

Havant Infrastructure Investment Plan Final Report

Solent Local Enterprise Partnership

April 2021

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1.0 Introduction

- 1.1 The Solent Local Enterprise Partnership (LEP) commissioned Lichfields to prepare an Infrastructure Investment Plan (IIP) for the Borough of Havant. The purpose of the IIP is to identify key deliverable economic infrastructure investments to support and stimulate sustainable economic growth in Havant Borough to bring forward a coastal renaissance through improved competitiveness and productivity, and enable it to contribute further to the broader Solent and UK economies.

Background

- 1.2 In 2019, Havant Borough Council (HBC) published a regeneration strategy for the Borough covering the period between 2018 and 2036¹. The strategy sets out the economic case for regeneration and highlights opportunities to drive forward economic growth within the Borough, including those that require intervention to enable the greatest impact. Despite investment to help enable economic growth in recent years, the Borough continues to face challenges such as low residual land values, relatively low levels of private sector interest in renewal and the loss of key local employers (e.g. Pfizer and Seagate) that have and could continue to slow the path of progress.
- 1.3 To help avert this outcome, it is recognised that there are a range of key sites in the Borough that offer development potential to bring forward a significant amount of new housing and employment floorspace. Some of these sites, while having significant potential to deliver economic growth, require infrastructure investment to enhance the viability proposition for the private sector and accelerate delivery.
- 1.4 Provision of good quality infrastructure is an essential ingredient for a competitive modern economy. Research indicates that intelligent infrastructure investments deliver long-term economic benefits including increased economic growth, productivity and positive spill-over effects. However, what distinguishes infrastructure from other forms of investment is its typically high-risk, long-term, capital-intensive nature, with high initial sunk costs and relatively long return periods on investment. This can lead to instances of market failure and, consequently, the potential rationale for public intervention. This underlines the need for a dedicated IIP to provide the Solent LEP and its partners with an evidence base to help frame investment priorities.

Methodology and Basis for Assessment

- 1.5 The brief for the commission includes the following requirements:
- 1 Provide a Havant Borough IIP for the period to 2050 to support and stimulate sustainable economic growth in the Borough, within the context of the National Industrial Strategy and the emerging Solent 2050 Economic Strategy;
 - 2 Provide an economic profile of Havant Borough, identifying strengths, weaknesses, opportunities and threats;
 - 3 Identify and prioritise infrastructure investment projects in the short, medium and long-terms (to 2050) based on their ability to stimulate economic growth;
 - 4 Provide a high level feasibility study to consider the potential for an autonomous solution along the Hayling Billy Trail to connect Havant Town Centre with the southern seafront of Hayling Island; and
 - 5 Identify options for funding as appropriate.

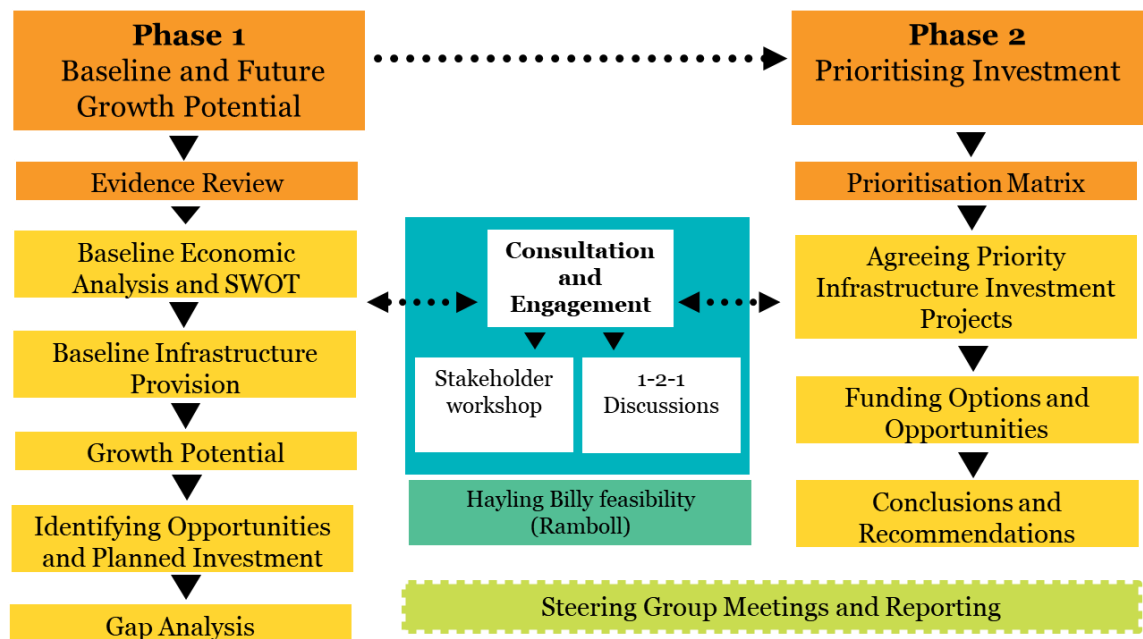
¹ Havant Borough Council (HBC), (2019); A Regeneration Strategy for Havant Borough

- 1.6 Infrastructure projects identified through this commission focus on unlocking new public and private development sites for employment and housing and are driven by securing:
 - a direct jobs;
 - b new homes;
 - c new employment space;
 - d new skills opportunities; and
 - e private sector investment.

- 1.7 The brief requires the commission to align with the Government’s National Industrial Strategy published in 2017 which sets out Government’s plan to boost the productivity and earning power of people throughout the UK, by capitalising on the country’s economic strengths, addressing its weaknesses and helping businesses create better, higher-paying jobs through investment in the skills, industries and infrastructure of the future. Since publication of the Industrial Strategy, a new Government has come to power following the General Election in December 2019 and there has been significant changes to the economic context as a result of the Covid-19 pandemic and the UK’s exit from the European Union. This has resulted in a review of national and local economic policy, which remains ongoing.

- 1.8 Preparation of this report has followed a two-phase methodology as set out in Figure 1.1 below, comprising a review of baseline infrastructure conditions and Havant’s future growth potential, followed by identification and agreement of priority infrastructure investment projects and potential funding sources.

Figure 1.1 Study Methodology



Source: Lichfields

Hayling Billy Trail High Level Feasibility Study

- 1.9 As part of the development of the Havant IIP, a high level feasibility study has been undertaken by engineering and design consultancy Ramboll to consider the potential for autonomous vehicle hubs to be deployed on an upgraded "Hayling Billy Trail" (a former railway alignment) to connect Havant Town Centre with the southern seafront of Hayling Island. This builds on

initial proposals put forward by HBC for autonomous pods, similar to those in use at Heathrow Airport, to run along the disused railway line between Havant and Hayling Island, which is currently used as a cycleway, providing access to the seafront and points along the route which runs alongside Langstone Harbour.

- 1.10 The high level feasibility study reviews the physical and environmental implications of the proposed autonomous vehicle solution and identifies areas and aspects to be considered through more detailed studies to facilitate the development of the solution. The final report is included at Appendix 3.

Definition of Economic Infrastructure

- 1.11 For the purposes of the IIP, the following infrastructure categories required to support the day-to-day functioning of an economy have been considered:
- 1 **Water, waste and flood defence** – including water, waste disposal, flood and coastal defences;
 - 2 **Energy** – generation and distribution;
 - 3 **Transport** – roads, railways, ports, ferries, airports and cycle paths;
 - 4 **Telecommunications** – broadband, telephone, mobile and radio; and
 - 5 **Human capital and skills** – skills and access to education and training provision.

- 1.12 These categories reflect the definition of “economic infrastructure” adopted by the National Audit Office² and the Government’s Industrial Strategy but are expanded to include human capital and skills which are also regarded as important to supporting economic growth.

Consultation

- 1.13 The project has been informed by consultation with a wide range of key stakeholders including infrastructure providers, local employers, site developers and public sector partners detailed in Appendix 1. This includes a stakeholder workshop which, due to operational restrictions posed by Covid-19, was convened virtually in September 2020.

Limitations

- 1.14 It is important to note that this report represents a point-in-time assessment. The analysis incorporates the latest data and other evidence available at the time of preparation during late 2020 but will be subject to change. The accuracy of data derived from third party sources has not been checked or verified by Lichfields.
- 1.15 For a number of infrastructure themes, potential interventions for addressing infrastructure gaps have been identified through the review of evidence and the consultation process. Where interventions are noted, they are not necessarily exhaustive and are likely to be subject to more detailed scrutiny and review in due course.
- 1.16 In particular, the status of individual projects and investments is likely to change on an ongoing basis, for example as particular developments are completed and funding becomes available/is announced. For this reason, it is recommended that individual projects and interventions are reviewed and updated regularly.

² Planning for economic infrastructure, National Audit Office, January 2013
<https://www.nao.org.uk/wp-content/uploads/2013/03/Economic-infrastructure-full-report.pdf>

Covid-19

- 1.17 The outbreak of Covid-19 and resulting pandemic has developed rapidly with far reaching impacts on the economy and business across the country. Lockdown measures have led to unprecedented shut downs of large parts of the economy simultaneously, with effects being transmitted rapidly across all sectors.
- 1.18 This study has been undertaken during a period of significant economic uncertainty associated with the Covid-19 pandemic, although due to the timing of the analysis and evidence upon which the study draws, it provides only initial consideration of the short, medium, and longer-term implications associated with Covid-19 for economic growth within Havant Borough.
- 1.19 While restrictions remain in place to varying degrees across the country, and may do so for some time, it is difficult to anticipate the full extent of the economic shock at the time of writing. It is arguably still too early to understand how the pandemic and resulting structural changes may affect how businesses operate and the resultant demand for economic infrastructure to, from and within Havant Borough. Notwithstanding the ongoing uncertainty, it is likely that the Covid-19 pandemic will induce and accelerate some key structural economic changes that will influence patterns of local economic growth and development. These include:
- 1 Growth of key sectors such as health/life-sciences/med-tech, logistics and energy/environmental that face particular growth opportunities as the UK embarks on economic recovery and moves forward to a post-Covid-19 economy.
 - 2 A shift from larger cities in response to increased demand for public and private open space, more general issues relating to the affordability of housing, and a shift towards greater levels of home-working.
 - 3 Increased home-working/reduced office demand both in the short-term as social distancing requirements keep many workers at home and over the medium to longer term as people look to the success of home working as a justification to shift to new working arrangements.

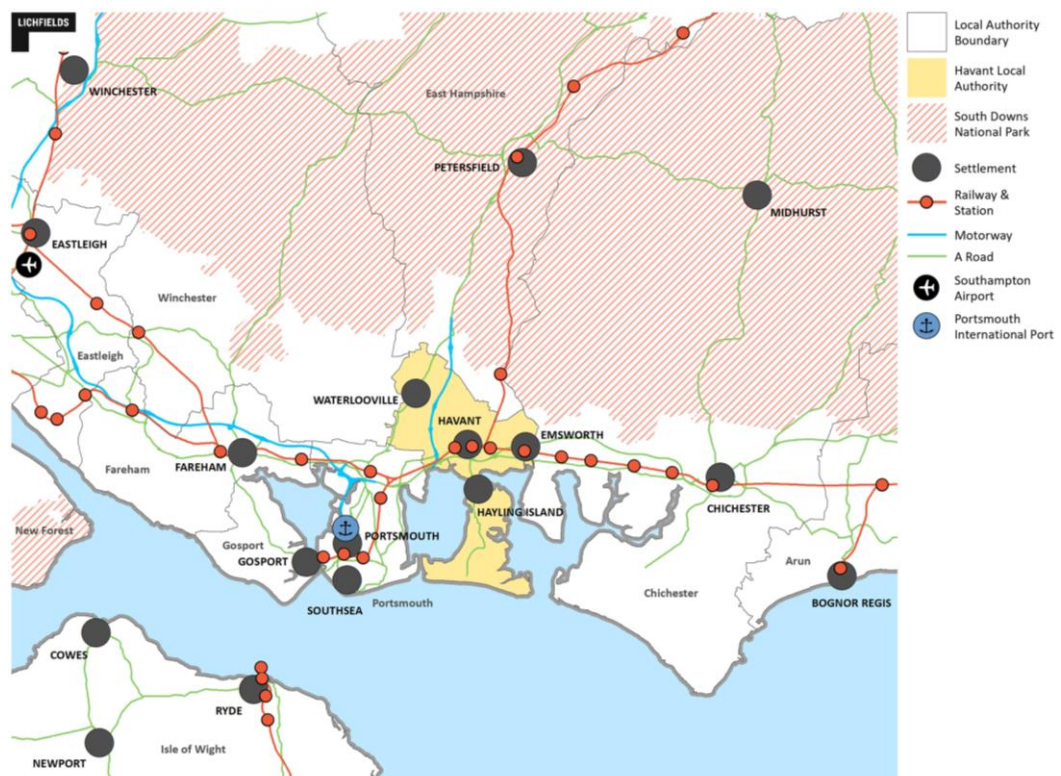
Structure of the Report

- 1.20 This report is structured as follows:
- **Section 2.0** provides an overview of the Borough economy and key strengths, weaknesses, opportunities and threats.
 - **Section 3.0** examines the drivers for future economic growth in Havant, including planning and regeneration policies.
 - **Sections 4.0 – 8.0** review each infrastructure category in turn, including existing provision, constraints and priorities, and planned investments.
 - **Section 9.0** details planned development opportunities and committed infrastructure investments in Havant before considering the key gaps in provision.
 - **Section 10.0** identifies and prioritises future infrastructure investments and considers funding options and opportunities.
 - **Section 11.0** draws together overall conclusions.

2.0 Economic Context

- 2.1 This section establishes the baseline economic context for the study and summarises key economic trends in Havant. It identifies the Borough’s strengths and weaknesses and considers what socio-economic challenges the Borough faces to unlocking future growth and prosperity.
- 2.2 The Borough lies in a prominent geographical location with excellent transport links. The M27/A27 coastal trunk route and the A3(M) meet in Havant and so the Borough enjoys connections towards London, Brighton, Portsmouth, Southampton and beyond. Havant also benefits from excellent rail connectivity: Havant Station is the best connected in South Hampshire with direct services to a large number of key destinations. The London airports of Heathrow and Gatwick are only 75 minutes away whilst Portsmouth International Port offers further international connections. Havant’s place as a key transport route led to its birth and this still remains an important part of the character of the Borough today³.

Figure 2.1 Context of Havant Borough



Source: Lichfields

Demographic Profile

- 2.3 In 2018, the population of Havant totalled 125,800 people, representing just over 10% of the total Solent LEP area population (see Table 2.1)⁴. The population of the Borough is typically older than the wider area it sits within, with 23.3% of residents aged over 65 which is higher than the Solent LEP, South East and England averages (of 20.4%, 19.3% and 18.2% respectively). This results in Havant having a smaller working-age population (people aged 16-64) than other areas.

³ Havant Borough Council, Havant Borough Profile, January 2018

⁴ Office for National Statistics (ONS), (2019); Mid-Year Population Estimates

Table 2.1 Population Age Structure and Projected Change

Variable	Population Group	Havant	Solent LEP	South East	England
Number of Residents 2018	Aged 0-15	22,200	219,800	1,755,300	10,748,500
	Aged 16-64	74,300	774,400	5,616,600	35,049,500
	Aged 65 and over	29,400	254,300	1,761,800	10,179,300
	Total	125,800	1,248,500	9,133,600	55,977,200
% Total Residents 2018	Aged 0-15	17.6%	17.6%	19.2%	19.2%
	Aged 16-64	59.0%	62.0%	61.5%	62.6%
	Aged 65 and over	23.3%	20.4%	19.3%	18.2%
Number of Residents 2036	Aged 0-15	22,100	207,700	1,639,800	10,307,800
	Aged 16-64	76,600	771,100	5,677,800	36,052,400
	Aged 65 and over	40,800	346,100	2,432,100	14,017,600
	Total	139,500	1,325,000	9,749,700	60,377,800
% Total Residents 2036	Aged 0-15	15.9%	15.7%	16.8%	17.1%
	Aged 16-64	54.9%	58.2%	58.2%	59.7%
	Aged 65 and over	29.2%	26.1%	24.9%	23.2%

Source: ONS (2019/2020) / Lichfields analysis
 Note that figures may not sum due to rounding

- 2.4 The Borough's population is forecast by the Office for National Statistics (ONS) to grow by 13,700 between 2018 and 2036, equating to a proportional increase of 10.9%⁵. This represents a higher level of population growth than forecasts for the Solent LEP area, South East and England (6.1%, 6.7% and 7.9% respectively). The 65+ age group is the largest driver of this expected population growth; by contrast, the 0-15 age group is expected to decline in absolute terms by 2036 (Table 2.1).
- 2.5 Part of why Havant's population is forecast to increase in the future is due to migratory patterns within the UK. In 2019, 394 more people moved to the Borough from elsewhere in the UK than left it. This gain was smaller than Eastleigh, the Isle of Wight and New Forest which gained 1,326, 839 and 805 people respectively, but was also considerable in the context of all other LEP authorities which experienced more people out-migrating than in-migrating.

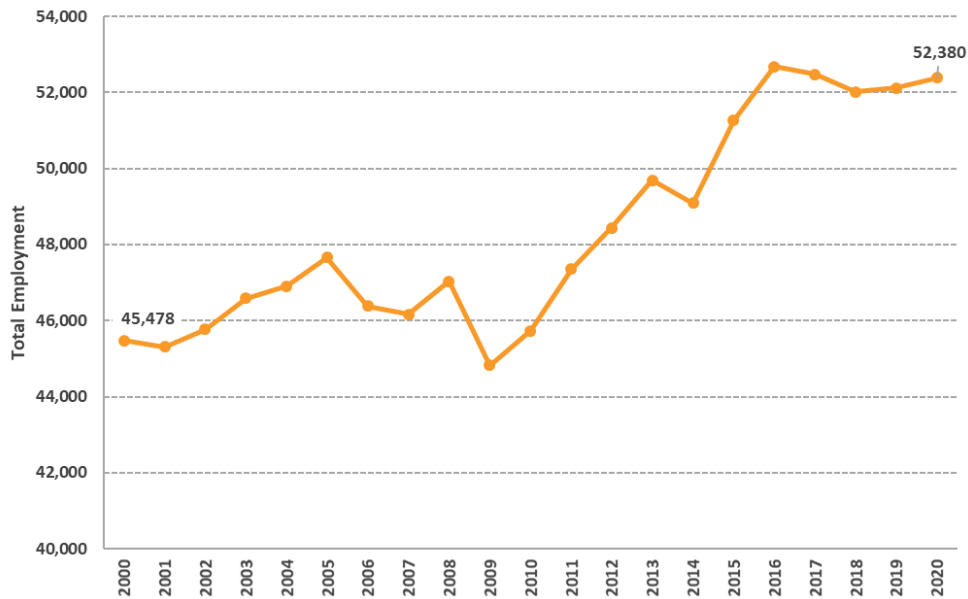
Employment

- 2.6 Employment in Havant Borough has grown considerably over the past 20 years, with the number of workplace jobs in the Borough increasing by 6,900 (15.2%) from 2000-2020; with most of this growth occurring between 2009 and 2016 (see Figure 2.2)⁶. This rate of growth closely matched the South East average (of 15.3%) but significantly outperformed the Solent LEP-wide average over this time (9.9%). The Borough accommodates a total of 52,380 workplace jobs as at 2020.

⁵ ONS, (2020); 2018-Based Population Projections

⁶ Oxford Economics, (2020); Solent Dataset

Figure 2.2 Havant Total Employment (2000-2020)

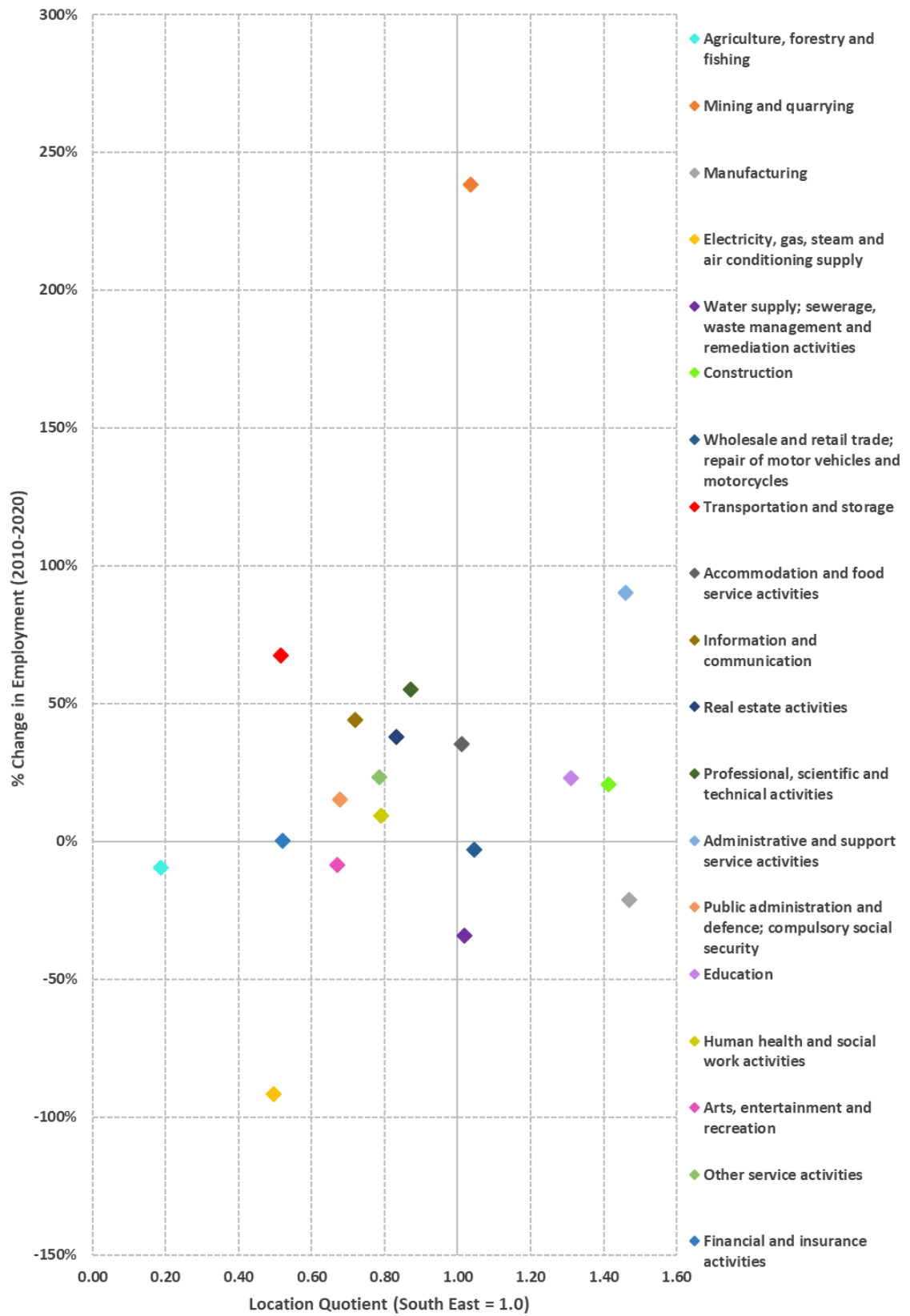


Source: Oxford Economics (2020) / Lichfields analysis

- 2.7 The sectors driving employment growth in Havant between 2000 and 2020 were professional, scientific and technical activities (+2,220 jobs), education (+2,090 jobs), and admin and support service activities (+2,070 jobs). Over the same time period, the Borough lost 6,020 manufacturing jobs, which equates to 87% of all jobs lost in the Borough from 2000-2020. Overall, this change indicates that the Borough is moving towards an increasingly service based economy, with less reliance on traditional manufacturing activity.
- 2.8 Figure 2.3 overleaf presents locations quotients (LQs) for Havant’s sectors in 2020 compared with the South East and shows how employment changed in these sectors from 2010-2020. The sectors with the highest LQs are manufacturing (1.47), admin and support service activities and construction (1.41). All of these sectors – aside from manufacturing - experienced growth in employment between 2010 and 2020.
- 2.9 AME (Advanced Manufacturing and Engineering) industries in particular have a good presence in the Borough, with Havant accommodating a higher number of employees and enterprises in both manufacturing and AME industries than compared regionally and nationally. The largest concentration of manufacturing related employment can be found in Central Havant, with high business numbers in Waterlooville⁷.

⁷ Havant Borough Council, Havant Sub-Area Economic Profile – January 2020

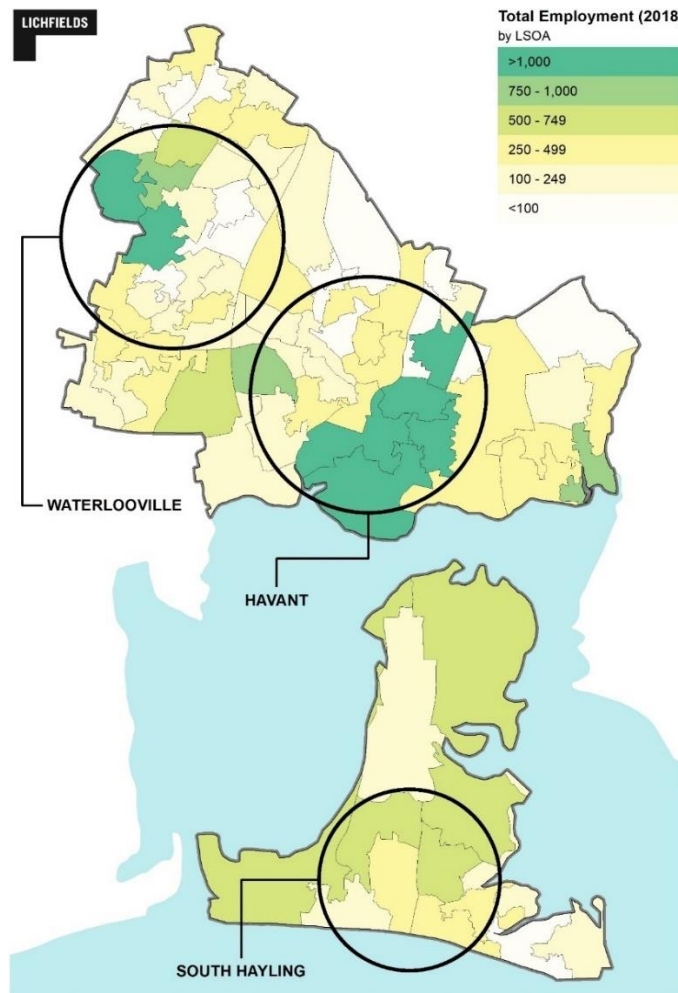
Figure 2.3 Havant Sector Location Quotients



Source: Oxford Economics (2020) / Lichfields analysis

2.10 As shown in Figure 2.4, employment in the Borough is concentrated in lower super output areas (LSOAs) around Havant town centre, Langstone Technology Park, New Lane industrial area and Waterlooville district centre. Elsewhere, employment tends to be more dispersed across the Borough.

Figure 2.4 Havant Borough Employment by LSOA (2018)



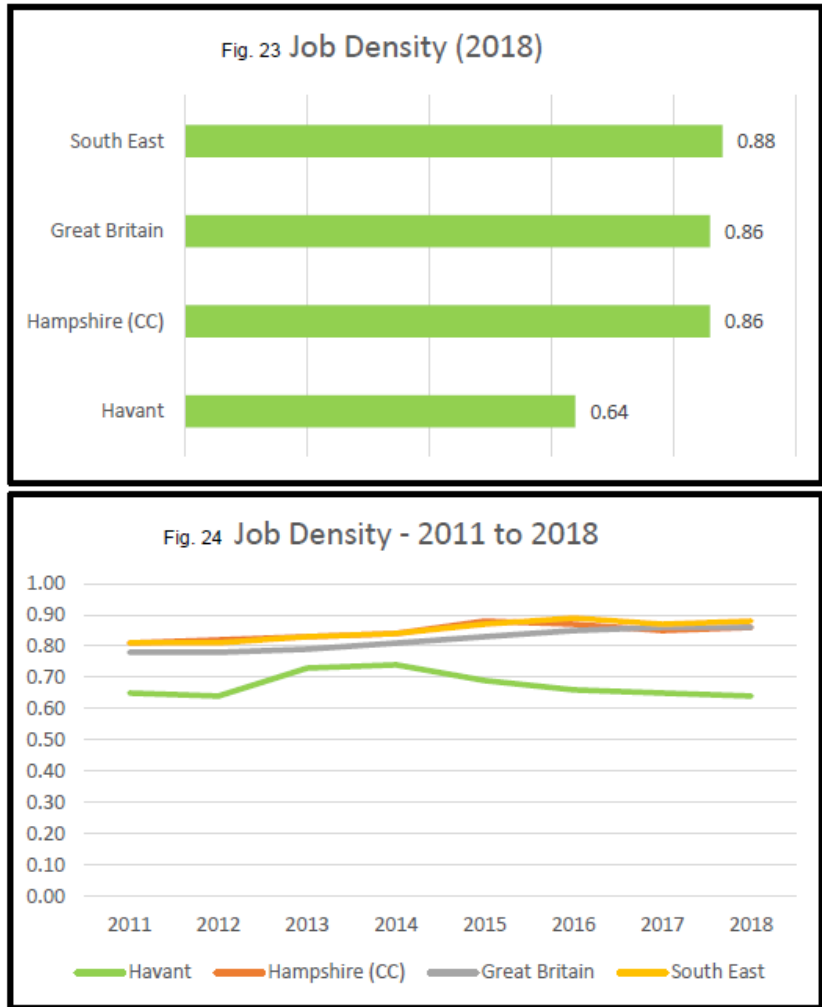
Source: ONS (2019) / Lichfields analysis

Job Density

- 2.11 Job density is measured by the ratio of jobs to working-age residents (aged 16-64 years). A ratio of 1 means that there is one job for every adult aged between 16 and 64 in a given local area.
- 2.12 Havant Borough records a job density of 0.64 as of 2018, which is significantly lower than the South East, Great Britain and Hampshire-wide scores (Figure 2.5). This indicates that residents may need to commute out of the Borough for employment, and also reflects the growing number of economically inactive residents.
- 2.13 The data shows that job density has been consistently low in Havant compared with other areas, and currently stands at its lowest level since 2011. Over the same time period, the scores for the South East, Great Britain and Hampshire have all increased to some extent.

2.14 Job density in Havant also ranks as one of the lowest in the Solent LEP area, with only Gosport Borough recording a lower job density.

Figure 2.5 Job Density



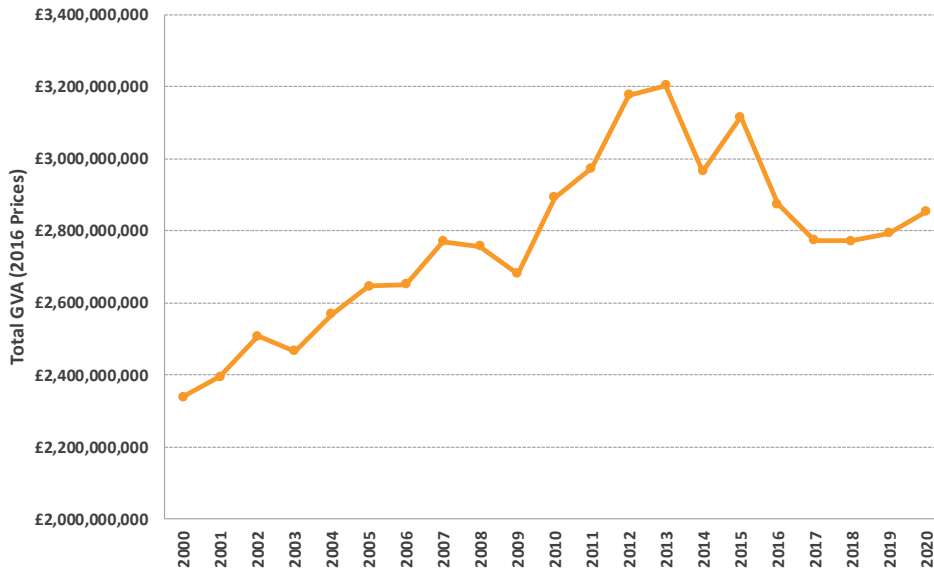
Source: Havant Borough Council (January 2020)

Economic Output and Productivity

2.15 Total economic output (measured in terms of Gross Value Added) generated by the Borough currently stands at £2.85 billion. This has increased from £2.34 billion in 2000, which equates to growth of 22% over this time (Figure 2.6). This rate of growth is similar to the Solent LEP-wide average for the same period (23.9%) but significantly lower than the South East (38.3%).

