and green environment and encourage activity
Tipping the scales - why preventing obesity makes economic sense UK Health prevention forum	Obesity is a major cause of illness and death	The Local Plan must support initiatives to tackle this
Coastal access: An audit of coastal paths in England 2008-09 Natural England 2008 - 2009	Natural England has undertaken, with the 53 English access authorities with a coastline, a desk based audit of the extent to which legally secure paths currently exist around the English coast	The Local Plan needs to be aware there is an inherent conflict with this and preventing bird disturbance
Great Outdoors: How Our Natural Health Service Uses Green Space To Improve Wellbeing Briefing Statement by Natural England 2010	There is mounting evidence demonstrating the contribution green spaces can make to mental and physical health and wellbeing	The Local Plan must promote and facilitate access to open spaces and green spaces
Water. People. Places. A guide for master planning sustainable drainage into developments By the Lead Local Flood Authorities of the South East of England	Sets out best practice for Sustainable Urban Drainage Systems (SUDS)	The Local Plan must support SUDS as part of new development

Monitor of Engagement with the Natural Environment: a pilot to develop an indicator of visits to the natural environment by children By Natural England March 2013 to February 2015	A 2 year pilot to develop a national indicator for children's access to the natural environment	The Local Plan will seek to encourage access to the natural environment of Portsmouth
The Great Outdoors: How Our Natural Health Service Uses Green Space To Improve Wellbeing' by Natural England in 2010	There is mounting evidence demonstrating the contribution green spaces can make to mental and physical health and wellbeing	Protection and enhancement of greenspace is a key issue
Shaping Neighbourhoods - A guide for health, sustainability and vitality By Hugh Barton, Marcus Grant and Richard Guise 2003	The importance of good design and a range of other factors is well understood, but rarely applied	Design is a key issue for place making

County Council

Hampshire Minerals and Waste Plan October 2013	Hampshire's total estimated waste arisings are about 4.8 Million tonnes per annum. Over half of this is recycled, with over 82% diverted from landfill. The County Council aim to meet the Governments goal of a 'zero waste' economy, which will mean zero waste to landfill	The main issue for the Local Plan is the waste recycling facilities and material recovery facilities and supporting the 'zero waste' economy idea
Minerals and Waste Safeguarding in Hampshire SPD February 2016	The document safeguards mineral resources, as well as waste recycling centres	The Local Plan must ensure development does not sterilise mineral resources
Hampshire Ageing Profile by Hampshire County Council Spring 2015	Give details of ageing trends in the County	Important issue to plan for



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