2.16 Figure 2.5 shows that following a period of steady output growth, the size of the local economy declined sharply following the Great Recession, and has recorded more modest growth since then.

Figure 2.6 Havant Total GVA (2000-2020)



Source: Oxford Economics (2020) / Lichfields analysis

2.17

On average, each worker in Havant generates £54,600 of economic output (GVA) each year (in 2016 prices) which is higher than the Solent LEP-wide and UK average, but lower than the South East (Figure 2.7). Gains in local productivity have lagged behind other areas over recent years, albeit starting from a higher base in 2000.

Figure 2.7 Workforce Productivity

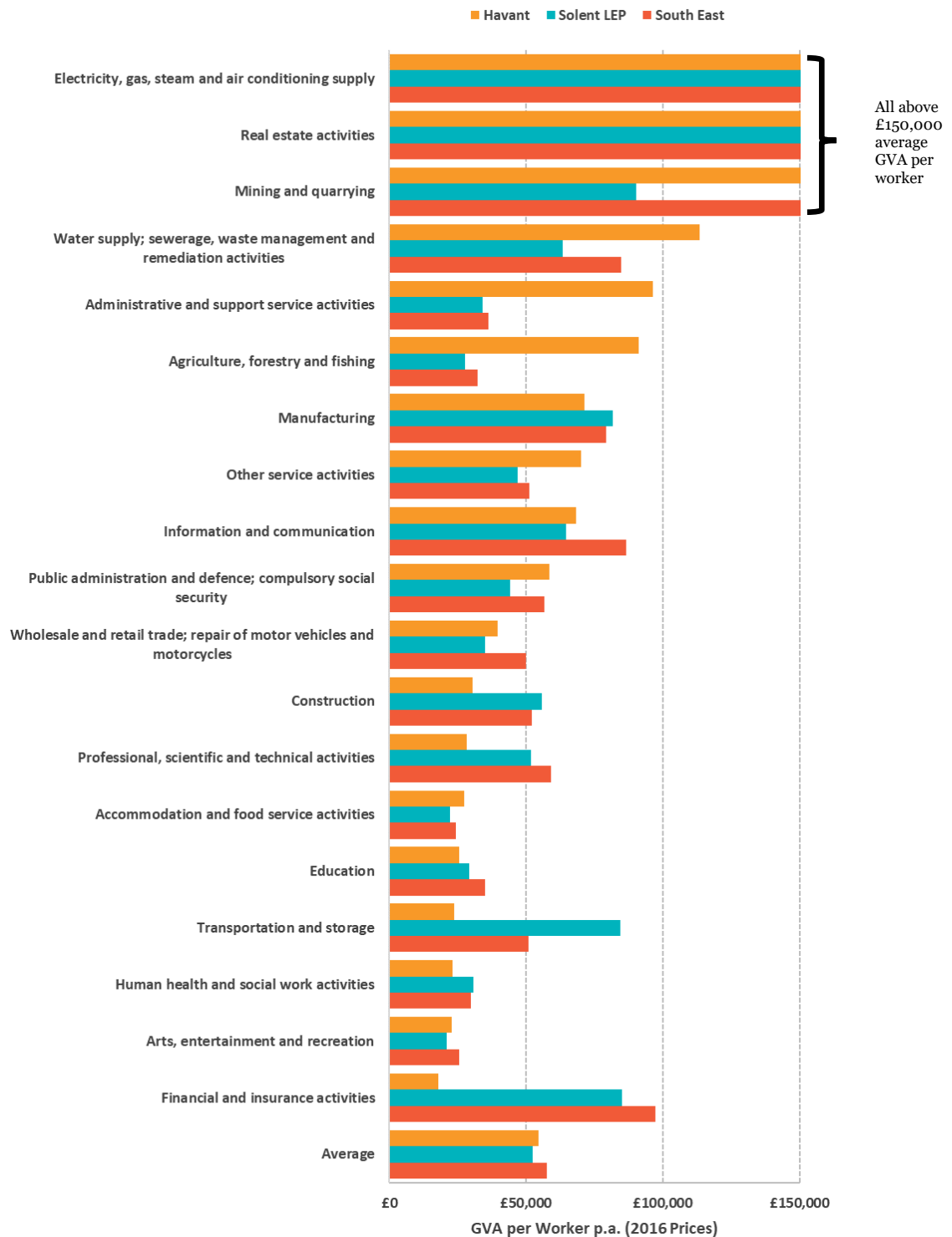


Source: Oxford Economics (2020) / Lichfields analysis

2.18

Looking beyond economy-wide trends, and excluding smaller sectors in terms of employment in the Borough (e.g. mining and quarrying), Havant has several sectors that are more productive than the Solent LEP and South East. These include admin and support service activities and accommodation and food services (Figure 2.8).

Figure 2.8 Workforce Productivity by Sector (2020)



Source: Oxford Economics (2020) / Lichfields analysis

Labour Market Characteristics

- 2.19 The economic activity rate of the working-age population of Havant in 2019 was 74.1% (see Table 2.2)⁸. This was lower than in the Solent LEP, South East and England (78.8%, 82.0% and 79.2% respectively), which suggests that Havant has a comparatively less economically active population⁹.

Table 2.2 Key Labour Market Characteristics

		Havant	Solent LEP	South East	England
Economic Activity Rate Age 16-64 (Dec 2019)		74.1%	78.8%	82.0%	79.2%
Out-of-Work Benefits Age 16-64 Claimant Count (March 2020)		2.9%	2.8%	2.4%	3.3%
Resident Qualification Level Age 16-64 (Dec 2019)	NVQ4 and Above	37.2%	36.6%	43.4%	40.0%
	NVQ3 and Above	18.5%	22.3%	18.7%	18.4%
	NVQ2 and Above	20.3%	17.5%	17.0%	17.2%
	NVQ1 and Above	12.1%	11.8%	9.8%	10.1%
	Other Qualification	_*	5.4%	5.4%	6.7%
	No Qualifications	10.4%	6.3%	5.8%	7.5%
Resident Occupation Group (Dec 2019)	SOC Major Group 1-3	39.7%	43.2%	52.4%	47.9%
	SOC Major Group 4-5	23.6%	20.6%	18.5%	19.5%
	SOC Major Group 6-7	20.8%	17.8%	15.5%	15.9%
	SOC Major Group 8-9	14.9%	17.8%	13.3%	16.3%
Median Gross Weekly Earnings by Residence (2019)		£594.7	£583.5	£636.0	£591.3
Median Gross Weekly Earnings by Workplace (2019)		£551.7	£563.6	£613.5	£591.4

Source: ONS (2019/2020) / Lichfields analysis (Note that figures may not sum due to rounding)

*No result

- 2.20 The claimant count rate for the Borough was similar to the Solent LEP and England and slightly higher than the South East in March 2020, indicating that work-age residents were not significantly reliant on out-of-work benefits before the outbreak of the Covid-19 pandemic.
- 2.21 However, this figure has subsequently increased by over 100% to 6% of the working-age population as at October 2020, representing an increase of 2,455 residents claiming out of work benefits in the Borough over this time¹⁰. Similar rates of increase were recorded across the

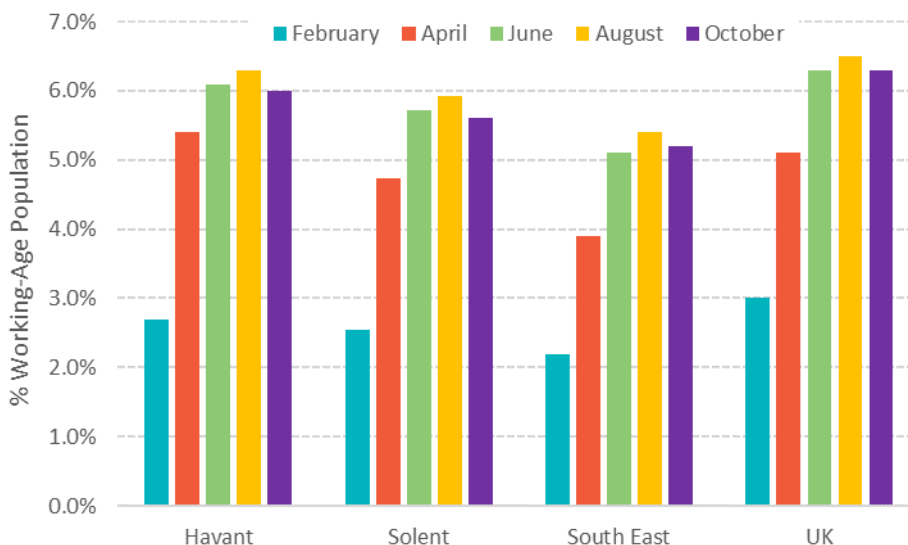
⁸ ONS, (2020); Annual Population Survey

⁹ ONS, (2020); Claimant Count

¹⁰ ONS, (2020); Claimant Count (experimental statistics)

Solent, South East and UK over the last few months, and the current (October 2020) claimant count in Havant is slightly higher than Solent-wide and regional equivalents (Figure 2.9).

Figure 2.9 Claimant Count as % of Working Age Population



Source: ONS Claimant Count (experimental statistics) 2020

- 2.22 A similar proportion of working-age residents in Havant (37.2%) are qualified to NVQ4+ level as the Solent LEP-wide average (36.6%); both areas have a lower proportion in comparison to the South East and England (43.4% and 40.0% respectively). However, Havant also has a higher proportion of residents with no qualifications compared with other areas.
- 2.23 A lower proportion of the working-age population in Havant are employed in Standard Occupational Categories (SOCs) 1-3 than in the Solent LEP area (39.7% and 43.2% respectively)¹¹. These SOCs are typically associated with higher paying, managerial and professional occupations, which might be taken by residents with higher level qualifications. As the Borough has a slightly higher proportion of residents with degree level and above qualifications, this suggests there might be a slight mismatch between the types of qualifications residents hold and what is required to take up occupations in these higher SOCs.
- 2.24 Average earnings amongst Havant residents (£594.70) in 2019 were higher than for the Borough’s workers (551.70)¹². In comparison, median workplace earnings (£563.60) were higher across the Solent LEP area and median resident earnings were lower (£583.50), while both were higher in the South East (£613.60 and £636 respectively). Overall, this suggests that many Havant residents commute out of the Borough to access higher paying jobs elsewhere in the Solent or wider South East, which correlates with commuting patterns identified using the Census Origin-Destination dataset below.

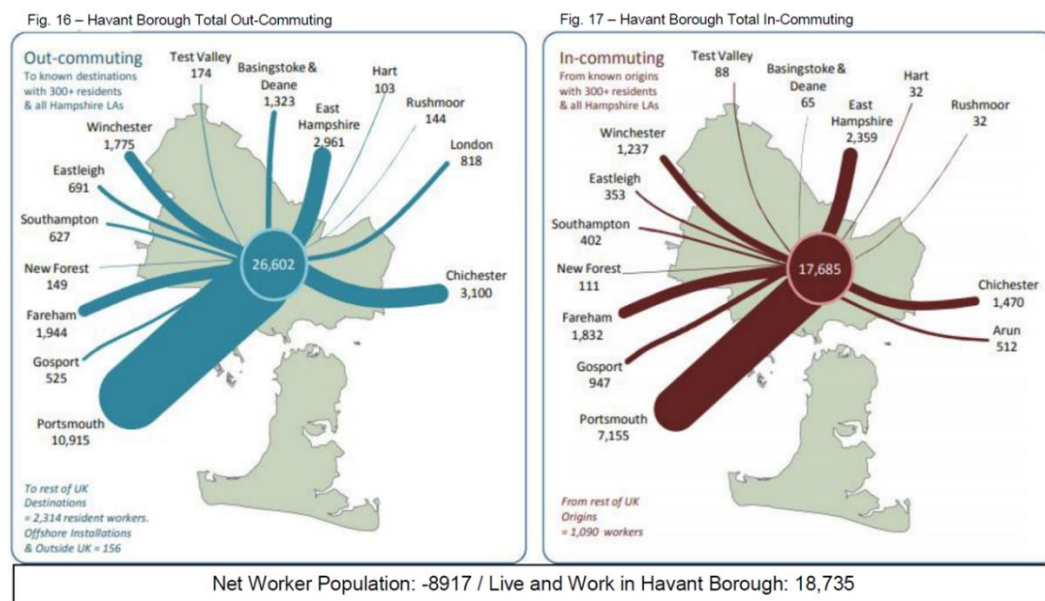
¹¹ SOCs 1-3 are as follows: 1 - managers, directors and senior officials; 2 - professional occupations; and 3 - associate professional and technical occupations

¹² ONS, (2019); Annual Survey of Hours and Earnings

Commuting Flows

2.25 The Census Origin and Destination (2011) dataset indicates that more people commute out of Havant to work than commute in from other local authority areas¹³. In total, 26,602 people commuted out of the Borough and 17,685 people commuted in, resulting in a net labour outflow of 8,917 workers. The largest commuter outflows were to Portsmouth, Chichester, East Hampshire, Fareham and Winchester, with these local authority areas also generating the largest labour inflows to the Borough (Figure 2.10). The scale of commuting relationships with Portsmouth are particularly significant, reflecting the Borough’s geographical proximity.

Figure 2.10 Havant Commuting Flows



Source: Havant Borough Council (January 2020)

2.26 The need for workers to commute out of the Borough is highlighted by Havant’s low job density and the differences between resident and workplace wages (as described above).

2.27 Of all working residents aged 16+ in Havant as of 2011, 8.9% mainly worked from home; within a Solent LEP context this proportion is similar to Eastleigh and Fareham, lower than for the Isle of Wight and New Forest, but higher than for Gosport, Portsmouth and Southampton.

Business Base

2.28 The majority of enterprises in Havant have between 0 and 9 employees (90.7%)¹⁴ typically defined as micro businesses. This is a slightly higher proportion than across the Solent LEP area as a whole, the South East and England, and leads to Havant having a smaller proportion of enterprises in the larger size brackets (see Table 2.3).

¹³ ONS, (2011); Census Origin-Destination

¹⁴ ONS, (2019); UK Business Counts

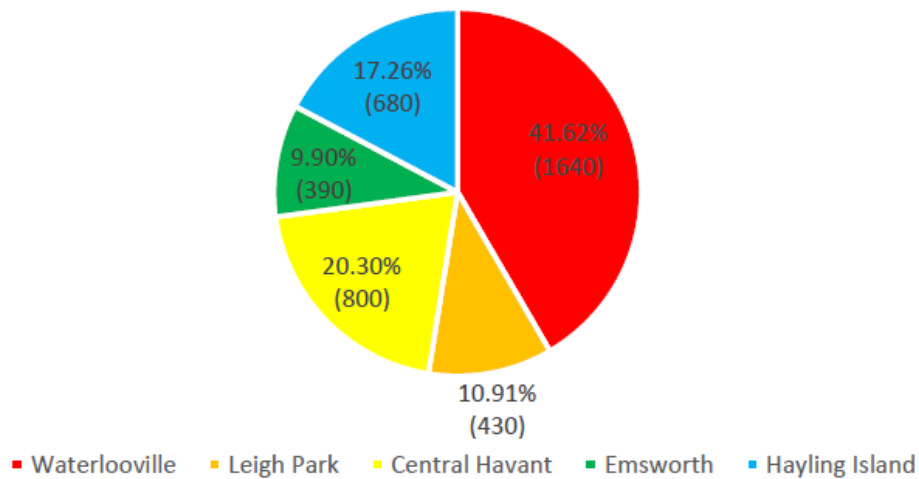
Table 2.3 Enterprise Size Profile (2019)

Enterprise Size (No of Employees)	Havant	Solent LEP	South East	England
Micro (0 to 9)	90.7%	89.4%	90.2%	89.6%
Small (10 to 49)	7.6%	8.8%	8.0%	8.5%
Medium (50-249)	1.4%	1.5%	1.5%	1.5%
Large (250+)	0.3%	0.3%	0.4%	0.4%

Source: ONS (2019) / Lichfields analysis

2.29 This relatively high proportion of micro businesses is even higher in some sub-areas, with the business landscapes of Waterlooville, Hayling Island and Emsworth in particular being heavily influenced by micro businesses (Figure 2.11). Meanwhile, Central Havant tends to be home to the Borough’s larger businesses.

Figure 2.11 Share of Micro Businesses by Sub-Area (2019)

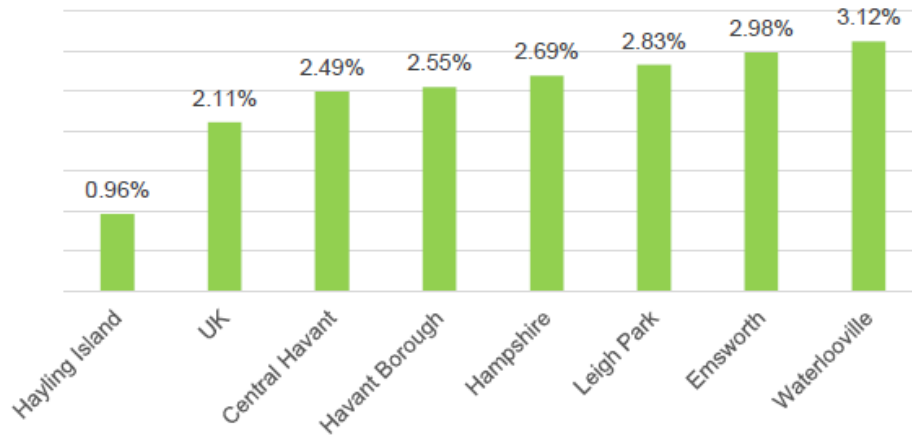


Source: Havant Borough Council (January 2020)

2.30 The Borough’s micro-business stock is made up of a number of different sectors, but the construction industry is the highest portion, accounting for almost 1,000. There are also high concentrations of micro businesses operating within professional, scientific & technical sectors.

2.31 Havant Borough has performed relatively well in terms of business growth over recent years, although as shown in Figure 2.12, this performance has varied significantly by sub-area within the Borough. Performance has been strongest within Waterlooville and weakest in Hayling Island during the past few years.

Figure 2.12 Business Growth p.a. (%) 2016-2019

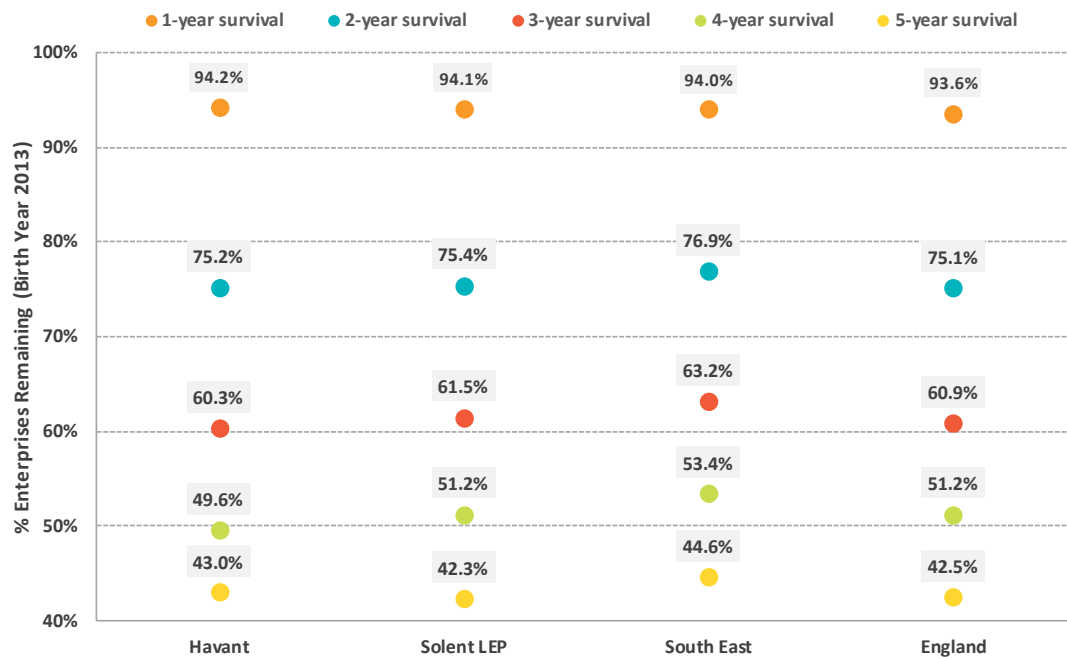


Source: Havant Borough Council (January 2020)

2.32

Business survival within the Borough is improving, with Figure 2.13 showing that of those enterprises born in Havant in 2013, 43% were still surviving after five years. This is slightly higher than the LEP and England-wide averages, falling behind only the South East.

Figure 2.13 Enterprises Remaining after Birth in 2013



Source: ONS (2019) / Lichfields analysis

Business Floorspace

2.33 Valuation Office Agency (VOA) statistics provide an indication of how much business floorspace is accommodated in Havant and how this has changed over time. In 2019/20, the Borough recorded 417,000 sq.m of industrial floorspace, 98,000 sq.m of office floorspace and 231,000 sq.m of retail floorspace. The stock of office and retail floorspace grew between 2000/01 and 2019/20 (by 34.2% and 20.3% respectively), while the stock of industrial floorspace decreased over the period (by 14.4%).

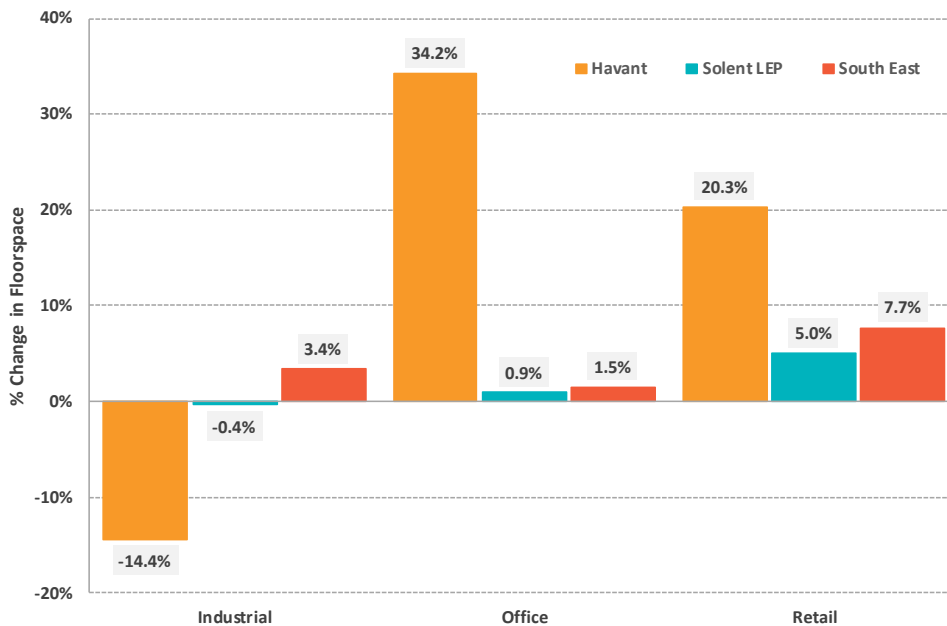
Table 2.4 Havant Business Floorspace Stock

Floorspace Type	Floorspace (sq.m) (2019/20)	Absolute Change (2000/01 to 2019/20)	% Change (2019/20)
Industrial	417,000	-70,000	-14.4%
Office	98,000	25,000	34.2%
Retail	231,000	39,000	20.3%

Source: VOA (2020) / Lichfields analysis

2.34 In comparison to the Solent LEP area and South East, Havant experienced significantly faster growth in office and retail floorspace between 2000/01 and 2019/20 (Figure 2.14). Over the same period, the Borough’s declining industrial floorspace exceeded losses recorded across the Solent LEP area as a whole, while the South East experienced a slight gain.

Figure 2.14 % Change in Business Floorspace (2000/01 to 2019/20)

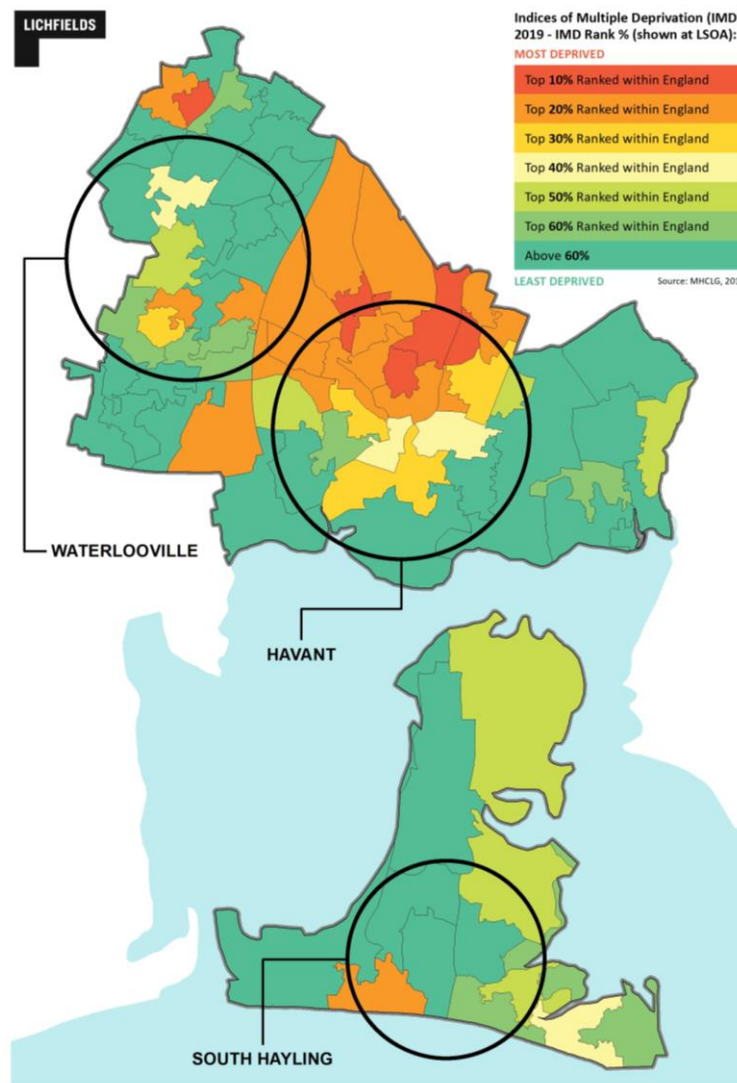


Source: VOA (2020) / Lichfields analysis

Deprivation

- 2.35 The Ministry of Housing, Communities and Local Government’s (MHCLG’s) Indices of Multiple Deprivation (IMD) (2019) ranks relative levels of deprivation within different local authority areas and LSOAs in England across a number of domains of deprivation to produce an overall score¹⁵.
- 2.36 Figure 2.15 below illustrates how this relative level of deprivation varies across the Borough and identifies particular pockets and concentrations of socio-economic deprivation in and around Leigh Park, Cowplain and South Hayling. The mainland areas of the Borough tend to be characterised by higher levels of deprivation, in particular to the east of the A3(M).

Figure 2.15 Havant Borough Deprivation



Source: MHCLG 2019 / Lichfields analysis

¹⁵ MHCLG, (2015); Indices of Multiple Deprivation

Synthesis

2.37

Based upon the analysis above, the key findings can be summarised as follows:

- 1 The population of the Borough has increased in recent years, with the largest increase in residents aged over 65. The local population is projected to continue to grow in the future with those aged over 65 expected to be the main driver of growth, suggesting the average resident age is set to increase.
- 2 The local employment base has grown over recent years, increasing at a similar rate to the South East but at a higher rate than the Solent LEP. Employment growth has been driven by a variety of sectors including admin and support services and construction. Overall workforce productivity exceeds Solent LEP-wide averages but continues to lag behind the South East.
- 3 The stock of office and retail floorspace increased in Havant over the last 10 years while the stock of industrial space has declined. Growth in office and retail floorspace in the Borough was higher than both the Solent LEP and South East averages, while the decline in industrial space was considerably larger.
- 4 The majority of enterprises in Havant are of micro scale with small, medium and large scale enterprises making up only 9.3% of the total number of enterprises. The Borough has performed relatively well in terms of business growth over recent years, and rates of business survival within the Borough have been improving.
- 5 Whilst the Borough has a slightly higher proportion of residents that hold NVQ4+ qualifications than the Solent LEP, a comparatively high share of residents hold no qualifications at all, and a relatively low share hold jobs in higher level occupation groups.
- 6 In labour market terms, Havant is a net-contributor of workers to other local authority areas with more residents commuting outside of the Borough for work than commuting in. These trends are likely to be influenced by Havant's low job density and lower workplace wages when compared with resident earnings.

2.38

Table 2.5 overleaf presents a summary SWOT analysis of the Borough's characteristics.

Table 2.5 Havant Economic Characteristics SWOT

Havant Economic Characteristics SWOT	
Strengths	<ul style="list-style-type: none"> • The Borough’s economy has been growing in both output and employment terms over recent years • Overall workforce productivity is higher than the Solent LEP-wide average, with good performance in some key sectors • Residents hold slightly more NVQ4+ qualifications compared with the Solent LEP-wide average • Business growth has been strong over the last few years, and business survival rates are relatively high • The Borough benefits from good strategic connectivity in terms of road and rail
Weaknesses	<ul style="list-style-type: none"> • A high proportion of residents have no qualifications • Net outflow of commuters from the Borough to other local authority areas • Sector productivity is relatively uneven and locally significant sectors (such as manufacturing) are characterised by lower productivity than the Solent LEP and South East averages • Pockets of socio-economic deprivation persist in key parts of the Borough
Opportunities	<ul style="list-style-type: none"> • The growing number of residents aged 65 and over could increase demand for care services and support job creation within these key sectors • Location of growth sectors within the Borough (such as advanced manufacturing and engineering) could generate additional high value jobs • Increasing job density through local employment growth
Threats	<ul style="list-style-type: none"> • An ageing population places increased pressure on the Borough’s working-age, economically active population to supply the labour needed to drive economic growth in future • Growth sectors do not grow as expected and provide additional high value job opportunities • Residents are not up-skilled to take advantage of potential advanced jobs in the future • Major development and regeneration projects nearby (across the wider Solent area) attract investment and job creation away from Havant

Source: Lichfields analysis

3.0 Economic Growth Potential

- 3.1 This section examines the economic growth potential of Havant Borough in order to understand the future scale of economic change and growth that could take place over the coming years, and the associated increase in demand for infrastructure to be able to practically support this growth.

Supporting Havant's Growth

- 3.2 Analysis presented in the previous section underlines a range of economic challenges that the Borough faces in terms of achieving economic growth, and it is recognised that Havant needs growth and investment to address and support the future economic prosperity of the Borough.
- 3.3 Whilst economic growth and prosperity is ultimately driven by a wide range of factors and interventions, the key focus of the IIP is upon infrastructure projects that have the potential to unlock new public and private development sites for housing and employment and in doing so, securing direct jobs, new homes, new employment space, new skills opportunities and private sector investment to respond to the place-based opportunities and challenges of the Borough.
- 3.4 In particular, the IIP is intended to support and stimulate sustainable economic growth in Havant Borough within the context of the national Industrial Strategy which aims to boost productivity of the UK's companies, industries, places and people and enhance economic competitiveness.
- 3.5 As a coastal community Havant Borough is particularly susceptible to flooding issues. The Borough has a coastline with an estimated total length of 48km, all of which is subject to international and national nature conservation designations. A Flood and Erosion Risk Management (FCERM) strategy was recently developed for the mainland of the Borough that estimated that approximately £113m would be needed to implement all of the schemes required to prevent nearly £200 million of direct flood and erosion damages. Hayling Island is in the process of having an FCERM strategy developed but early indication shows that over the next 100 years, if nothing is done to protect the island from extreme flooding and erosion, there will be over £1bn of damage, not including the wider economic impacts of flooding on business and growth. The costs of managing the risk have yet to be determined.
- 3.6 It is recognised that there are a range of development sites with potential to bring forward new housing and employment floorspace in Havant. However, many sites need infrastructure investment to unlock or accelerate their potential and improve viability for private sector investment. Although the Borough sits in a prosperous part of the South East of England with an affluent population and a high demand for housing, difficult economic conditions, high construction costs versus relatively low values and a nervousness from commercial developers who require a high degree of certainty and fixed rates of return has led to a prolonged lack of investment in renewal in the Borough. In some areas this has led to further depression of residual values, a deterioration in the quality of the urban form and building stock which in turn has exacerbated the lack of private sector investment.
- 3.7 In order to break this cycle, HBC are seeking to take a more interventionist approach to directly drive and invest in regeneration projects to create conditions that are more attractive for private sector investment. The responsibility for setting the Borough's growth agenda and for planning to achieve its growth potential rests with HBC, and this planning approach is set out within, and guided by, the Council's planning policy evidence base as summarised below.

National Industrial Strategy

- 3.8 In November 2017, the Government published its Industrial Strategy ‘Building a Britain fit for the future’¹⁶. It sets out Government’s plan to boost the productivity and earning power of people throughout the UK and identifies five ‘foundations of productivity’ for a transformed economy, summarised in Figure 3.1 below.
- 3.9 These five foundations of productivity are considered by Government to represent the essential attributes of every successful economy and form the overall basis for the various policies included in the Industrial Strategy to boost productivity and earning power throughout the UK.

Figure 3.1 Industrial Strategy Five Foundations of Productivity



Source: UK Government (2017)

- 3.10 Of particular relevance to the IIP is the ‘Infrastructure’ foundation which acknowledges that infrastructure is the essential underpinning of our lives and work, and having modern and accessible infrastructure throughout the country is essential to our future growth and prosperity. The Industrial Strategy notes that much of this investment is, by its nature, large scale and long term, and represents one of the most significant ways the Government can influence the economy – from transport and housing through to the roll-out of digital networks.

Solent 2050 Economic Strategy

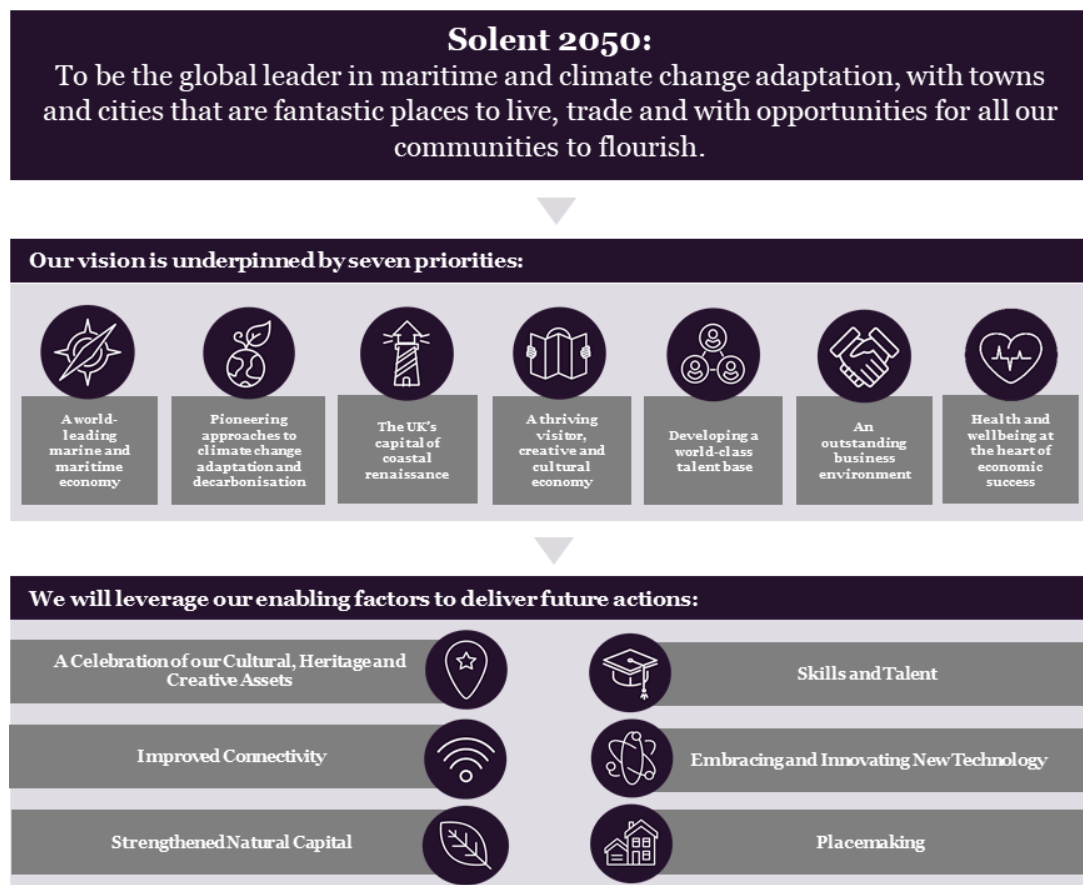
- 3.11 Solent 2050 sets out a long-term action plan, aligned to the UK Industrial Strategy, to unleash the Solent's distinctive strengths that can power the local economy to increase productivity and support the area’s communities to prosper in a fast-changing world. It represents a major opportunity to put the region on the path to realise its potential as a world-renowned economic cluster by 2050.
- 3.12 Developed by the Solent LEP on behalf of the region, the strategy offers a bespoke approach for building on these strengths to achieve sustainable and transformative growth in the Solent, with a vision of building a more prosperous and productive regional economy.

¹⁶ UK Government, (2017); Industrial Strategy White Paper ‘Building a Better Britain fit for the future’

3.13 It seeks to protect the Solent’s natural assets and communities from the effects of climate change given its unique geographical constellation of islands and peninsulas, and the major coastal cities of Portsmouth and Southampton, and secure the renaissance of the area’s coastal towns and their adaptation within a changing economic landscape. The Strategy aims to unite the region’s illustrious history across the marine and maritime sectors with the region’s world-class universities and colleges. The Solent will build on its strengths to become a leading hub for decarbonisation and environmental innovation, and an international centre for the incubation and application of ground-breaking technological solutions. This will help deliver an ambitious and innovative local economy, whilst protecting and enhancing the region’s natural capital and ensuring opportunities are created for all communities.

3.14 Underpinning this overall vision are seven key priorities around which the plan for future activities to transform the Solent is framed, summarised below.

Figure 3.2 Overview of the Solent 2050 Strategy



Source: Solent LEP

3.15 The Strategy identifies a range of assets and strengths that the Solent has at its disposal, which together, can be leveraged as a set of enabling factors to overcome key challenges to productivity growth and set a path to achieving its vision of the Solent in 2050. These include improved connectivity, skills and talent, placemaking and strengthened natural capital, all of which are relevant considerations in the context of this IIP for Havant Borough.

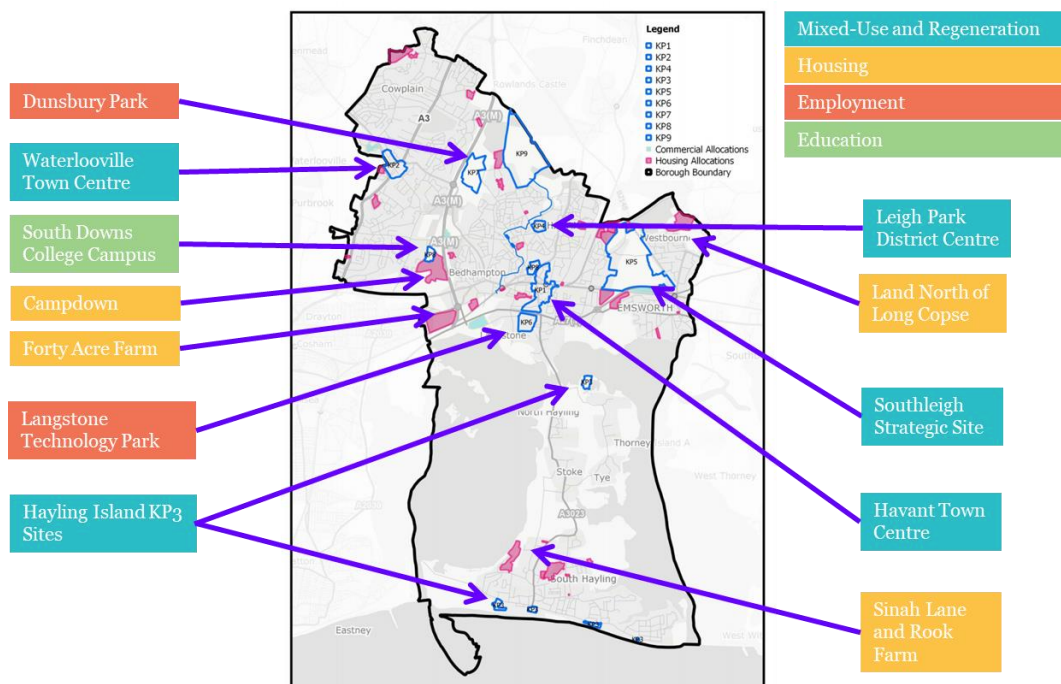
3.16 Further work is currently underway to consider the implications of Covid-19 on the Solent’s economy and the direction of travel to 2050, and in light of the pandemic, to explore the increasing importance of health and wellbeing in supporting a resilient economy.

Local Evidence Base

Emerging Havant Borough Local Plan 2037

- 3.17 HBC is currently preparing a new Local Plan for the Borough to set out the vision and framework for the future development, growth and prosperity of the local area over the period to 2037. Final changes to the Local Plan are being made following consultation on a Pre-Submission Draft, with a current target of submission for examination by Q1 2021.
- 3.18 The new Local Plan seeks to ensure that by 2037, Havant Borough will have delivered regeneration and investment in high quality new businesses, homes, facilities and town centres. Success in Havant will be achieved through six overlapping strategic priorities which together make up the Council’s vision for the future:
- 1 People have a varied selection of housing that meets their needs;
 - 2 People have access to high quality new employment, education and training opportunities to boost economic growth and address the skills gap;
 - 3 Communities are supported through new infrastructure and improvements to the network;
 - 4 A focus on the regeneration of the Borough’s town centres and Hayling Island Seafront;
 - 5 Celebrating Havant’s natural environment, sunny climate and South Downs-Solent location whilst addressing climate change; and
 - 6 A Fourth Industrial Revolution location, focused on digital, green, biological and physical technology.
- 3.19 The delivery strategy identifies a range of key development sites (‘Key Projects’) across the Borough to accommodate growth of 10,773 new homes and 149,940 sq.m of new commercial floorspace by 2037, as illustrated in Figure 3.3 below.

Figure 3.3 Havant Borough Local Plan: Key Projects and Development Allocations



Source: Havant Borough Council, Pre-Submission Havant Borough Local Plan 2036 / Lichfields analysis

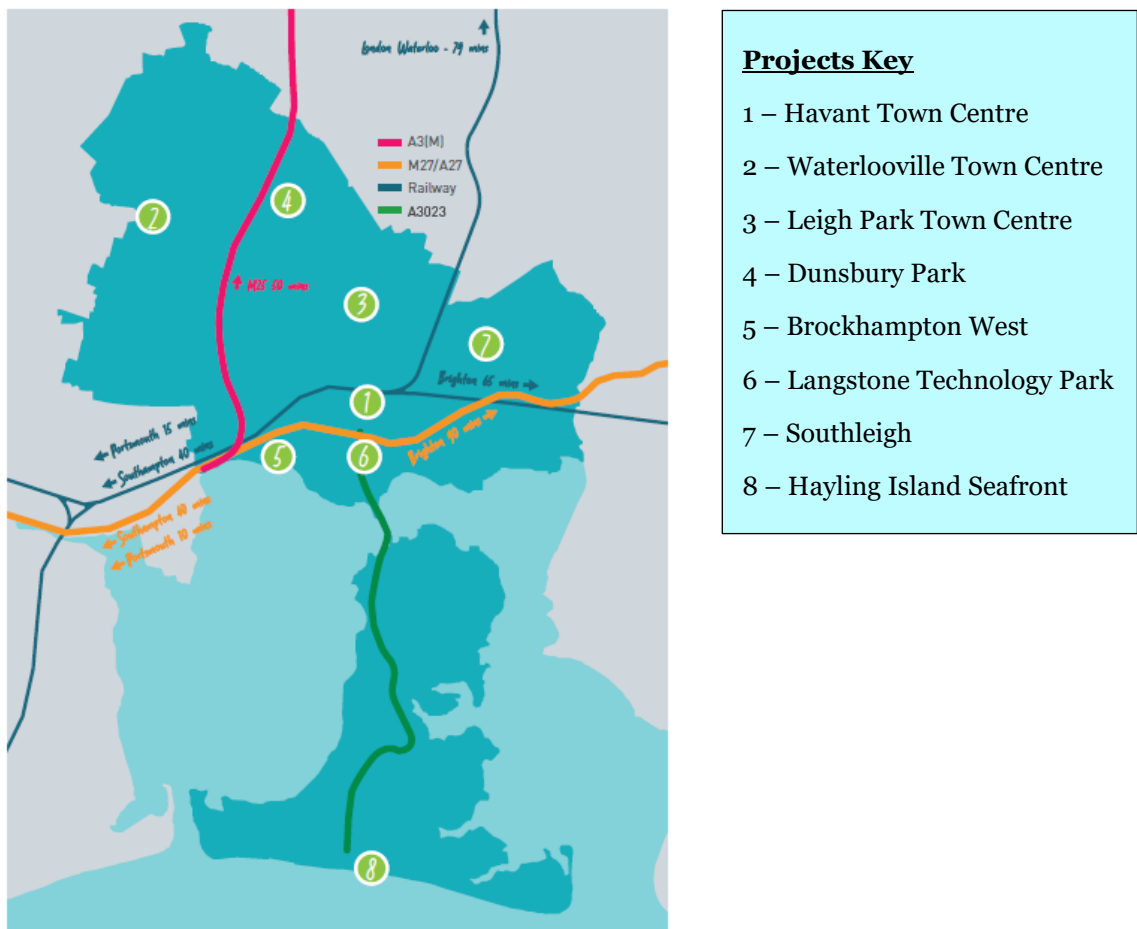
3.20 To form part of the evidence base for the new Local Plan, HBC prepared an Infrastructure Delivery Plan (IDP) in July 2020. This assesses the infrastructure capacity and needs of the Borough and provides an overview of the way infrastructure is planned and the organisations involved in its delivery. It also looks at costs and likely funding mechanisms for infrastructure and forms the basis for assessing contributions that would be sought to meet the needs for new development.

Havant Regeneration Strategy

3.21 HBC has established a pro-growth agenda and committed long-term resources to support regeneration. The Borough is at the beginning of a new era of business development, commercial success and resident amenity, and in 2018 HBC launched a new Regeneration Strategy for Havant Borough 2018 – 2036 to set out the economic case and opportunities for regeneration in the Borough.

3.22 The Regeneration Strategy is designed to enable the Borough to address a number of key economic challenges and opportunities (namely job density, employment by occupation, skills levels, earnings, industrial structure, and out-commuting) whilst also capitalising on the Borough’s wealth of strategically and regionally important natural and economic assets that make it a prime location for investment. It identifies 8 key opportunities/projects for regeneration and development in the Borough (summarised below), and aims to help create 14,120 new jobs to bring the Borough’s average job density up to that of the South East region.

Figure 3.4 Key Regeneration and Development Opportunities



Source: Havant Borough Council (<https://www.havant.gov.uk/opportunity-havant>)

3.23 These priority projects and sites are characterised by a range of infrastructure issues and challenges to development, many of which have been identified as part of background evidence base work for the new Havant Borough Local Plan which identifies many of the same development sites (see Figure 3.3 above).

Economic Forecasts

3.24 Against the backdrop of a changing macro-economic climate, the Solent LEP recently commissioned Oxford Economics (OE) to prepare a new baseline outlook for the LEP area’s economy¹⁷. The outputs from this work include forecasts for how the economies of each local authority area within the Solent LEP could change in terms of employment and economic output (GVA) over the period to 2038.

3.25 The resulting employment growth for Havant implied by these latest economic forecasts is presented in Table 3.1 below, covering the period 2020 to 2036 (to broadly match the new Local Plan period). This implied job growth can be used as a proxy to understand the scale of economic change and growth that could take place over the coming years, and the associated increase in demand for the Borough’s infrastructure to be able to practically support this growth.

Table 3.1 Key Economic Growth Indicators

2020 - 2036 Projections	Havant	Solent LEP
Total Employment Change	1,900 (+3.6%)	24,500 (+4.1%)
Fastest Growing Sectors (Employment)	Administrative and Support Services, Construction, Professional, Scientific and Technical	Human Health and Social Work, Administrative and Support Services, Professional, Scientific and Technical
Fastest Decling Sectors (Employment)	Manufacturing, Public Admin and Defence, Education	Manufacturing, Public Admin and Defence, Utilities
Total GVA Change	+29.2%	+28.3%
Working-Age Population Change	+2.0%	-0.7%

Source: Oxford Economics (2020) / ONS (2020) / Lichfields analysis

3.26 In overall terms, employment in Havant is estimated to increase by 1,900 jobs between 2020 and 2036. This represents a 3.6% increase in proportionate terms, which is broadly in line with the pace of employment growth expected across the LEP area as a whole over this time period (see Table 3.1). This implies that the Borough’s relative contribution to Solent-wide growth is expected to be broadly maintained in future. GVA generated by the economy of Havant is also expected to grow, by approximately £834 million over this time, representing an increase of just over 29%.

3.27 Key sectors expected to drive employment growth include administrative and support services, construction and professional, scientific and technical activities. At the same time, employment is expected to decline in Havant’s manufacturing, public administration and defence and education sectors, echoing forecasts for sectoral employment decline across the Solent LEP area (see Table 3.1).

¹⁷ Oxford Economics forecasts were prepared prior to the global pandemic caused by Covid-19, and therefore, may not fully reflect short and longer term economic implications for the economies of Havant and the Solent LEP area as a whole

- 3.28 From a demographic perspective, the latest population projections from the ONS suggest that the Borough’s working age population is expected to increase by around 1,500 between 2020 and 2036¹⁸. Whilst this represents a relatively small increase in absolute terms, it contrasts with an overall declining working age population across the LEP area as a whole; indeed, the Borough accounts for 11.6% of the gross gain in working age population within the LEP area over this period.
- 3.29 The above analysis suggests that, under a ‘business as usual’ scenario, the Borough is unlikely to grow at sufficient scale and pace to support the 14,120 job creation target set out in the Havant Regeneration Strategy, to bring the Borough’s average job density up to that of the South East region. Whilst this poses a key challenge, it also provides a useful indication of the current scale of opportunity that exists to enhance the Borough’s economic performance.

Implications for Infrastructure Demand

- 3.30 The economic forecasts summarised above provide a ‘business as usual’ view of Havant’s economic growth potential, broadly assuming that past trends and sector specialisms continue in future. It is clear that the scale and scope of employment growth implied by the Council’s ambitious Regeneration Strategy and emerging Local Plan could deliver a significant step-change in the Borough’s economic evolution and growth, significantly out-pacing the OE job growth projections by over 12,000 jobs if the full scale of development and regeneration can be achieved and maximised over the coming years.
- 3.31 The trajectory of future economic growth within Havant will have significant implications for infrastructure requirements to, from and within the Borough, with a growing business and employment base increasing the demand for all types of economic infrastructure to support the day-to-day functioning of the local economy. The forecasts do however point to shifting requirements in terms of the nature of business premises and skills required to accommodate economic growth, for example with declining demand for manufacturing space and skills (in some but not all manufacturing sub-sectors), growing anticipated demand for high quality premises to accommodate business service sector growth, and a growing need for construction skills to meet the needs of an evolving industry. At the same time, the changing population structure (i.e. an ageing population) will have significant implications for the local housing market and the mix of accommodation types and tenures required.
- 3.32 As noted above, the key focus of the IIP is upon supporting and stimulating the Borough’s sustainable economic growth through enhancing competitiveness and productivity. The delivery of infrastructure projects will be a key enabler in this respect, for instance with highways improvements supporting better connectivity to more isolated/peripheral areas of the Borough (such as Hayling Island) and to meet increased demand created by strategic site developments such as Southleigh; and new education facilities helping to upskill and/or reskill residents to meet changing needs in the labour market.
- 3.33 In order to achieve this agenda, infrastructure priorities will inevitably vary by economic sector, for instance with telecommunications and digital infrastructure being particularly key for Havant’s business services sector which is expected to record employment growth over the next 16 years. The type of infrastructure required to support economic growth will therefore look different across these sectors.

¹⁸ ONS, (2020); 2018 Based Population Projections

4.0 Water, Waste and Flooding

4.1 This section provides an overview of existing water, waste and flood defence provision to, from and within Havant and the key issues and gaps associated with this strand of economic infrastructure. The findings are based upon a review of existing data sources and evidence, as well as discussions with a number of stakeholders and operators currently active within Havant and the wider Solent area (Appendix 1).

4.2 For the purposes of the study, this strand of infrastructure is defined as including:

- Water supply;
- Waste water;
- Waste disposal; and
- Flood defences.

Existing Provision

Water Supply

4.3 Water in Havant is currently supplied by Portsmouth Water, which also serves much of the Portsmouth conurbation and bordering parts of Hampshire and West Sussex. Portsmouth Water draws 88% of water supplied to customers from a local chalk aquifer, which features multiple boreholes and wells; the Company also has one surface water abstraction¹⁹.

Figure 4.1 Portsmouth Water Supply Network



Source: PUSH (2020)

4.4 The majority of waste water and sewage created by the Borough is processed at Budds Farm wastewater treatment works just south of Langstone technology park. Budds Farm also serves Portsmouth and parts of East Hampshire and Winchester Districts, making the wastewater treatment works significant at the wider scale. Emsworth is separately served by Thornham

¹⁹ Portsmouth Water, (2019); Water Resources Management Plan

wastewater treatment works, which is located outside of the Borough and also serves parts of Chichester District. Concerns have been raised about discharges of storm water (a mix of rain water and untreated sewage) from Budds Farm into Langstone Harbour at times of high rainfall.

- 4.5 The Integrated Water Management Study (2018) recently produced by the Partnership for Urban South Hampshire (PUSH) from a series of water quality assessments indicates there are no significant constraints to planned housing growth in the Borough²⁰; however, wastewater treatment works may require upgrades by 2036 to reduce the potential risk of increased sewer network overflows.
- 4.6 The Borough and wider Solent area has also been suffering from nitrates pollution which has temporarily delayed development. Decades of pollution from wastewater, urban runoff and agricultural discharges have led to high input levels of nitrogen and phosphorus to the Solent’s water environment causing eutrophication. The resulting dense mats of green algae are impacting negatively on the area’s protected habitats and bird species. Following an EU Habitats Directive, house building in the Solent area was temporarily put on hold, with Natural England advising planning authorities that mitigation must be in place to ensure nutrient neutrality before further development can be allowed. A broad suite of mitigation measures has been developed by various organisations including water companies and local authorities as well as private landowners to include agricultural land being taken out of intensive use, improvements to wastewater treatment works and on-site wetland construction²¹.
- 4.7 Portsmouth Water is planning to invest £120 million to create a new reservoir, Havant Thicket, straddling the border between Havant and East Hampshire local authority areas. The reservoir will provide an important strategic resource to help support new housing and other development and cope with the effects of climate change. The reservoir will be built on a grassland site next to Havant Thicket, which sits in between Rowlands Castle, Leigh Park and Staunton Country Park in Havant. As well as providing reliable supplies for the water-stressed South East, it will also create enhanced natural capital by providing a new community and green leisure space, bringing more benefits for local people and nature, including a wetland to support threatened species of birds. A planning application has now been submitted/validated and the reservoir is expected to take approximately 10 years to complete.

Waste Disposal

- 4.8 Hampshire County Council is the waste disposal authority and waste planning authority for the Borough. This makes the County Council responsible for managing the treatment of household waste, recycling centres and liabilities of closing landfills and determining all applications for waste infrastructure and for planning for the future waste demand of the Borough. The main contractor that handles waste within the Borough is Veolia, which works in partnership with other Hampshire authorities through a 25 Year Waste Management Strategy, known as Project Integra.
- 4.9 Household recycling centres can be found on the mainland and Hayling Island within the Borough boundary. There is also a household waste recycling centre in Waterlooville, which is within the boundary of Winchester District.
- 4.10 The latest Havant Infrastructure Delivery Plan (2020) identifies that through planning policies and design guidance for developers, expectations can be set for detailed layouts to be set out to ensure that adequate provision is made for the storage of waste without compromising the quality of schemes that may come forward in the Borough up to 2036.

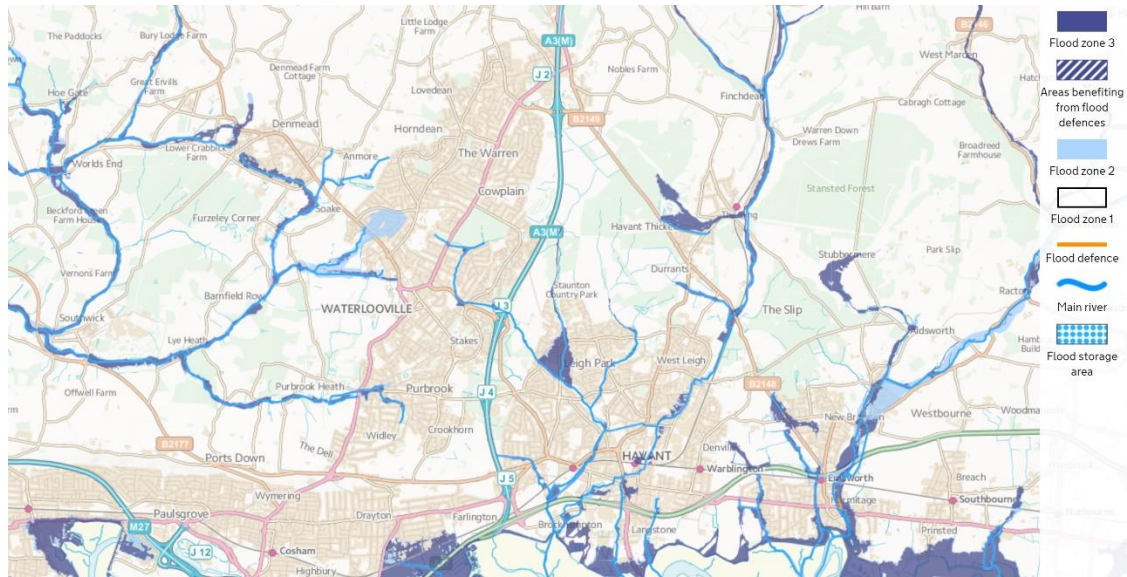
²⁰ Partnership for Urban South Hampshire (PUSH), (2018); Integrated Water Management Study

²¹ Hampshire & Isle of Wight Wildlife Trust, <https://www.hiwwt.org.uk/reducing-nitrates-solent>

Flood Defences

4.11 Figure 4.2 and Figure 4.3 below indicates which flood zones each part of the Borough lies within. The areas of the Borough that are in flood zone 3 are primarily around the coastline of Hayling Island, along the coast between Langstone and Emsworth and a portion of the Leigh Park estate area. There are some other small areas of the Borough within flood zone 2 along water courses, with the remainder of the area located within flood zone 1.

Figure 4.2 Havant North Flood Map



Source: Environment Agency Online (2020)

Figure 4.3 Havant South Flood Map



Source: Environment Agency Online (2020)

- 4.12 The most recent version of the PUSH Strategic Flood Risk Assessment (2016) includes a specific annex about flood risks in the Borough²². The annex identifies that 22% of the Borough land area is within flood zones 2 and 3. The primary source of flood risk is from the sea, linked to the potential for extreme tidal heights and wave overtopping. The second source of flood risk is from fluvial sources such as the Lavant Stream, Hermitage Stream and other tributaries. These water courses flow through multiple parts of the Borough and introduce the potential for flooding in locations including Havant town centre, Leigh Park, West Leigh and Stockheath.
- 4.13 The Borough has also experienced flooding from other sources including groundwater and surface water over the years caused by infrastructure failures, including the area’s ageing drainage system. The existing drainage systems within Havant are known to be at or below capacity in key areas according to the PUSH Strategic Flood Risk Assessment (2016) and that this may create difficulties when providing drainage for new development unless new investments are made to improve the infrastructure.
- 4.14 Coastal defences across the Borough, where they currently exist, are likely to be susceptible to rising sea levels linked to climate change. In particular, this applies to Hayling Island as shown by the large areas of the Island in flood zone 3 in Figure 4.3. The PUSH assessment identifies that to limit future tidal flooding, significant investment will be required to improve existing flood defences and to sustain future development – especially on Hayling Island – more investment would be required in flood defences and flood defence infrastructure.
- 4.15 Havant Borough Council in support of the emerging Local Plan published a Strategic Flood Risk Assessment (2018) for key sites in the Plan. The broad findings of the assessment were that some sites are free of tidal and fluvial planning risks, while some other sites suffer from more fundamental issues with flooding²³. The largest proposed development site in the Borough – Southleigh – was found to be acceptable for allocating in the Plan, with plans to limit flooding on the site by continuing to develop the masterplan and identifying measures that could help decrease flood risk.

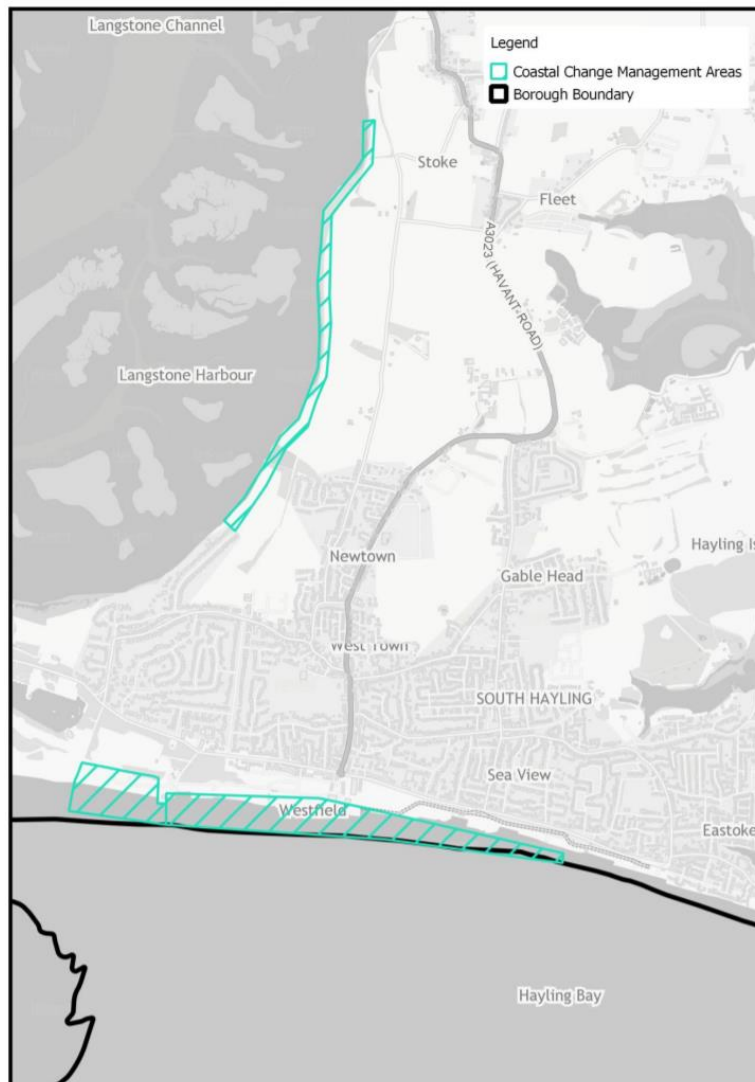
Coastal Management

- 4.16 The management of the Borough’s coastline is considered with utmost importance within the emerging Havant Local Plan. Policy E4 ‘Development on the Coast’ of the Plan focuses on limiting development to appropriate parts of the coastline, protecting Coastal Change Management Areas (see Figure 4.4) and controlling how new or replacement coastal defences will be developed. The principles of emerging Local Plan Policy E4 regarding controlling how new or replacement coastal defence development occurs are based on the North Solent Shoreline Management Plan (2010) and other potential future coastal management strategies.

²² PUSH, (2016); Strategic Flood Risk Assessment – 2016 Update

²³ Havant Borough Council, (2018); Strategic Flood Risk Assessment (Local Plan Sites)

Figure 4.4 Havant Areas of Coastal Change



Source: Havant Borough Council (2019)

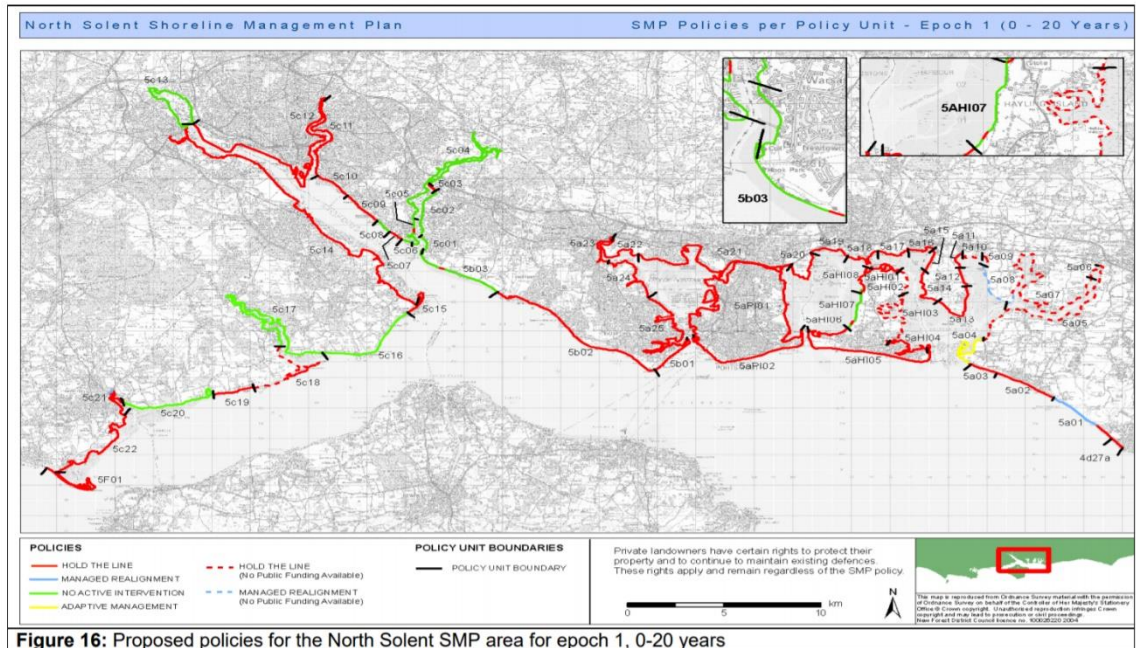
4.17 The North Solent Shoreline Management Plan (2010) was developed on behalf of a coalition of coastal local authorities including Havant and the Environment Agency²⁴. The aim of the SMP is to provide realistic and achievable policies that are in accordance with relevant legislation and constraints. The policies in the document are designed to be technically sustainable, environmentally acceptable and economically viable and are considered over three main epochs:

- “from present day (taken nationally as being 2005) 0 – 20 years (short term) (Epoch 1)
- medium-term 20 – 50 years (medium-term) (Epoch 2)
- long-term 50 - 100 years (long-term) (Epoch 3)”

4.18 Within epoch 1, the proposed policy for the coast of Havant as shown in Figure 4.5 is to hold the existing coastline position, with one area of no active intervention on the western side of Hayling Island. The map also identifies that at the time of preparation no public funding was available for holding the coastline of the eastern side of Hayling Island. This policy is maintained through epochs 2 and 3 as shown below in Figure 4.6 and Figure 4.7.

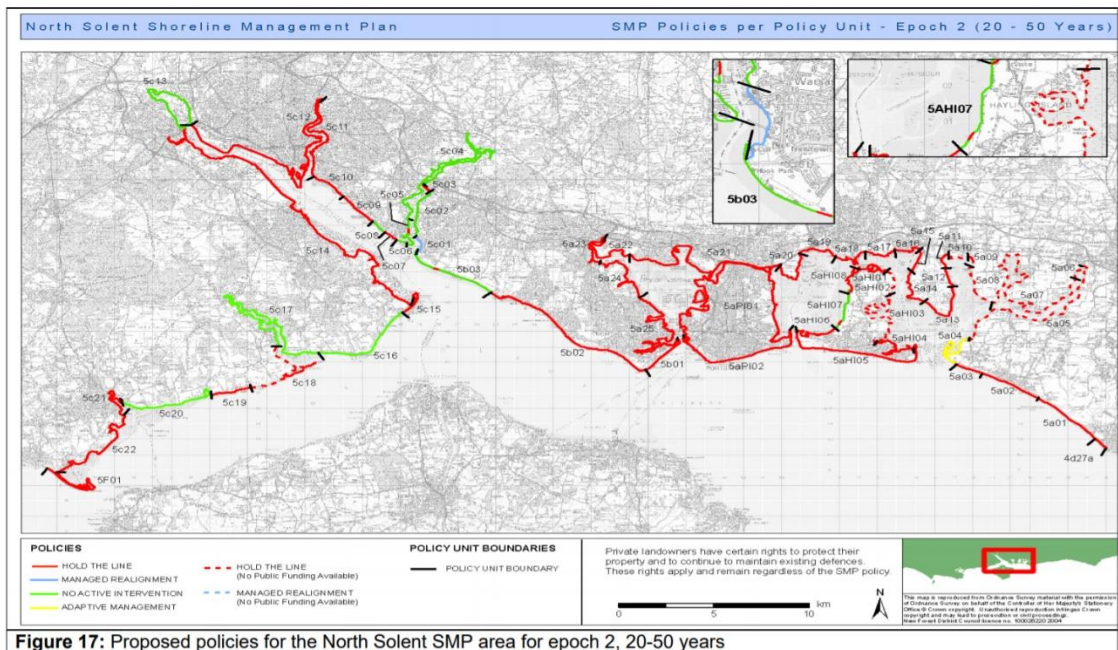
²⁴ North Solent Shoreline Management Plan Partnership, (2010); North Solent Shoreline Management Plan

Figure 4.5 Epoch 1 Coastline Policy Status



Source: North Solent Shoreline Management Partnership (2010)

Figure 4.6 Epoch 2 Coastline Policy Status



Source: North Solent Shoreline Management Partnership (2010)

Figure 4.7 Epoch 3 Coastline Policy Status

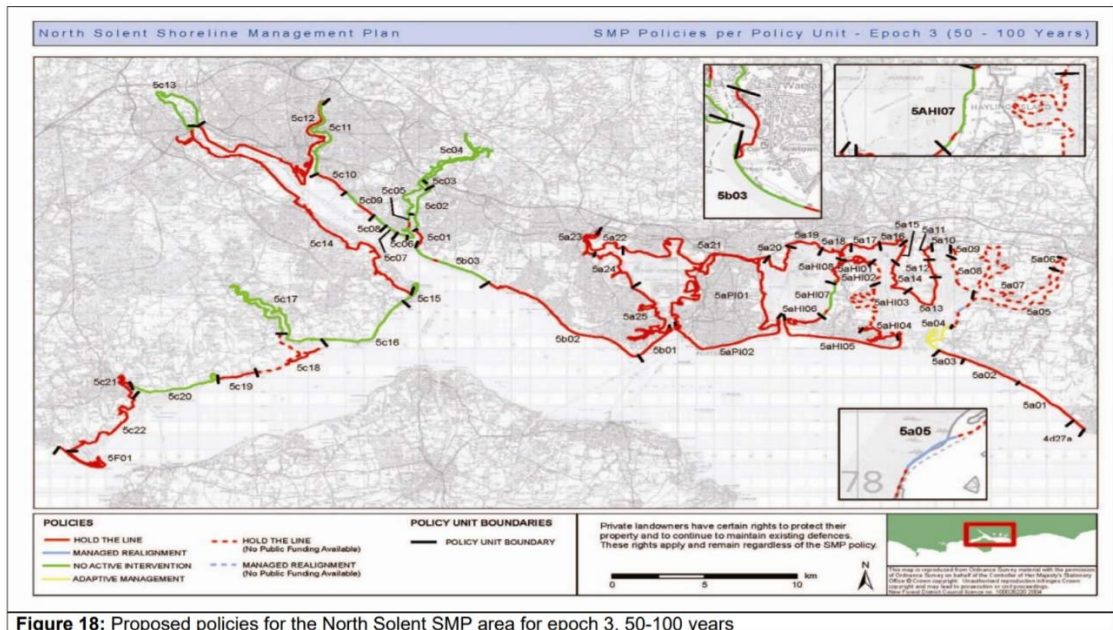


Figure 18: Proposed policies for the North Solent SMP area for epoch 3, 50-100 years

Source: North Solent Shoreline Management Plan Partnership (2010)

- 4.19 An action plan included in the North Solent Shoreline Management Plan outlines the measures that are likely to be required for implementing the recommendations over the 10 years following the Plan. Several of these measures are relevant to the Borough including the development of a flood and coastal erosion risk management (FCERM) strategy for Hayling Island; completing the Portchester to Emsworth coastal defence strategy; and the development of a flood and coastal erosion risk management strategy study for sea frontages between Portchester Castle to the River Hamble.
- 4.20 Actions that have been completed include the development of the Portchester to Emsworth FCERM strategy which features a 100 year life time cost of £113 million. The main policy of the strategy is to 'hold the line' in the same manner as the North Solent Shore Management Plan. Identified measures within the strategy include potential 'managed realignments' at locations along the mainland coast (e.g. Conigar and Southmoor) and works to repair revetments to protect Budds Farm wastewater treatment works in the long-term. Furthermore, the Council is undertaking feasibility work to appraise designs for new coastal management measures at Langstone as existing defences are in poor condition. A separate FCERM strategy has not been finalised for Hayling Island; however, plans are in action to develop the FCERM strategy specified as an action in the North Solent Shore Management Plan.

Constraints to Growth and Key Messages

- 4.21 Water, waste and flood defence infrastructure is fundamental to supporting new development which underpins economic development and housing provision. For example, without fresh water and waste water infrastructure new housing developments cannot be provided, which means that construction and supply chain jobs are not created. It is therefore important that this type of infrastructure is provided in a timely manner to support new development within Havant Borough to support economic growth.
- 4.22 The Borough's water supply is expected to be sufficient to support longer term development needs; however, wastewater infrastructure may require some upgrades to avoid future stormwater surges and the development of Havant Thicket reservoir is required to support the

water supply of the wider region. Waste disposal provision is also unlikely to constrain future development.

- 4.23 However, the Borough faces a number of challenges linked to flooding risks and management of its long coastline including tidal flooding, wave overtopping, and fluvial flooding. These have the potential to delay the delivery of sites and threaten existing urban areas of the Borough, which could have negative effects on the functioning of the local economy. Whilst measures needed to mitigate these potential impacts are costly, it is crucial that public funding continues to be secured and aligned to the timescales of the projects in the technical studies such as the North Solent Shoreline Management Plan and the emerging FCERM strategy for Hayling Island in order to minimise any delays for key development projects.

5.0 Energy

5.1 This section provides an overview of existing energy provision to, from and within Havant and the key issues and gaps associated with this strand of economic infrastructure. The findings are based upon a review of existing data sources and evidence as well as discussions with key energy providers (Appendix 1).

5.2 For the purposes of the study, energy infrastructure is defined as:

- generation and distribution of conventional electricity and gas; and
- renewable energy sources.

Existing Provision

Electricity

5.3 Scottish and Southern Electricity Networks (SSEN) is the distributor of electricity to homes within the Borough, delivering electricity via a 132,000 volt network of overhead and underground electricity cables that feed from the main higher-voltage electricity grid managed by National Grid.

5.4 In recent years to reduce risks resulting from extreme weather events and the effects of climate change, SSEN has invested in solutions for maintaining the network and responding to emergencies. These solutions include improved tools to identify line faults, more tree cutting, resilience funds for communities to adapt to the challenges of climate and new emergency response protocols.

5.5 The strategy of SSEN in the future is to transition to a low carbon energy system by reducing the carbon intensity of its generating units. This includes significant investments elsewhere in the UK that produce low carbon energy such as the Walney, Greater Gabbard and Beatrice offshore wind farms.

Gas

5.6 Southern Gas Networks (SGN) is the owner and the operator of major gas infrastructure in the Borough, feeding gas to local homes and businesses where needed. In terms of major gas infrastructure, there are two high-pressure gas pipelines that cross the Borough. The first runs from east to west just south of the A27 and crosses the A27/A3(M) slip roads. This pipeline then meets another high-pressure gas pipeline that runs from the northern part of the Borough to the east of the A3(M) and then crosses the road along Purbrook way, then travelling south to Portsdown Hill Road.

Renewable Energy

5.7 In 2019, the Government committed to bringing the UK's greenhouse gas emissions to net zero by 2050. This will require a different, more innovative approach to building design, the use of the private motor vehicle etc. HBC notes within its latest Infrastructure Delivery Plan that the Local Plan has a key role to play in this, for example by encouraging the take up and development of renewables and using design policies to encourage energy efficiency in buildings through for instance passive solar design and BREEAM assessments. In line with the NPPF and building regulations, policies may require electric car charging points. The IDP also notes that opportunity may be taken to consider the establishment of an Energy Service Company (ESCO) for the Southleigh Strategic Site.

- 5.8 The Solent LEP recently produced a Heat and Power Strategy to support the Solent region to become the UK’s leading gateway for innovative and sustainable heat and power solutions by 2050. It demonstrates that the generation of energy, including low carbon and energy efficiency, are significant economic opportunities in the Solent, with the area accommodating a significant level of natural resources for renewable energy and represented by sectors important to clean growth.
- 5.9 This is supplemented by HBC’s own Energy Strategy 2016-2020 which provides a strategic framework to deliver energy projects across Havant Borough over the 5 years. One of its key principles was to increase local energy generation by identifying and exploring low carbon energy generation opportunities across the Borough.
- 5.10 Nonetheless, the Borough faces some key challenges to renewable energy generation, including limited availability of land for land-hungry uses such as solar and on-shore wind farms, and with the Solent’s waterways proving too congested for offshore wind generation facilities. There could however be opportunities for Havant’s business base – particularly its advanced manufacturing and engineering expertise - to service other areas through the renewable energy supply chain, while also proactively embedding energy efficiency within its new developments and wider regeneration programme.

Constraints to Growth

- 5.11 SSEN have indicated that connections to new development sites can be provided, but there are often costs and a time lag involved in this process. Existing infrastructure is likely to be sufficient to support new development in the Borough, but where it is not, timescales to reinforce the infrastructure to take-up the demand generated by new development can create a time lag of up to two years. Overall, SSEN conclude that future provision for new developments in the Borough is not likely to present an issue, including in the outlying areas of Hayling Island.
- 5.12 SGN has identified that the level of proposed development over the Local Plan period would likely have a significant impact on existing gas infrastructure in the Borough and reinforcements to the network may be required to cope with increased demand. Regional upgrades may also be required to the gas network to meet need generated by the level of proposed new development. If changes are required to the existing gas network, this could create time lag for development to come forward.
- 5.13 The high-pressure gas pipelines that run through the Borough have a Building Proximity distance either side of each pipeline. This distance can vary depending on the diameter, material, wall thickness and pressure of each particular pipeline and any encroachment within this distance requires a risk assessment. The Building Proximity distance could lead to site layouts needing to be planned around the pipelines, potentially changing the character and design of developments beyond original specifications.

Key Messages

- 5.14 The electricity network in the Borough is unlikely to be affected by future development anticipated to come forward over the Local Plan period. However, issues could arise in relation to the gas network in the Borough, with the potential need for reinforcements to the network to cope with increased demand created by new development. Building Proximity distances associated with the two high-pressure gas pipelines that run through the Borough also pose an additional constraint for development sites in close proximity.

6.0 Transport

6.1 This section provides an overview of existing transport provision in Havant and the key issues and gaps associated with this strand of economic infrastructure. The findings are based upon a review of existing data sources and evidence, as well as discussions with a number of stakeholders and operators currently active in Havant and the wider Solent LEP area.

6.2 For the purposes of the study, transport infrastructure is defined as:

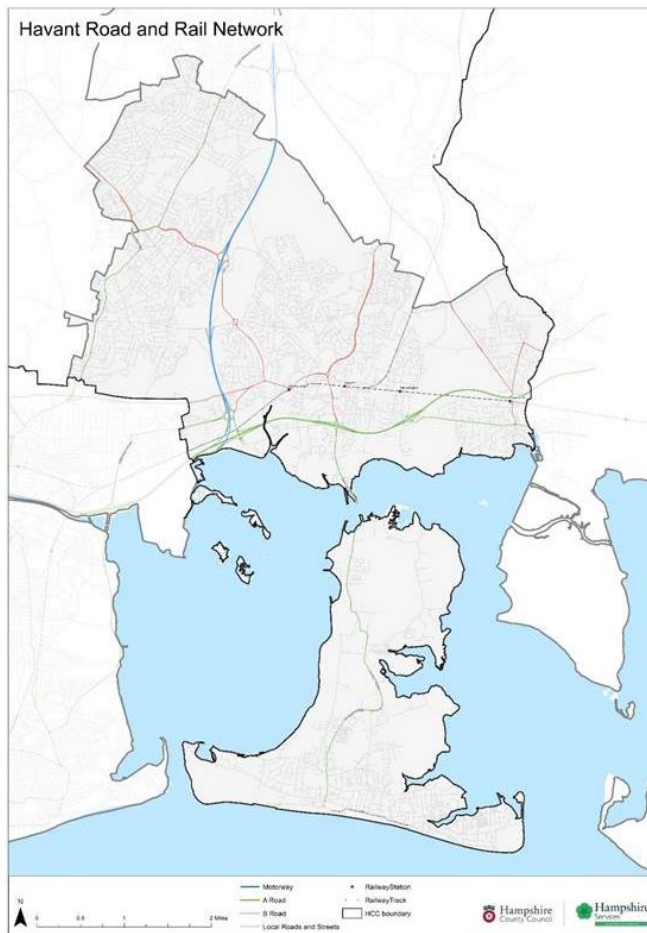
- Roads, including bus, cycle and pedestrian priorities and the public realm;
- Port facilities for trade and passenger/goods ferries;
- Rail infrastructure and services, including disused rail alignments; and
- Ticketing infrastructure and technology.

Existing Provision

Road Network

6.3 The Borough of Havant has very good connections to the National Strategic Route Network and routes of sub-regional importance, as shown in Figure 6.1. The main roads that cross Havant Borough are the A3(M) and A27, both of which are managed by Highways England.

Figure 6.1 Havant Road and Rail Network



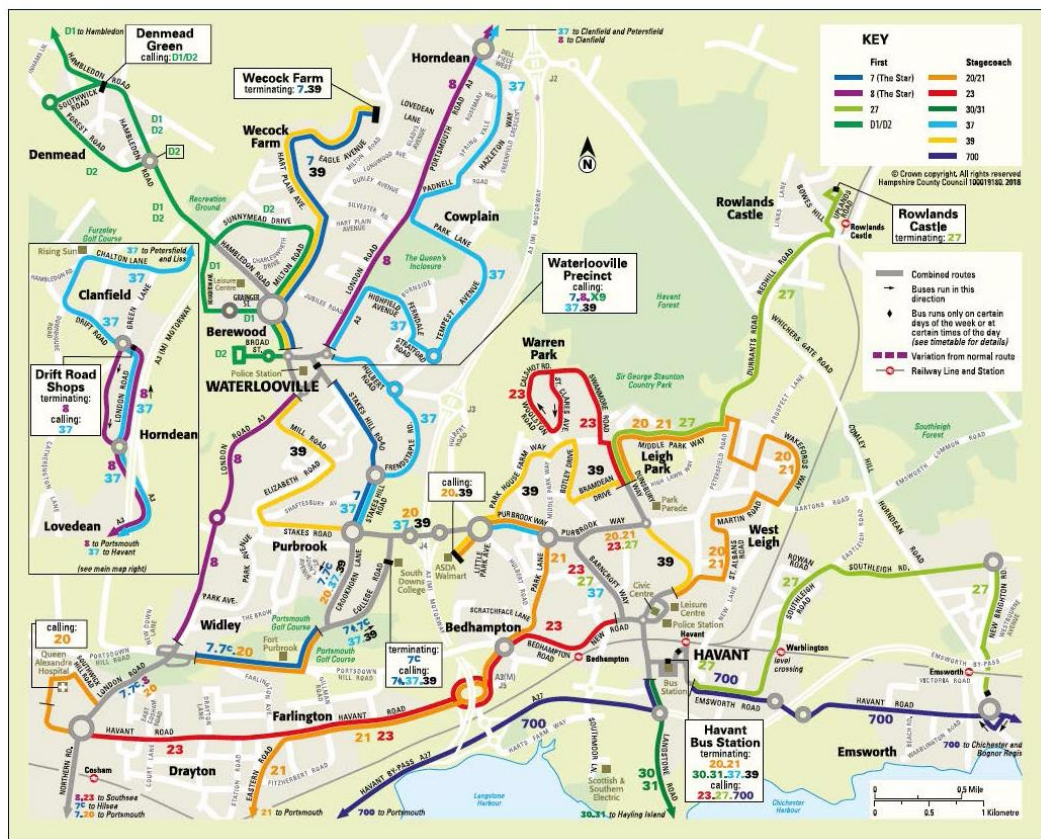
Source: Havant Borough Council (2019)

- 6.4 There are multiple junctions that connect onto these roads within the Borough boundary including the Rusty Cutter roundabout and the Hubert Road roundabout. These allow traffic to pass onto the non-strategic – but still significant – roads such as Park Road South and Hubert Road that lead to the town centres of Havant and Waterlooville.
- 6.5 From the southern side of the junction where the A27 meets Park Road South, traffic can head south along Langstone Road to the Langstone Bridge, which is the only bridge crossing between Hayling Island and the mainland. Langstone Road continues south along the length of the island to the main settlements of South Hayling and Eastoke.

Bus Services

- 6.6 Bus services in Havant are operated by Stagecoach and First Group plc, with Hampshire County Council also providing two tendered services²⁵. The Borough has an excellent bus network with links to other local urban centres including Portsmouth, Petersfield and Rowlands Castle.

Figure 6.2 Bus routes in the Havant area



Source: Hampshire County Council (<http://documents.hants.gov.uk/passenger-transport/HavantTravelGuide.pdf>)

- 6.7 Services run throughout the Borough with Havant Bus Station acting as a major terminus and connecting facility between services. Most on the local network have wifi and next stop announcement signage and other incentives to use buses are also being introduced such as phone charging, contactless payment at point of delivery and pre-paid tickets via a mobile phone application.

²⁵ HBC (2020); Infrastructure Delivery Plan

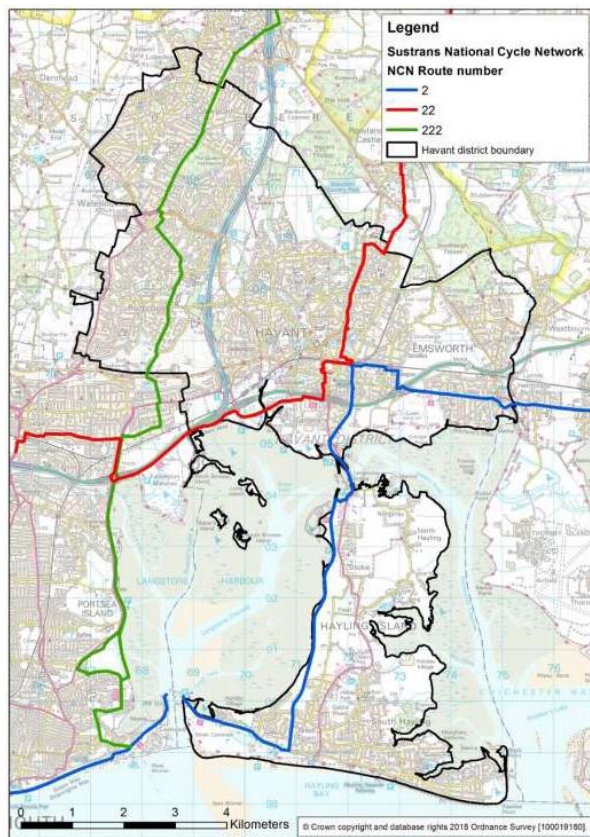
Rail Services

- 6.8 Havant Borough is served by four rail stations (Bedhampton, Emsworth, Havant and Warblington) all of which are situated on the West Coastway Line. Havant station is the busiest, with around 2.3 million exits and entries during 2018/19²⁶. The station is served by several rail companies (South Western Railway, Southern and Great Western Railway), with trains travelling to destinations that include London Waterloo, London Victoria, Brighton, Portsmouth, Southampton and Gatwick Airport. The fastest travel time from Havant to London Waterloo and London Victoria is 85 minutes and 100 minutes respectively as at June 2020²⁷. The other stations offer a more limited train service comprised primarily of stopping services.
- 6.9 Waterlooville, the largest urban area in the Borough, is not served by a railway line and the Hayling Island Branchline was closed in 1963, leaving some areas of the Borough to rely on different forms of public and private transport.

Walking and Cycling

- 6.10 The public rights of way (PROW) network in the Borough features 242 routes and is around 61km in length. Some of the paths and rights of way in the area are designated as ‘Long Distance Paths’ (e.g. Solent Way) that connect the Borough and its assets (e.g. coastline) with other parts of the county. The Borough also has a number of dedicated cycling routes with access to two long-distance cycle routes; Sustrans National Cycle Network (NCN) routes 2 and 22 (Figure 6.3). Many of the Borough’s on-road cycling lanes do not meet Highways England standards.

Figure 6.3 Sustrans National Cycle Network in the Havant area



Source: Havant Borough Council 2019

²⁶ Office for Road and Rail (ORR), (2020); Estimates of Station Usage 2018-2019 (revised June 2020)

²⁷ <https://www.nationalrail.co.uk/>, accessed June 2020

- 6.11 HBC is currently working with Hampshire County Council and Sustrans to produce a Local Cycling and Walking Infrastructure Plan (LCWIP) for Havant Borough which will replace the Borough’s existing cycle strategy and walking strategy. This work will help to identify infrastructure requirements relating to new development that can be implemented as funding becomes available.
- 6.12 A draft of the LCWIP was produced to support the County Council’s bid to the Department for Transport for funding from the Transforming Cities Fund (TCF) and is due for public consultation shortly. The LCWIP will identify a network of primary and secondary cycle routes connecting main destinations and places of interest such as schools, stations, employment centres and shopping areas.

Ferry Services

- 6.13 The Hayling Ferry service operates from Ferry Point on Hayling Island to Eastney Point on Portsea Island. The ferry is run by Baker Trayte Marine with Summer and Winter Timetables.

Figure 6.4 Hayling Island Ferry and Location



Source: Havant Borough Council 2019 / Baker Trayte Marine

- 6.14 The ferry is licensed to carry 64 passengers with no capacity to carry vehicles (e.g. cars and motorbikes). Passenger numbers collected from the ferry operator indicate that during the summer months, the ferry is well used.

Constraints to Growth

Road Network

- 6.15 The Local Transport Assessment undertaken for the mainland area of Havant identifies that the level of growth and development set out in the emerging Local Plan can be accommodated without severe traffic impacts if a range of mitigation measures are implemented to enable this growth²⁸. The mitigation measures are estimated to have a cost of around £25 million in total and include projects such as adding a ‘Jet Lane’ on the Bedhampton Hill southbound approach and introducing a new lane at Park Road South and Elm Lane to enable left turn manoeuvres between Park Road North to Elm Lane.
- 6.16 A separate Local Transport Assessment has also been undertaken for Hayling Island, which found that growth planned for the Island could also mitigate severe traffic impacts if a set of measures were constructed²⁹. The mitigation measures for Hayling Island are estimated to cost

²⁸ HBC, (2019); Local Transport Assessment - Mainland

²⁹ HBC, (2019); Hayling Island Transport Assessment

£26.3 million and include projects such as significantly investing in the Stoke bypass and southern link to Manor Road.

- 6.17 The Local Transport Assessments do not test the local transport impacts of individual development sites; these would need to be considered within transport assessments for each individual planning application/proposal.

Bus Services

- 6.18 The Bus Rapid Transit (BRT) is seen as one of the key interventions which would help provide an alternative to car use across South East Hampshire and improve links between Havant, Portsmouth, Southsea and Queen Alexandra Hospital. A package of works has been identified to deliver the BRT including highway modifications, signalling improvements and interchange improvements. Of particular note are modifications to the Rusty Cutter roundabout, which currently lowers bus service efficiency. £4 million of funding was recently awarded by the Department for Transport (DfT) to Hampshire County Council and Portsmouth City Council towards developing the BRT³⁰.
- 6.19 Schemes have also been identified by Hampshire County Council that are focused at a more local level³¹ and include measures such as the provision of real time information on board and at bus stop facilities in Havant town centre and easy access curbs on bus route 30/31. Funding has not yet been identified for these measures.

Rail Services

- 6.20 Some improvements to passenger facilities, including interchanges with other transport modes have been identified as potential areas of intervention; however, it is expected that these could be delivered using transport contributions negotiated in association with residential developments.
- 6.21 Network Rail is funded by the DfT in five-year blocks, called Control Periods. Control Period 6 (CP6) runs from 2019 to 2024, and no major schemes in the Havant area are identified in the documentation. Furthermore, none of the train companies have indicated that the development arising from the emerging Havant Borough Local Plan would require rail infrastructure enhancements.
- 6.22 Notwithstanding this overall position, the Havant Infrastructure Delivery Plan notes that while the railway lines through the Borough and the stations provide good alternative sustainable travel to other locations, they also give rise to issues of severance of communities and pinch points for other modes of transport.

Walking and Cycling

- 6.23 General improvements to walking and cycling infrastructure are planned across the Borough such as upgrading the footpaths along New Brighton Road in Emsworth for shared-use and a new link between Emsworth Station subway and Washington Road. Larger potential projects include the replacement of a footbridge over the railway between Havant Town Centre and Leigh Road near to Havant Station (estimated cost of £3.5 million) and a footbridge at the Warblington level crossing which is closed for around 30 minutes every hour. A new cycle track is also planned to run along the Langstone Road so that cyclists from Hayling Island on National Cycle Route 2 can avoid crossing Langstone Road.

³⁰ <https://www.hants.gov.uk/transport/strategies/fundingbids>

³¹ Hampshire County Council, (2012); Havant Borough Transport Statement

- 6.24 The Hayling Billy Trail Coastal Path is not currently suitable as an all-weather route for cyclists. Measures such as new surfacing and lighting could be introduced to turn it from being a purely recreational route. Although the path is at risk from ongoing coastal erosion and subject to a 'no active intervention' policy in the North Solent Shoreline Management Plan, that policy is under review in the FCERM for Hayling Island. Opportunities for a multifunctional active travel and a defended route will be considered, potentially diverting some of the trail inland.

Key Messages

- 6.25 The review of baseline transport infrastructure provision and key constraints to growth in the Borough indicates that existing rail and ferry infrastructure is generally adequate. Potential constraints to growth are primarily linked to the provision of road, bus and walking and cycling infrastructure.
- 6.26 There is clearly scope for investing in new road infrastructure considering the £51.3 million of expenditure identified for new infrastructure on the mainland and Hayling Island in the two Local Transport Assessments. Investing in this infrastructure would mitigate adverse impacts associated with the growth ambitions of the Local Plan, thereby enhancing the overall prosperity and productivity of the local area and its economy.
- 6.27 Investment in road infrastructure would also be beneficial in helping to improve the efficiency of the local bus network. The bus network plays an important role in transporting people around the Borough and reducing journey times would be beneficial to all passengers.
- 6.28 At a strategic level, progress is being made on bringing forward the BRT, which will improve public transport access between Havant and the rest of the Solent and has the potential to induce positive economic impacts such as agglomeration economies. The £4 million recently secured by Hampshire County Council and Portsmouth City Council will help fund the development of the scheme; however, it appears in the context of the size of the project that the value of funding needed to deliver the full BRT network is significantly higher.
- 6.29 There are also opportunities to improve walking and cycling infrastructure in the Borough. Improvements in this infrastructure can be beneficial as encouraging people to walk and cycle rather than using a motorised form of transport could lead to decreased greenhouse gas emissions and improve the fitness of residents, inducing improved health and potential cost savings to NHS facilities in the Solent (e.g. Queen Alexandra Hospital). It could also lead to tourists coming to the Borough via the National Cycle Routes, generating additional expenditure in town centres and key destinations (e.g. Hayling Island).
- 6.30 The outbreak of Covid-19 in 2020 has had a significant impact upon travel patterns as businesses and residents have responded to government guidance and the various phases of lockdown. Short term impacts include an accelerated shift to more online shopping, a significant take-up of home working amongst sectors of the economy where this is feasible, and a reduction in public transport use. Whilst some of these trends are likely to reverse once the economy is able to return to some degree of normality, others will become embedded within the 'new normal'. This is likely to place increasing importance on more sustainable, localised forms of transport including walking and cycling and associated infrastructure (such as segregated surfaces/carriageways) to enable this to happen safely and effectively.

7.0 Telecommunications

7.1 This section provides an overview of existing telecommunications provision within Havant and the key issues and gaps associated with this strand of economic infrastructure. The findings are based upon a review of existing data sources and evidence, as well as discussions with a number of stakeholders and operators currently active in Havant and the wider Solent area.

7.2 For the purposes of the study, telecommunications infrastructure is defined as:

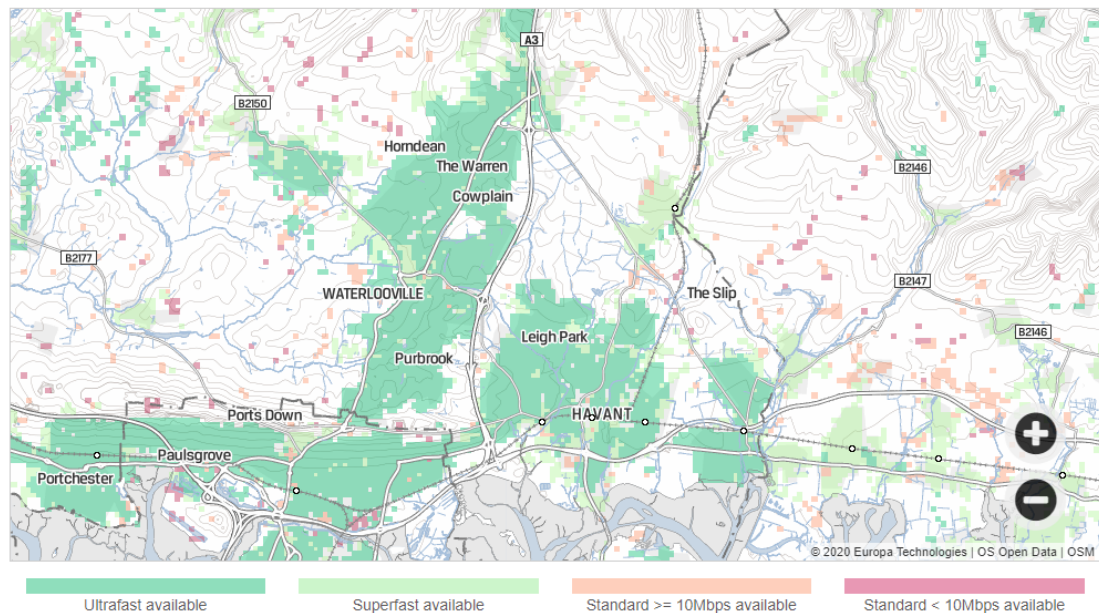
- Broadband;
- Telephone;
- Mobile; and
- Radio.

Existing Provision

7.3 BT Openreach and Virgin Media provide the physical broadband infrastructure (i.e. fibres, wires and cables) in Havant. The Borough is one of the best served areas in the country in terms of high-quality broadband; as shown in Figures 7.1 and 7.2, almost all of the Borough has access to ultrafast broadband, which is defined as broadband with a speed of between 362Mbps and 1,000Mbps³².

7.4 A small number of areas within the Borough do not have access to ultrafast broadband, and these tend to be focused around Langstone Technology Park, just south of the A27 and the northern half of Hayling Island. The speed of broadband available in these areas is typically superfast (35Mbps to 213Mbps), with some patches limited to standard broadband (10Mbps to 11Mbps).

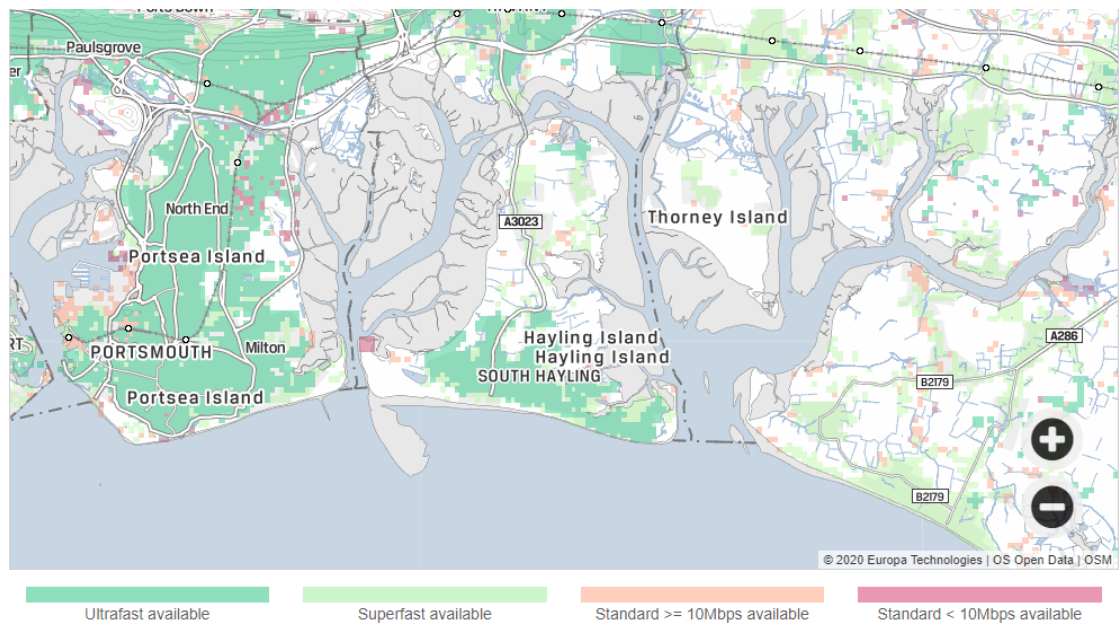
Figure 7.1 Broadband Availability - Havant Borough North



Source: Ofcom (2020)

³² <https://www.cable.co.uk/broadband/guides/ultrafast-broadband/>

Figure 7.2 Broadband Availability - Havant Borough South



Source: Ofcom (2020)

7.5

Unlike physical broadband, the coverage of mobile broadband across the Borough is less consistent. Figures 7.3 to 7.6 illustrate the quality of 4G provided by the four main mobile telecoms networks in the UK; Vodafone; O2; EE; and Three. 4G coverage on the Vodafone and O2 networks across the Borough is better than EE and Three. Good to very good rated coverage is available across most of Havant on both networks, with some smaller patches of lower quality coverage on the northern half of Hayling Island. Areas of lower quality coverage are typically land used for agriculture or small settlements (such as North Hayling and Northney).

Figure 7.3 Vodafone 4G Indoor Coverage



Source: Ofcom (2020)

Figure 7.4 O2 4G Indoor Coverage

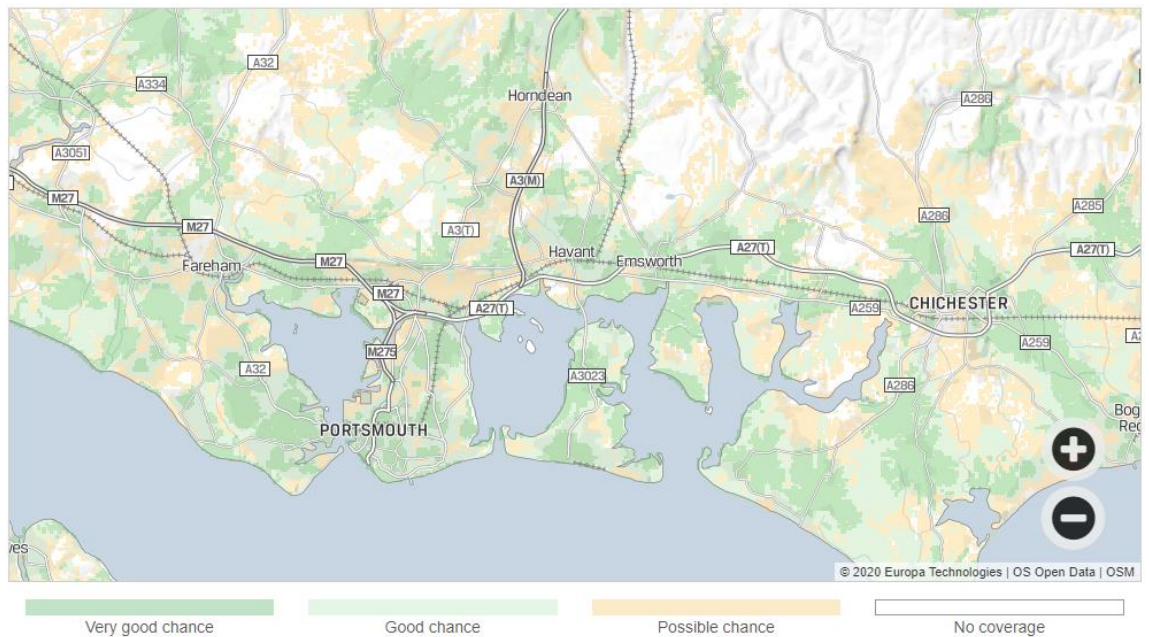


Source: Ofcom (2020)

7.6

The quality of 4G coverage across the Borough on the EE network is variable. For example, some non-urban areas have better coverage (e.g. the northern part of Hayling Island) than offered by Vodafone and O2, but large parts of Havant town and Waterlooville have poorer coverage. This pattern is also true of the wider Solent with a significant portion of Cosham having poorer quality coverage for instance.

Figure 7.5 EE 4G Indoor Coverage



Source: Ofcom (2020)

- 7.7 4G coverage across the Borough appears to be worst on the Three network compared to Vodafone, O2 and EE. Figure 7.6 indicates that over half of Hayling Island only has a chance of accessing 4G internet from indoors. This also applies to the suburban areas of Havant, around Langstone Technology Park south of the A27 and across much of Waterlooville.

Figure 7.6 Three 4G Indoor Coverage



Source: Ofcom (2020)

Constraints to Growth

- 7.8 Access to competitive broadband and mobile services has become an expectation for businesses and residents in the UK. It is increasingly essential for the day-to-day operations of most businesses, particularly those in the ‘knowledge economy’, as businesses increasingly host their operations on ‘the cloud’ and exchange ever increasing volumes of data with customers and suppliers. In particular online retail has seen remarkable growth in recent years. Because it plays an important role in supporting economic growth, it is identified as a key priority within the Solent 2050 Economic Strategy.
- 7.9 Whilst telecommunications connectivity does support economic growth it is often viewed as an enabler of growth rather than directly generating it. For example, people now take into account broadband accessibility in their decision making when purchasing homes; vibrant and desirable places to live therefore need to have competitive broadband connectivity. Without this connectivity then the labour market will ultimately suffer as people choose to locate in other areas.
- 7.10 The above evidence suggests that broadband provision is very good in Havant and most businesses already have the option to access ultrafast broadband. There are however some remaining pockets of the Borough that are home to significant employers, such as the area around Langstone Technology Park, where scope exists to further enhance broadband connectivity.
- 7.11 Mobile connectivity by comparison is more variable across the Borough, depending upon the 4G provider. Coverage is generally better across the Vodafone and O2 networks than EE or Three, although in all cases 4G connectivity is better and more reliable within the more urban areas of

the Borough. Research by Ofcom has shown that in recent years, more people rely on a mobile phone than rely on a landline; and that people on lower incomes are even more likely to live in a mobile-only household, or to access the internet using a mobile connection. This underlines the importance of access to competitive mobile internet connectivity if the Borough's resident base is to realise the benefits of economic growth and prosperity over the coming years.

- 7.12 Rollout of next generation 5G digital infrastructure has not yet begun within the Borough, but offers the opportunity to further enhance the area's digital connectivity with 5G delivering bandwidth of up to 1,000Mbps. The introduction of 5G elsewhere in the Solent is currently underway at Portsmouth and Southampton, providing faster networks, increased reliability and reduced reliance on physical infrastructure. An underpinning ambition of Solent 2050 is to roll out 5G and gigabit fibre across all parts of the Solent by 2030 to achieve world class digital connectivity for all communities.

Key Messages

- 7.13 Overall, Havant has good telecoms infrastructure albeit with some opportunities for improvements to be made by increasing access to ultrafast broadband within Langstone Technology Park and the northern area of Hayling Island; and improving 4G coverage on the EE and Three mobile networks. The Borough would also benefit from the rollout of 5G infrastructure in due course to enable Havant to remain competitive with other areas and to cater to businesses and residents who need and/or could benefit positively from the technology.

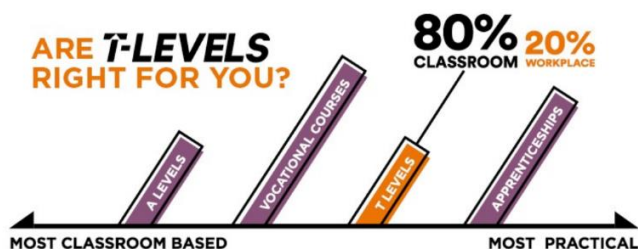
8.0 Human Capital and Skills

- 8.1 This section provides an overview of existing skills and human capital provision in Havant and the key issues and gaps associated with this strand of economic infrastructure. The findings are based upon a review of existing data sources and evidence and through discussions with the Borough's main provider of further education; Havant and South Downs College.
- 8.2 For the purposes of the study, skills infrastructure is defined as:
- Further education facilities;
 - Higher education (i.e. NVQ Level 4 and above) facilities.
- 8.3 Primary and secondary education provision falls within the statutory role of Hampshire County Council as local education authority and therefore does not directly fall within the remit of this study. Nevertheless, schools and pre-school provision and performance does influence further and higher education outcomes and the high level of Havant Borough residents with no formal qualifications (noted in Chapter 2.0) is an indicator of a significant issue for increasing productivity in the Borough. Whilst outside the scope of this study, a collaborative process between all relevant organisations to address this major shortcoming will need to be developed if the ambitions for productivity transformation across the Solent and Havant are to be realised.

Existing Provision

- 8.4 Havant and South Downs College (HSDC) is the major provider of further education in the Borough. The College was founded in 2017 when Havant Sixth Form College and South Downs College merged together, and they subsequently merged with Alton College in 2019. Courses are now run from three campuses located at Havant town, Widley and Alton. The Havant town and Widley campuses are situated within the Borough boundary, with the Alton campus located within East Hampshire District. The College is rated by Ofsted as 'outstanding' in providing adult learning programmes and 'good' in all other categories. HSDC serves a relatively large catchment area, with just under 60% of students living outside the Borough of Havant.
- 8.5 The campus in Widley is the largest of the three and offers the widest range of courses including: A-level apprenticeships; diplomas and higher national diplomas; GCSEs; foundation degrees; undergraduate degrees in several subjects; and access courses. The Havant town campus is smaller and focuses on a smaller range of courses including A-levels, diplomas and some distance learning qualifications.
- 8.6 HSDC was chosen as the only College in Hampshire to deliver the first three T Levels from September 2020; Construction, Digital and Education and Childcare. T-Levels are a new type of qualification which follows GCSEs and are equivalent to three A-levels. Courses are two years long and are developed in collaboration with employers and businesses to align the content with the needs of industry and prepare students for work. Notably, the two-year courses include approximately 45 days of 'on-the-job' experience through an industrial placement. Students that complete the course are then able to go onto either skilled employment, further study (e.g. undergraduate degrees or higher-level apprenticeships). Figure 8.1 illustrates where T-Levels sit within the existing spectrum of further education courses.

Figure 8.1 T-Levels



Source: Havant and South Downs College (2020)

- 8.7 HSDC partners with a range of organisations, institutions and universities including the Chartered Institute of Purchasing and Supply, University of Arts London, University of Portsmouth and University of Chichester to deliver higher education qualifications. The courses offered cover a wide range of subjects including engineering, procurement and cyber security. Specialities among the range of subjects include arts courses, business and different phases of childcare and education. Undergraduate degrees are available in Adult Social Care, Early Childhood and Early Years through a partnership the College has with the University of Chichester.
- 8.8 The College has recently completed the renovation of a portion of its South Downs Campus for the introduction of the new T Levels provision in Autumn 2020, and is due to receive £1.3 million government funding to support delivery of the College’s three-year estate improvement strategy across all three campuses.
- 8.9 The emerging Havant Borough Local Plan identifies that the Borough has an education and skills ‘gap’ which could limit the prospects and prosperity of Borough residents. This is evidenced earlier in this report (see Chapter 2.0) which shows that a higher than average proportion of working-age residents in Havant hold no qualifications, and by latest government data which shows that nine of the ten schools and colleges in the Borough at the end of key stage 4 in 2019 underperformed in terms of progress students made between key stages 2 and 4.³³

Constraints to Growth and Key Messages

- 8.10 As identified in Section 2.0, Havant residents have similar levels of higher education qualifications as the Solent LEP-wide area, but a high proportion have no qualifications at all. This represents the overriding constraint to future growth from a skills perspective, and suggests that there is significant potential for upskilling local people to participate in the labour market and access higher value employment opportunities as the economy continues to evolve in the coming years. This includes a growing focus on digital skills; in the wake of Covid-19 as online learning becomes embedded over the longer term, it becomes increasingly important that learners of all ages have the means to access skills provision (and eventual labour market opportunities) in terms of both infrastructure and competency. A concerted collaboration between all relevant organisations will be needed to start the transformation that can unleash this significant potential.
- 8.11 HSDC offers a wide range of courses, is highly rated and represents an important skills infrastructure asset for the Borough and its residents. The College provides a number of higher, degree level qualifications and local residents also have access to three universities within the wider Solent area (i.e. University of Portsmouth, University of Southampton and Solent University) whilst the University of Chichester is located approximately ten miles away.

³³ <https://www.compare-school-performance.service.gov.uk/schools-by-type?step=default&table=schools&parliamentary=Havant&geographic=parliamentary&For=secondary&dataSetFilter=final>

8.12 The Solent LEP has a role to play in realising the potential productivity of Havant's human capital. As a business focused organisation the LEP aims to develop a world class talent base, both as a key element of the Solent 2050 Economic Strategy and the more immediate Solent Economic Recovery Plan in response to Covid-19. Solent LEP hosts the Solent Growth Hub, which amongst many functions supports school children in developing career choices through networking, mentoring, being role models and mock interviews; skills that some in Havant will lack from current life experiences. Opportunities for piloting innovative schemes to enhance productivity could prove to be a key part of the transformation of Havant's workforce.

9.0 **Planned Investments and Gap Analysis**

- 9.1 This section reviews future growth objectives and planned developments in Havant Borough, and then considers committed infrastructure investments. In this context, the main gaps in provision that could act as constraints to future growth are identified to help inform the identification and prioritisation of projects in section 10.0.

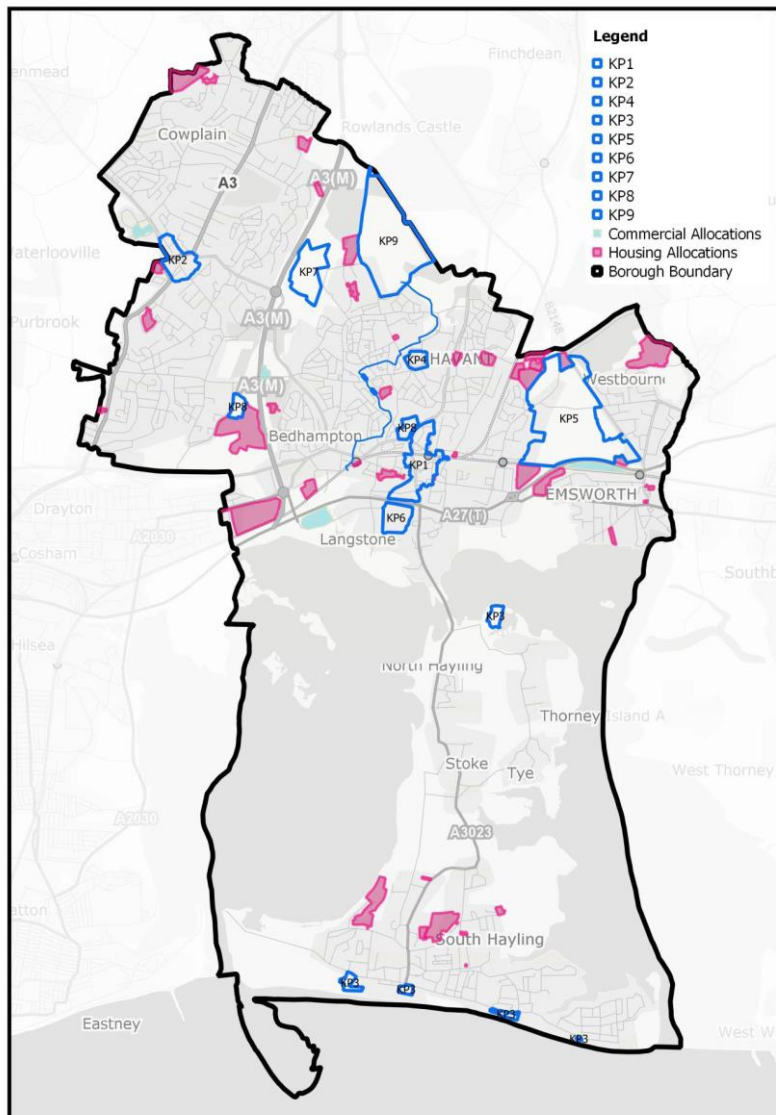
Havant Growth Objectives

- 9.2 The Solent LEP seeks to create a step-change in economic growth and productivity levels across the Solent area, and through the Solent 2050 Economic Strategy, sets out a long-term action plan to put the region on the path to realise its potential as a world-renowned economic cluster by 2050.
- 9.3 The Strategy represents a call to action for all parts of the Solent to play their part in addressing the productivity underperformance of the area's economy by raising performance to above the UK average and closing the productivity gap with the wider South East. Specifically, it seeks to secure a renaissance of the Solent's coastal communities – including the Borough of Havant - so that they are better positioned to confront the challenges of tomorrow and promote inclusive growth; pioneering the next generation of coastal-urban living by adopting innovative practices and smart technologies in terms of improved transport and digital connectivity, and coastal living.
- 9.4 As noted in Section 3.0, the Council's spatial vision and objectives are set out in the emerging Havant Borough Local Plan. This includes provision for 10,773 new homes and 149,940 sq.m of new commercial floorspace by 2037, supported in part by a series of key development sites ('Key Projects') across the Borough.
- 9.5 The emerging Local Plan is complemented by a recently adopted Regeneration Strategy which identifies 8 key opportunities and projects for regeneration and development in the Borough with the aim of helping to create 14,120 new jobs, thereby bringing the Borough's average job density up to that of the South East region.

Development Opportunities

- 9.6 Through the emerging Local Plan and Regeneration Strategy, HBC identify a range of housing and commercial/employment sites that offer potential to accommodate business and economic growth over the coming years. Specific commercial and housing allocations are supported by a number of Key Project areas that together represent key locations for growth and development across the Borough, summarised in Figure 9.1 overleaf.
- 9.7 These development opportunities provide a baseline to frame subsequent analysis of economic infrastructure investments that are required to support and stimulate sustainable economic growth in the Borough over the short, medium and longer term.
- 9.8 This shows that new development opportunities are dispersed across the Borough but with a particular focus upon the mainland, in and around Havant town, to the east of the Borough at Emsworth/Southleigh and along the A3(M) corridor.

Figure 9.1 Key Development Sites and Opportunities



Source: Havant Borough Council (Pre-Submission Havant Borough Local Plan, 2019)

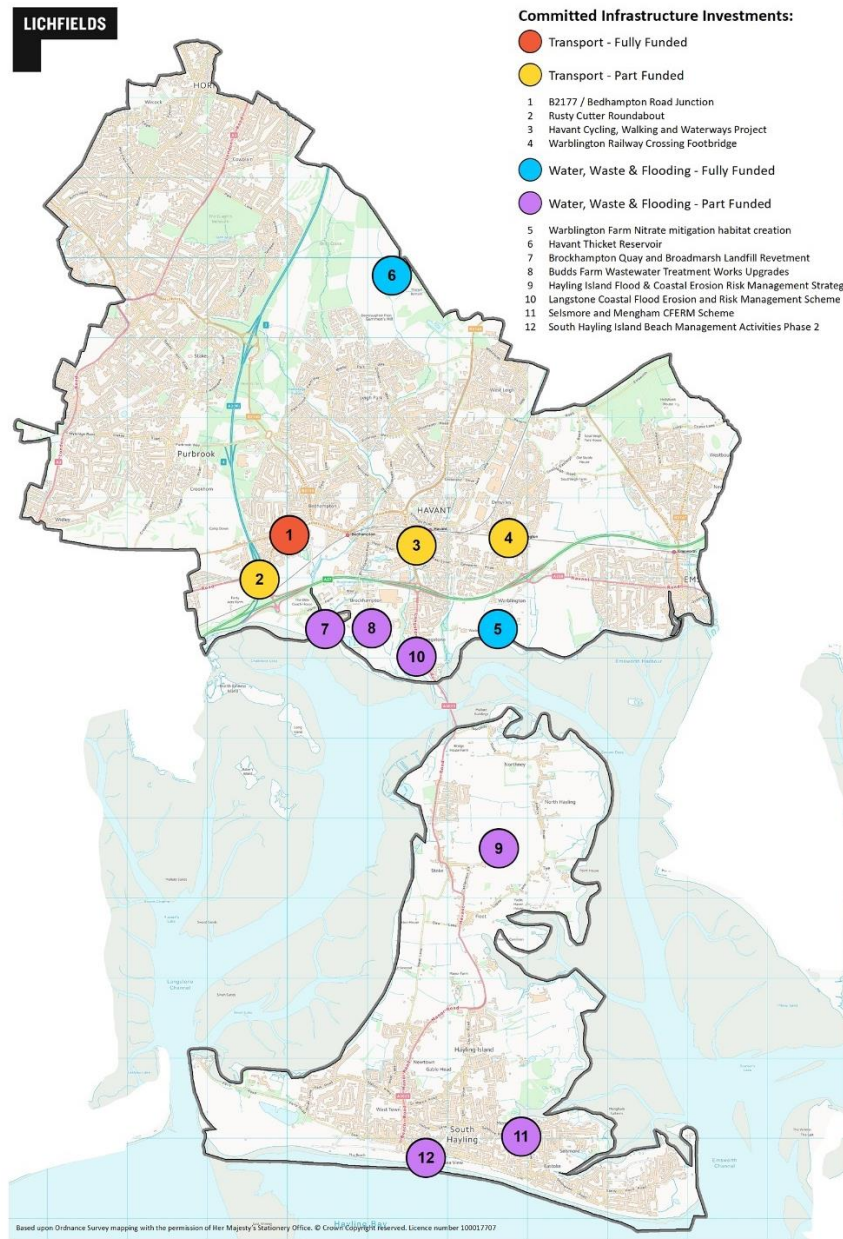
- 9.9 The emerging Local Plan encourages a renewed focus on high density housing in town centres, making use of easily accessible services and public transport. As a result, it is proposed that Havant and Waterlooville Town Centres (KP1 and KP2) undergo significant change and development with a focus on new residential development.
- 9.10 Alongside the town centres, Hayling Island Seafront is also in need of regeneration and the Council is seeking to use its own landholdings and work with other landowners to achieve the co-ordinated regeneration of Hayling Island seafront (KP3). This will help the seafront to adapt to the needs and demands of the local community and the visitor economy in the 21st century.
- 9.11 Dunsbury Park has proved to be a successful location for businesses in the Solent area and the site has planning permission for a new business park, including substantial new employment floorspace and other supporting uses including a hotel. Through the new Local Plan HBC will continue to work with Portsmouth City Council, the site’s landowner, to market the site and bring forward the development already planned. Further employment development to build on the success of the Dunsbury Park (KP7) will also be explored.

- 9.12 Recognising the Borough's education and skills gap which limits prosperity for residents, KP8 seeks to support the development of education and skills opportunities offered by Havant and South Downs College and further integrating the college into the local community through the continued development of the two campuses.
- 9.13 Adjoining the Borough boundary at Waterlooville town centre, 3,000 new homes are currently under construction (with around 1,000 having been completed to date) together with community uses, employment and associated supporting infrastructure. This is known as the West of Waterlooville Major Development Area (MDA). Whilst a small part of the MDA is within Havant Borough the majority lies within Winchester City District. The MDA is a planned new community with much of its own infrastructure; however, the proximity of the MDA to Waterlooville town centre has a significant impact on the town's infrastructure, particularly its transport network whilst its physical integration with the town centre remains a challenge as identified in Policy KP2 of the emerging Local Plan.
- 9.14 Havant lies at the eastern boundary of both Hampshire County and the Solent LEP administrative areas. Significant new housing development is underway and being planned just across the boundary in Chichester District in West Sussex and the Coast to Capital LEP area. That new development will generate traffic and other infrastructure demands on Havant, Hampshire and the Solent LEP area. Collaboration with the authorities to the east of the Borough will need to be increased to provide a comprehensive picture of future infrastructure needs which go beyond the duty to cooperate requirements of the Local Plan. This is likely to be an additional area of future work.

Committed Infrastructure Investments

- 9.15 Through the research undertaken as part of the IIP, it has been possible to identify a number of infrastructure investments that are already planned to take place within the Borough by both the public and private sector. At the time of analysis, these investments have secured and/or been awarded funding either in full or part, and are therefore associated with some level of certainty of delivery over the next few years. Figure 9.2 presents an overview of these committed infrastructure investments by location, theme and status.

Figure 9.2 Committed Infrastructure Investments



Source: Lichfields, drawing on various sources

- 9.16 The committed investments relate to the infrastructure themes of transport and water, waste and flooding; comparatively limited investment is currently committed to overcome challenges associated with energy, telecommunications and human capital/skills beyond ongoing upgrades and maintenance works carried out from time to time by infrastructure providers such as Portsmouth Water, SSEN/SSE and HSDC.
- 9.17 Meanwhile, our research has identified a range of site specific infrastructure issues and barriers that would need to be overcome in order to unlock development sites across the Borough over the coming years, such as coastal flood management and road servicing schemes. Some of these site specific barriers are explored in further detail in the following section.

- 9.18 From a geographical perspective, most of the committed infrastructure investment is concentrated to the south of Havant town and Hayling Island which aligns with a significant proportion but not all of the potential development opportunities (as shown on Figure 9.1).

Gaps in Infrastructure Provision

- 9.19 Analysis undertaken as part of this study points to a mixed picture in terms of economic infrastructure provision and capacity to, from and within the Borough, based on a review of existing data sources and evidence, as well as discussions with a number of stakeholders and operators currently active in Havant Borough and the wider Solent area.
- 9.20 In overall terms, the review shows that each type of economic infrastructure considered by the IIP tends to be reasonably well catered for, with no evidence of particular ‘showstoppers’ that threaten to hold the Borough back from achieving sustainable economic growth over the short, medium and longer term horizon. It does however underline some wider structural issues such as local skills performance/attainment and the unique environmental challenges associated with Havant’s coastal characteristics, which pose significant threats to stifling the longer term economic prosperity.
- 9.21 The latest ‘business as usual’ economic forecasts for the Solent LEP area identify a strong potential and basis for economic growth in the Borough over the next 16 years and have significant implications for infrastructure requirements to, from and within the Borough, with a growing business and employment base increasing the demand for all types of economic infrastructure to support the day-to-day functioning of Havant’s economy. An even more ambitious Regeneration Strategy being developed by HBC could further add to this pressure if the planned scale of growth and development is achieved.
- 9.22 The Government’s Industrial Strategy provides an important backdrop to the development of an IIP for Havant Borough, in particular its identification of a number of key challenges to driving economic growth across the whole country. Key to this is improving competitiveness and productivity; recent evidence suggests that productivity in the Solent lags behind the South East and national average, and whilst Havant performs relatively well within a Solent context, economic output still falls behind the regional average and some sectors locally continue to be characterised by low workforce productivity. In response to this, the LEP is seeking to create a step-change in economic growth and wealth creation and a rise in productivity levels, and this renewed focus on driving productivity underpins the LEP’s work across all strategic priority areas.
- 9.23 Against this backdrop, Table 9.1 overleaf summarises the emerging key issues, gaps and priorities associated with each strand of economic infrastructure, framed within the context of their ability to support the growth of the local economy. It builds upon the key themes and ‘foundations of productivity’ set out in the Government’s Industrial Strategy and contextualises them in terms of unlocking the economic potential of Havant Borough.
- 9.24 In some cases, specific interventions, projects and proposals have been identified to address infrastructure gaps, pinch points and weaknesses, while in other cases these responses tend to represent wider aspirations or longer term objectives.

Table 9.1 Emerging Infrastructure Gaps and Constraints

Infrastructure Theme	Emerging Gaps and Constraints to Growth
Water, Waste and Flood Defence	<ul style="list-style-type: none"> • Flood and coastal defence ‘high risk’ areas and projects identified to reduce or respond to specific risks • Requirements vary from site to site but water utilities provision generally funded by developers/consumers
Energy	<ul style="list-style-type: none"> • Improvements/reinforcements likely to be required to local and wider regional gas network to accommodate increased demand over Local Plan period • Limited opportunities for renewable energy generation within the Borough to meet low carbon objectives
Transport	<ul style="list-style-type: none"> • Scope for strengthened internal connectivity within the Borough, in particular to better integrate communities with economic opportunities either side of the railway line and A3(M) • Road network congestion and capacity constraints (particularly in pinch points linking local and strategic routes in the Borough) • Scope for upgraded and expanded bus provision including to connect major new developments (e.g. Southleigh) and peripheral communities to town centres, employment opportunities and public transport hubs • Scope for upgrading of cycle routes to meet Highways England standards and to develop routes identified in the LCWIP
Telecommunications	<ul style="list-style-type: none"> • Scope to enhance access to ultrafast broadband within key parts of Borough (e.g. Langstone Technology Park, northern Hayling Island) • Pockets of poor 4G coverage on EE and Three mobile networks • Scope for rollout of 5G to enable the Borough to ‘catch-up’ with other parts of the Solent where 5G is available (e.g. parts of Portsmouth)
Human Capital / Skills	<ul style="list-style-type: none"> • Demographic constraints associated with an ageing population and declining working-age resident base • High proportion of residents with no qualifications at all - significant potential for upskilling local people to participate in the labour market and access higher value employment opportunities

9.25 In this context, it is clear that the small number of committed infrastructure investments noted above will help to address some of these identified gaps but that significant issues remain outstanding if the growth objectives for Havant are to be realised. There are also some site-based opportunities for new housing and employment growth that have been identified (as set out in Figure 9.1) but may require intervention in order to stimulate development or accelerate delivery.

9.26 On this basis, a pipeline of deliverable infrastructure investments needs to be identified and prioritised, and this forms the focus of the next section of the report.

10.0 Future Infrastructure Investment Priorities

- 10.1 The overarching aim of the IIP is to consider the key deliverable economic infrastructure investments that are required to support and stimulate sustainable economic growth within Havant Borough through improved competitiveness and productivity, and enable it to contribute further to the broader Solent and UK economies. This section identifies and prioritises infrastructure investment projects based on their ability to stimulate economic growth over the short term (to 2025), medium term (to 2030) and longer term period (to 2050).
- 10.2 Preparation of the IIP is timely within the context of the emerging Solent 2050 Economic Strategy and key consideration needs to be given to potential funding sources for these infrastructure projects in light of strong competition nationwide for a set amount of public funding.

Identification and Prioritisation of Projects

- 10.3 A 'long list' of 33 infrastructure projects has been compiled by Lichfields from a range of sources including a literature review of the emerging Havant Borough Local Plan evidence base (including HBC's Infrastructure Delivery Plan 2020, Transport Assessment 2019, and Hayling Island Transport Assessment 2019) and through focused consultation and discussions with HBC's economic development and regeneration team and wider stakeholders. A summary description of each project is provided in Appendix 2.
- 10.4 The key focus of infrastructure projects identified through the IIP is upon unlocking new public and private development sites for housing and employment uses. To inform this assessment, a 'prioritisation framework' has been compiled that focuses on identifying and bringing forward deliverable infrastructure proposals that can support future economic growth of the Borough.
- 10.5 The framework prioritises future infrastructure projects based on their ability to support economic growth of the Borough through unlocking new development sites for employment and housing and stimulating private sector investment and economic growth, focusing on three broad timescales; short-term to 2025, medium term to 2030 and longer term to 2050.

Appraisal Criteria

- 10.6 A series of criteria have been identified for the purposes of appraising the 'long list' of potential infrastructure projects against their ability to stimulate local economic and productivity growth. These criteria draw upon guidance set out by the Solent LEP for ensuring value for money from investments it allocates public funds to – including the Solent LEP Prioritisation Matrix³⁴ – as well as Lichfields' own experience of economic appraisal. The appraisal criteria applied are set out in Table 10.1 overleaf.

³⁴ Solent LEP, Assurance Framework (February 2019) <https://solentlep.org.uk/media/2552/solent-lep-assurance-framework-feb-2019.pdf>

Table 10.1 Appraisal Criteria

Appraisal Criteria	Description	
Strategic Fit	National	Alignment with / supporting Government's national Industrial Strategy (including 5 'foundations of productivity') and Covid-19 economic recovery strategy
	Sub-Regional	Alignment with / supporting LEP strategic growth and Solent 2050 priorities, including world leading marine & maritime economy, climate change adaptation/ decarbonisation, coastal renaissance, thriving visitor & cultural economy, world class talent base, outstanding business environment
	Local	Alignment with / supporting Havant Regeneration Strategy, emerging Local Plan and associated Key Projects
Economic Outcomes & Growth Potential	Directly unlocks development	Scope for unlocking development sites for housing and employment, securing these outputs/outcomes. Focus on type and scale of outcomes (including scope to unlock more than one development site)
	Direct jobs	
	New homes	
	New employment space	
	New skills opportunities	
Leveraging private sector investment		
Deliverability	Planning permission / planning policy status	Allocated / unallocated / permission / none etc
	Project status	Pre-feasibility, feasibility, outline design etc
	Evidence of market demand	Including scale / type of market demand
	Evidence of 'Showstopper' constraints	Risks to timely delivery, other constraints beyond LEP control
Timing of Development	Short term (to 2025)	Anticipated timescales associated with infrastructure proposals / projects
	Medium term (to 2030)	
	Long term (to 2050)	
Additionality	Deadweight	Extent to which benefits will be realised without funding / intervention
	Displacement	Extent to which funding / intervention will shift economic activity from other areas
	Speed of delivery	Impact of funding / intervention on the speed of delivery of economic benefits

Source: Lichfields, drawing on various sources

Project Assessment Overview

- 10.7 A summary of the outputs from the project prioritisation assessment is shown in Table 10.2 overleaf. The overall level of priority is identified for each of the 33 'long list' infrastructure projects, taking into account the relative performance across the key appraisal themes of strategic fit, economic outcomes & growth potential, deliverability and additionality. An indication of anticipated project delivery timescales is also provided, although this could be subject to change and is therefore not appraised per se.
- 10.8 It should be noted that these appraisals are based on existing project information where this is available. The accuracy of third party information has not been checked or verified by Lichfields. For some projects, particularly those at pre-feasibility stage, there is limited current information or other evidence available. The appraisals of individual projects may therefore be subject to change if more detailed feasibility work or related evidence becomes available.
- 10.9 It is also important to highlight the limitations of conventional appraisal criteria, particularly in relation to more strategic projects that might not be identified as directly delivering significant additional outputs or outcomes (e.g. new housing and jobs), but may play a wider enabling role and thereby can also make an important wider contribution to delivering growth.
- 10.10 Of the 33 projects, the majority (27) are identified as medium priority, with 4 high priority and 2 low priority. Highest priority projects tend to offer greatest scope for directly unlocking development and supporting economic growth through provision of new commercial and residential development, align well with strategic growth objectives and are not associated with any notable deliverability risks. Conversely, lower priority projects offer much less scope to directly deliver economic growth objectives and net additional economic impact.
- 10.11 As Table 10.2 shows, most of the 33 projects have good strategic fit with economic and productivity growth priorities at the national, sub-regional and local level but with limited scope in some cases to directly support and unlock development sites in the Borough. In overall terms, the additionality associated with economic impacts that could occur as a result of investment is expected to be reasonably high, in terms of deadweight, displacement and speed of delivery. Deliverability varies considerably across the long list of projects, reflecting the various stages of development that each project is currently at, and the analysis suggests that considerable work remains to be done to demonstrate that many of the proposed infrastructure projects are deliverable.

Table 10.2 Project Prioritisation Summary

No	Project Name	Location	Project Type	Strategic Fit	Economic Outcomes & Growth Potential	Deliverability (excl market demand)	Additionality	Overall Priority	Timing of Development
1	B2177 / Bedhampton Road Junction	Mainland	Transport (strategic highway improvements)					Med	Short
2	A3(M) J5 / B2177 Bedhampton Hill (Rusty Cutter Roundabout)	Mainland	Transport (strategic highway improvements)					Med	Long
3	B2149 Durrants Road / B2148 Whichers Gate Road	Mainland	Transport (strategic highway improvements)					Med	Short/med
4	B2149 Petersfield Road / Stockheath Road	Mainland	Transport (strategic highway improvements)					Med	Short/med
5	Harts Farm Way approach to Teardrop junction	Mainland	Transport (strategic highway improvements)					Med	Long
6	Havant Cycling, Walking and Waterways Project	Borough-wide	Transport (modal shift/active travel)					Med	Short
7	Havant Shared Pedestrian and Cycle Bridge	Mainland	Transport (local connectivity/active travel)					Low	Med/long
8	Hayling Billy Trail Realignment	Mainland/Hayling Island	Transport (modal shift/active travel)					Med	Short/med
9	Hayling Billy Line Autonomous Vehicle Hubs	Mainland/Hayling Island	Transport (modal shift/active travel)					Med	Unknown
10	Hayling Island Traffic Mitigation Package 1	Hayling Island	Transport (strategic highway improvements)					Med	Short/med
11	Hayling Island Traffic Mitigation Package 2	Hayling Island	Transport (strategic highway improvements)					Med	Short/med
12	Hayling Island Traffic Mitigation Package 3	Hayling Island	Transport (strategic highway improvements)					Med	Short/med
13	Park Road South / Elm Lane	Mainland	Transport (strategic highway improvements)					Med	Long
14	Purbrook Way / Parkhouse Farm Way	Mainland	Transport (strategic highway improvements)					Med	Short/med
15	Purbrook Way A3(M) J4 southbound on-slip (B&Q roundabout)	Mainland	Transport (strategic highway improvements)					Med	Short/med
16	Purbrook Way westbound approach and Hulbert Road southbound approach to Asda roundabout	Mainland	Transport (strategic highway improvements)					Med	Short/med
17	South East Hampshire Rapid Transit	Borough-wide	Transport (modal shift/active travel)					Med	Short/med
18	South Leigh Strategic Site Transport Package and Emsworth Road / A27 eastbound off-clip	Mainland	Transport (site specific connectivity/active travel)					High	Long
19	Warblington Railway Crossing Footbridge	Mainland	Transport (local connectivity/active travel)					Low	Short
20	Brockhampton Quay and Broadmarsh Landfill Revetment	Mainland	Water, Waste and Flooding					Med	Short
21	Budds Farm Wastewater Treatment Works Upgrades	Mainland	Water, Waste and Flooding					Med	Long
22	Conigar and Warblington – Habitat Creation	Mainland	Water, Waste and Flooding					Med	Medium
23	Warblington Farm – Nitrate mitigation habitat creation	Mainland	Water, Waste and Flooding					High	Short
24	Havant Thicket Reservoir	Mainland	Water, Waste and Flooding					Med	Medium
25	Hayling Island Flood & Coastal Erosion Risk Management Strategy	Hayling Island	Water, Waste and Flooding					Med	Short
26	Langstone Coastal Flood Erosion and Risk Management Scheme	Mainland	Water, Waste and Flooding					Med	Short/med
27	Northney – Habitat Creation	Hayling Island	Water, Waste and Flooding					Med	Short/med
28	Selsmore and Mengham CFERM Scheme	Hayling Island	Water, Waste and Flooding					Med	Short/med
29	South Hayling Island Beach Management Activities Phase 2	Hayling Island	Water, Waste and Flooding					Med	Short/med
30	Southmoor – Habitat Creation	Mainland	Water, Waste and Flooding					Med	Unknown
31	HSDC Digital Skills Hub (South Downs Campus)	Mainland	Human Capital and Skills					High	Short
32	Dunsbury Park Maker Space and Advanced Manufacturing Innovation Centre	Mainland	Human Capital and Skills					High	Short
33	Hayling Island West Beach Public Realm Phase 1	Hayling Island	Other (Public Realm)					Med	Short

Source: Lichfields analysis

10.12 Table 10.3 below shows how the overall level of identified priority is split by infrastructure theme. This illustrates that both of the human capital and skills projects score high, alongside one transport and one water, waste and flooding project. Both of the low priority projects are transport schemes (foot/cycle bridges) with the remaining projects all considered to be medium overall priority.

Table 10.3 Project Prioritisation by Infrastructure Type

No	Project Name	Project Type	Overall Priority
18	South Leigh Strategic Site Transport Package and Emsworth Road / A27 eastbound off-clip	Transport (site specific connectivity/active travel)	High
23	Warblington Farm – Nitrate mitigation habitat creation	Water, Waste and Flooding	High
31	HSDC Digital Skills Hub (South Downs Campus)	Human Capital and Skills	High
32	Dunsbury Park Maker Space and Advanced Manufacturing Innovation Centre	Human Capital and Skills	High
1	B2177 / Bedhampton Road Junction	Transport (strategic highway improvements)	Med
2	A3(M) J5 / B2177 Bedhampton Hill (Rusty Cutter Roundabout)	Transport (strategic highway improvements)	Med
3	B2149 Durrants Road / B2148 Whichers Gate Road	Transport (strategic highway improvements)	Med
4	B2149 Petersfield Road / Stockheath Road	Transport (strategic highway improvements)	Med
5	Harts Farm Way approach to Teardrop junction	Transport (strategic highway improvements)	Med
10	Hayling Island Traffic Mitigation Package 1	Transport (strategic highway improvements)	Med
11	Hayling Island Traffic Mitigation Package 2	Transport (strategic highway improvements)	Med
12	Hayling Island Traffic Mitigation Package 3	Transport (strategic highway improvements)	Med
13	Park Road South / Elm Lane	Transport (strategic highway improvements)	Med
14	Purbrook Way / Parkhouse Farm Way	Transport (strategic highway improvements)	Med
15	Purbrook Way A3(M) J4 southbound on-slip (B&Q roundabout)	Transport (strategic highway improvements)	Med
16	Purbrook Way westbound approach and Hulbert Road southbound approach to Asda roundabout	Transport (strategic highway improvements)	Med
6	Havant Cycling, Walking and Waterways Project	Transport (modal shift/active travel)	Med
8	Hayling Billy Trail Realignment	Transport (modal shift/active travel)	Med
9	Hayling Billy Line Autonomous Vehicle Hubs	Transport (modal shift/active travel)	Med
17	South East Hampshire Rapid Transit	Transport (modal shift/active travel)	Med
20	Brockhampton Quay and Broadmarsh Landfill Revetment	Water, Waste and Flooding	Med
21	Budds Farm Wastewater Treatment Works Upgrades	Water, Waste and Flooding	Med
22	Conigar and Warblington – Habitat Creation	Water, Waste and Flooding	Med
24	Havant Thicket Reservoir	Water, Waste and Flooding	Med
25	Hayling Island Flood & Coastal Erosion Risk Management Strategy	Water, Waste and Flooding	Med
26	Langstone Coastal Flood Erosion and Risk Management Scheme	Water, Waste and Flooding	Med
27	Northney – Habitat Creation	Water, Waste and Flooding	Med
28	Selsmore and Mengham CFERM Scheme	Water, Waste and Flooding	Med
29	South Hayling Island Beach Management Activities Phase 2	Water, Waste and Flooding	Med
30	Southmoor – Habitat Creation	Water, Waste and Flooding	Med
33	Hayling Island West Beach Public Realm Phase 1	Other (Public Realm)	Med
7	Havant Shared Pedestrian and Cycle Bridge	Transport (local connectivity/active travel)	Low
19	Warblington Railway Crossing Footbridge	Transport (local connectivity/active travel)	Low

Source: Lichfields analysis

10.13 As noted above, some strategic projects not identified as directly delivering significant additional outputs or outcomes (i.e. new housing and jobs) based on current information tend to be given lower priority through the appraisal notwithstanding that they may play an important wider enabling role. For example, proposals to extend the South East Hampshire Rapid Transit within Havant Borough and public realm improvements to Hayling Island West Beach could be considered in this context.

10.14 A similar cut of analysis is shown in Table 10.4 with regards to anticipated timing of delivery by project. This shows that three of the high overall priority projects are expected to be able to be delivered over the short term (i.e. to 2025), with the majority of medium priority projects associated with short to medium term (to 2030) timescales. Some of the projects included in the long list are currently subject to uncertainty regarding timescales.

Table 10.4 Project Prioritisation by Timescale

No	Project Name	Overall Priority	Timing of Development
23	Warblington Farm – Nitrate mitigation habitat creation	High	Short
31	HSDC Digital Skills Hub (South Downs Campus)	High	Short
32	Dunsbury Park Maker Space and Advanced Manufacturing Innovation Centre	High	Short
18	South Leigh Strategic Site Transport Package and Emsworth Road / A27 eastbound off-clip	High	Long
1	B2177 / Bedhampton Road Junction	Med	Short
6	Havant Cycling, Walking and Waterways Project	Med	Short
20	Brockhampton Quay and Broadmarsh Landfill Revetment	Med	Short
25	Hayling Island Flood & Coastal Erosion Risk Management Strategy	Med	Short
33	Hayling Island West Beach Public Realm Phase 1	Med	Short
3	B2149 Durrants Road / B2148 Whichers Gate Road	Med	Short/med
4	B2149 Petersfield Road / Stockheath Road	Med	Short/med
8	Hayling Billy Trail Realignment	Med	Short/med
10	Hayling Island Traffic Mitigation Package 1	Med	Short/med
11	Hayling Island Traffic Mitigation Package 2	Med	Short/med
12	Hayling Island Traffic Mitigation Package 3	Med	Short/med
14	Purbrook Way / Parkhouse Farm Way	Med	Short/med
15	Purbrook Way A3(M) J4 southbound on-slip (B&Q roundabout)	Med	Short/med
16	Purbrook Way westbound approach and Hulbert Road southbound approach to Asda roundabout	Med	Short/med
17	South East Hampshire Rapid Transit	Med	Short/med
26	Langstone Coastal Flood Erosion and Risk Management Scheme	Med	Short/med
27	Northney – Habitat Creation	Med	Short/med
28	Selsmore and Mengham CFERM Scheme	Med	Short/med
29	South Hayling Island Beach Management Activities Phase 2	Med	Short/med
22	Conigar and Warblington – Habitat Creation	Med	Medium
24	Havant Thicket Reservoir	Med	Medium
2	A3(M) J5 / B2177 Bedhampton Hill (Rusty Cutter Roundabout)	Med	Long
5	Harts Farm Way approach to Teardrop junction	Med	Long
13	Park Road South / Elm Lane	Med	Long
21	Budds Farm Wastewater Treatment Works Upgrades	Med	Long
9	Hayling Billy Line Autonomous Vehicle Hubs	Med	Unknown
30	Southmoor – Habitat Creation	Med	Unknown
19	Warblington Railway Crossing Footbridge	Low	Short
7	Havant Shared Pedestrian and Cycle Bridge	Low	Med/long

Source: Lichfields analysis

10.15 It should also be noted that some of the infrastructure projects already have funding either fully or partly committed, as identified in Figure 9.2 in the previous chapter. Of the four highest priority projects, only one (Warblington Farm) currently has funding identified.

Longer Term Economic Infrastructure Priorities

- 10.16 The ‘long list’ of infrastructure investment projects identified for Havant Borough through this IIP provides an initial starting point for considering the type, nature and timing of economic infrastructure investments that are required to support improved competitiveness, productivity and sustainable economic growth within the Borough over the short, medium and longer term. Given the timing of Havant’s new Local Plan which is nearing final stages of preparation, many of the infrastructure projects have been identified as a means of facilitating the scale of growth anticipated by the Local Plan, and/or mitigating adverse impacts from this level of growth upon the Borough’s economic infrastructure.
- 10.17 Through the various stakeholder discussions that have taken place through the IIP, a range of broader overarching economic infrastructure priorities have begun to emerge that are considered to have an important role to play in facilitating a step change in Havant’s economy – in some cases, over and above local growth aspirations set out in the emerging Havant Local Plan - for different reasons. These are summarised in Table 10.5 below.
- 10.18 These interventions represent potential strategic infrastructure investments or options rather than specific, tangible schemes that have been worked up or are being promoted by particular stakeholders, albeit they align well with future policy frameworks and longer term strategic priorities associated with key partners such as HBC and Hampshire County Council. In most cases they relate to Borough-wide infrastructure and have the potential to help unlock the development potential of more than one site in Havant Borough. The Covid-19 pandemic has accelerated the urgency of some of these longer term priorities, including digital inclusion and human capital/skills development.

Table 10.5 Longer Term Economic Infrastructure Priorities

Infrastructure Theme	Potential Area of Infrastructure Investment
Water, Waste and Flood Defence	<ul style="list-style-type: none"> Ongoing tidal flooding defence works to safeguard Havant’s coastline and economic capacity as sea levels continue to rise in response to climate change
Energy	<ul style="list-style-type: none"> Embedding more energy efficient technology and standards within Havant’s built environment and through new development
Transport	<ul style="list-style-type: none"> Upgrading the Borough’s transport infrastructure to respond more proactively to climate change priorities, sustainability commitments and more innovative modes of travel To potentially include investment in electric vehicle charging infrastructure, encouraging more active travel amongst Havant’s communities, autonomous vehicles, and demand responsive solutions (through use of technology)
Telecommunications	<ul style="list-style-type: none"> Roll-out of ‘next-generation’ 5G connectivity and provision across the Borough to ‘catch-up’ with other parts of the Solent where 5G is available Facilitating digital inclusion and access to economic opportunity for all of Havant’s communities, e.g. through free to access WiFi zones at key hubs
Human Capital / Skills	<ul style="list-style-type: none"> Focus on early years educational attainment and aspirations to prepare and equip the future workforce to be able to realise growth opportunities locally To potentially include more comprehensive employer engagement and career development initiatives which could be trialled/piloted in Havant
Overarching	<ul style="list-style-type: none"> Transforming local connectivity across the Borough to better link local communities with economic opportunity and ‘level up’ prosperity across its population – with a particular focus on internal transport connectivity and digital inclusion (as noted above)

Source: Lichfields

Funding Options and Opportunities

- 10.19 This section identifies funding options in support of the potential investments detailed above. The focus is on direct funding sources available from Central Government as well as those administered by the Solent LEP that can directly support investment in a range of infrastructure for the purposes of supporting growth in Havant Borough.
- 10.20 It should be noted that this is not an exhaustive list of funding sources for all potential projects in the Borough – there are additional scheme/sector specific sources of potential funding that partners may also need to explore, and the nature of funds available will change over time in line with national and local priorities or as future rounds are launched. Beyond publicly available funding opportunities, infrastructure investment may also be secured through the planning system by way of developer contributions, for instance via development specific Section 106 agreements and the Community Infrastructure Levy (CIL).
- 10.21 Access to funding is typically on the basis of competitive bidding processes either directly to Government or through the LEP depending on the nature of the fund. These processes usually have defined criteria (e.g. scale of funding, defined outputs) and conditions (e.g. timescale for delivery, private sector leverage) and may be subject to business cases developed in line with national guidance. An individual project or proposal may qualify for more than one fund.

National Productivity Investment Fund

- 10.22 The National Productivity Investment Fund (NPIF) was announced as part of the 2016 Autumn Statement, with investment exceeding £37 billion over the period to 2023/24. The fund is intended to invest in new high-value economic infrastructure including housing, economic infrastructure, and research and development (R&D).³⁵ There are a number of component funds relevant to the different types of economic infrastructure considered as part of this IIP, as summarised below:

- **Transforming Cities Fund:** focused on intra-city connectivity, making it quicker and easier for people to get around and access jobs in, some of England’s biggest cities. Within the Solent, two areas have successfully been awarded funding to date:
 1. A joint bid submitted in November 2019 by Southampton City Council and Hampshire County Council for Southampton and Hampshire was awarded £57 million of Government funding towards the total £68.5 million project and covers the three years to March 2023.
 2. The Portsmouth city region bid, working in partnership with Hampshire County Council and the Isle of Wight Council, was successfully awarded £55.6 million from the Transforming Cities Fund in September 2020, following an initial grant of £4 million. The funding will enable the next phase of the South East Hampshire Rapid Transit network.
- **Future High Streets Fund:** a £1 billion fund to renew and reshape town centres and high streets in a way that drives growth, improves experience and ensures future sustainability, co-funding successful applicants to support transformative and structural changes to overcome challenges in their area. Areas within the Solent benefiting from the funding include Fratton and Commercial Road in Portsmouth and Heart of the City Quarter in Southampton.
- **Roads and local transport:** funding for local highway and other transport improvements which aims to reduce congestion at key locations, upgrade or improve the maintenance of

³⁵ Autumn Statement 2016, HM Treasury, https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/571559/autumn_statement_2016_web.pdf

local highway assets across England (outside London) to improve access to employment and housing, to develop economic and job creation opportunities.

- **Digital communications:** funding to deploy full fibre networks into businesses and the public sector, and a coordinated programme of integrated 5G and fibre projects to accelerate and de-risk deployment of future digital technologies.
- **Housing Infrastructure Fund:** funding the infrastructure needed to enable house-building on sites with marginal viability in areas with an acute housing need.
- **Accelerated Construction:** a tailored package of support to ambitious local authorities who would like to develop out surplus land holdings. Within Havant, a grant of £3.36 million has been secured to support the redevelopment of HBC's Civic Plaza car park through the re-provision of parking and public realm improvements.

Local Growth Programmes

10.23 The Solent LEP plays a key role in administering significant funding allocations from central government to support economic growth and development in the area. This involves identifying and developing investment opportunities, prioritising the award of local growth funding, and monitoring and evaluating the impacts of its activities to improve productivity across the local economy.

10.24 These funding packages include the £182.92 million **Solent Growth Deal** which commenced delivery in 2015 with the aim of supporting local productivity and growth. This will unlock £600 million public and private sector investment across the area, creating 6,500 new jobs and enabling 12,000 new homes to be built. Capital funding through the Solent Growth Deal is available from 2015/16 to 2020/21.

Covid-19 Economic Recovery Response

10.25 Since the onset of the pandemic, the Solent LEP has mobilised to provide a range of ongoing support for businesses across the region during the initial emergency phase, and this continues as the area looks ahead to longer term stability and growth.

10.26 As part of the government's **Getting Building Fund**, the LEP have been awarded an initial allocation of £15.9 million to help deliver 'shovel ready' projects across the Solent. This is supplemented by a larger portfolio of 68 projects with a total value of over £900 million that have been identified by the LEP to help deliver jobs, skills and infrastructure across the area.

Spending Review 2020

10.27 The Chancellor of the Exchequer delivered his Spending Review to Parliament on 25 November 2020. Spending Review 2020 (SR20) prioritises funding to support the government's response to Covid-19 and invest in the UK's recovery. Key funding announcements of particular relevance to infrastructure and economic growth include:

- A £4 billion **Levelling Up Fund** to upgrade local infrastructure and support economic recovery. It will be open to all local areas in England and prioritise bids to drive growth and regeneration in places in need, those facing particular challenges, and areas that have received less government investment in recent years.
- Total investment of £12 billion to support a **Green Industrial Revolution** and recovery from Covid-19, with the SR20 providing funding for the Prime Minister's Ten Point Plan. This includes £1.9 billion for charging infrastructure and consumer incentives, £1.1 billion to make homes and buildings net zero-ready, £1 billion for a Carbon Capture and Storage

Infrastructure Fund, and additional investment in low hydrogen carbon production, offshore wind, and nuclear power.

- 10.28 Alongside SR20 Government has launched a new **National Infrastructure Strategy** setting out its plans to transform the UK’s economic infrastructure. This is based around three central objectives: economic recovery, levelling up and unleashing the potential of the Union, and meeting the UK’s net zero emissions target by 2050. These objectives will be supported by the creation of a new infrastructure bank to catalyse private investment in projects across the UK, as well as through a comprehensive set of reforms to the way infrastructure is delivered.
- 10.29 SR20 also provided an initial indication for what the **UK Shared Prosperity Fund** (UKSPF) will invest in and how it will be targeted. The UKSPF will operate UK-wide, with total domestic UK-wide funding at least matching current EU receipts, on average reaching around £1.5 billion a year. A portion of the UKSPF will target places most in need across the UK, such as ex-industrial areas, deprived towns and rural and coastal communities. It will support people and communities, opening up new opportunities and spurring regeneration and innovation.
- 10.30 The government intend to publish further details on how these key SR20 funding opportunities will operate during the course of 2021. In the Budget 2021, the government announced the introduction of the **UK Community Renewal Fund**; an additional £220 million of investment being provided for 2021-22 to help support local areas to pilot imaginative new approaches and programmes that unleash their potential, instil pride, and prepare them to take full advantage of the UK Shared Prosperity Fund when it launches in 2022. Projects are expected to align with a series of investment priorities including investment in skills, investment for local business, investment in communities and place, and supporting people into employment.

Solent Freeport

- 10.31 In 2019, the Government announced that up to ten Freeports will be established across the UK in order to boost economic activity and level up towns, cities and regions across the country post-Brexit. The policy has become even more important in the wake of Covid-19, the prolonged period of economic disruption this has caused, and the drive to ‘build back better’. Freeports will benefit from tax reliefs, simplified customs procedures and streamlined planning processes to promote regeneration and innovation.
- 10.32 In response to the recent competition, the Solent LEP submitted a successful bid to government to establish a Freeport in the Solent on behalf of a coalition of businesses, local authorities and other partner organisations. This represents a ‘once-in-a-generation’ opportunity to level-up local communities, turbocharge post-Brexit trade and invest in a net zero future, with Freeport status helping to create more than 50,000 jobs and attract £2 billion in extra investment into the Solent area.
- 10.33 The Freeport will operate with both ‘tax’ and ‘customs’ sites, and the 62ha Dunsbury Park site in Havant has been included as one of the tax sites which would offer occupiers business rates relief and other incentives to support capital investment, skills and employment. Strategically located on the A3(M), it provides a gateway to the trade flows through Portsmouth International Port, Port of Southampton, and Marchwood Port and benefits from extant planning permission to develop 665,000sqft of warehouse, manufacturing and office space. The site is adjacent to one of the most deprived communities in the Solent and which falls within the 10% most deprived nationally. The fiscal incentives for tax sites will increase investment by manufacturing and logistics companies, increasing trade in the area.

- 10.34 Freeport stauts provides a significant opportunity to drive economic growth and prosperity within Havant over the coming years, and associated infrastructure requirements will need to be considered through the evolving prism of government policy.

11.0 Conclusions and Recommendations

11.1 This section draws together the key findings from the preceding sections and outlines some recommendations in respect of future investments in infrastructure for Havant Borough.

Context

11.2 This report has been prepared to identify future infrastructure needs of Havant Borough across a range of “economic infrastructure” categories. This is in the context of the need to support sustainable economic growth of the Borough, and having regard to national, Solent LEP and local HBC policy priorities.

11.3 The study brief is set against the backdrop that it is widely recognised that access to good quality infrastructure is an essential ingredient for a competitive economy. Accordingly, infrastructure investment is recognised as one of the 5 ‘foundations of productivity’ within the Government’s Industrial Strategy. However, infrastructure can present high initial costs and long-return periods on investment which can lead to instances of market failure and, consequently, the rationale for public sector intervention.

11.4 Within the context of a constrained public sector funding environment, it is therefore essential that potential projects and investments are considered carefully in terms of their ability to directly support economic growth objectives whilst also taking account of standard appraisal approaches for public sector projects relating to deliverability, additionality and timeframes. The report focuses on unlocking sites for development which can achieve delivery of new housing and jobs, employment space, skills opportunities and leveraging of private sector investment.

Havant Economy

11.5 The Borough’s economic performance has been somewhat mixed over recent years, characterised by relatively strong levels of employment and business growth, but also below average workforce productivity in some sectors, and a notable skills gap with a high proportion of local residents holding no qualifications.

11.6 The Borough’s population has been growing, mainly amongst older age groups, and Havant struggles to retain people in younger age groups. Forecasts indicate these population shifts are set to continue leading to a contraction of the working-age population. Reflecting its strategic location within the Solent, the Borough operates as a net-contributor of workers to other local authority areas, influenced by Havant’s low job density and lower workplace wages when compared with resident earnings.

11.7 Latest economic forecasts commissioned by the Solent LEP indicate that employment in Havant is expected to increase by 1,900 jobs between 2020 and 2036, a 3.6% increase in proportionate terms which is broadly in line with the pace of employment growth expected across the LEP area as a whole. Most growth is anticipated in admin and support services, construction and professional, scientific and technical activities, while employment is expected to decline in Havant’s manufacturing, public administration and defence and education sectors.

11.8 It is clear that the scale and scope of employment growth implied by HBC’s ambitious Regeneration Strategy and emerging Local Plan could deliver a significant step-change in the Borough’s economic evolution and growth, significantly out-pacing these ‘business as usual’ job growth projections by over 12,000 jobs if the full scale of development and regeneration can be achieved and maximised over the coming years.

- 11.9 The trajectory of future economic growth within Havant will have significant implications for the Borough’s infrastructure requirements, with a growing business and employment base increasing the demand for all types of economic infrastructure to support the day-to-day functioning of the local economy.

Key Infrastructure Issues

- 11.10 Analysis undertaken as part of this IIP points to a mixed picture in terms of economic infrastructure provision and capacity to, from and within the Borough, based on a review of existing data sources and evidence, as well as discussions with a number of stakeholders and operators currently active in Havant Borough and wider Solent area.
- 11.11 In overall terms, the review shows that each type of economic infrastructure considered by the IIP tends to be reasonably well catered for, with no evidence of particular ‘showstoppers’ that threaten to hold the Borough back from achieving sustainable economic growth over the short, medium and longer term horizon. It does however underline some wider structural issues such as local skills performance/attainment and the unique environmental challenges associated with Havant’s coastal characteristics, which pose significant threats to stifling longer term economic prosperity.
- 11.12 In this context, it is clear that the small number of already committed infrastructure investments within the Borough will help to address some of these identified gaps but that significant issues remain outstanding if the growth objectives for Havant are to be realised.

Project Prioritisation

- 11.13 Against a backdrop of limited committed/funded infrastructure projects within the Borough, a ‘long list’ of 33 infrastructure projects has been compiled from a range of sources and stakeholder discussions.
- 11.14 The key focus of infrastructure projects identified through the IIP is upon unlocking new public and private development sites for housing and employment uses. Potential infrastructure projects have been appraised on their ability to secure direct jobs, new homes, new employment space, new skills opportunities and private sector investment, focusing on three broad timescales; short-term to 2025, medium term to 2030 and longer term to 2050.
- 11.15 Of the 33 projects, the majority (27) are identified as medium overall priority, with 4 high priority and 2 low priority. Highest priority projects tend to offer greatest scope for directly unlocking development and supporting economic growth through provision of new commercial and residential development, align well with strategic growth objectives and are not associated with any notable deliverability risks. Conversely, lower priority projects offer much less scope to directly deliver economic growth objectives and net additional economic impact.
- 11.16 Both of the human capital and skills projects included in the ‘long list’ score highly, alongside one transport and one water, waste and flooding project. Both of the low priority projects are transport schemes (foot/cycle bridges) with the remaining projects all considered to be medium overall priority (see Table 11.1).

Table 11.1 Project Prioritisation by Infrastructure Type

No	Project Name	Project Type	Overall Priority
18	South Leigh Strategic Site Transport Package and Emsworth Road / A27 eastbound off-clip	Transport (site specific connectivity/active travel)	High
23	Warblington Farm – Nitrate mitigation habitat creation	Water, Waste and Flooding	High
31	HSDC Digital Skills Hub (South Downs Campus)	Human Capital and Skills	High
32	Dunsbury Park Maker Space and Advanced Manufacturing Innovation Centre	Human Capital and Skills	High
1	B2177 / Bedhampton Road Junction	Transport (strategic highway improvements)	Med
2	A3(M) J5 / B2177 Bedhampton Hill (Rusty Cutter Roundabout)	Transport (strategic highway improvements)	Med
3	B2149 Durrants Road / B2148 Whichers Gate Road	Transport (strategic highway improvements)	Med
4	B2149 Petersfield Road / Stockheath Road	Transport (strategic highway improvements)	Med
5	Harts Farm Way approach to Teardrop junction	Transport (strategic highway improvements)	Med
10	Hayling Island Traffic Mitigation Package 1	Transport (strategic highway improvements)	Med
11	Hayling Island Traffic Mitigation Package 2	Transport (strategic highway improvements)	Med
12	Hayling Island Traffic Mitigation Package 3	Transport (strategic highway improvements)	Med
13	Park Road South / Elm Lane	Transport (strategic highway improvements)	Med
14	Purbrook Way / Parkhouse Farm Way	Transport (strategic highway improvements)	Med
15	Purbrook Way A3(M) J4 southbound on-slip (B&Q roundabout)	Transport (strategic highway improvements)	Med
16	Purbrook Way westbound approach and Hulbert Road southbound approach to Asda roundabout	Transport (strategic highway improvements)	Med
6	Havant Cycling, Walking and Waterways Project	Transport (modal shift/active travel)	Med
8	Hayling Billy Trail Realignment	Transport (modal shift/active travel)	Med
9	Hayling Billy Line Autonomous Vehicle Hubs	Transport (modal shift/active travel)	Med
17	South East Hampshire Rapid Transit	Transport (modal shift/active travel)	Med
20	Brockhampton Quay and Broadmarsh Landfill Revetment	Water, Waste and Flooding	Med
21	Budds Farm Wastewater Treatment Works Upgrades	Water, Waste and Flooding	Med
22	Conigar and Warblington – Habitat Creation	Water, Waste and Flooding	Med
24	Havant Thicket Reservoir	Water, Waste and Flooding	Med
25	Hayling Island Flood & Coastal Erosion Risk Management Strategy	Water, Waste and Flooding	Med
26	Langstone Coastal Flood Erosion and Risk Management Scheme	Water, Waste and Flooding	Med
27	Northney – Habitat Creation	Water, Waste and Flooding	Med
28	Selsmore and Mengham CFERM Scheme	Water, Waste and Flooding	Med
29	South Hayling Island Beach Management Activities Phase 2	Water, Waste and Flooding	Med
30	Southmoor – Habitat Creation	Water, Waste and Flooding	Med
33	Hayling Island West Beach Public Realm Phase 1	Other (Public Realm)	Med
7	Havant Shared Pedestrian and Cycle Bridge	Transport (local connectivity/active travel)	Low
19	Warblington Railway Crossing Footbridge	Transport (local connectivity/active travel)	Low

Source: Lichfields analysis

11.17 It should be noted that these appraisals are based on existing project information where this is available. For some projects, particularly those at pre-feasibility stage, there is limited current information or other evidence available. It is also important to note that this analysis represents a point-in-time assessment; it incorporates the latest data and other evidence available at the time of preparation during late 2020 but will inevitably be subject to change. In particular, the status of individual projects and investments is likely to change on an ongoing basis, for example as particular developments are completed and funding becomes available. For this reason, it is recommended that individual projects and interventions are reviewed and updated regularly.

11.18 Furthermore, it should be emphasised that some strategic projects not identified as directly delivering significant additional outputs or outcomes (i.e. new housing and jobs) based on current information tend to be given lower priority through the appraisal notwithstanding that they may play an important wider enabling role.

Longer Term Economic Infrastructure Priorities

- 11.19 Beyond this ‘long list’ of infrastructure investment projects, a range of broader overarching economic infrastructure priorities have begun to emerge that are considered to have an important role to play in facilitating a step change in Havant’s economy, in some cases, over and above local growth aspirations set out in the emerging Havant Local Plan.
- 11.20 These interventions, summarised in Table 11.2 below, represent potential strategic infrastructure investments or options rather than specific, tangible schemes that have been worked up or are being promoted by particular stakeholders, albeit they align well with future policy frameworks and longer term strategic priorities associated with key partners such as HBC and Hampshire County Council.
- 11.21 They provide an important starting point to considering longer term economic infrastructure investment priorities for Havant Borough, with the Covid-19 pandemic acting to accelerate the urgency associated with priorities around digital inclusion and human capital/skills development in partiuclar.

Table 11.2 Longer Term Economic Infrastructure Priorities

Infrastructure Theme	Potential Area of Infrastructure Investment
Water, Waste and Flood Defence	<ul style="list-style-type: none"> Ongoing tidal flooding defence works to safeguard Havant’s coastline and economic capacity as sea levels continue to rise in response to climate change
Energy	<ul style="list-style-type: none"> Embedding more energy efficient technology and standards within Havant’s built environment and through new development
Transport	<ul style="list-style-type: none"> Upgrading the Borough’s transport infrastructure to respond more proactively to climate change priorities, sustainability commitments and more innovative modes of travel To potentially include investment in electric vehicle charging infrastructure, encouraging more active travel amongst Havant’s communities, autonomous vehicles, and demand responsive solutions (through use of technology)
Telecommunications	<ul style="list-style-type: none"> Roll-out of ‘next-generation’ 5G connectivity and provision across the Borough to ‘catch-up’ with other parts of the Solent where 5G is available Facilitating digital inclusion and access to economic opportunity for all of Havant’s communities, e.g. through free to access WiFi zones at key hubs
Human Capital / Skills	<ul style="list-style-type: none"> Focus on early years educational attainment and aspirations to prepare and equip the future workforce to be able to realise growth opportunities locally To potentially include more comprehensive employer engagement and career development initiatives which could be trialled/piloted in Havant
Overarching	<ul style="list-style-type: none"> Transforming local connectivity across the Borough to better link local communities with economic opportunity and ‘level up’ prosperity across its population – with a particular focus on internal transport connectivity and digital inclusion (as noted above)

Source: Lichfields

- 11.22 As noted in Chapter 9.0, a significant scale of new development is planned to take place (and indeed is already underway) just beyond the Havant Borough boundary, within adjoining Winchester City District (the West of Waterlooville Major Development Area) and Chichester District in West Sussex. The close proximity means that these developments will generate traffic and other infrastructure demands upon Havant and the surrounding Hampshire and Solent LEP area, and this underlines the importance of cross boundary collaboration with adjoining authorities in order to ensure that sufficient infrastructure can be put in place.

Actions in Support of Future Delivery

- 11.23 As noted above, existing plans and programmes identify significant future growth potential for Havant Borough including a range of housing and commercial development and wider regeneration opportunities in the pipeline. However, there are currently only a small number of committed infrastructure investment projects to support delivery. This report identifies a series of practical infrastructure interventions that could help to bring sites forward and stimulate economic growth, alongside some more strategic economic infrastructure priorities to guide investment over the longer term period to 2050.
- 11.24 The appraisal and prioritisation presented in this report is inevitably a snapshot in time, and starting point for future updating and progression. In particular, the LEP and its partners should focus on:
- moving projects up the priority list to 'high';
 - being realistic about projects for addition to, or removal from, the list; and
 - having the flexibility to combine/disaggregate projects in response to specific funding opportunities as they arise, subject to inter-dependencies.
- 11.25 This will require a more coordinated and streamlined approach across public and private partners to build evidence and make the strongest case for investment. Suggested actions and next steps are as follows:
- 1 Using the IIIP as a starting point for discussions across public and private sectors, and maintaining an up-to-date long list to ensure ready monitoring and progression of identified priorities, and ensuring more projects become 'bid ready'.
 - 2 Improving the availability and quality of technical evidence in relation to individual projects in terms of potential scheme design and costings. With the exception of some larger projects that have been under active consideration for a number of years (and accordingly have a degree of supporting technical work) for many projects there is a lack of technical information that could form the basis for discussion with either public or private sector partners or competitive funding bids.
 - 3 Linking future progress to the ongoing review of HBC's Regeneration Strategy (and review of the Local Plan in due course) to ensure alignment of evidence and prioritisation, shared assumptions about growth potential and delivery timescales, and to provide policy support for funding bids.

Appendix 1 Consultees

Aaron Butson, Havant and South Downs College
Adam Carden, SSE
Andrew Biltcliffe, Havant Borough Council
Cathryn Ward, representing Alan Mak MP
Dan Grindey, Havant Borough Council
David Youngs, LiveLink and Solent LEP Board Director
Graham Wright, Hampshire County Council
Jacqueline Boulter, Havant Borough Council
James Spragg, Havant Borough Council
John Pickford, Portsmouth Water
Joseph Gamlin, Havant Borough Council
Mark Stratton, Havant Borough Council
Martin Shefferd, Hampshire County Council
Mike Gaston, Havant and South Downs College
Phil Dominey, South Western Railway
Richard Barlow, Havant and South Downs College
Rob Vince, Stagecoach Bus
Sam Ingram, Havant and South Downs College
Stephanie Godden, Wartsila
Tim Guymer, Hampshire County Council
Trevor Linn, Turbulent Designs

Appendix 2 Infrastructure Project Descriptions

No	Project	Description
1	B2177 / Bedhampton Road Junction	Converting existing roundabout to fully signalised junction with additional pedestrian crossings
2	A3(M) J5 / B2177 Bedhampton Hill (Rusty Cutter Roundabout)	'Jet lane' on the Bedhampton Hill southbound approach and associated works to the shared cycle lane alongside
3	B2149 Durrants Road / B2148 Whichers Gate Road	Converting existing double mini-roundabout to fully signalised junction
4	B2149 Petersfield Road / Stockheath Road	Change to signal timings at key junction
5	Harts Farm Way approach to Teardrop junction	'Jet lane' on the Harts Farm Way approach and associated works to the shared cycle lane alongside
6	Havant Cycling, Walking and Waterways Project	Package of walking, cycling and wayfinding improvements across the Borough
7	Havant Shared Pedestrian and Cycle Bridge	Shared bridge crossing for pedestrians and cyclists
8	Hayling Billy Trail Realignment	Upgrading existing Hayling Bill Trail (re-surfacing, enabling all year use, suitability for emergency vehicles and re-routing to avoid flood erosion)
9	Hayling Billy Line Autonomous Vehicle Hubs	Autonomous vehicle hubs deployed on an upgraded Hayling Billy Trail to connect Havant Town Centre with the southern seafront of Hayling
10	Hayling Island Traffic Mitigation Package 1	Friction reduction measures (inc bus lay-bys and pull-ins, right turn lanes, traffic signal control, pedestrian and cyclist crossing facilities)
11	Hayling Island Traffic Mitigation Package 2	Package 1 + mini roundabout at A3023/ Cope Lane junction and signalisation of A3023/ Northney Road junction with an offline bus stop
12	Hayling Island Traffic Mitigation Package 3	Packages 1 & 2 + bypass connecting Manor Road to the existing West Lane Road
13	Park Road South / Elm Lane	New lane for left turning manoeuvres between Park Road (N) to Elm Lane
14	Purbrook Way / Parkhouse Farm Way	Converting existing priority junction to fully signalised junction
15	Purbrook Way A3(M) J4 southbound on-slip (B&Q roundabout)	'Jet lane' on the Purbrook Way westbound approach
16	Purbrook Way westbound approach and Hulbert Road southbound approach to Asda roundabout	Widening of Purbrook Way eastbound approach to 4-lane and associated widening of circulatory carriageway
17	South East Hampshire Rapid Transit	Further development of the Bus Rapid Transit (BRT) to include links between Havant, the QAH, Portsmouth and Southsea
18	South Leigh Strategic Site Transport Package and Emsworth Road / A27 eastbound off-clip	Package of highway works to deliver direct access from Southleigh strategic site onto the A27
19	Warblington Railway Crossing Footbridge	Footbridge with cycle gully to link residential areas with secondary school at level crossing adjacent to Warblington railway station
20	Brockhampton Quay and Broadmarsh Landfill Revetment	Scheme to protect former landfill site and Budds Farm
21	Budds Farm Wastewater Treatment Works Upgrades	Upgrade existing Wastewater Treatment Works with new technology to manage processes more efficiently and effectively
22	Conigar and Warblington – Habitat Creation	Creating new intertidal habitat to compensate for loss elsewhere within the Solent where 'hold the line' policy
23	Warblington Farm – Nitrate mitigation habitat creation	Creation of a new nature reserve to provide a nitrate offset mechanism for new development in the area
24	Havant Thicket Reservoir	Creation of a new reservoir to secure water supplies for the region
25	Hayling Island Flood & Coastal Erosion Risk Management Strategy	Strategic study of Hayling Island requirements for FCERM following on from North Solent Shoreline Management Plan (2010)
26	Langstone Coastal Flood Erosion and Risk Management Scheme	Flooding management scheme to reduce flood risk to c.61 existing residential properties present day and 86 over the next 100 years
27	Northney – Habitat Creation	Creating new intertidal habitat to compensate for loss elsewhere within the Solent where 'hold the line' policy
28	Selsmore and Mengham CFERM Scheme	Flooding management scheme to protect over 180 homes by 2115 from flooding
29	South Hayling Island Beach Management Activities Phase 2	Periodic nourishment and annual recycling of suitable beach material for flood and erosion defence
30	Southmoor – Habitat Creation	Creating new intertidal habitat to compensate for loss elsewhere within the Solent where 'hold the line' policy
31	HSDC Digital Skills Hub (South Downs Campus)	Next phase of work at HSDC's South Downs campus to create a new Digital Skills hub with purpose-built teaching spaces
32	Dunsbury Park Maker Space and Advanced Manufacturing Innovation Centre	Development of 33,000sqft maker space/advanced manufacturing innovation space with workshop units and ancillary offices
33	Hayling Island West Beach Public Realm Phase 1	West Beach public realm improvements to support a wider vision and 'seafront journey' along Hayling Island seafront

Appendix 3 Hayling Billy Trail High Level Feasibility Study

Intended for
Solent Local Enterprise Partnership

Document type
Report

Date
November, 2020

HAYLING BILLY TRAIL INITIAL FEASIBILITY STUDY AND ENVIRONMENT REVIEW

HAYLING BILLY TRAIL

INITIAL FEASIBILITY STUDY AND ENVIRONMENT REVIEW

Project name **Hayling Billy Trail**
Project no. **1620010209**
Recipient **Solent Local Enterprise Partnership**
Document type **Report**
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Description **Engineering and environmental constraints overview relating to the conversion of the Billy Line route to an automated electric vehicle track.**

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1 INTRODUCTION

Ramboll have been appointed by Nathaniel Lichfield and Partners on behalf of the Solent Local Enterprise Partnership to investigate the feasibility of using Connected Autonomous Vehicles (CAVs) to improve connectivity between Havant Station and the southern seafront of Hayling Island. The study uses the existing Hayling Billy Trail as the basis of the route for the CAVs. This initial feasibility study will form an annexe to the wider Infrastructure Investment Plan for the Borough of Havant, which will identify and prioritise economic infrastructure investments that are required to support and stimulate sustainable economic growth within the Borough over the period to 2050.

CAVs are unmanned vehicles which are programmed to operate over defined routes without direct human intervention. The vehicles self monitor their locations and surrounding through direct and remote sensing technology such as proximity detectors and satellite global positioning and there will be overall system monitoring from a control centre utilising CCTV cameras mounted both in the vehicle and along the route. The vehicles will be fuelled by sustainable sources such as hydrogen, or electricity using rechargeable batteries or direct charging using infrastructure built into the route.

The vehicles will operate at a speed appropriate to their environment and with due consideration of other users, it is probable that this will be broadly equivalent to an average cycling speed. It is envisaged that there will be a series of defined stops along the 6 mile route and a fleet of CAVs will be in place. The size of the fleet will be determined based on demand modelling and the chosen fuel technology so that there are always sufficient vehicles available to users.

A funding model would need to be developed but could broadly be direct charge on a demand basis (similar to TfL's oyster card or contactless payment) or indirect through local taxation. Whilst these vehicles are being used/piloted in a number of locations including Heathrow Airport and Oxford city centre it is still very much an emerging technology and therefore can be expected to change and grow rapidly over the coming years.

The trail is an existing non-motorised user route which follows the route of a railway line decommissioned in the 1960's and runs from Havant Station, largely hugging the western edge of Hayling Island alongside Langstone Harbour to just north of the seafront at which point the CAVs would use the local road network to cover the remaining distance down to the seafront. This study is a high level review into the physical and environmental implications of the proposed scheme solution and identifies areas and aspects which should be considered in later more detailed studies to facilitate the development of the scheme.

A review of the following topics has been undertaken based on publicly available desk-based research and a site walk over:

- Ecology
- Flood risk and Climate Change
- Landscape and Heritage
- Physical Constraints

It should be noted that ground conditions have not been reviewed at this stage. If works are to go forward, this should be reviewed to understand the potential risk from ground contamination when carrying out the works.

2 PHOTO LOCATION MAPS

The photo location maps are interactive. When viewing the PDF on a computer, click on the photo number to be taken to the corresponding photo and associated text describing the feature or constraint identified at this location.

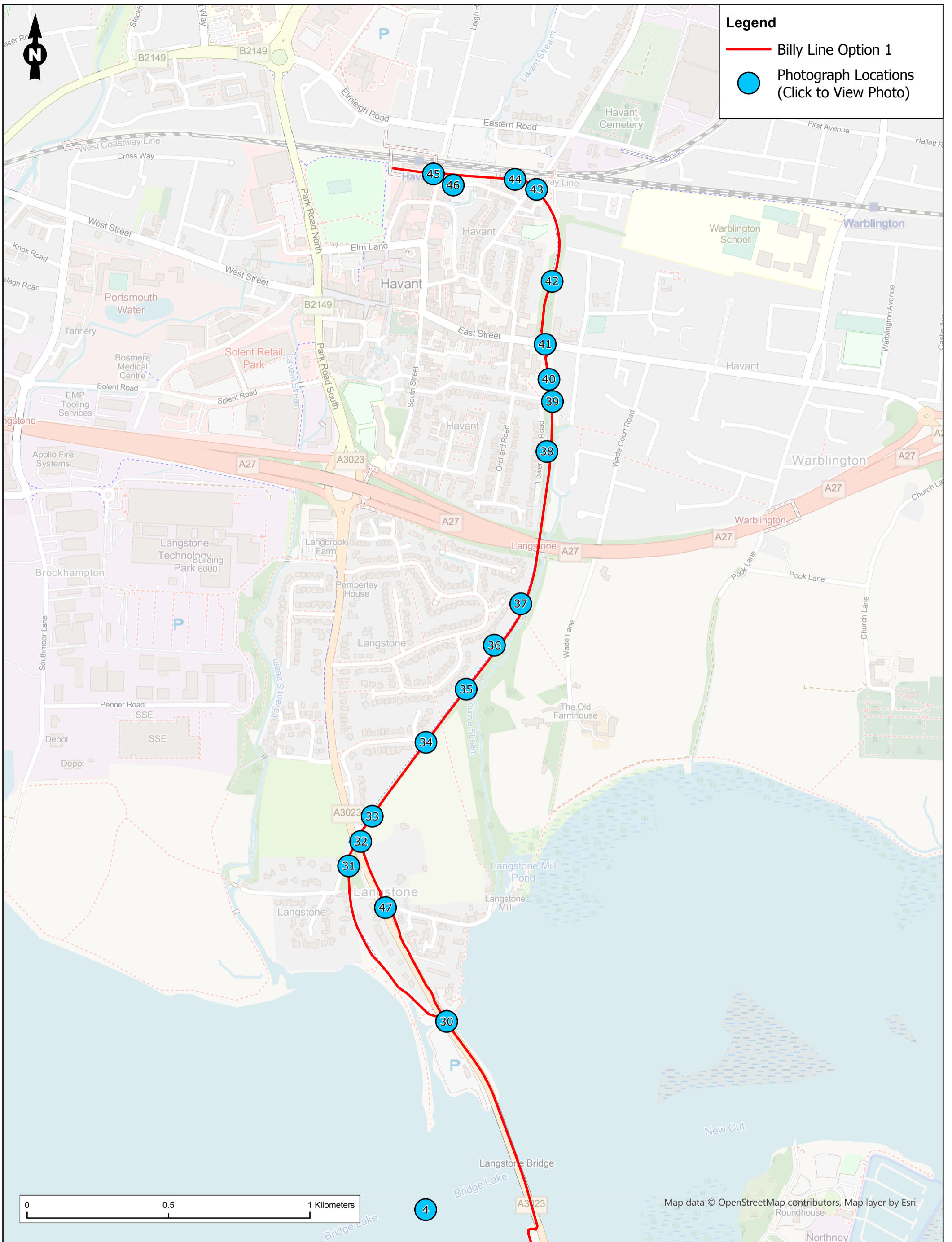



Figure Title Photograph Locations	Project Number 1620010209	Figure No. 1a	Client Nathaniel Lichfield & Partners Limited
	Date October 2020	Prepared By CO	
Project Name Billy Line	Scale 1:12,000 @A3	Issue 1	

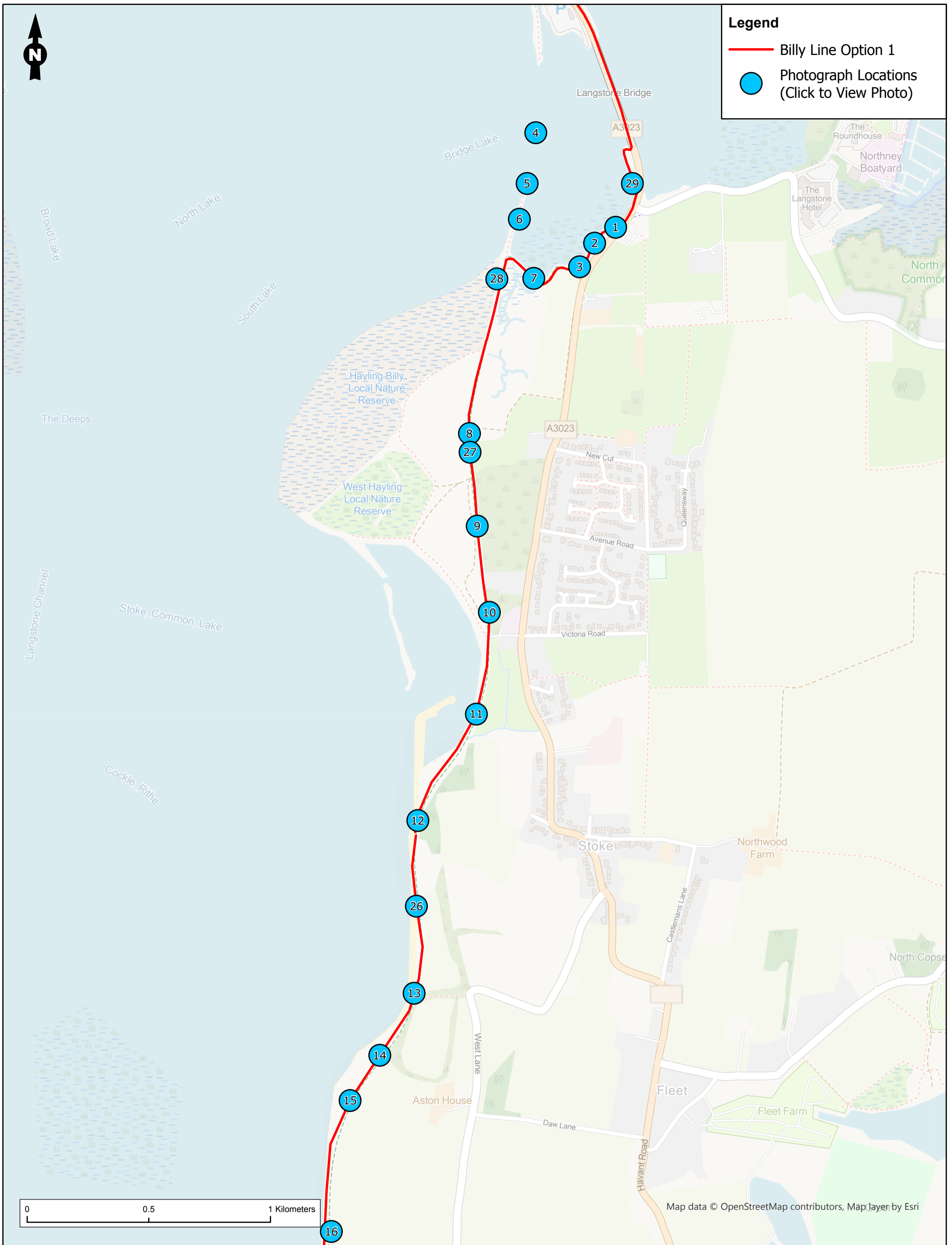



Figure Title Photograph Locations	Project Number 1620010209	Figure No. 1b	Client Nathaniel Lichfield & Partners Limited
	Date October 2020	Prepared By CO	
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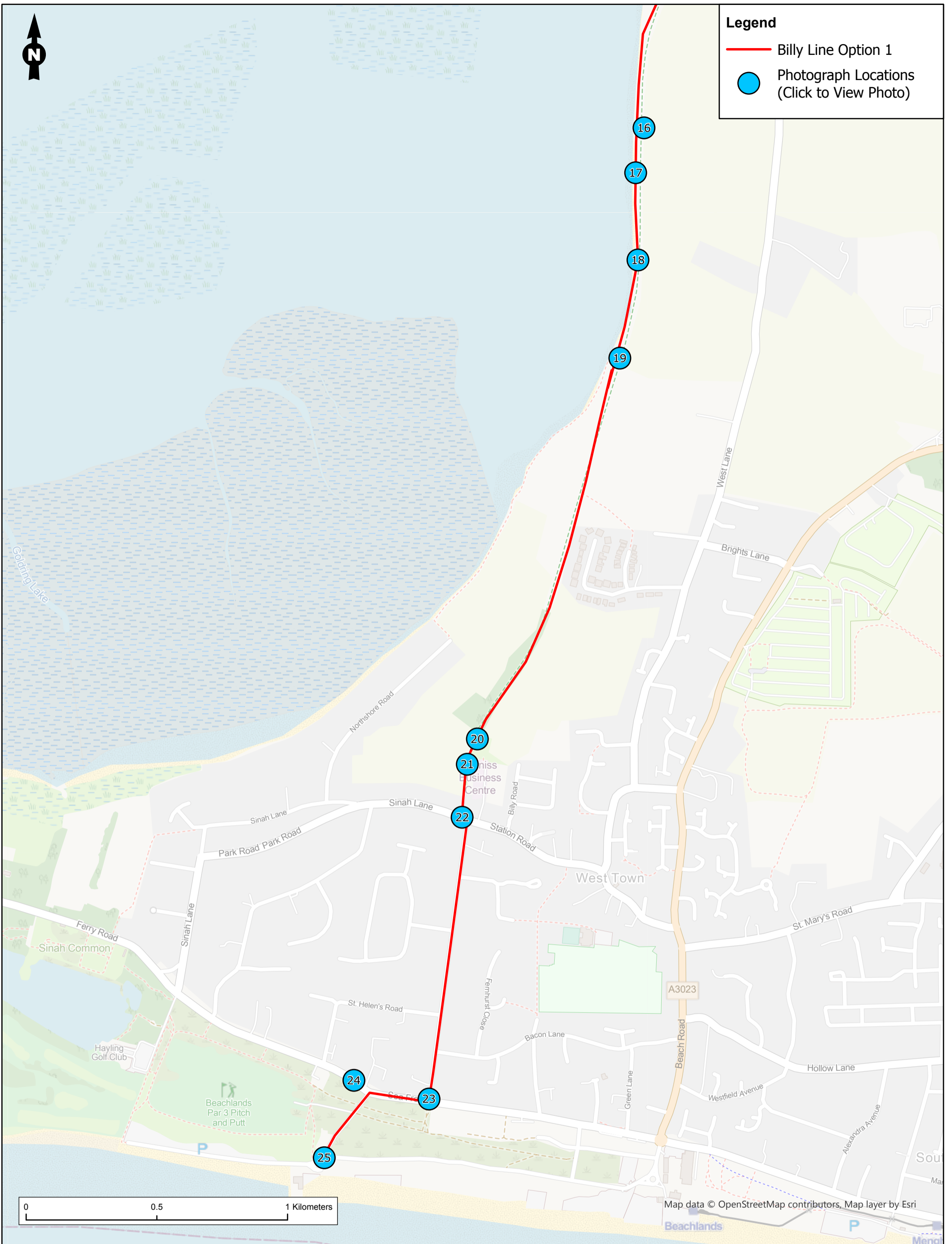


Figure Title Photograph Locations	Project Number 1620010209	Figure No. 1c	Client Nathaniel Lichfield & Partners Limited
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3 ECOLOGY

The Billy Line route is associated with a number of overlapping designations. Whilst planning assessments would need to consider ecology designations in a zone of influence that may include sites up to 10km away, this high-level review considers only those directly interacting with the route. These include:

- Chichester and Langstone Harbours Ramsar Site;
- Chichester and Langstone Harbours Special Protection Area (SPA);
- Solent Maritime Special Area of Conservation (SAC);
- Langstone Harbour Site of Special Scientific Interest (SSSI); and
- West Hayling Local Nature Reserve (LNR) (formerly Hayling Oysterbeds).

Langstone harbour contains extensive intertidal mudflats and sandflats with areas of seagrass, saltmarsh, shallow coastal waters, coastal lagoons, coastal grazing marsh and shingle ridges and islands. These habitats support internationally and nationally important numbers of overwintering, migrating and breeding bird species which are the main qualifying features/special interest for the above designations.

Due to the proximity to these European designated sites, a Habitats Regulations Assessment will be required. Construction works will be occurring directly within the Ramsar Site and SPA, therefore this will need to be followed up by an Appropriate Assessment to assess the implications of the proposals for that site in view of its conservation objectives. Consent can only be given if it is demonstrated that the proposal will not adversely affect the integrity of the European sites due to physical works within the designation.

The main ecological impact to consider due to the upgraded route would be potential disturbance of wintering, migrating and breeding bird species. This disturbance could be from the construction phase works activity, but also from the operation of the proposed development. Disturbance can come from site activity, vehicle movements, activity by pedestrians and from their dogs. Dogs are a particularly strong disturbing agent to birds. Whilst the Billy Line route is already in use by pedestrians and dog walkers, the implications of upgrading the Billy Line to include automated vehicles should be reviewed in terms of whether this would increase disturbance to birds.

Seasonality of use of the route for the proposed purpose could also play a role in bird disturbance. If the route is only operated during the peak visitor summer months, there is no risk of disturbance to wintering birds and only the risk to breeding birds would need to be assessed. Only breeding terns are present in significant numbers during the summer, and their breeding activity is generally restricted to shingle islands/sand bars away from human disturbance. Therefore the proposals may have less of an effect if operation is only in the summer months. In all cases the effects of construction and operation of the proposed development on the designated sites in the vicinity would need to be assessed robustly, and if necessary, mitigation devised to address any significant effects or effects on integrity of designated sites.

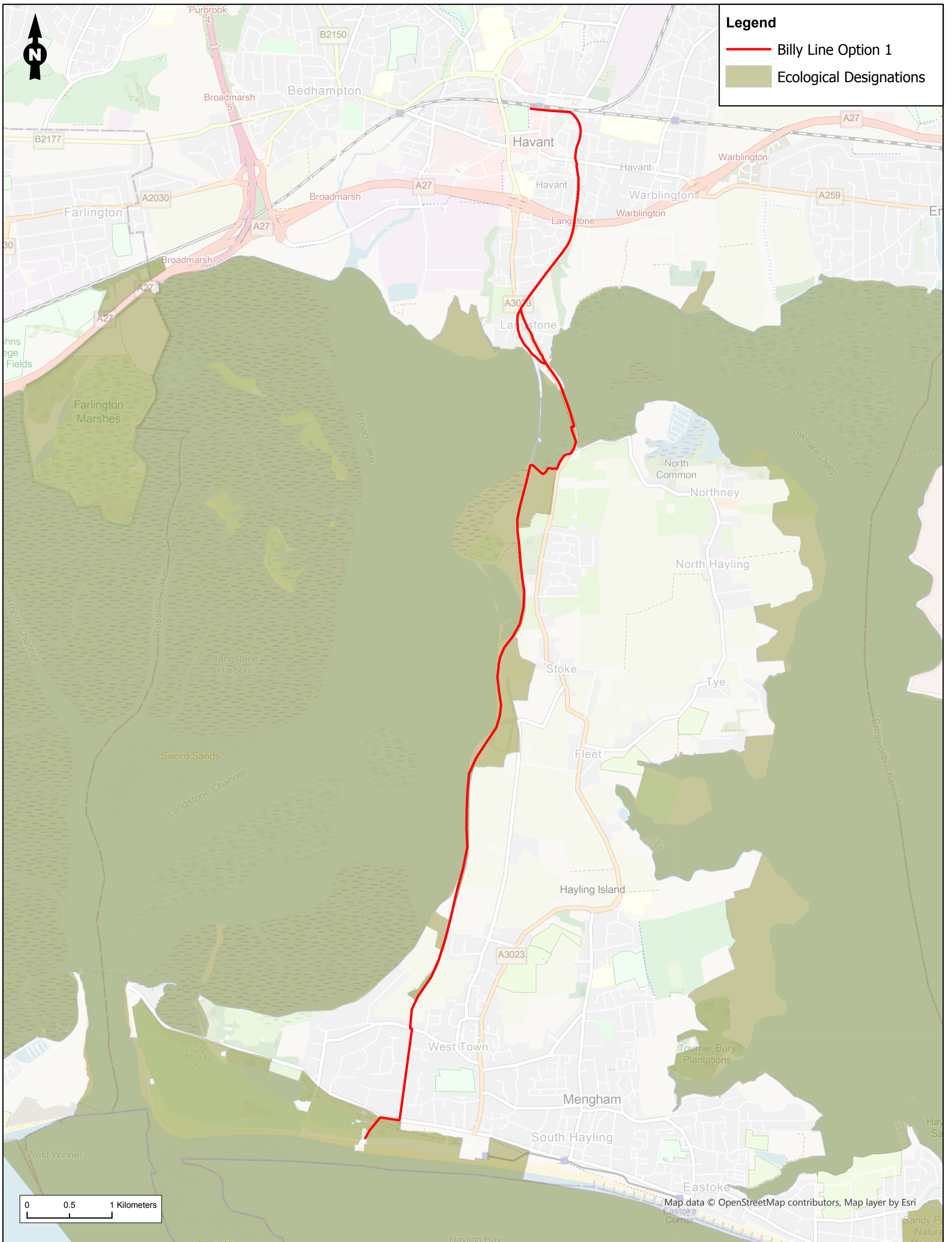


Figure Title Ecology Designations	Project Number 1620010209	Figure No. 2	Client Nathaniel Lichfield & Partners Limited
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4 FLOOD RISK AND CLIMATE CHANGE

The Billy Line mostly runs along the West coast of Hayling Island, at many points only metres from the waterfront, with the majority of the route within Flood Zone 3. This indicates that the area is susceptible to a 1% (1 in 100) annual chance of flooding from rivers in any one year for fluvial flooding and a 0.5% (1 in 200) annual chance of flooding from the sea in any one year. It also indicates the area that has a 0.1% (1 in 1000) annual chance of flooding in any given year for both rivers and the sea. This is also referred to more generally as the 'Extreme Flood Outline'. This makes the route vulnerable to impacts of flooding, storm surges, wave overtopping and the exacerbation of these risks from climate change.

It is considered that there is reduced wave action on the west coast of Hayling Island thanks to protection from Langstone Harbour. This should reduce the risk from wave overtopping during storm events. High tides due to storm surges may lead to infrequent overtopping in lower lying portions of the route, however it is not thought that this would severely impact its operation. During extreme weather events, the route should be closed for public safety. Infrequent flooding would therefore have minimal impact as the route would be closed.

In the UK the predicted trends of climate change that may influence flooding include – increased frequency and intensity of rainfall events, increased levels of rainfall during winter and more frequent storms. In the later half of the century there may also be increased windspeeds, which could impact on wave formation¹. All of these factors could contribute to an increased potential for flooding.

There is a potential to combine the works with a flood defence, allowing joint funding with the Environment Agency. This would include raising levels to protect in-land areas whilst also reducing risk of flooding to the route itself. It should be noted that funding and programme complications as well as future maintenance responsibilities could become complex and would need a combined assessment if this is to be considered further.

¹ Met Office (2018) UKCP18 data. Available at: <https://www.metoffice.gov.uk/research/approach/collaboration/ukcp/download-data> [Accessed 19/10/2020].





<p>Figure Title Flood Zones</p>	<p>Project Number 1620010209</p>	<p>Figure No. 3a</p>	<p>Client Nathaniel Lichfield & Partners Limited</p>
<p>Project Name Billy Line</p>	<p>Date October 2020</p>	<p>Prepared By CO</p>	
<p>Scale 1:12,000 @A3</p>		<p>Issue 1</p>	



Figure Title Flood Zones	Project Number 1620010209	Figure No. 3b	Client Nathaniel Lichfield & Partners Limited
	Date October 2020	Prepared By CO	
Project Name Billy Line	Scale 1:14,000 @A3	Issue 1	

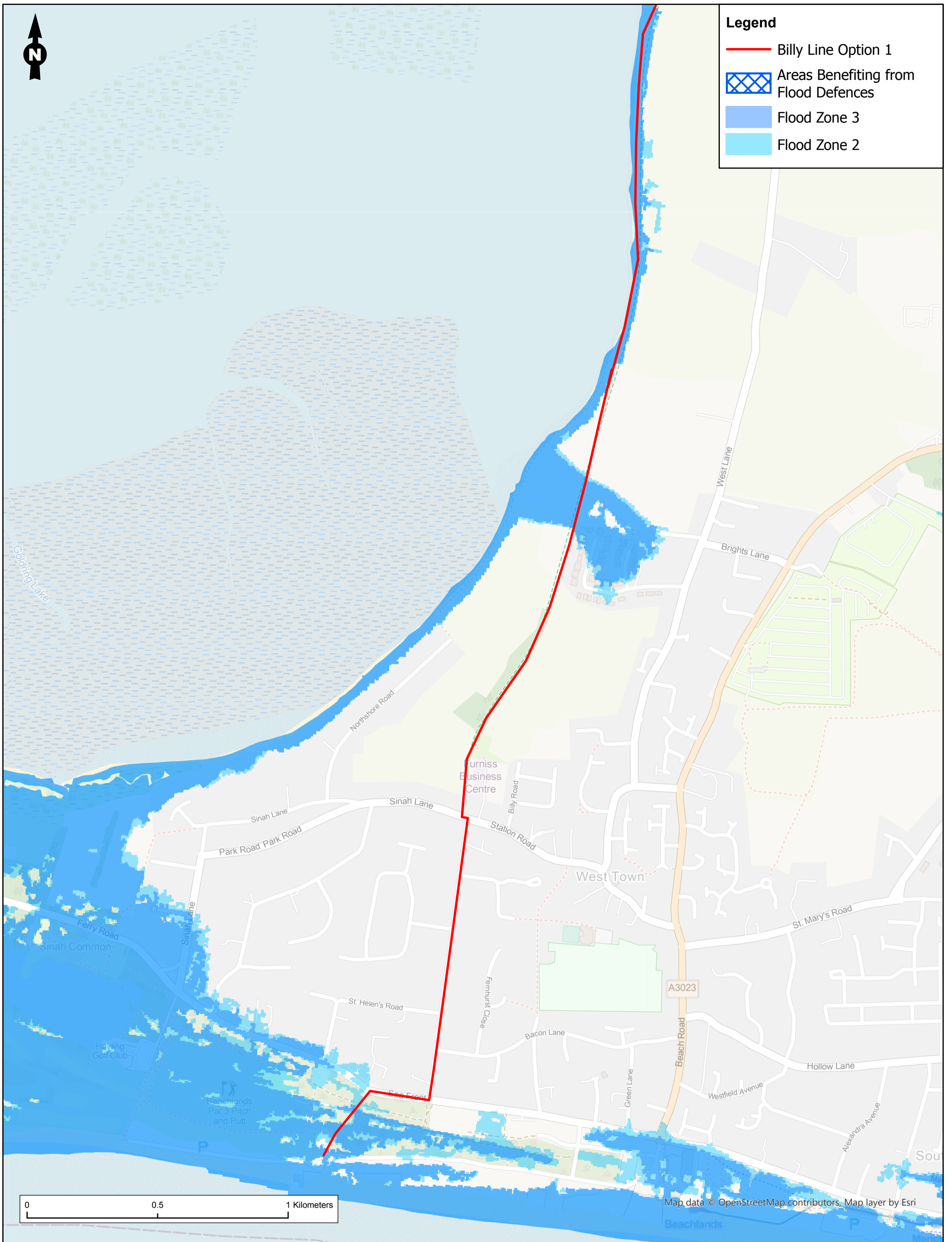



Figure Title Flood Zones	Project Number 1620010209	Figure No. 3c	Client Nathaniel Lichfield & Partners Limited
	Date October 2020	Prepared By CO	
Project Name Billy Line	Scale 1:13,000 @A3	Issue 1	

5 LANDSCAPE AND HERITAGE

The most important factors to consider in relation to landscape and heritage are maintaining the structural integrity of features and preserving the setting in which they are situated.

The majority of listed buildings near to the Billy Line are clustered directly south of the Havant Train Station and the Northern side of Langstone bridge. There are many more listed buildings scattered around Hayling Island however none are within 100 metres of the route. There are two scheduled monuments on Hayling Island, which includes a WWII Heavy anti-aircraft gunsite at Sinah Common, and Tourner Bury at South Hayling just south of the Tournerbury Golf Centre. It is not considered that works to the Billy Line would significantly impact the setting of listed buildings or scheduled monuments due to the route already being an existing feature of the landscape, however this would need to be considered further once details of the proposals are known.

Additionally, the Chichester Harbour Area of Outstanding Natural Beauty covers the Eastern edge of Hayling Island and incorporates Langstone Bridge and the area surrounding Warblington Castle. The Billy Line Option 1 route passes through this area as it crosses over the bridge and towards the underpass under the A27. Due to the route already existing as part of the landscape and the unobtrusive nature of any upgrades, it is not considered that the landscape would be negatively impacted by upgrades to the route, although this would need to be considered further and robustly if the project is taken forward.

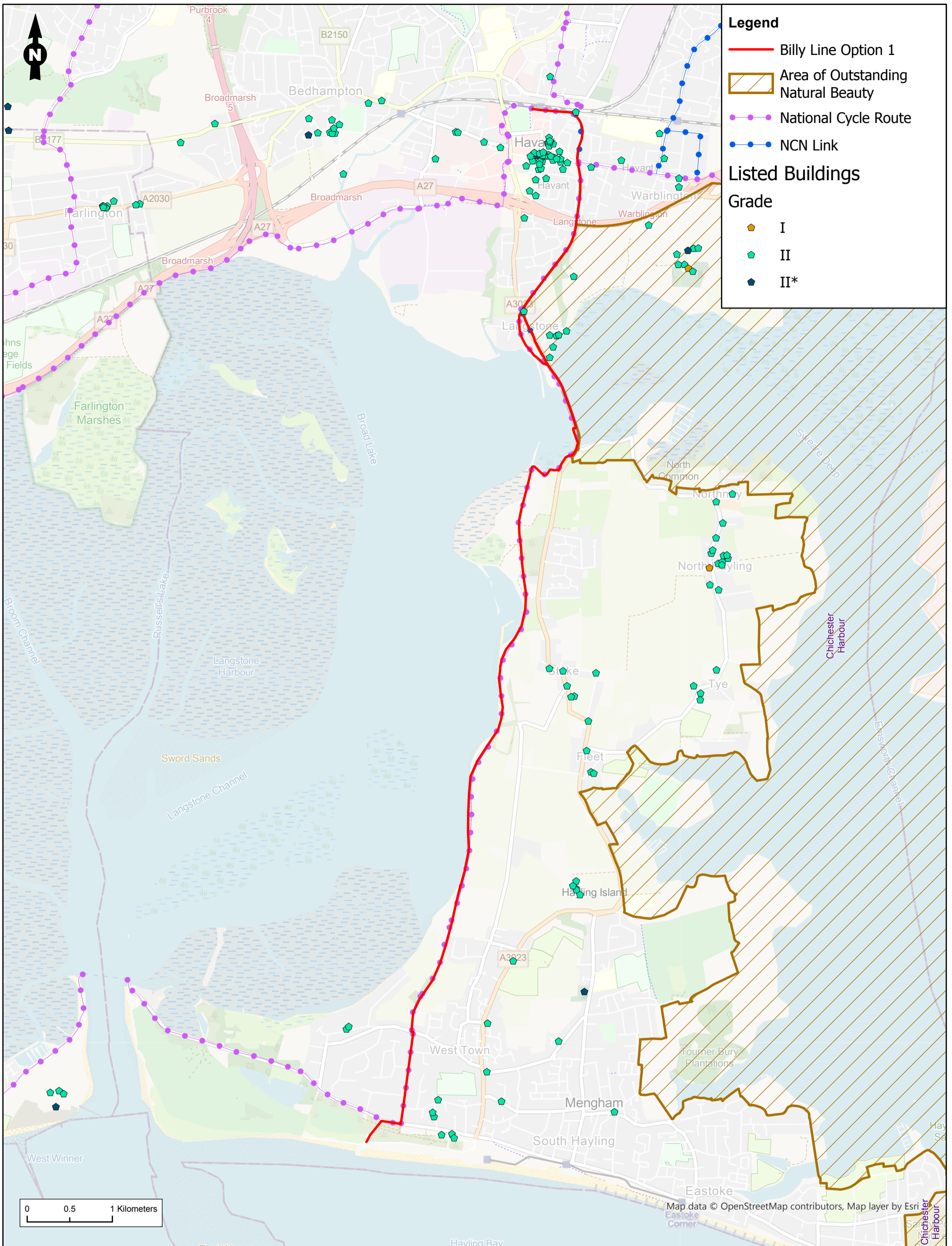


Figure Title Landscape and Heritage	Project Number 1620010209	Figure No. 4	Client Nathaniel Lichfield & Partners Limited
	Date October 2020	Prepared By CO	
Project Name Billy Line	Scale 1:40,000 @A3	Issue 1	

6 PHYSICAL CONSTRAINTS

There are a number of physical constraints along the existing route which will need to be investigated further. These include the existing bridges, the locations where the route crosses public highways, and the main crossing from the mainland on to Hayling Island.

Further work will also be required to establish how the power and control aspects of the proposed CAVs can be built into the physical construction/upgrade of the route.

Finally there are a number of ongoing and overlapping studies which are taking place looking at aspects such as flood defence, the main crossing from the mainland on to Hayling Island, the re-paving of the route and the wider non-motorised user network in the Havant area. To take greatest advantage of this scheme's construction process we recommend that further investigations be undertaken to understand where combining the possible schemes could offer benefit.

7 CONCLUSIONS

This high level review into the feasibility of using the Hayling Billy Line as part of a CAV link from Havant Station to the southern seafront of Hayling Island has indicated that there are no significant issues. There are, however, many aspects which will need further investigation in order to develop an understanding of how the project can move forward and whether or not it was technically, environmentally and economically appropriate. These include:

- Significant proportions of the route run through or closely adjacent to sensitive habitats and environments which are very likely to put regulatory, constructional and operational restrictions on the proposed route.
- The portions of the route running adjacent to Langstone Harbour and the watercourses which discharge into it are potentially susceptible to both flooding and erosion which could compromise the construction and operation of the route.
- It is not considered that the landscape would be negatively impacted by upgrades to the route, although this would need to be considered further and robustly if the project is taken forward.
- There are a number of physical constraints along the existing route which will need to be investigated further. These include the existing utilities, bridges, culverts, the locations where the route crosses public highways, and the main crossing from the mainland on to Hayling Island.
- The route has heavy existing usage by the public for commuting and leisure and is likely to be considered a valued local asset which will attract close scrutiny should proposals appear to significantly affect or limit its use.
- The operational configuration of the CAVs including fuelling, monitoring and passenger interface will have a significant effect on the configuration of the route.

To support this further investigation, we recommend the following steps.

Next Steps

- Produce a project master plan charting the steps necessary to progress the scheme through development, planning, consents, design, construction and into operation.
- Engage with suppliers and operators of CAVs in order to better understand the operational opportunities and constraints in relation to the proposed route.
- Establish a formal interface with the other studies currently being underway by related and third parties to identify and monitor where common interfaces and interactions exist. This is particularly important in relation to the crossing from the mainland to Hayling Island and for coastal protection areas in Langstone Harbour along the western edge of Hayling Island.
- Engage with statutory consultees and prepare a register of approvals, constraints and licenses that will be required to carry out the works.
- Develop the operational model for the CAVs to better understand their frequency, daily & yearly operational range, and then to carry out a climate resilience study to identify challenges to their operation over the intended life of the scheme.
- Develop a typical structural cross-sectional design of the route including widths, drainage requirements, surfacing, power and communication equipment etc. so that implications at pinch points along the route can be more thoroughly reviewed.

- Based on the information available relating to the CAVs carry out initial structural reviews of the bridges and culverts to establish any potential issues relating to capacity; both in terms of loading and passage.
- Develop a consultation process to engage the public and other route users and identify risks and opportunities from a user perspective.
- Develop a plan for the survey and monitoring work which will be required in order to inform later stages of the project including topographical, geotechnical and ecological aspects.

APPENDIX A: PHOTOGRAPHS



Photograph 45

General view of Havant train station car park looking East.



Photograph 46

General view looking East down Waterloo Road. This Road operates 2-way traffic and pedestrian footpaths. This road could be utilised for the use of the Connected Autonomous Vehicles (CAVs).



Photograph 44

View from the end of the Billy Line looking across New Lane to the Havant train station car park. At the time of the walk over, construction works were being undertaken so direct access to the car park was not possible.



Photograph 43

At the end of the Billy Line trail a road rail crossing was observed on New Lane. The direct route to the train station for the Connected Autonomous Vehicles (CAVs) would be to cross New Lane to the Havant train station car park.



Photograph 42

General view of the route looking North before it reaches New Lane. Residential areas are located either side of the route.



Photograph 41

The route continues under the masonry arch bridge which supports East Street. Approximate height and width dimensions were taken on site for access being 4 metres wide and 2.9m high at mid arch position. Height and width restrictions to be considered for the change of use of the route.



Photograph 40

The route crosses a car park. Access to, and egress from the car park by vehicle is from East Street. The continued existing use as a car park would need to be reviewed should the Connected Autonomous Vehicles (CAVs) be adopted.



Photograph 39

Footpath rise slightly and narrows at this location.



Photograph 38

Billy Line trail measured at approximately 3 metres wide after passing under the A27 over bridge. The route at this location was observed to be tree lined. Tree Preservation Orders may need to be reviewed should the route be altered and widened. Either side of the route residential properties are located.



Photograph 37

General view of the of the A27 over bridge. Approximate span of the structure is 7 metres, as-built drawings to be reviewed when considering the suitability of change of use for the route both to the width and height for access.



Photograph 36

A timber footbridge was observed providing a public right of way over the water stream adjacent to the Billy Line trail.



Photograph 35

Adjacent watercourse observed next to the Billy Line trail. The flood risks and mitigations from adjacent watercourses will need to be considered.



Photograph 34

Over head cables and support posts were observed along this part of the route. Overhead cable supporting timber posts restrict the existing width of the route. This part of the route runs adjacent to a built-up residential area. Further investigations should be undertaken to understand the potential impact on private and commercial properties abutting the route. This could include noise and/or visual shielding.



Photograph 33

Access from Langstone Road back onto the Billy Line trail. Bollards provided preventing vehicle access but remains as a pedestrian and cyclist route. Further investigations should be undertaken to identify how unauthorised vehicles can be prevented from using the route whilst maintaining free flow of the CAVs.



Photograph 32

The photograph shows the crossing over Langstone road to continue on the Billy Line trail.



Photograph 31

To continue on the Billy Line trail route, you need to cross 2no roads, the first being Mill Lane shown in this photograph. Further investigations should be undertaken to establish how these road crossings would function. They would certainly require traffic controls, possibly even barriers.



Photograph 47

General view looking South down Langstone Road. This part of the road could be used as an alternative to the adjacent Billy Line trail.



Photograph 30

View of Billy Line trail North of Langstone Road Bridge which runs adjacent to residential buildings. The footpath is approximately 2 metres wide.



Photograph 4

General view of the original railway bridge foundations looking towards Langstone Sailing club. The bridge turning mechanism can be viewed which originally allowed passage of small boats. The potential to re-use the bridge foundations could be investigated further to confirm if it provides an option for the proposed scheme.



Photograph 5

General view of Billy Line trail land spit which separates Bridge Lake water and originally joined the railway bridge. The image shows a restored railway signal.



Photograph 6

General view of the Billy Line trail looking south. At this location the trail is approximately 3 metres wide. It is likely that the route would need to be paved to facilitate the scheme which will require extensive reconstruction along the whole route.



Photograph 29

General view looking North over road and pedestrian Langstone Road Bridge. The bridge provides 2-way lane traffic and a footpath each side used by pedestrians and cyclists. Further studies should be undertaken to establish if the bridge, with suitable reconfiguration, could be used for the CAVs.



Photograph 1

General view of original billy line rail bridge foundations. The last public train was recorded to run on the 2nd November 1963.



Photograph 2

General view of footpath approximately 3.5m adjacent to Hayling Billy Line car park. Currently widely used by cyclists and walkers.



Photograph 3

View of billy line trail footpath adjacent to the water (Bridge Lake). The footpath narrows here to approximately 2 metres wide after leaving the Hayling Billy Line car park. To the left of the photograph there is what appears to be a fence enclosed substation, the implications of the proposed scheme on this substation would need to be assessed.



Photograph 7

View of a culvert which is located under the Hayling Billy line. Existing structure condition and assessment records will need to be reviewed for any new proposals of the Hayling Billy Line.



Photograph 28

Concrete blocks observed adjacent to the Billy line trail spit.



Photograph 8

View of Billy line trail looking South. At approximately this location, the trail narrows to about 1.5 metres wide although there appears potential for widening. This would need to be confirmed as part of a further more detailed investigation.



Photograph 27

Overhead cables observed adjacent to the Billy Line Trail. Future investigations should confirm that these would not have an adverse effect on the CAVs.



Photograph 9

Potential existing path location which could be utilised for Connected Autonomous Vehicles (CAVs) turning/charging points. Existing infrastructure and services would need to be reviewed to its location being suitable.



Photograph 10

Car park observed on the Billy Line route which has access from Havant Road and Victoria Road. The interface between public parking/vehicles and the proposed CAVs need to be defined and developed.



Photograph 11

View of a culvert which is located under the Hayling Billy line. Existing structure condition and assessment records will need to be reviewed for any new proposals of the Hayling Billy Line.



Photograph 12

View of Billy line footpath which widens adjacent to the water up to 6 metres. The footpath at this location undulates slightly in level. The status of coastal erosion and flood prevention measures in place or planned should be confirmed as part of future investigations.



Photograph 26

Erosion protection work has been carried previously where the Billy Line trail is located adjacent to the water. The erosion was measured approximately 6 metres away from the Billy Line footpath. Collapsed masonry structure previous use is unknown.



Photograph 13

View of a masonry World War II fortification adjacent to the Billy line. Existing records should be reviewed to determine if it is listed and the implication of any change of use to the Billy Line trail.



Photograph 14

General view of the Billy Line trail looking south. The path widens here and is separated by vegetation. A sign suggests the path should be separated by horse riders on one side and pedestrian and cyclists the other. The need for separation of different trail user types should be considered in future investigations.



Photograph 15

View of a culvert which is located under the Hayling Billy line. Existing structure condition and assessment records will need to be reviewed for any new proposals for the Hayling Billy Line.



Photograph 16

General view of the Billy Line trail looking south. The path is still separated by vegetation for horse riders on one side and pedestrian/cyclists the other.



Photograph 17

View of the Billy Line trail looking south showing proximity to the water and local sea defence/protection measures to the route.



Photograph 18

A lot of the route is lined with vegetation and trees. The image shows an overhanging tree. When considering the route Tree Preservation Orders should be reviewed for any conflict with the proposals.



Photograph 19

Various spurred routes and gates were observed along the route. Further investigations should consider the implications of joining 'traffic' on the operation, some measures may be necessary to address any issues identified.



Photograph 20

The billy line trail passes a BMX bike track which is located near residential and commercial buildings.



Photograph 21

The Billy line trail continues onto a tarmac raised public footpath adjacent to a car park. This car park is accessed from Sinah Lane. The switch from the Hayling Billy trail to the public roads and the interface of the CAVs with private and commercial vehicles needs to be investigated in further studies.



Photograph 22

General view looking South down Staunton Avenue. From the Billy Line trail this is the most direct route to the West Beech. The road is 2-way traffic with wide tree lined verges and footpaths.



Photograph 23

General view looking down Sea Front road which currently supports 2-way traffic and a footpath adjacent to residential buildings.



Photograph 24

General view looking towards west beach. Access is a via 2-way traffic road. Adjacent land could be utilised either side of the road to provide access and egress using Connected Autonomous Vehicles (CAVs).



Photograph 25

Potential turning position at West Beach Car Park for Connected Autonomous Vehicles (CAVs) at the waterfront.

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